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ROUTES
IN
AFGHANISTAN
SOUTH-EAST.

GENERAL STAFF, INDIA.

1912.

Catalogue No. A-63.

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The event of operations in Afghanistan
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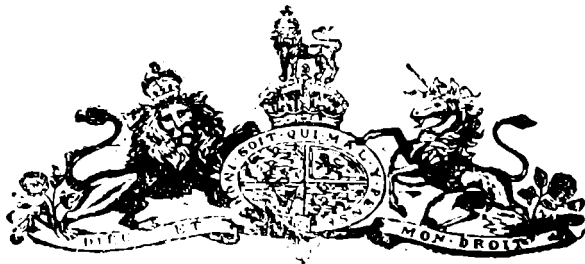
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TO

ROUTES IN AFGHANISTAN, SOUTH-EAST.

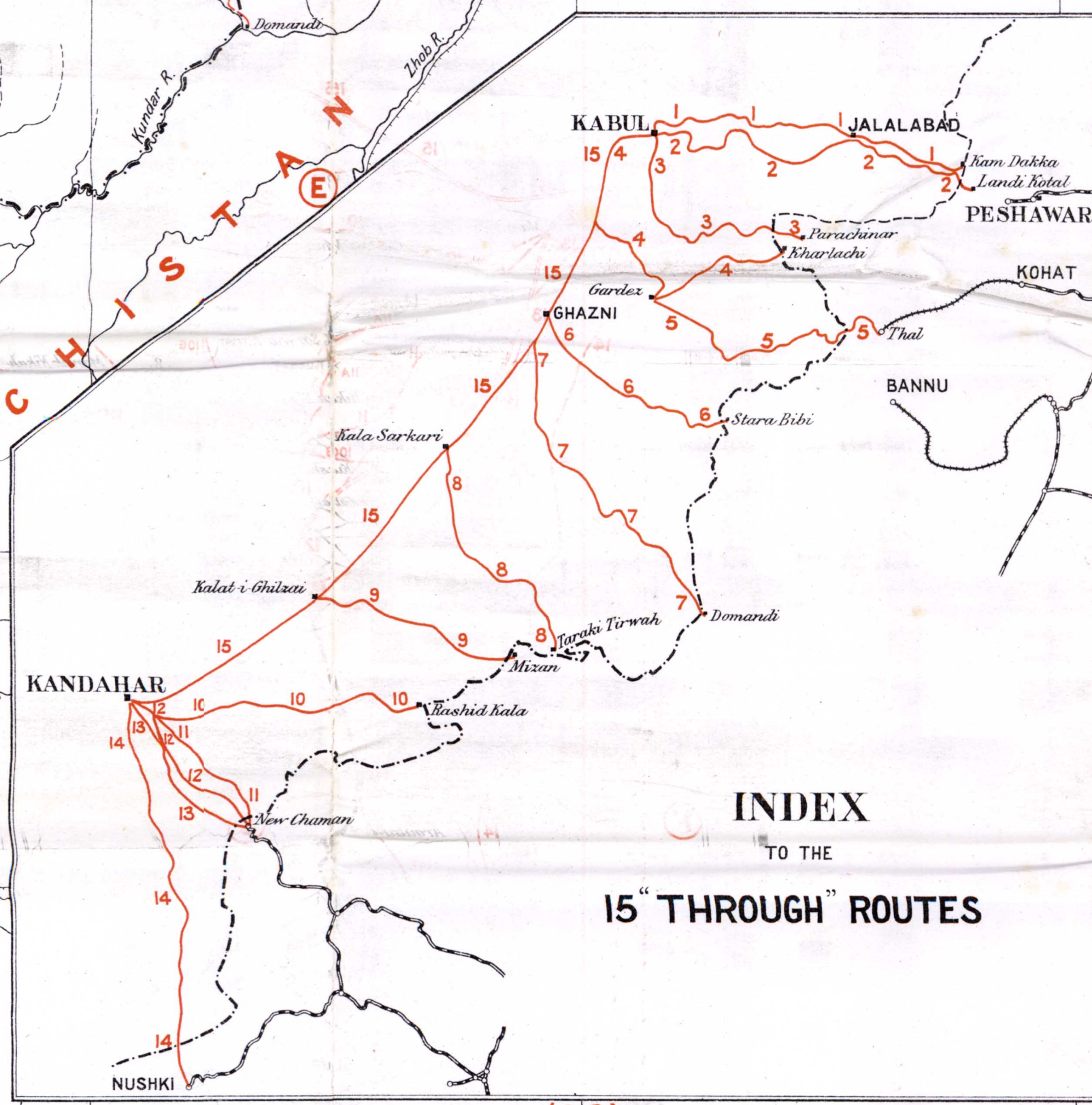
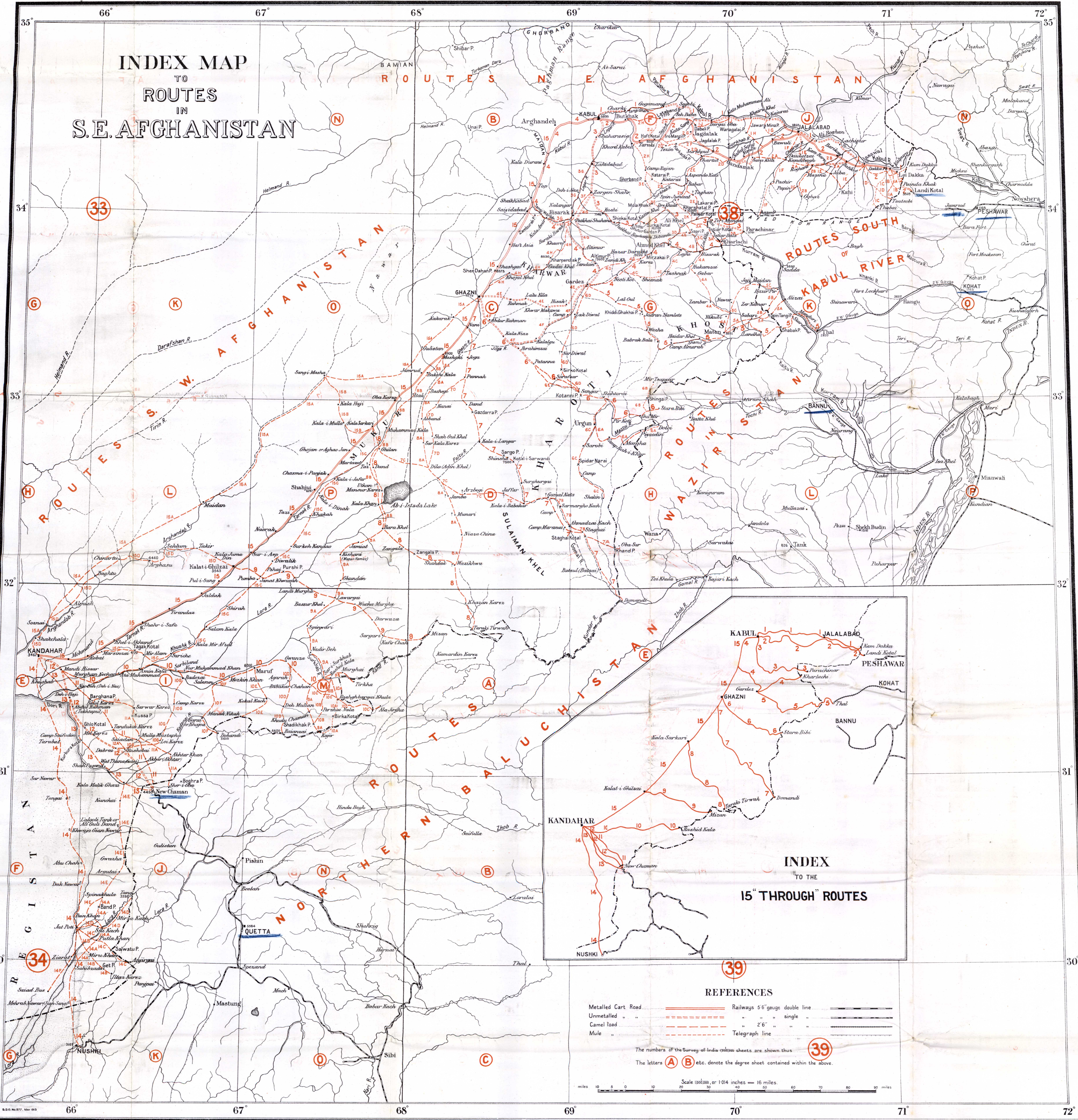
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- Unmetalled " " - - - - -
- Camel load " " - · - · -
- Mule " " - · - · -
- Railways 5'6" gauge double line = = = = =
- " " " " single " " - - - - -
- " " " " 2'6" " " " - · - · -
- Telegraph line - · - · -

The numbers of the Survey of India 190830 sheets are shown thus **39**
The letters **A B** etc. denote the degree sheet contained within the above.

Scale 100,000 or 1,014 inches = 16 miles.
0 10 20 30 40 50 60 70 80 90 miles

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ROUTE No. 1.

KAM DAKKA TO KABUL.

Viâ the Kabul river route and the Tangi Gaaru.

132 $\frac{1}{4}$ miles.

13 stages.

Authority.—2nd Afghan war records, 1879-80; Malleson, 1905; Hayden, 1907; and various reports up to 1912, mostly native.

Epitome.

General description.—This route is one of the main through routes from India to Kabul. It connects at Kam Dakka with Routes South of the Kabul River, Route No. 1.

Road.—First 5 miles mule road, then metalled road 24' with 12' to 16' metalling to Basawal (stage 2); thence disused, unmetalled cart road about 10', made by the British in 1880, to Jalalabad (stage 5); first 8 miles after Jalalabad, *i.e.*, to the Darunta bridge, metalled road, 24' as above; thence to Gogamand (stage 11), at the eastern entrance to the Tangi Gharu, unmetalled cart track; road through the Tangi Gharu at present (1912) only fit for camels;* last stage to Kabul good, unmetalled cart road 24' wide. This route follows the Kabul river throughout, with the exception of a section of 15 miles in the 10th and 11th stages, where the departure of the road from the river bank is due to the road making a short cut and following the chord of a loop made by the river, N. of Sarobi (stage 10).

The following *obstacles* are encountered :—

- (1) Darunta hill, opposite the gorge in stage 6; the ascent and descent of the Darunta spur of the Siah Koh was up to 1908 very difficult, the road was rough with very sharp turns and was quite impracticable for carts. It is doubtful whether this road has yet (1912) been materially improved.

* This road was formerly used by wheeled vehicles.

ROUTE No. 1—*contd.*

- (2) Bridge over the Maroda (Pari Dara) gorge in stage 10 at point where the road leaves the Kabul river; bridge was a weak, wooden bridge, easily destroyable, unsuited for regular passage of carts. It is probable that a new bridge would have to be built at this point.
- (3) Tangi Gharu gorge in stage 12; quite impassable for carts, *vide* description stage 12.

Route open throughout the year.

Camping-grounds.—For a division at all stages except—

- (i) at Kajurai, stage 6, no details;
- (ii) at Kats Muhammad Ali, stage 8, for 1 infantry brigade with proportion of divisional troops only.
- (iii) at Gogamand, stage 11, for 3 battalions only.

Water.—For a force of any size from the Kabul River throughout the route, with the exception of Sarobi (stage 10), where there is water sufficient for a division from the Tezin River.

Fuel.—Scanty throughout, except at Sarobi (stage 10), where it is reported to be plentiful, due probably to the fact that the heights flanking the Tezin and Maroda (Pari Dara) valleys are wooded. In the vicinity of both Jalalabad and Kabul fuel is very scarce.

Fodder.—Grass scarce throughout; *khasil* daily in March and April for horses of a cavalry brigade from stages 1 to 6; *bhusa* to an appreciable extent from stages 1 to 6, thereafter to Kabul in negligible quantities only; camel grazing scanty throughout, except at Sarobi (stage 10), where it is plentiful.

Supplies.—For troops could not be depended on to any appreciable extent except at Jalalabad (stage 5) and at Kabul, though supplementary supplies to a moderate extent are obtainable from stages 1 to 6, thenceforward in negligible quantities only to Kabul. At Jalalabad about 1,500 maunds of wheat and 2,500 maunds of barley with 100 maunds of *ata* would normally be available. At Kabul in 1879-80 it was calculated that a force of 10,000 men with followers and transport would find sufficient supplies of wheat, grain and fodder, also sheep, to meet its requirements for 12 months, but that during the second year serious supply difficulties would arise.*

* This is probably true at the present time (1912).

ROUTE No. 1—*contd.*

No of stage and total distance.	DETAILS.
1 m.	DAKKA FORT 7 m. Mule road to Loi Dakka 5 miles, thence metalled road 24'. (1,300').

Leaving Kam Dakka, direction S.W., the road enters the valley of the Kabul river, keeping along its right bank. The valley is completely commanded by the hills on the S. For the first mile the road runs along the level when it crosses a rocky spur about 400' high by a stiff and slippery ascent and descent. Then another fairly level and easy mile, after which the path crosses a second spur, which terminates at the water's edge. This part of the road is a mere ledge overhanging the river with a drop of about 20' to 30'. At 5 miles Loi Dakka (120 houses, Mohmands and Shinwaris) on the bank of the *Chinar nala*, an offshoot of the Kabul river. Winter camp for Kuchis and Ghilzais from Lalpura; garrison, 200 *khasidars* armed with Lee-Metford rifles. Valley at this point is about 1 mile wide, the hills on the left bank coming close down to the edge of the river, which here runs in several channels, between low-lying islands; width of bed about 400'. In the winter a bridge of boats connects Dakka with Lalpura. It consists of 16 boats, with 12' plank roadway. Mud-walled *sarai* on the right bank opposite this bridge. At Loi Dakka the road joins the main metalled road from Dakka to Jalalabad along which it continues to Basawal (stage 2). At 7 miles, Fort Dakka; fort in ruins; dimensions 500× by 400×, square trace, enclosed by mud walls 15' high, 4 round bastions on each face; contains several wells. Fort stands close to the right bank of the Kabul river, the town of Lalpura, the headquarters of the Mohmand tribe, being on the opposite bank 1,300× distant from the N.E. corner of the fort. The lower spurs of the hills on the NW. and S.W. entirely command interior of fort within 400 yards range.*

Camping-ground.—For a force of any size, W. of the fort.

*The British garrison at Dakka Fort towards the end of the 1878-80 campaign was usually—

1 section Royal Artillery
1 squadron native cavalry.

1 company British infantry.
1 battalion native infantry.

ROUTE No. 1—*contd.*

Water.—For a division or more from the Kabul river.

Fuel.—Wood procurable within a radius of 5 miles from the surrounding hills ; limited amount of scrub near camp.

Fodder.—No grass for horses. About 3,000 maunds *bhusa* obtainable.

Supplies.—It has been calculated that the annual production of wheat and barley from the Loi Dakka lands is about 5,000 maunds. The Lalpura fields probably yield twice that amount. Deducting requirements of inhabitants, it is computed that about 5,000 maunds unground wheat and barley would ordinarily be procurable in this vicinity. The inhabitants of Loi Dakka possess some 300 head of cattle and 700 sheep and goats.

At Dakka fort, Routes 1-A, 1-B and 1-C coming from the S. and connecting with the Bazar valley, join this route.

2	BASAWAL	.. 10 m. Metalled road 24'.
17 m.	(1,400')	

General direction W. veering to N.W. during last 2 miles.

Road level but stony ; it crosses Dakka plain for $\frac{3}{4}$ mile when it enters the Khurd Khaibar pass through which it runs for 1 mile emerging on a small, sandy plain. Pass narrow but has been widened to allow the metalled road, through it, to maintain its uniform width. A small fortified post 100^x to the S. of the road commands the summit of the pass. At $2\frac{1}{2}$ miles road emerges on to the Girdi plain and thence runs parallel once more with the Kabul river (which flows about $\frac{1}{2}$ mile to the N.) crossing several dry water-courses. From $3\frac{1}{4}$ to 4 miles the road runs through low sandstone hills which command it on either side ; it is also commanded by a large isolated hill further to the S. ; at $3\frac{3}{4}$ miles, *nala* 600^x broad is met with ; no banks to speak of, and dry in February 1911. At 4 miles Mohmand village of Girdi (700 houses) whose inhabitants possess about 1,500 head of cattle, 1,200 sheep, 100 buffaloes ; annual production about 90,000 maunds wheat and barley ; there is a fortified post at Girdi, garrison 200 *khawadars*.

From Girdi a camel road leads S.E. direct to Pinda Khak* in the Khaibar, distance 12 miles, *viâ* the Tarkai tangi, crossing

*A post half way between Landi Kotal and Loi Dakka.

ROUTE No. 1—*contd.*

the Chinar *nala* at 6 miles, and passing the Gurraki Obo spring at 8 miles. This road could easily be made into a cart road and is at present fit for all classes of transport animals (1912).

At 4½ miles, hills again approach the road which runs for ½ a mile over a col, commanded on both sides by low hills; a détour by the river bank, thus avoiding these hills, is possible in dry weather.

The road continues for 3 miles along the foot of the hills, a well-cultivated plain bounding the road on the N.; at 5½ miles a short cut to Hazarnao, a track across the plain is passed. At 7¾ miles the large straggling Mohmand village of Hazarnao (900 houses) divided into 2 portions by a *nala* 400' broad. Here there is a :—

Camping-ground.—For a division or more between the road and the river bank 1 mile distant.

Water.—For a force of any size from the Kabul river, and from several water channels near camp.

Fuel.—Very scarce.

Fodder.—Plenty of grass except in winter; *khasil* for horses of a cavalry brigade daily during March and April; camel grazing scanty.

Supplies.—It has been estimated that the inhabitants possess 2,500 head of cattle, 1,500 sheep and goats, and 200 buffaloes, and that the annual production of wheat and barley is 170,000 maunds.

From Hazarnao the road crosses stony bed of a dry stream and at 9 miles ascends to the Ningrahar plain, the hills to the S. falling back entirely. Cultivation continuous along bank of river from Hazarnao to Basawal, which is reached at 10 miles. Basawal consists of a collection of Mohmand villages comprising about 1,000 houses in all.

Camping-ground.—For a division between the main village and the river.

Water.—For a force of any size from the Kabul river, supplemented by a stream ½ mile E. of camp.

Fuel.—Very scanty.

Fodder and Supplies.—From Hazarnao, Basawal and Pesh Bulak, a town 4 miles S.W. of Basawal, unground wheat and barley, *bhusa*, sheep, goats and cattle sufficient for the

ROUTE No. 1—*contd.*

requirements of a division for at least 2 or 3 days could be collected with the assistance of the inhabitants; also *khasil* daily for the horses of a cavalry brigade during March and April.

NOTE.—At Basawal Route 1-D coming from the S.E. and connecting with the Bazar valley joins this route.

From Basawal Route 1-E alternative route to Jalalabad *viâ* Pesh Bulak and Kahi branches off S.W.

At Basawal Routes 1 and 2 are contiguous.

3	LACHIPUR ..	12 m.	Unmetalled cart road 10'.
29 m.	(1480').		At present (1912) the road is not passable by carts; it has been cut away in places by the river and requires repairing.

General direction N.W. Road crosses open, stony country for $1\frac{1}{2}$ miles when rocky hills are reached, which skirt the road on the N.; at 2 miles enter small pass, $\frac{1}{4}$ mile long and $350\times$ wide, no difficulty; at $2\frac{1}{4}$ miles site of brigade camp in 1880, water supply from 3 *karez*s which were reported dry in April 1905; at $2\frac{3}{4}$ miles, road again emerges from the hills on to a sandy plain which extends to Chardeh Tope, reached at 6 miles. At $4\frac{1}{4}$ miles, an unmetalled cart road leaves this route and runs due S. to Pesh Bulak, $5\frac{1}{2}$ miles distant; a similar road coming from Batikot (4 miles to the S.W.) in stage 3 of Route 2 crosses the road here and proceeds to Ambar Khana, $\frac{1}{2}$ mile distant on the river bank. At $6\frac{1}{2}$ miles, shrine and well of Pir Kâmal Baba; $100\times$ from the shrine there is a ruined Buddhist tope on a steep isolated hill $250'$ above the plain. At the foot of the hill, a small enclosure sufficient for a half squadron cavalry. Excellent site here for a camping-ground. Details as follows:—

Camping-ground.—For a division on the plain.

Water.—For a force of any size, from the Kabul river 1 mile distant.

Fuel.—Obtainable, but scarce.

Fodder.—Grass and camel grazing obtainable.

Supplies.—Nil; but as the valley on the opposite bank of the river is very fertile, unground wheat, barley, *bhusi* and *khasil* in spring to some considerable extent could certainly be collected there.

[ROUTE No. 1—*contd.*

At $7\frac{1}{2}$ miles *nala** $15\times$ broad, banks 20' high, bottom sandy, depth of water 6". At $7\frac{3}{4}$ miles walled village of Ghaziabad (500 houses), inhabitants chiefly weavers, possessing about 1,500 head of cattle, 1,200 sheep and goats, and 200 buffaloes; no cultivation.

At 8 miles, about $500\times$ to the E. of the road the walled Barakzai village of Chardeh (400 houses), elevation 1,822'. Annual production of wheat and barley 22,000 maunds. Inhabitants possess about 1,200 head of cattle, 1,500 sheep and 50 buffaloes; winter camp of Mandezai Kuchis with their camels. Garrison 400 *khasadars*. From here an unmetalled cart road running nearly due W. connects this route with Route 2, *via* Barikao, distance 8 miles. At 8 miles Tirahi Chardeh *nala*, breadth $100\times$, bottom sand and gravel, very little water in summer, easy gradients in and out of the *nala*. At 9 miles, ravine $30\times$ broad, banks 9 feet, gradients steep. At $9\frac{1}{4}$ miles Mashwani (60 houses); inhabitants possessed in 1904 about 300 head of cattle, 400 sheep. At 11 miles, *nala*, $80\times$ broad, practically dry, gradients gentle. At $11\frac{3}{4}$ miles, small *nala*, banks 15' high, usually about 1' of water. Descent by 2 steep cuttings, ascent by 1 steep and 1 gentle cutting. At $12\frac{1}{4}$ miles, rugged hills 200' to 600' high commence on the W. of the road, which runs along their base, passing here an abandoned fort. At $12\frac{1}{2}$ miles the Tajik village of Lachipur (140 houses, 1904), adjoining which is small post and fort built by us in the 2nd Afghan War for a half squadron of cavalry and a double company of infantry, but not now kept up by the Amir.

Camping-ground.—For a division between the fort and the river.

Water.—For a force of any size from the Kabul river, also from a good spring close to the fort.

Fuel.—No details.

Fodder.—No details *re* grass; *bhusa*, annual production 15,000 maunds; *khasil* in spring for horses of a cavalry brigade for 1 day.

Supplies.—From Lachipur as follows: annual production of wheat and barley, 13,500 maunds; inhabitants possess 500 head of cattle, 700 sheep and goats, and 120 buffaloes. Supplies also

*Believed to be bridged 1911.

ROUTE No. 1—*contd.*

from Chardeh $4\frac{3}{4}$ miles distant as described. Further, a report states that the "country is level and highly cultivated on both sides of the road" whence it can be safely assumed that unground wheat and barley to some considerable extent could be collected with the assistance of the inhabitants during a period of 2 or 3 days.

4 ALI BOGHAN 9 m. 6f. Disused, unmetalled cart
38 m. 6f. (1580'). road made by the British
in 1880 ; narrow in places
with awkward corners. At present only fit for camels, but could
be converted into a cart road without much difficulty.

The road follows the course of the river, direction N.W., for about $2\frac{1}{2}$ miles. At $2\frac{3}{4}$ miles it debouches on to the Girdi Kats plain; at $3\frac{1}{2}$ miles Girdi Kats (160 houses), elevation 1,620', inhabitants Mohmands and Dehgans; *sarai*, built in 1905, at W. end of village. The Dane Mission encamped here in 1904 and 1905. Here there is a:—

Camping-ground.—For a division on the stony plain S. of the village, but the camp is commanded by the semi-circle of hills to the S.

Water.—For a force of any size from the river. Also from a water channel running through the village.

Fuel.—Scanty.

Fodder—For about 5,000 animals for 1 day, according to a calculation made in 1880.

Supplies.—Annual production of wheat and barley about 28,000 maunds. The inhabitants possess about 500 head of cattle and 100 sheep. It is estimated that about 700 *jaribs* or *bighas*, *i.e.*, 420 acres, are under cultivation, the principal crops being wheat, barley, *jowar*, rice, cotton and pepper.

Immediately on leaving Girdi Kats village the road proceeds along the side of cliffs and continues so almost up to the 1879 encampment at Ali Boghan, where the hills, having already receded, cease entirely. The road on this section occasionally rises from 100' to 150' above the river level; in places it is very narrow, and two horses abreast move with difficulty. The road (April 1905) had been temporarily repaired by loose earth being dumped down, but it is naturally very rough, with steep slopes

ROUTE No. 1—*contd.*

and some very awkward corners. The easier gradients, made during 1879-80, have fallen into almost complete disrepair. This stretch of road, as it stands, would be a formidable obstacle for a large force with its wheeled transport and it includes a couple of bridges, the destruction of which would cause much delay. The river here can be crossed by a ford in the cold weather, or by a ferry 4 miles E. of the ford.

At Ali Boghan, a fort was built in 1879 to hold 150 infantry and 32 cavalry, on a fairly strong site commanding the surrounding country. The remains of the huts were still to be seen in 1905, but the walls of enclosure on the right were much breached. All could be easily repaired in a few days.

The valley in the vicinity of the river, and wherever irrigation is available, is richly cultivated.

Camping-ground.—For a division.

Water.—For a force of any size from the river.

Fuel.—Scanty.

Fodder.—A limited supply of grass procurable in the vicinity; considerable amount of *bhusa* could be collected within 24 hours; camel grazing scanty.

Supplies.—From the village itself, 160 head of cattle and 2,500 sheep, and as the valley here is highly cultivated, unground wheat and barley to some considerable extent could be collected within 1 or 2 days.

5	JALALABAD 7m. 4 f. Unmetalled cart road as before,
46m, 2 f.	(FORT SALE). but first 5 miles at present (1,850'). (1912) only fit for camels.

General direction N.W. At 1 mile cross *nala*, 250× wide, on far bank of which is the village of Ali Boghan (40 houses). Famous *zirat* of Mian Ali near village. Road very heavy and ground broken. At 2 miles an unmetalled cart road running due S. connects this route with Route 2 at Takia, 1 mile distant. The road continues by the river bank over grassy and firm ground, and at 5 miles approaches to within $\frac{1}{4}$ mile of Route 2 once more. From this point Route 1 follows the new road to the right, through the cultivation, while Route 2 keeps to the road to the left, outside the cultivation; this latter road is sandy. Just beyond this bifurcation of roads the

ROUTE No. 1—*contd.*

Kunar river joins the Kabul river from the N.E. At $7\frac{1}{2}$ miles Fort Sale, $\frac{1}{4}$ mile from the river, built by us in 1879 to accommodate 2,835 men and some 5,000 animals. The hornwork in 1905 was in ruins, but the barracks inside the fort are kept up by the Amir and would accommodate one battalion. Walled *sarai* built in 1905 outside eastern gate of the town.

Camping-ground.—For a division each on two sites S. and SW. of the fort; neither site has any shade, and would probably be unhealthy owing to being surrounded by irrigated lands. Shady camping-ground for 2,000 men near Amir's place at Wazirbagh 2 miles from the fort and $\frac{1}{2}$ mile from the western gate of the city, approached by a metalled road.

Water.—For a force of any size from the Kabul river.

Fuel.—There are no woods in the immediate vicinity, with the exception of some copses E. and W. of Jalalabad. Fuel is brought in from the neighbouring hills.

Fodder.—About 5,000 maunds *bhusa* could generally be depended on; *khasil* for the horses of a cavalry brigade daily during March and Apri

Supplies.—Approximate estimate of food supplies normally available in Jalalabad city are as follows :—

		Mds.		Mds.
<i>Ata</i>	..	.. 100	Wheat (unground)	1,500
<i>Ghi</i>	..	.. 25	Barley ..	2,500
			Rice ..	200
<i>Dal</i>	..	.. 20	Maize ..	600
Salt	..	.. 15	<i>Gur</i> ..	150

Jalalabad city consists of an irregular quadrilateral, perimeter 2,100×, enclosed by a mud wall. It is divided into 4 unequal parts by streets running from the 4 gates. The walls, about 16' high and 16" thick near the gates, are in good order but badly loopholed and would offer a poor defence against artillery. The town itself is a miserable place and is compared to a 3rd class walled village in the Punjab. The permanent population is 2,000, but in the winter this is largely increased by an influx of tribes from the hills to enjoy its milder climate. The Amir is anxious (1912) to have Jalalabad made into a fitting winter capital for his country, and officials

ROUTE No. 1—*contd.*

are being encouraged and assisted to build themselves suitable residences: The Amir has built himself a palace and garden $\frac{1}{2}$ mile W. of the town called the Wazirbagh, containing 2 large tanks. This would form an ideal headquarters for an army of occupation. A metalled, motor road running completely round Jalalabad with an approach to the Wazirbagh, was made in 1912, early in which year the first report that an arsenal existed was received. Jalalabad is one of the chief cantonments in Ningrahar. Garrison in 1911 consisted of—

2 regiments of infantry ('Awal' and 'Dwama' Regiments), each 600 strong.

1 regiment of cavalry (Ningrahara Risala) 400 strong.

1 field battery (Kabuli battery). Six M.L. guns. Also 300 *khasadors*. Practically the whole of this garrison proceed to Agam in the summer.

The river at Jalalabad runs in 2 channels of which the southern is the larger. In the winter of 1904-05, the water was 8' to 10' deep. Current moderate and several fords in the vicinity existed. In the same year there was a rope ferry, immediately opposite the Wazirbagh, across the river, with one large boat with a carrying capacity for 30 people in each channel. During the Afghan War 1878-80 there was a regular raft service between Jalalabad and Dakka, as a supplement to the land transport and during this campaign Jalalabad was always the headquarters of a strong brigade and occasionally of a division.

The following routes converge on, or radiate from, Jalalabad.

Route 1-E. alternative route from Basawal (stage 2) *viâ* Kahi.

Route 1-F. the Agam pass through Ningrahar.

Route 1-G. to Kats Laghman *viâ* the Jawara Miana pass.

Route 2 to Kabul *viâ* Gandamak and the Khurd Kabul defile,

6	KAJURAI	14 m.	Metalled road 24' to
60 m., 2 f.			Darunta bridge 8 miles, thence unmetalled cart track.

Leaving camp the road skirts the northern limits of the town and follows the right bank of the river through cultivated lands for 7 miles, passing at 4 miles the Tajik village of Baladeh.

ROUTE No. 1—*contd.*

At Baladeh the new motor road (Route 2) which has run due W. from the western gate of the town, $2\frac{1}{2}$ miles distant, meets this route but immediately branches off S.W., the present route running N.W. At 6 miles the Surkhab river is crossed $\frac{1}{4}$ mile before its confluence with the Kabul river by a bridge with wooden piers which was repaired in November 1911 to render it passable by the Amir's motors.* At 8 miles the Darunta gorge. Here the main Jalalabad—Tigri (Laghman) road crosses the Kabul river by a steel suspension bridge, *vide* Routes in Afghanistan N.E., Route 3. The present route leaves the river bank and ascends the Darunta spur of the Siah Koh by zigzags rising 350' in 720', mean gradient 1 in 6 with some short lengths 1 in 4; road 9' to 12' broad, extremely rough with very sharp turns; up to 1908 the ascent and descent of the Darunta spur was quite impracticable for carts. It is doubtful whether this portion has yet (1912) been materially improved and made passable for carts. From the exit of the Darunta gorge, the road enters upon the comparatively open plain of Kats Laghman which it traverses as far as Dargai Oba (Stage 9). During the last 4 miles of this stage the road is flanked on the N. by cultivated fields which extend to the river about a mile away, while to the S. it is bounded by the northern spurs of the Siah Koh range along the base of which the road runs. The section of the road from the exit of the Darunta gorge to Kats Muhammad Ali (Stage 8) is a fair cart road passable in all weather, as it runs to a great extent over beds of sand, rock and gravel.

At 14 miles Kajurai (200 houses) opposite the junction of the Kabul river with the Alingar, which rises in the Hindu Kush and flowing due S. joins the Kabul river at this point. The river is crossed by rafts, the main ferry being at the confluence of the two rivers.

Camping ground.—No details.

Water.—For a force of any size from the Kabul river.

Fuel.—Scanty.

Fodder.—*Khasil*, for the horses of at least a cavalry brigade daily during March and April. *Bhusa* to some considerable extent; camel grazing scanty.

*A 6 ton motor lorry was driven over this bridge in February 1912, but the engineer in charge stated there was absolutely no margin of safety.

ROUTE No. 1—*contd.*

Supplies.—The valley on the left bank of the Kabul river in this vicinity is highly cultivated, especially that portion of it lying between the Alishang and Kabul rivers which is studded with fortified villages. It is therefore reasonable to assume that unground wheat and barley, *bhusa* and probably sheep and goats to a very large extent could be collected on the opposite side and transported across by the existing rafts.

7 **KHAIRU KHEL** 6 m. Unmetalled cart road 10'.
66 m, 2 f.

General direction due W. The road now runs parallel to the river and is never more than half a mile away from it. The route traverses a barren desolate country on the right bank of the river, with decreasing cultivation also on the left. At 2 miles there is a ford across the river, opposite the village of Abdul Rahimzai (on left bank); at 4 miles Surka Khan (50 houses). At 6 miles Khairu Khel (300 houses, inhabitants Nasir Khel Ghilzais); village surrounded by cultivation. River here reported to be usually fordable but in August 1904, it was found to have an average depth of from 5' to 6'.

Camping ground.—For a division, on the plain W. of the village.

Water.—For a force of any size from the river; a canal conveys a good stream of water close to the camping ground.

Fuel.—Scanty.

Fodder.—*Khasil* in spring probably only for the horses of 1 cavalry regiment for 1 day; *bhusa*, annual production about 1,000 maunds.

Supplies.—Annual production about 700 to 800 maunds unground wheat.

Route 1-H, one of the connecting routes between Routes 1 and 2 joins this route here from Bawali (Route 2, stage 6).

8 **KATS MUHAMMAD ALI** .. 9 m. Unmetalled
75 m, 2 f. cart road 10'.

General direction due W. The road from Khairu Khel continues over a low, stony plateau between the foot of the Siah Koh range and the river, the road bearing slightly away from

ROUTE No. 1—*contd.*

the river. At 4 miles a collection of huts known as Girdi Kats on the banks of a stream of good water, a small tributary of the Kabul river. The road thence to Kar Kats (7 miles) is fairly good, running along the foot of some steep hills, infested by marauding bands of Ut Khel Ghilzais. The road passes through Kar Kats (100 houses with small square mud fort) passing under the fort walls. At $8\frac{1}{4}$ miles the Mamozai village of Urmun which consists of 2 hamlets; at 9 miles Kats Muhammad Ali (100 houses, inhabitants Jabar Khel Ghilzais and Tajiks).

Camping ground.—Cramped, probably only sufficient for 1 infantry brigade with proportion of divisional troops.

Water.—For a force of any size from the river which is usually fordable in many places here, though the actual position of the fords changes periodically.

Fuel.—Scanty.

Fodder.—No details; probably negligible except a little camel grazing.

Supplies.—Nothing appreciable.

From Kats Muhammad Ali, Route 1-J., a lateral communication between the 2 main Routes 1 and 2, leads S.W. *via* the Dabeli pass, to Kata Sang 1, Route 2, stage 10.

9 **DARGAI OBA** .. 9 m. Unmetalled cart road 10'.
84 m, 2 f.

General direction S.W. The road follows the right bank of the river throughout the stage. At mile 2 it enters a narrow valley up which it runs to the point where the Dargai stream is crossed by a wooden bridge, $\frac{1}{2}$ mile from Dargai Oba. Country throughout this march is confined, and movement of troops would be limited to the road.

Camping ground.—For a division on the river bank.

Water.—For a force of any size from the river.

Fuel.—Scanty.

Fodder.—
Supplies.— } Probably nothing appreciable.

10 **SAROBI** .. 13 m. Unmetalled cart road 10'.
97 m, 2 f.

ROUTE No. 1—*contd.*

Road continues along the river bank. At $4\frac{1}{2}$ miles cross by a wooden bridge the *Pari dara* which joins the Kabul river here from the W. The road immediately then deflects due W. leaving the river, and runs up the valley of the *Pari dara* to Maroda (9 miles).

The report on this section of the road in 1908 was as follows. "From the point at which the road leaves the Kabul river and rises on to the high cliffs on the left side of the valley of the *Pari dara*, the road becomes merely a camel track. It is too narrow for carts and is also in a very bad state of repair. To convert it into a cart road it would be necessary to cut for at least 3' into the hill side which is steep and usually composed of slate, but occasionally of granite. The length of this section is about $4\frac{1}{2}$ miles and the present width of the road from 5' to 8'. In wet weather trouble would be experienced by landslips."

At Maroda the metalled road (Route 2) is only 1 mile distant to the S.W. From Maroda the road turns N. sharply, and ascends the Sarobi hill, crosses the pass and runs down the far slopes of the hill to Sarobi fort on the Tezin river, $2\frac{1}{2}$ miles due S. of the group of villages known by that name, situated just above the junction of the Tezin and Kabul rivers. Government *sarai* at Sarobi.

Camping ground.—For a division N. and W. of the fort.

Water.—For a division from the Tezin stream and from springs near the fort.

Fuel.—Plentiful.

Fodder.—Camel grazing plentiful.

Supplies.—Nothing appreciable.

From Sarobi a camel track runs S.W. along the Tezin river to Seh Baba which is in stage 11 of Route 2.

11	GOGAMAND	8 m. 4 f.	Unmetalled cart track,
105 m, 6 f.			10'.

Road runs nearly W. up the Tezin stream for $1\frac{1}{2}$ miles, then turns N.W. across a low range of hills and rejoins the Kabul river at $4\frac{1}{2}$ miles at Umar Khel, opposite Doaba; thence S.W. along the right bank to Gogamand where the valley is fairly open.

Camping ground.—For 3 battalions.

ROUTE No. 1—*contd.*

Water.—For a division or more from the river; also from spring near camp.

Fuel.—A limited amount procurable.

Fodder.—Probably camel grazing for a few hundred camels.

Supplies.—Nothing appreciable.

12 CHARKI .. 15 m. Camel road.
120 m, 6 f.

Leaving Gogamand, the road at once enters the Tangi Gharu gorge through which the river flows in a narrow bed between cliffs on both sides. At 2 miles, the road runs over a gallery in the face of the cliffs, supported on wooden struts. At 4 miles it crosses to the left bank by first bridge, single span with cement abutments and iron supports, wooden roadway; at 5 miles, waterfall 50' to 60' is passed. At $6\frac{1}{4}$ miles the road returns to the right bank by second bridge of similar construction to the first, but with wooden supports. At $9\frac{1}{4}$ miles road passes the main waterfall (Mahipar) where the Kabul river leaps some 90' over a ledge and falls into a deep pool below. At mile $12\frac{1}{2}$, the road crosses again to the left bank by a wooden bridge, double span, masonry abutments, with latticed parapets 3' 6" high. Thence the gorge becomes less precipitous and the valley begins to open out.

The report on the road through the Tangi Gharu in 1908 runs as follows. "Although parts of the road are at present suitable for carts these are very limited in extent and the track at and for some miles above the waterfall (Mahipar) is so narrow and in places so steep that in order to convert it into a cart road it would be necessary to resort to extensive blasting. The road below the waterfall has almost completely fallen away. The road is very dangerous at this point and in a normal winter would be impassable on account of ice. Temporary repairs are periodically made here whenever the Amir travels by this route, but such repairs have no permanency."

At $14\frac{1}{2}$ miles Kala Amir Khan where there is a small post; at 15 miles one of the new Government *sarais* opposite the village of Charki (200 houses) which is on the far (right) bank. The bridge here was broken in 1908 but the river is usually fordable.

ROUTE No. 1—*contd.*

A camel track connects Charki with Butkhak, 6 miles distant due S., the penultimate stage of Route 2. At Charki there is:—

Camping ground.—For a division near the *saras*.

Water.—For a division or more from the river.

Fuel.—Procurable to a limited extent.

Fodder.—For 4,000 animals for 1 day can be collected; this calculation was made in 1880.

Supplies.—500 maunds unground wheat normally available.

13	KABUL	..	11 m, 4 f.	Good unmetalled cart
132 m. 2 f.	(5,895').			road 24'.

General direction W. The road follows the left bank of the river during this march through the rich Kabul valley; road excellent, raised in the centre with deep drainage ditches lined with willows on either side, this is liable, however, to become very heavy after snow or rain as there is no metalling, also the numerous culverts under the road are not in good order. Between Charkhi and the point where the Ut Khel villages commence (6 miles) the soil is water-logged and covered with saline efflorescence. Opposite here on the right bank of the river is the Amir's favourite snipe grounds with a shooting lodge at the head of the swamp close to the foot of the Siah Sang range. To the W. of the Ut Khel villages the road traverses fertile, irrigated land. At $8\frac{1}{4}$ miles the walled village of Kala Kasim. At $9\frac{1}{4}$ miles cross a wide road which leads from Sherpur over the river by the Pul-i-Farangi bridge and thence to the foot of the Siah Sang heights. About $\frac{1}{2}$ mile beyond these cross-roads, pass the cavalry barracks, large walled enclosure $400\times$ by $200\times$, in front of which are the elephant lines and almost adjoining is the Government distillery. Continuing for about $\frac{1}{2}$ a mile, reach a building occupying 2 faces of a square known as a hospital. Opposite on the right bank of the river is the leather factory. At 11 miles road is crossed by another which leads from Sherpur to Butkhak and which crosses the river by a good masonry bridge capable of taking all traffic. At $11\frac{1}{2}$ miles Kabul.

KABUL (5,895').—*Population*, 1,50,000. *Garrison*, 12 regiments cavalry, 12 battalions, 6 mountain, 12 field, and 2 heavy batteries. The city is situated on the right bank of the Kabul river, 6 miles above its junction with the Logar river. N.

ROUTE No. 1—*contd.*

of the city, on the left bank of the river stand the suburbs of Deh-i-Murad Khani, Andarabai, and Deh-i-Afghan, and beyond these lies the Afghan military cantonment of Sherpur, protected from the N. by the Bimaru Hill. On the W. the Kabul river flows through the gorge formed by the Asmai and Sher Darwaza Hills.

The city is $3\frac{1}{2}$ miles in circumference, and is no longer walled. One gate alone is standing, that on the eastern face, known as the Lahore Gate (Darwaza-i-Lahore).

The lower Bala Hisar has been completely dismantled. The upper Bala Hisar is now kept up as a grain store.

The bridges over the Kabul river at Kabul are 10 in number, *viz.*—

- (1) Pul-i-Deh-i-Mozang ; brick.
- (2) Workshops bridge ; footbridge.
- (3) At Bagh-i-Alam Ganj.
- (4) Pul-i-Shah-i-Dushamshira ; narrow brick bridge connecting city with Chandawal quarter ; fit for all arms in 1880.
- (5) New (trestle) bridge connecting Arg with Timur's tomb.
- (6) Pul-i-Khishti ; brick bridge connecting Deh-i-Murad Khani with the city ; fit for all arms in 1880.
- (7) Pul-i-Bagh-i-Ali Maidan, connecting Arg and Kotwali with transport lines and Idgah mosque.
- (8) Pul-i-Mahmud Khan ; stone bridge connecting Sherpur with Bala Hisar, fit for all arms in 1880.
- (9) New bridge connecting leather factory with hospital.
- (10) Pul-i-Kala-i-Muhammad Umar ; wooden bridge connecting S.E. portion of Sherpur cantonment with road to Butkhak, passing N. of Siah Sang spur. Fit for all arms in 1880.

All bridges except No. 2, are presumably fit for all arms (1912,)

The city is divided into quarters (*mahalla*) and streets (*kucha*). The latter are closed by small gates, which in time of war are built up. The place then becomes a collection of small fortresses rendering street fighting a troublesome task for the attackers.

There are over 30 streets in the city, the two principal being the Shor bazar and the Char Chata. The four principal

ROUTE No. 1—*contd.*

mosques are the Masjid-i-Safed, Madrasa, Masjid-i-Pul-i-Khishti, and Masjid-i-Bala Chauk. The burial places are all outside the town.

The Amir's fortified palace, or *Arg*, as it is locally called, is situated in well timbered grounds ($\frac{3}{4}$ mile by $\frac{1}{2}$ mile in area), N. of the city between Alam Ganj and Sherpur. The *Arg* grounds are partly enclosed by an iron garden railing and partly by a wall. There are 2 gateways—one facing Alam Ganj, the other facing E. Round the walls of the outer enclosure and facing inwards, are the various Government offices. The *Arg* itself is surrounded by a wet ditch; width at top, 60'; breadth of water, 30'. This moat is crossed by a solid brick bridge, not a drawbridge.

The *Arg* is a massive structure about 250× square, and some 50' from the bed of the moat; it has 3 bastions on each face, upon which guns are mounted. The walls are of immense thickness, and loopholed for rifle fire. At the top, built into the wall, and on the inner side, are store rooms, and the barracks of the Household troops which alone garrison the fortress.

The *Arg* is said to contain a vast armoury of weapons of all kinds, including some 300 pieces of artillery, many of them of modern design. 41 modern guns are said to be mounted on the bastions (1910).

In the outer enclosure of the *Arg* stands the public Durbar Hall, the inside measurements of which are, length 190', breadth 60' and height 30'. The *Arg* is kept in perfect repair.

The various workshops, including the Arsenal, are situated on the left bank of the Kabul river, right in the Deh-i-Mozang gorge. Not only is war material, including heavy ordnance, turned out in these factories, but also leather and other kinds of work (such as saddles, cartridge pouches and transport carts).

The change in the external aspect of Kabul since its evacuation by the British in 1880 is not very great. The place can now boast the *Arg* and some other good houses, including Prince Nasrulla Khan's (*Londoni koti*), which contrast favourably with the old mud buildings of former days. One or two broad roads, lined with trees, have been constructed, and the streets in the city are now (1912) to be all widened. Wheeled vehicles are on the increase, and are no longer an unusual sight about Kabul, yet the roads are still generally very bad.

ROUTE No. 1—*concl'd.*

The Sherpur cantonment is full of troops, and does not appear to have been much altered since the war, except that the parapets and portions of the wall are in bad repair.

The forts built by us during our occupation, on the hills round Kabul, appear to be carefully kept up and occupied by Afghan troops.

Camping ground.—Several, for a total of 4 or 5 divisions.

Water supply.—Is good and is derived from wells and also from an excellent canal (amongst several others) called the Jui Sher which is brought from the Paghman hills and joins the Kabul river near Chandawal.

Fuel.—During our occupation of Kabul in 1879-80, firewood was obtainable in good quantities, but it has since become very scarce in the neighbourhood of Kabul and now (1912) the bulk of the supply is imported from some considerable distance.

Fodder and Supplies.—General Badcock, Commissary General in Chief during the second Afghan war (1878-80) expressed an opinion that a force of 10,000 men with followers and transport arriving at Kabul at any period of the year would find supplies of wheat, grain and fodder for animals for at least 12 months and a supply of sheep sufficient to meet its requirements. The presence of a force in Kabul, however, during a second year would entail serious supply difficulties. The above figures give an idea of what the country can and did supply in 1879-80, when all food and grain supplies with the exception of *ghi*, rum and tea were obtained locally and not from India.

ROUTE NO. 1-A.

TSATSOBI TO DAKKA FORT.

14 miles.

1 stage.

Authority.—Reports on Bazar valley expeditions 1878-79; Routes on the North-West Frontier 1892; Tytler, 1878.

Epitome.

General description.—This is a continuation of Route 17, Routes South of the Kabul River and leads direct from the Bazar valley to Dakka. In 1878 General Tytler's column of 1,400

ROUTE No. 1-A—concl'd.

rifles and 80 sabres with mule transport, bivouacked in a grassy plain about 8 miles S. of Dakka and crossed over into the Bazar valley by this route. Nadir Shah is believed to have used this route instead of the Khaibar when he invaded India, and he is known to have largely used camel transport.

Road.—Camel road for 12 miles, thence metalled road 24', no *obstacles* are met with; route open throughout the year.

Camping-ground.—

Water.—

Fuel.—

Fodder.—

Supplies.—

} *Vide* Route 1, Stage 1.

No.
of stage
and
total dis-
tance.

DETAILS.

1	DAKKA FORT (1,300')	.. 14 m.	Camel track to 12 miles, thence metalled road 24' to end of stage.
14 m.			

Leaving Tsatsobi, which stands in a well cultivated and partially wooded valley, whence Route 16, *Routes South of the Kabul River*, branches off N.E. to Landi Kotal, the track enters Chinar *nala*,* usually dry, down which it runs in a north-westerly direction for 3 miles to Chinar or Chuner (50 houses). Thence it leaves the *nala* and proceeds N.E. At 8 miles cross Route 1-B. about $\frac{3}{4}$ mile before it enters the Tarkai *tangi*. Here track enters Chinar *nala* once more which it follows to 9 miles, when it finally leaves this *nala* and heads due N. for Loi Dakka (12 miles). At 11 miles cross Route 2, 1 mile E. of the Garhai Ghakke. From these cross-roads a camel road runs S.E. to Haft Chah 3 miles distant. At 12 miles Loi Dakka, thence by metalled road to Dakka fort, *vide* Route 1, Stage 1.

Camping ground.—

Water.—

Fuel.—

Fodder.—

Supplies.—

} *Vide* Route 1, Stage 1.

* No details except that it is described as a valley of average breadth.

ROUTE NO. 1-B.

PAINDA KHAK TO DAKKA FORT.

11 miles.

1 stage.

Authority.—Native information, 1912.

Epitome.

General description.—A route forming one of the lateral communications between the 2 main Routes 1 and 2, running from Painsda Khak in the first stage of the latter route to Dakka fort, stage 1 of the former route. *Road.*—Mule road throughout. The following *obstacles* are encountered:—

- (i) The Darband pass; ascent and descent steep, but quite feasible for laden mules.
- (ii) The Taraki *tangi* which it ascends for 2 miles; no difficulty.

Route open throughout the year.

Camping ground.—

Water.—

Fuel.—

Fodder.—

Supplies.—

} *Vide* Route 1, Stage 1.

No.
of stage
and
total dis-
tance.

DETAILS.

1	DAKKA FORT (1,300').	11 m. Mule road.
11 m.		

Painsda Khak, the starting point of this route is a small *khasadar* post in the Khaibar pass half way between Loi Dakka and Landi Kotal about $6\frac{1}{2}$ miles distant from each place. Leaving Painsda Khak the track proceeds S.W. At 1 mile cross the Darband pass; ascent and descent steep, but passable for mules. At $1\frac{1}{2}$ miles, Gurrakki Oba, a small spring of excellent water. Here track curves and proceeds N.W. At $2\frac{1}{2}$ miles Darband, few scattered houses about $\frac{1}{2}$ mile to the N.E. up the valley. At 4 miles cross the Chinar *nala*, usually dry; at 5 miles enter the Taraki *tangi*, an arrow defile, which extends for 2 miles; no difficulty. Emerging from the *tangi* at 7 miles the track joins Route 2 which it follows for 2 miles, when it

ROUTE No. 1-B—*concl'd.*

turns almost at right angles N.E. and runs to Dakka fort reached at 11 miles.

<i>Camping-ground.</i> —	} <i>Vide</i> Route 1, Stage 1.
<i>Water.</i> —	
<i>Fuel.</i> —	
<i>Fodder.</i> —	
<i>Supplies.</i> —	

ROUTE NO. 1-C.

CAMP THABAI TO DAKKA FORT.

1 stage. 18 miles.

Authority.—Bazar expedition, 1878.

Native surveyor, 1908.

Epitome.

General description.—This is a continuation of Route 18 *Routes South of the Kabul River*, and leads direct from the Bazar valley to Dakka. *Road.*—Mule road, said to be practicable for lightly laden camels. Traversed by General Tytler's column, accompanied by 2 mountain guns and mule transport in 1878, The track is commanded by precipitous wooded cliffs and in places by fortified homesteads. A difficult pass at mile 15 is the only *obstacle* encountered. Route open at all seasons of the year.

<i>Camping-ground.</i> —	} <i>Vide</i> Route 1, Stage 1.
<i>Water.</i> —	
<i>Fuel.</i> —	
<i>Fodder.</i> —	
<i>Supplies.</i> —	

No. of stage and total dis- tance.	DETAILS.	
1 <hr/> 18 m.	DAKKA FORT (1,300').	18 m. Mule road (said to be practicable also for camels).

ROUTE No. 1-C—*concl'd.*

General direction almost due N. Leaving Thabai the road follows an irrigation channel on the right bank of the *nala*, but the *nala* bed is also passable for mules. At 1 mile *khasadar* post of Dur Baba (18 men); post 40× by 30×, walls 18' high, 1' thick at the top; about 300 × higher up the hill side there is a similar but smaller post used by the garrison in the summer. Just beyond the post is the *ziarat*, round which several houses are scattered, belonging to the Shaikhs of the *ziarat* and some Mir Jan Khel Shinwaris. Here there is some cultivation. At 5 miles the villages of Sholghar or Shilghar, which are strongly fortified and defended by towers. From Sholghar a track runs N.W. to Pesh Bulak. Leaving Sholghar track leads across waterless, grassy plains to mile 14. At 9 miles Route 1-D from Tsatsobi to Basawal is crossed; there are several cave hamlets near the cross roads. At mile 15, a difficult pass with precipitous sides is encountered. At 16 miles, track turns sharply N.E. and leads direct for Dakka fort reached at 18 miles.

<i>Camping ground.</i> —	} <i>Vide</i> Route 1, Stage 1.
<i>Water.</i> —	
<i>Fuel.</i> —	
<i>Fodder.</i> —	
<i>Supplies.</i> —	

ROUTE NO. 1-D.

TSATSOBI TO BASAWAL.

16 miles.

1 stage.

Authority.—Native information, 1912.

Epitome.

General description.—This is also a continuation of route 17, *Routes South of the Kabul River*, and leads direct from the Bazar valley to Basawal *viâ* the Tsatsobi pass. It crosses at 7 miles Route 1-C. which leads from Bazar to Dakka, and a through route from Bazar to Basawal is thereby established. This route was followed by a column with mule transport under General Tytler in 1880. *Road.*—Mule track throughout, with no

ROUTE NO. 1-D—*concl'd.*

steep gradients. No river, pass or other *obstacle* encountered. Route open throughout the year.

<i>Camping-ground.</i> —	} Nothing appreciable except at Basawal, <i>vide</i> Route 1, stage 2.
<i>Water.</i> —	
<i>Fuel.</i> —	
<i>Fodder.</i> —	
<i>Supplies.</i> —	

No. of stage and total dis- tance.	DETAILS.
1 <hr/> 16 m.	BASAWAL (1,400'). 16 m. Mule track.

For the first 3 miles to Chinar the track followed is part of Route 1-A. At Chinar these routes bifurcate, Route 1-A. running N. to Dakka fort while this route continues N.W. to Basawal. At 7 miles several cave villages and here Route 1-C. from Bazar to Dakka *viâ* the Thibai pass is crossed. The track then continues along the southern and western slopes of Amarkot which overlooks the Sam Ghakhai pass from the S. At 16 miles Basawal.

<i>Camping-ground.</i> —	} <i>Vide</i> Route 1, Stage 2.
<i>Water.</i> —	
<i>Fuel.</i> —	
<i>Fodder.</i> —	
<i>Supplies.</i> —	

ROUTE NO. 1-E.

BASAWAL TO JALALABAD.

Viâ Kahi.

40 miles.

4 stages.

Authority.—Native information, 1912.

Epitome.

General description.—Alternative route through Ningrahar to the Basawal—Jalalabad section of the two main routes (Routes 1 and 2).

ROUTE No. 1-E—*contd.*

Road.—Good camel road, generally over uncultivated plains and hence easily convertible to a cart road as far as Roghani (stage 3). Thence for the last stage to Jalalabad it is reported (1912) that the road has been improved for carts, but not metalled; as far as Hada (10 miles) it is not clear, however, which of the following existing tracks have been improved for carts :—

(i) *Viâ* Kahan Kau and Sahibzada.

(ii) *Viâ* Kaltarghar and Harban.

Length of both tracks is 10 miles; the former has been followed as it appears to traverse the more populous country, should the latter road have been selected for improvement it is probable that it will be continued to Jaba (stage 2) *viâ* Shershai. In this case, stage 3 would either be at Shershai, 2 miles N.W. of Roghani or at Kaltarghar 4 miles due N. of Roghani, instead of at Roghani as described. The only *obstacles* that are met with are several *nalas* and streams, the more important being the Hisarak Rud at stage 3 and the Chapriar stream in the last stage, both of which are liable to cause temporary obstruction owing to ‘spates.’ Route open throughout the year.

Camping-grounds.—For a division at stage 1, and for 1 infantry brigade at least at remaining intermediate stages.

Water.—For a brigade at all stages, possibly for a division at Roghani (stage 3) from the Hisarak Rud.

Fuel.— } No details, probably nothing appreciable.
Fodder.— }

Supplies.—No details, but Kahi (stage 1) is the headquarters of an Afghan brigade and in the vicinity of the Maidanak villages. Jaba (stage 2) consists of a cluster of villages on both banks of the Kot *khwar* along whose banks to the southward are other neighbouring villages. Roghani (stage 3) is roughly in the centre of a group of villages which owe their existence to the Hisarak Rud. Hence it is reasonable to assume that unground wheat for the troops of at least 1 infantry brigade with proportion of divisional troops, and grain and *bhusa* for its transport animals for 2 or 3 days, would normally be available at each of these 3 intermediate stages of this route.

ROUTE No. 1-E.—*contd.*

No. of stage and total dis- tance.	DETAILS.
1 <hr/> 11 m.	KAHI .. 11 m. Camel road.

Leaving Basawal the road runs S.W. and crosses an open and mostly uncultivated plain. At 4 miles it crosses a broad *nala* formed by the confluence of 3 mountain streams; *nala* usually dry, stony bed, banks moderate gradient. At 4½ miles Pesh Bolak (Bulak), group of 7 Dehgan villages, largest group containing 400 houses; fortified post; *garrison*: 2 squadrons cavalry and two (in summer 3) companies infantry. During first Afghan war (1841) there was a detachment of *jazailchis* here under Captain Ferris. Leaving Pesh Bolak the road continues S.W. across an open and little cultivated plain. At 10 miles Deh Sarak (80 to 90 small hamlets). Here the Banda *khwar* joins the main *khwar* from the E. At 11 miles the Shinwari village of Kahi (150 houses), headquarters of the Kahi Brigade. Cantonment with small *bazaar* of 15 shops immediately to the W. of the junction of the Pekha and Adalkhelo *khwars*.

Garrison—(1912).---

2 battalions infantry, each 600 strong, armed with Martini-Henry rifles.

1 mountain battery, six muzzle-loading guns for mule transport, establishment 172.

1 cavalry regiment 400 strong.

Camping-ground.—No details but the ‘plains,’ referred to indicate the probability that a division at least could encamp in the vicinity.

Water.—For 1 infantry brigade at least from good perennial springs in the bed of the *nala*.

Fuel.— }
Fodder.— } No details, probably nothing appreciable.

Supplies.—The presence of the brigade indicates that supplies for this force, probably for 2 or 3 months at least, would normally be stored here.

ROUTE No. 1-E—*contd.*

2 **JABA** 7 m. Camel road.

18 m.

Road now runs N.W. At 4 miles Chilgazai (250 houses) on the right bank of *nala* of that name. A force of about 1,200 of all arms under General Tytler encamped here on the 22nd March 1879, returning from a punitive expedition against the Shinwaris of Maidanak, a group of villages 4 miles due S. of Chilgazai. At $6\frac{1}{2}$ miles cross the Kot *khwar*; no difficulty. Country throughout the stage is open and passable by all arms, but broken ground is met with N. and S. of Chilgazai. At 7 miles Jaba, a collection of Tirahi villages (largest containing about 100 houses) on both banks of the *khwar*.

Camping-ground.—For 1 infantry brigade at least.

Water.—For the above force and more from the Kot *khwar* in which the stream is perennial, though small in summer.

Fuel.—Scarce.

Fodder.—
Supplies.— } Nothing appreciable.

3 **ROGHANI** .. 7 m. Camel road.

25 m.

Leaving Jaba the road immediately bifurcates. The northern arm runs N.W. *via* Shershai, a collection of Dehgan hamlets passed at 6 miles and the Tajik village of Kaltaragha (200 houses) passed at 11 miles and rejoins the route at Hada in the last stage, 5 miles from Jalalabad. The southern arm, the present route, proceeds almost due W. across an uncultivated plain; at $6\frac{1}{2}$ miles the Hisarak Rud; easily fordable except after heavy rain when a temporary obstruction might occur. At 7 miles the camping-ground known as Roghani, bounded on the N. by the Banda villages (400 houses), on the W. by the Kadi villages, and on the S. and S.W. by the Roghani hamlets which gradually merge into those known as Hisarak, occupied by Mohmands and Dehgans.

Camping-ground.—For 1 infantry brigade at least, N.W. of village.

ROUTE No. 1-E—*concl'd.*

Water.—For the above force and more, from the Hisarak Rud and from *karez* near Banda.

Fuel.— }
Fodder.— } No details.

Supplies.—Fairly plentiful. It is probable that unground wheat sufficient for an infantry brigade also grain for its transport animals for 2 or 3 days at least could normally be collected from the surrounding villages.

At Roghani this route crosses Route 2-B running from the Kurram valley to Barikao (Route 2, stage 3).

A camel track runs N.W. from Roghani to Kaltarghar distance 4 miles.

4 **JALALABAD** .. 15 m. Unmetalled cart road,
——— (1,950').
40 m.

Leaving Roghani road runs N.W. At 4 miles Kahan or Kau (400 houses). At 7 miles small Tajik village of Sahibzada. At 8½ miles cross Chapriar stream, 300× broad, sandy bottom, small stream of good water, normally easily fordable everywhere but subject to spates.

At 10 miles the Mohmand village of Hada or Ada (400 houses); seat of considerable trade; notorious as the residence of the late Najamuddin (died 1902), celebrated 'Hada Mulla' persistently hostile to the British and cause of several disturbances. Now (1912) residence of his successor Mir Saiyid Jan Badshah.

From Hada road runs due N. to Jalalabad reached at 15 miles.

Camping ground.— }
Water.— }
Fuel.— } *Vide* Route 1.
Fodder.— }
Supplies.— }

ROUTE NO. 1-F.

CAMP (ON THE NORTHERN SIDE OF THE) AGAM
PASS TO JALALABAD.

38 miles.

3 stages.

Authority.—McBarnet, from native information, 1893.*Epitome.*

General description.—This route connects at the camping ground on the N. side of the Agam pass with Route 55, *Routes South of the Kabul River*, and together they form a through route from Parachinar to Jalalabad *via* the Agam pass* (11,766'), the most western and the lowest and easiest of all the passes over the Safed Koh. *Road.*—Practicable for mules throughout and from Agam to Jalalabad (19 miles) easily convertible for carts. No serious *obstacles* encountered along the route, which is open throughout the year (but *vide* footnote regarding the Agam pass).

Camping-grounds.—No details regarding the camps at the 2 intermediate stages.

Water.—For one infantry brigade at least at the intermediate stages, from the Chapriar stream.

Fuel.—Scarce throughout.

Fodder.—*Bhusa* to a limited extent at stage 2; probably fair camel grazing throughout.

Supplies.—Unground wheat and barley to a limited extent at stage 2.

No. of stage and total dis- tance.	DETAILS.
1	PACHIR .. 15 m. Mule road.
15 m.	

Leaving camp† at the northern approach to the Agam pass the road runs N.E. Very little is known of the road from the

* Blocked by snow for at least 6 months of the year.

† Exact position and details of this camp are not known.

ROUTE No. 1-F—*contd.*

crest of the pass to Agam 4 miles beyond (N. of) Pachir, but Colonel Low, who reached the summit from the Kurram side in 1879, considered that the road on the Jalalabad (N.) side was easier, and believed the route to be practicable for laden mules. Colonel Low also found traces of camel traffic. At 15 miles Pachir on a tributary of the Chapriar.

<i>Camping-ground.</i> —	} No details, but there would probably
<i>Water.</i> —	
<i>Fuel.</i> —	
<i>Fodder.</i> —	
<i>Supplies.</i> —	
	be water for 1 infantry brigade from
	the stream on which Pachir stands.

2 DAULATZAI 14 m. Mule road.

29 m.

General direction due N. to Agam (4 miles), thence N.E. to Daulatzai. Leaving Pachir the road leads through hilly country as far as Agam which stands at a bend of the Chapriar stream at the foot of the Safed Koh and consists of several well-built mud forts and numerous orchards; permanent garrison 400 *khasadars*. In summer the greater portion of the Jalalabad garrison moves to Agam where new barracks were built, 1910-11. The road now follows left bank of the Chapriar stream passing several fortified villages which generally lie on the right bank and which are surrounded by much cultivation.

At 12½ miles cross Route 2-A, opposite Kandibagh, stage 2 of that route. The Chapriar valley down which the road runs in this stage after leaving Agam, is flanked close to the river on the W. by high hills, but to the E. on the right bank of the river the valley is 1 to 2 miles wide and highly cultivated. At 14 miles, Daulatzai, group of fortified hamlets surrounded by cultivation; garrison 200 *khasadars*.

Camping-ground.—No details.

Water.—For 2 or 3 brigades at least from the Chapriar.

<i>Fuel.</i> —	} No details.
<i>Fodder.</i> —	

Supplies.—Supplementary stores of grain could evidently be counted on here as there is much cultivation from land irrigated by the Chapriar.

ROUTE NO. 1-F—*concl'd.*

A new road was reported as being under construction in February 1911 from Daulatzai along the Chapriar stream to Ali Boghan, direction N.E., distance about 12 miles.

3 JALALABAD .. 9 m. Camel road easily
 ——— (1,950') convertible for cart.
 38 m.

The Road now immediately leaves the Chapriar stream which Flows N.E. to the Kabul river and runs almost due N. and crosses a stony plain for 8 miles; for the last mile it leads through the cultivated fields S. of Jalalabad.

Camping-ground.—

Water.—

Fuel.—

Fodder.—

Supplies.—

} *Vide Route 1, Stage 5.*

ROUTE NO. 1-G.

JALALABAD TO KAJURAI (KATS LAGHMAN)
viâ THE JAWARA MINA PASS.

23 miles.

2 stages.

Authority.—2nd Afghan war records and Routes on the N.-W. Frontier, 1892.

Epitome.

General description.—An alternative route between Jalalabad and Kajurai, stages 5 and 6 of Route 1. *Road.*—Metalled road for the first 10 miles, then mule track to Jabar Khan (stage 1); thereafter little is known of the road till it joins Route 1 at about mile 21 except that the ascent of the Jawara Mina pass from the S. is impassable for laden animals. For the last

NOTE.—A column consisting of one mountain battery and one regiment of infantry followed this route on the 1st April 1879. Leaving Jalalabad at 9 p.m. they followed the Kabul road for 9 miles and then turned sharp to the north through irrigated land. The Surkhab was crossed with difficulty by a ford 1½ miles from the village of Tatangi Nawab Jabar Khan, and the village at the foot of the pass was reached soon after daybreak. In many places the road over the pass had to be made passable for the mules and guns, over ascents, and descents across large boulders and layers of rock, so that it was 10 a.m. when the crest was gained. Kachuni was reached at 1-15 p.m. The rear-guard did not arrive till 2 p.m. on the following day after extraordinary difficulties with the mules.

ROUTE No. 1-G—*contd.*

2 miles the road follows Route 1 to Kajurai (stage 6). The following *obstacles* are met with:—

(i) In the 1st stage the Surkhab river ; ford temporarily impassable after heavy rain.

(ii) In the 2nd stage the Jawara Mina pass ; impassable for laden mules.

Route open throughout the year.

Camping-grounds.—For 1 infantry brigade at Jabar Khan, the intermediate stage.

Water.—For the above force at Jabar Khan ; thereafter there is probably no water till the Kabul river is reached as country is described as desolate.

Fuel.—Scanty.

Fodder.—

Supplies.— } No details.

No.
of stage
and
total dis-
tance.

DETAILS.

1	JABAR KHAN ..	14 m. Metalled motor road 24' to Bagh (10 miles), thence mule road.
14 m.		

Road follows the motor road (Route 2) to Bagh (10 miles), passing Charbagh, Mata Bagh and Sultanpur at 4½, 7 and 9 miles respectively ; Sultanpur large village with several water mills and numerous orchards. At Bagh (10 miles) the track leaves the motor road and runs due W. striking the Surkhab river at 11½ miles ; river at this point is a fast, flowing stream normally 60' broad and 2½' deep ; quite impassable when swollen, the best ford is about ¾ mile E. of the Tajik village of Shamshapur. At 14 miles a few scattered hamlets known as Jabar Khan where there is a suitable but small site for a camp.

Camping-ground.—For 1 infantry brigade.

Water.—For the above force at least from a water channel from the Surkhab.

Fuel.—Scanty.

Fodder.—

Supplies.— } No details.

2	KAJURAI ..	9 m. To summit of the Jawara Mina pass (2 miles) impassable
23 m.		

ROUTE No. 1-G—*concl'd.*

for laden mules ; thence to the Kabul river, reached at 7 miles believed to be at least a mule track though not surveyed ; last 2 miles metalled road 24'.

Leaving Jabar Khan the road immediately ascends the Jawara Mina pass, by which the Siah Koh is here crossed by steep and difficult zigzags. It takes over 2 hours to reach the summit of the pass (4,800') ; rocks and boulders, combined with the seep and difficult road, make this pass impracticable for laden animals, though local bullocks and donkeys (without loads) are frequently driven over it.

From the Jawara Mina the Kabul river is about 5 miles distant, but this part of the route has not been surveyed. For the last 2 miles this route follows the river route (Route 1) to Kajurai (stage 6).

<i>Camping-ground.</i> —	} <i>Vide</i> Route 1, Stage 6.
<i>Water.</i> —	
<i>Fuel.</i> —	
<i>Fodder.</i> —	
<i>Supplies.</i> —	

ROUTE NO. 1-H.

BAWALI TO KHAIRO KHEL (KATS LAGH-MAN).

Viâ the Waragali pass.

18 miles.

2 stages.

Authority.—Stewart, 1880. Routes on the N.-W. Frontier, 1892.

Epitome.

General description.—One of the connecting routes between the 2 main Routes 1 and 2, running from stage 6 on the latter to stage 7 on the former route, *viâ* the Waragali pass. It is the easiest known route over the Siah Koh. *Road.*—Metalled road 24' to 4 miles, thence camel road throughout.

The following *obstacles* are encountered :—

- (i) The Surkhab river is forded in the first stage ; temporarily impassable after heavy rain.
- (ii) The Waragali pass (4,400') in the second stage ; descent difficult but frequently crossed by *kuchi* camels.

ROUTE No. 1-H—*contd.*

Route open throughout the year.

Camping-ground.—For 1 infantry brigade at the intermediate stage.

Water.—For the above force at that stage.

Fuel.—Scanty throughout.

Fodder.—Fair camel-grazing along the route.

Supplies.—Nothing appreciable at Kurram.

No. of stage and total distance.	DETAILS.			
1	KURRAM	..	11 m.	Metalled motor road 24 to Fatehabad 4 miles, thence camel road.
11 m.				

For the first four miles to Fatehabad, the road follows the main motor road (Route 2) to Kabul, running S.W., across a stony plain. From Fatehabad which is surrounded by much cultivation and many fruit trees, the track strikes due W. across an open plain. At 5 miles cross the Karasu *nala*, no difficulty, after which the road gradually veers N.W., and passes the hamlets of Baghwani and Barera, about $\frac{1}{2}$ mile E. of the road, at $6\frac{1}{2}$ and 7 miles respectively. At 8 miles reach the Surkhab $1\frac{3}{4}$ miles E. of the Ghilzai village of Kankrak, road for the last mile being much intersected by water courses. The Surkhab is forded here, banks moderately steep, average width of stream 50', normal depth 2'; ford good and easy, but quite impassable after rain. Immediately after crossing the river the ascent of one of the spurs of the Siah Koh commences; the ascent is at first steep and stony, but lightly laden animals could ascend with difficulty. At 10 miles the road becomes easy and level and follows the right bank of a stream in which there is an abundance of good water. At 11 miles Kurram, a Nasir Khel Ghilzai village near which there is some cultivation and a few mulberry trees.

Camping-ground.—Space limited; sufficient for 1 infantry brigade.

Water.—Probably for 1 infantry brigade from the stream referred to.

Fuel.—No details.

Fodder.— } No details, probably nothing appreciable.
Supplies.— }

ROUTE No. 1-H—*concl'd.*2 **KHAIRO KHEL** .. 7 m. Camel road.

18 m.

The ascent of the Waragali pass is at once commenced.

For nearly a mile the road continues easy; it then becomes more difficult for a short distance, and then again the ascent becomes gradual and easy. At 3 miles reach the *kotal*, (4,400'). The road beyond this has not been surveyed. The descent at first is gentle, but afterwards said to be bad and difficult; it runs down a *nala* flowing due N. There can, however, be no doubt that it is a practicable route for lightly laden animals, as *kuchi* camels frequently traverse it. It is in fact the easiest route across the Siah Koh range. This range consists chiefly of granite, and the hills on either side of the pass are steep and destitute of vegetation.

<i>Camping-ground.</i> —	}	<i>Vide</i> Route 1, Stage 7.
<i>Water.</i> —		
<i>Fuel.</i> —		
<i>Fodder.</i> —		
<i>Supplies.</i> —		

ROUTE NO. 1-J.

KATS MUHAMMAD ALI TO KATA SANG.

Viâ the Dabeli pass.

22½ miles.

2 stages.

Authority.—2nd Afghan war records, 1879.*Epitome.*

General description.—A lateral communication between the 2 main Routes 1 and 2. *Road.*—Camel road with the exception of 300× in the second stage when the track makes a sudden drop into the *Pari dara* defile, which only the strongest animals with light loads could negotiate. Track passes through mountainous country and is much commanded. The following *obstacles* are encountered :—

(i) Adrag Badrag pass in the first stage; no difficulty.

ROUTE No. 1-J *contd.*

(ii) Dabeli pass in the second stage ; ascent and descent easy with the exception of the final drop of 300^x into the *Pari dara* defile already referred to.

Route open throughout the year.

Water.—Sufficient for 1 or 2 infantry brigades at Dargai the intermediate stage.†

Fuel.—Wood plentiful, at Dargai,

Fodder.—Fair camel grazing throughout.

Supplies.—Nothing appreciable at Dargai.

No. of stage and total dis- tance.	DETAILS.	
1	DARGAI ..	11 m. Camel road.
11 m.		

Turning southwards from the river, the road crosses the long, flat-topped spurs which jut out from the base of the Siah Koh, and for $2\frac{1}{4}$ miles is rough and stony. It then ascends by a steep zigzag for about a mile and winds along the side of the hill above a deep precipitous valley to "Chhota" Dargai ($5\frac{1}{2}$ miles), a small piece of flat ground near a stream commanded on all sides by high barren hills. Zigzag is steep, but this part of the road is otherwise good.

From "Chhota" Dargai the road, here very good, follows the windings of the narrow valley gradually, but steadily ascending, until, at $8\frac{1}{2}$ miles, it reaches the top of the Adrag Badrag pass, estimated at about 4,200' high. From here forts, etc., in Kats Laghman are visible with glasses. In ascending the above-mentioned valley the road is entirely shut in on both sides between the two high ridges of barren rocks through which the valley runs. From the pass the road drops quickly down, and a mile beyond reaches a stream of good water in a wide bed, which the road follows until, at about 11 miles, it issues on the eastern end of the Dargai plain.

Throughout the gradients are easy with the exception of the zigzag in the 3rd mile which is rather steep. There would be no difficulty in tracing a good road for wheeled traffic.

Camping-ground.—Several suitable places for encamping ; probably room for 1 or 2 infantry brigades, possibly for a third.

ROUTE No. 1-J—*contd.*

Water.—Stream of good water in a wide bed; probably sufficient for the above force.

Fuel.—Wood plentiful close to camp.

Fodder.—Unlimited supply of coarse grass procurable, fair camel grazing.

Supplies.—Nil.

2 **KATA SANG** .. 11 m. 4 f. Camel road.

22 m, 4f.

From "Bara" (or Loi) Dargai the route follows the banks of a stream for about $3\frac{1}{2}$ miles, over easy gradients and open country, up to the entrance of a defile at a locality named Garband Kai. From Kats Muhammad Ali up to this point the road was much improved by sappers in 1880. From here there is an alternative track to Jagdalak, past the ruby mines.* About $1\frac{1}{2}$ miles up this defile the route branches off to the right and follows the bed of another stream until it reaches the Dabeli or Manzil pass, estimated at 5,600'. This part of the road is also remarkably good; and the gradual ascent which is made to this point the whole way from camp, is quite imperceptible. For the next two miles the road descends by an easy gradient, winding round the face of the hill above the *Pari dara* defile. It then makes a sudden drop for about 300 yards by a zigzag (very steep and difficult for laden animals) to the stream, which is reached at $7\frac{1}{2}$ miles from Dargai. Here Route 2 is met.

* Leaving Garband Kai this road runs due S. and enters a very rough and narrow gorge, impracticable for laden animals, then crosses some open ground and a low *kotal* and finally descends into a valley with a stream whose course it follows due W. for $2\frac{1}{2}$ miles to Jagdalak. Length of this track is 7 miles.

Holdich says that "the whole difficulty of the Laghman valley route (*i.e.*, a combination of this route with Routes 1 and 2) to Kabul from Jalalabad may be said to be distributed between its ends—the Darunta defile — and the Dabeli pass. Between these two points the road, as it exists in its unmade condition, offers very unusual facilities to a marching force, (1) from its contiguity to a large river, (2) its easy gradients, and (3) its comparative immunity from attack; a gain which would be much under-estimated by a mere comparison of the highest point passed on this route with the known height of the Jagdalak pass."

The *kuchis* frequently use it to avoid being plundered by the Khugianis. On this point Colonel Jenkins says: "I am of opinion that it can be made a very useful road, and could be guarded without difficulty if we held the Laghman valley by placing a Ghilzai post at Dargai. The principal objection to this route has always been considered the Lakhai pass over the hill above the Darunta gorge, which was not passable even for *kuchi* camels. This is now obviated by the new road, and the only remaining bad piece on the whole route is the last 300 yards or so of the descent to the *Pari dara* stream, which is very steep. Everywhere else the route is remarkably easy and good, and quite practicable for all arms, except wheeled artillery, so far as the road itself is concerned."

ROUTE No. 1-J—*concl'd.*

This final, sudden drop is the chief difficulty in the route, being too steep for any but the strongest animals. With time the descent could be made fit for wheels, but the present track cannot be improved and would have to be abandoned, a better track could easily be laid out to the left of the present one.

For the last mile and a half the road follows Route 2, to Kata Sang.

<i>Camping-ground.</i> —	}	<i>Vide</i> Route 2, Stage 10.
<i>Water.</i> —		
<i>Fuel.</i> —		
<i>Fodder.</i> —		
<i>Supplies.</i> —		

ROUTE NO. 2.

LANDI KOTAL TO KABUL.

Viâ Jalalabad and the Khurd Kabul pass.

159 $\frac{7}{8}$ miles.

14 stages.

Authority.—Malleon, 1905; native information, 1911-12.

Epitome.

General description.—The principal through route to Kabul; a cart-road throughout with the exception of stage 2, Loi Dakka to Basawal, where the cart-road is left and the track *viâ* the Sam Ghakhai pass followed. This departure is made in order to keep Routes 1 and 2 entirely separate and consequently the cart-road for this stage is allotted to Route 1. This route connects at Landi Kotal with *Routes South of the Kabul River*, Route 6, making a through connection between Kabul and Peshawar.

Road.—Stage 1 double cart-road to Landi Khana 3 $\frac{1}{2}$ miles, northern metalled with easy grades, southern unmetalled and steeper; thereafter one unmetalled cart road to end of stage. From stage 2 to Kabul metalled road 24', with 12' to 16' metalling (no soling). In the last stage, in the section Butkhak to Pul-i-Bagrami (4 $\frac{3}{4}$ miles) the road is double, the second road metalled 16'. The main metalled road 24' referred to is suitable for 2 streams of carts, maximum grade $\frac{1}{30}$. Curves negotiable by long chassis car (56 H.P.

ROUTE No. 2—*contd.*

Limousine motor car). Bridges used by 5-ton loads, and probably up to 7 tons per vehicle. One hundred men per stage could ease curves in 6 hours sufficiently for tractor with 2 trailers. Light railway could follow this alignment with little difficulty as far as Jalalabad and possibly Nimla (stage 7). Beyond this, progress would be slow. Amir constantly motors by this road between Kabul and Jalalabad (3 hours). Total distance, Kabul to Peshawar (189 miles), has been covered by car in 8 hours. Only difficulty experienced by motors (April 1911) was on disputed section Landi Khana-Tor Kham ($1\frac{1}{2}$ miles), where road has not been made. *Sarai*, bungalow, telephone office at each stage* between Jalalabad and Kabul.

The following *obstacles* are encountered:—

- (i) In the 2nd stage, the Sam Ghakhai pass (1,700'); very easy.
- (ii) In the 9th stage, the Jagdalak *kotal* (6,200'); maximum gradient $\frac{1}{20}$.
- (iii) In the 12th stage, the Haft Kandao (8,200'); no difficulty.
- (iv) In the 13th stage, the Khurd Kabul defile (7,030'); defile 6 miles long, flanked by high mountains, passage difficult in the face of opposition.

Route open throughout the year.

Camping grounds.—For 1 division at least at all stages except at:—

Jagdalak (stage 9)* .. Camp for 1 infantry brigade with proportion of divisional troops.

Kata Sang (stage 10)
Tezin river (stage 11)
Taraki (stage 12) } Camp for 2 infantry brigades with proportion of divisional troops.

Water.—For 1 division at all stages except at:—

Barikao (stage 3), water for 2 infantry brigades with proportion of divisional troops.

Jagdalak (stage 9), water for 2 or 3 infantry brigades with proportion of divisional troops.

Kata Sang (stage 10), water for 1 infantry brigade, with proportion of divisional troops.

* Between Jagdalak (Stage 9) and Butkhak (Stage 13) the Amir has only 2 intermediate stages, viz., at Barikao and Khak-i-Jabar.

ROUTE No. 2—*contd.*

Fuel.—Scanty throughout, except at Gandamak an intermediate camp between stages 7 and 8 and Kata Sang (stage 10) where wood to a considerable extent is procurable from the wooded slopes of the northern spurs of the Safed Koh, within 5 miles of camp.

Fodder.—*Khasil* at Basawal (stage 2), Jalalabad (stage 5) and Sarkhpul (stage 8) for horses of a cavalry brigade daily during March and April; *bhusa* in varying quantities at every stage, except between stages 9 to 12 where there is *nil.*—Camel grazing generally negligible; probably for about 500 camels as far W. as Gandamak, and for half that number between Gandamak and Kabul, except during winter when very little is obtainable.

Supplies.—For troops to any large extent cannot be reckoned on, except at Jalalabad and Kabul, though stores of unground wheat and barley in varying quantities are available at every stage, except between stages 9 to 12 where there is *nil.* Amir maintains 2 days' supplies for 5,000 men and their transport at each stage* between Kabul and Jalalabad. At Jalalabad *ata, ghi, dal, rice* and unground wheat, barley and maize for 1 division for about a week.

At Kabul supplies for 12,000 men and 10,000 animals for 1 year.

No. of stage and total dis- tance.	DETAILS.	
1 <hr style="width: 50px; margin: 0 auto;"/> 12 m.	LOI DAKKA (1,300').	12 m. Double cart road to Landi Khana 3½ miles; northern road metalled with easy grades, southern unmetalled and steeper; thence unmetalled cart road to end of stage.

At 1 mile pass water tanks supplied by pipes from springs at Tangi (1¼ miles S.W.). There are four tanks at this point and one at Tangi, the headworks of the water-supply. There

* Amir's stages are at Barikao and Khak-i-Jabar between Jagdalak and Butkhak.

ROUTE No. 2—*contd.*

are also four small tanks for watering animals ; dimensions as follows :—

1. Covered tank	..	..	..25 × 20 yards
2. Open	„	..	.. 50 × 16 „
3. Open	„	..	.. 33 × 14 „
4. Open	„	..	.. 32 × 21 „

Combined contents of above four tanks=761,350 gallons of water.

Tangi head work tank, 16 × 18 yards.

Animal watering tanks.

(1) 33 × 1 yard.	(3) 8 × 1 yard.
(2) 43 × 1 „	(4) 8 × 1 „

There is a small post of Khaibar Rifles to guard the tanks.

From the tanks road follows N. side of valley, rising generally to Michni *kandao** 2½ miles ; here to the S. of the road on a knoll about 50 × above the col is Michni *kandao* blockhouse, with a garrison of Khaibar Rifles.

Road now descends steeply to Landi Khana, passing at 3 miles the ruins of Fort Tytler on a spur to the S. At 3½ miles Landi Khana camping-ground (no houses) situated a few feet above the level of the stream, and accommodation for two battalions only. A little fuel obtainable from the hills in vicinity. Grass in small quantities ; water-supply over 100,000 gallons daily, and of good quality. Between Landi Khana and Tor Kham, the road though not properly made, can be followed by wheels without any difficulty, except when at 4 miles it crosses a stony ravine which is difficult for all wheeled traffic. Tor Kham, on the frontier, is reached at 5 miles.†

From Tor Kham to Dakka the road is good and broad ; surface stony or shaly (unmetalled). At 4½ miles stream disappears in the sand and there is no more water until Dakka is reached, with the exception of two wells, one at Painsda Khak post, and the other at Haft Chah post, both held by Afghan *khasadars*.

* *Kandao* is a col or saddle.

†The Amir disputes this boundary, which has never been demarcated, claiming to the head of the Landi Khana stream.

ROUTE No. 2—*contd.*

At $6\frac{3}{8}$ miles, Painsa Khak post,* held by *khasadars* from Dakka. The post itself in bad repair and commanded at short range from hills to the N.W. Paper strength of garrison is 100, but there are seldom more than a dozen men on duty in peace-time.

From Painsa Khak, Route 1-B., runs N.W., to Dakka fort.

At $8\frac{1}{2}$ miles Haft Chah, a small stone fort for 50 men. It is well sited on top of a conical hill in centre of valley, but in 1905 appeared to be almost in ruins. Small supply of water, sufficient for this garrison, from a spring in a *nala* to the E. about $1,000\times$ from the post, and not covered by it; an alternative supply is from a spring $1\frac{1}{2}$ miles to the N.E.

From Haft Chah a camel track leads over the Gara ridge due N. to Kam Dakka; there is a good spring of water on the Kam Dakka side of this ridge near its foot; troops using this route should take a guide; it may easily be mistaken, as once happened in 1879.

At 9 miles the hills contract again; the road runs through a gap in them, about $100\times$ wide, and at $9\frac{1}{2}$ emerges on a wide, stony plain, across which it runs for 3 miles. Two small isolated hills a mile to left front here offer a commanding position.

At $12\frac{1}{2}$ miles village of Loi Dakka (100 houses) on the banks of the Chinar *nala*, an offshoot of the Kabul river, distant about 400 yards; it is partly surrounded by a low and half ruined mud wall. A winter camp for *kuchis*. Here the hills approach close to the left of the road.

Camping ground.—For a division S. of the village on an open plain 2 miles long by 1 mile wide, bounded on the S.E. and W. by hills, and on the N. by the Kabul river. The Chinar *nala*, running N. and S., roughly bisects this plain.

* This post was the scene of frequent raids during the last Afghan War, the raiders using an easy track leading through a gap in the higher hills to the village of Darband and thence over an open plain to Pesh Bulak in Ningrahar. S. of Darband lies the Sisobi (Tsatsobi) pass, leading into the Bazar valley (Route 3).

In the spring of 1879 convoys used to be fired on almost daily when passing Painsa Khak. At last a careful reconnaissance showed the value of this hill-top. A company of Gurkhas was posted there during the day, with the result that all annoyance ceased. There is a small spring called Gurrakki Oba, about half-way up the Darband pass, on the W. side. This is often the only water procurable between Landi Khana and Haft Chah, and though bad and scanty, was of value to the Gurkhas and to the robbers, who, until the supply was secured by the Gurkhas, made it their head-quarters. There is a disused irrigation channel on the left bank of the *nala*, which might be used to bring water down for some considerable distance.

ROUTE No. 2—*contd.*

Water.—For a force of any size from the Kabul river, with a supplementary supply in camp itself from the Chinar, a perennial stream of good water.

Fuel.—Nothing appreciable.

Fodder.—Annual production 7,500 maunds *bhusa*; camel grazing negligible.

Supplies.—Inhabitants, who are Mohmands and Shinwaris, possess 300 head of cattle and 700 sheep and goats. Annual production of wheat and barley averages 5,000 maunds.

2	BASAWAL ..	13 m. 4 f.	Camel road easily convertible to a cart-road.
-----	(1400').		
25 m. 4 f.			

Leaving camp road runs S.W. At 1 mile, 4 other tracks join in, coming from Dakka, Kam Dakka, Chinar and Dwa Chashma. Road follows the last named and runs over a low watershed, descending by an easy gradient into the bed of the Taraki *tangi* at 3 miles. Track then turns N.W. down the *tangi*, the bottom of which is sandy, about 5 yards wide, slopes on both sides gentle. At 4½ miles the track from Dakka to the Sam Ghakhai pass crosses the Taraki *nala*; road now follows this track which runs S.W. and is suitable for a double line of camels. At 8 miles cross the easy Sam Ghakhai pass (1,700') and bend round the base of the hill N. of the pass to Basawal reached at 14 miles.

<i>Camping ground.</i> —	}	<i>Vide</i> Route 1, stage 2.
<i>Water.</i> —		
<i>Fuel.</i> —		
<i>Fodder.</i> —		
<i>Supplies.</i> —)	

At Basawal Routes 1 and 2 are contiguous.

From Basawal Route 2-A. runs roughly W. to Safed Sang in stage 8, forming an important alternative to this section of the present route.

3	BARIKAO ..	10 m.	Road is unmetalled and runs over a sandy desert; it is passable for motor traffic after rain, when the sand binds and forms a firm surface, but the sand soon disintegrates and the road is then impassable without the help of elephants.

35 m. 4 f.			

ROUTE No. 2—*contd.*

The road now traverses the Batikot plain which is little more than a stony desert, but in winter affords good pasturage and the Ghilzais bring large numbers of camels and sheep to graze here during the winter, returning to the hills in the spring. In summer this plain is swept by a burning hot wind.

At 6 miles Batikot (1850', 800 houses with several mud forts), inhabitants Tirahis, famed for the *ziarat* of Akhund Musa.—Here there is—

Camping ground.—For a division or more on plain N. of village.

Water.—For 2 infantry brigades from a perennial stream $\frac{1}{4}$ mile W. of the village.

Fuel.—Obtainable in small quantities ; chiefly low scrub on the plain.

Fodder.—For about 8,000 animals for one day.

Supplies.—About 1,000 maunds unground grain normally available.

From Batikot Route 2-A. to Safed Sang *via* Kandibagh (Chapriar stream) branches off S.W.

At 9 miles road crosses the Kot *khwar*, wide ravine with precipitous banks which have been ramped and now made passable for motors. At $9\frac{3}{4}$ miles cross the Hisarak Rud, perennial stream of good water ; doubtful as to whether it has been bridged for motors. At 10 miles camp Barikao, $1\frac{1}{2}$ miles S. of village of that name ; inhabitants Dehgans and Mohmands. 1 squadron cavalry and 1 company infantry quartered here ; winter encampment for Hasan Khel nomads.

Camping ground.—For a division at least on the plain S. of the village.

Water.—For 2 infantry brigades from the Hisarak stream.

Fuel.—Scanty.

Fodder.—A little grass obtainable in the summer ; about 7,500 maunds *bhusa* normally available from Chardeh ($2\frac{1}{2}$ miles N.E.) ; camel grazing negligible.

Supplies.—The following is the *data* regarding Batikot and Chardeh, 4 and $2\frac{1}{2}$ miles distant respectively.

Batikot 1,000 maunds unground grain normally available.

Chardeh. Annual production 22,000 maunds wheat and barley. Inhabitants possess about 1,200 head of cattle, 1,500 sheep and 50 buffaloes.

ROUTE No. 2—*contd.*

At Barikao, Routes 2-B and 2-C., which lead to the Kurram valley, come in from the S.

4 **CHAPRIAR** 11 m. Metalled road 24'.
 RIVER.

—————
 46 m, 4 f.

Road leads nearly due W. for 5 miles across a stony plain. At 2 miles a low range of hills is met which runs parallel to the road about $\frac{1}{2}$ mile to the S. and continues to mile $4\frac{1}{2}$.

At 5 miles enter the Choragali pass, from the eastern entrance of which an unmetalled cart-road runs due E. to Chardeh, distant 8 miles connecting this route with Route 1. The road through the pass follows the bed of the stream but is completely commanded on both sides by low, rounded hills for half a mile. At $6\frac{1}{2}$ miles cross low *kotal* Sask Diwal or Surkh Diwal from the northern base of which a camel road branches off N.E. to Girdi Kats 6 miles distant, forming another connection with Route 1. The road now follows the course of a *nala* draining into the Kabul river at Ali Boghan, general direction N.W. At $10\frac{1}{2}$ miles road leaves the *nala* and at 11 miles reaches the camping ground on the right bank of the Chapriar stream, N. of and adjoining Sarai village. The camp is situated astride of the motor road, on high, commanding ground and would be easily defensible; it is commanded, however, by a hill $1400\times$ to the S.E.

Camping ground.—For a division; camping space N. of the road 1400×1400 paces which can be extended, if necessary, to the Kabul river. Camp S. of the road on wheat fields with shady mulberry trees dotted about.

Water.—For a division; one source of supply from a channel 1' deep by $2\frac{1}{2}$ ' broad, current $2\frac{1}{2}$ miles per hour, yielding 206,230 gallons per hour; this water channel issues from a *karez* S. of Sarai village. The second source of supply is the Chapriar stream which is perennial, but as the river bed here is a marsh it is difficult to estimate the quality and pumps would be necessary to draw the water without stirring up the mud. The third source of supply would be the Kabul river itself, 1 mile distant to the N., where all animals could be watered.

Fuel.—Scanty.

ROUTE No. 2—*contd.*

Fodder.— } A limited amount of unground wheat and barley
Supplies.— } and an equivalent amount of *bhusa* would be
 normally available ; camel grazing negligible.

5 JALALABAD 5 m. 5 f. Metalled motor road
 (FORT SALE) 24'.
 (1950'). *t.o.*
 52 m, 1 f.

Leaving camp, road immediately crosses Chapriar stream, bed of stream 300× broad, sandy bottom, with small stream of good water. A masonry bridge was being built at this point near village of Sara Chah Ali Khan in February 1911. Remains of old fort on the E. bank.

From here road continues between sandy hillocks along what was formerly the right bank of the river. At 2 miles cross *nala* (dry except after rain). Between 3 and 3¼ miles the road forks. Route 1 follows the new road, to the right, through the cultivation, while this route keeps the road to the left outside the cultivation.

At 5½ miles. Fort Sale.

Camping ground.—

Water.—

Fuel.—

Fodder.—

Supplies.—

} *Vide* Route 1, stage 5.

6 BAWALI 12 m. 6 f. Metalled motor road
 (ROZABAD). 24'.
 (2,300'). *t.o.*
 64 m, 7 f.

Leaving the new fort, the road runs for 3 miles across a level, sandy plain uncultivated (with a low range of rounded hills running parallel to it on the S., at a distance of about a mile). At 1¼ miles pass city of Jalalabad.

Near the western gate, the old road branches off S.W., the new metalled road following the Tangi Gharu route for 2½ miles due W.

At 4 miles the new road turns off S.W. leaving the Tangi Garu route. At 4½ miles Charbagh, the home of the Mian Sahib (*mulla*). Thence across a level cultivated plain to Sultanpur reached at 9 miles, where there is a *sarai*.

From 6½ to 11 miles the surrounding country continues of the same character, *viz.*, a low range of stony hills at ½ mile distance

ROUTE No. 2—*contd.*

to the S., and to the N., the stream, and beyond it a highly cultivated plain much cut up by irrigation channels, and forming, therefore, trappy and difficult ground for troops other than infantry. The whole of the stretch of country along the Surkhab, from below Nimla right down to the Kabul river, is studded with villages and gardens (Charbagh, Matabagh, Sultanpur and others). At 11 miles the hills on the left fall back along the Gujak *nala*, which is usually dry, and the road enters on a wide stony plain, stretching for several miles.

At $12\frac{3}{4}$ miles the camping ground, near which there is a *sarai* of the usual pattern, and a bungalow.

Camping ground.—For a division at least.

Water.—For a division or more from the Surkhab $\frac{3}{4}$ mile N.W. of camp; also from several irrigation channels.

Fuel.—Obtainable to a limited extent from short scrub on the plain.

Fodder.—About 3,000 maunds *bhusa* normally available; camel grazing negligible.

Supplies.—About 2,000 maunds unground grain generally procurable. Bawali is reported to be a good foraging centre.

The Amir's powder factory at Tatang bears $317\frac{1}{2}^{\circ}$ from Bawali *sarai* distant 3 miles.

From Bawali Route 1-H, a camel track, runs N.W. to Kats Laghman, connecting this stage with Khairu Khel, stage 7 of Route 1.

7	NIMLA	..	12 m, 6 f.	Metalled motor road
—————	(3,550') t. o.			24'.
77 m. 5 f.				

Road traverses a stony plain in a S.W. direction. There is a steady rise throughout. Low hills to right of road. At 4 miles the road runs through Fatehabad, a village of some 30 houses which gave trouble during the war. There is much cultivation, irrigated by numerous channels, in the vicinity and some fine old mulberry and apricot trees. A small stream crosses the road on both sides of the village. From here Route 1-H connects with the river road along the Kats Laghman *via* the Waragali pass. At $4\frac{3}{4}$ miles the Kuja *nala*, a broad stony bed of a stream, which loses itself in the Surkhab, is crossed by a bridge $21 \times$

ROUTE No. 2—*contd.*

long, 12' wide. Fort Battye is passed at 7 miles, now in ruins, but the stone walls are still standing and the post could easily be repaired.*

Leaving Fort Battye, two small *nalas* are crossed by wooden bridges, and at 9 miles the Shadai Rud by a similar bridge. At 10½ miles reach the Nimla *nala*, which was here crossed by the old road. The new road, however, leads up the right bank to Nimla village (200 houses), reached at 12½ miles. The Nimla valley is highly cultivated and dotted with numerous walled villages.

Camping ground.—For a division on the Nimla plateau near Nimla *bagh*.

Water.—For a division from the Nimla *nala*, and numerous irrigation channels and streams, also plentiful supply of good water, in the *bagh*.

Fuel.—A limited amount procurable from the neighbouring hills within 2 miles of camp.

Fodder.—For 4,000 animals for 1 day can be collected; little camel grazing.

Supplies.—700 *jaribs* of land under cultivation, yielding an average annual produce of 44,500 *manads* of wheat and other grain including rice and pulse. The Khugiani inhabitants of the villages possess some 900 head of cattle and 500 sheep and goats. The Nimla *bagh* between the village and the *sarai* is a fine old garden, said to have been made by Shah Jehan, filled with old plane and cypress trees; garden 400× by 375× surrounded by a high wall. Water enters top of garden and flows throughout its length in a succession of 4 masonry reservoirs 10' wide with a fall of 6' between each.

8	SURKHPUL	12 m. 3 f.	Metalled motor road
_____	<i>t. o.</i>		24'.
90 m. 3 f.			From Nimla the road

* In 1879 the camping-ground, unlimited, lay to the E. of the fort on a stony *maidan* without shade of any kind. The water-supply was then a small channel, sufficient for drinking for a moderate force, but not enough for bathing purposes, or for horses, transport, etc., of even a small column, and the supply could be cut off at Argnach, 3 miles to the S. But the extension of cultivation has been effected by the use of fresh water channels and some of these may be available for watering purposes (1911). There was water also in the large *nalas* W. of the fort but easily fouled. The fort was badly situated for defence, being commanded by hills on the W. and E. at about 400 yards distance or less. The normal garrison during the war was 100 rifles, 60 sabres. Signalling communication can be kept up with Gandamak and Rozabad.

ROUTE No. 2—*contd.*

strikes due W. crossing two branches of the Nimla *nala* and at $1\frac{1}{2}$ miles zigzags up to a *kotal*. Some of the curves are sharp, and for motor transport, would require trimming. From *kotal* the road rises gradually to Safed Sang ($3\frac{1}{2}$ miles). Height 4,500', or 990' feet above Nimla.

At $4\frac{1}{2}$ miles the old post at Safed Sang now in ruins; no buildings remain, but the walls are in fair repair. It is situated above the right bank of the Marki Khel river. Camping-ground unlimited. Water-supply from the river good and ample; also from a spring near the fort and above the stream. Safed Sang commands the whole country on three sides, the remaining side being the one towards Fatehabad. Safed Sang was the site selected for the encampment of the British force in both advances to Gandamak in 1879.

Here Route 2-A, from Basawal comes in.

The road now descends by an easy gradient to the Marki Khel stream and crosses it by a new bridge, which has taken the place of the old rickety structure crossed by the Dane Mission in 1904. The river, which is a mere trickling stream in the cold weather, increases considerably in the summer, when it is still fordable but liable to sudden floods from melting snow. Water is of good quality.

At 6 miles cross the junction of the Chashi and Nian Rud streams by a girder bridge.

Hence a steady ascent to Gandamak, reached at $6\frac{1}{2}$ miles, with long stretches of cultivation up to the base of the Safed Koh (September). Gandamak (4,150', 200 houses) lies on both banks of the Gandamak stream (Nian Rud). Inhabitants Sherzad Khugianis. Here there is a:—

Camping ground.—For a division or even two, W. of the village on a plain 5 miles in length lying between the Siah and Safed Kohs. Site of the old British camp during first Afghan War.

Water.—For a division from the Nian and Chashi Ruds which unite $300\times$ N. of the road and from the Khatai and Marki Khel streams, if necessary, about 1 mile W. and E. respectively of camp.

Fuel.—For a division for 1 month at least, possibly more, from the pine forests on the N. slopes of the Safed Koh, 5 miles distant; also *buta* from its lower slopes.

ROUTE No. 2—*contd.*

Fodder.—*Khasil* in March and April daily for the horses of a cavalry brigade; *bhusa* for 5,000 animals for 1 day normally available; good camel grazing on the plain.

Supplies.—Annual production wheat and barley 34,000 maunds. About 300 head of cattle in the village. Fine fruit gardens and mulberry trees near the village.

From Gandamak Route 2-D, alternative route to Taraki (stage 12), branches off due W.

At 8 miles cross the Khatai stream and at 8½ miles a conical hill called the 44th hill.*

At 10½ miles cross the Bulola stream by a bridge. There is a good and spacious camping-ground here. For the next 1½ miles there is a gradual ascent, and thence to the Surkhab river the descent is gradual and easy. The Surkhab (or red river), which is reached at 12 miles, is crossed by an old masonry bridge, 170× long by 6× broad, which was repaired during the war. (With approaches the actual span is about 20× and height above waterway 30'.) Here is Surkhpul where the Durand Mission camped in 1893. Camp for a brigade and proportion of divisional troops in bed and on bank of river. The ground is flat and sometimes under rice cultivation; at certain times of the year, therefore, it would be a swamp. In December 1904 it had dried and was fit for use. Position bad, surrounded by hills. In April 1905 these fields were under water, but there is a limited amount of camping space on the right bank of the Surkhab, below the bridge and close under the hills. This lies high and would always be dry. Water-supply from river.

River here is a fine stream 60' broad in September and running about 3 miles an hour; in December it is 40' wide and from 18" to 2' deep at the permanent ford, 50 yards below the bridge. In April when swollen by melting snow, 2½ to 3' deep.

Camping ground.—For a division with some difficulty; see above.

* Known locally as *Feringi Sarai*, celebrated as being the place where the handful of the 44th (now Essex) Regiment under Captain T. A. Souter, the remnant of our Army in the 1st Afghan War, made their last stand and were destroyed. The colours of the Regiment were however saved by this officer, who was severely wounded and left for dead. A cairn of white stones has been erected on the summit of this hill to mark the spot.

ROUTE No. 2—*contd.*

Water.—For a division or more from the Surkhab.

Fuel.—Scanty.

Fodder.—About 1,500 maunds *bhusa* available; camel grazing negligible.

Supplies.—About 1,500 maunds unground grain normally available.

9	JAGDALAK	12 m. 4 f.	Metalled motor road
	(5,420') <i>t.o.</i>		24.'

102 m. 7 f. From Surkhrul the road leads N.W., and passes the old British post at Lukhai at 1½ miles. At 3 miles the Pezwan *kotal* (5,180') is crossed; no difficulty. Pezwan *kotal* is a commanding position and a valuable intermediate signalling station; direct communication by heliograph can be established with Gandamak, Jagdalak *kotal*, or any posts that might be chosen on the Karkacha range.

At 4½ miles the road turns due W. up the valley of the Tsinkai *khwar* which it follows to the Jagdalak pass.

The Tsinkai *khwar* is a stony water-course with very little water in December, but a good deal in many small channels in April, owing to melting snow.

The road follows the left bank of this *nala*, occasionally crossing low ridges to cut off angles.

Low hills sparsely sprinkled with stunted ilex bushes stretch away to the S., and somewhat similar ground lies to the N.* merging eventually in the long gradual slopes which extend up to the Siah Koh ridge. At 8 miles the remains of a small fort named Koni *c auki*. Approaching the long low ridges which run nearly parallel to the Karkacha range and at right angles to the course hitherto taken, the road bends sharply to the N. and zigzags up to the crest of the Jagdalak *kotal* on which are the ruins of an ancient mud fort. The Siah Koh rises abruptly on the right, and on its slopes are several lines of walls, one behind another, evidently built for the defence of the pass. They would, however, be quite untenable as they could be turned with the greatest ease. The ridge 6,200' is reached at 11 miles. Here there is a small fort (now in ruins).

* As at present aligned (1911) number of bends in road reported to be excessive and unnecessary. Working party would be required to re-align road for motor transport at this point.

ROUTE No. 2—*contd.*

It is an important point, as the *kotal* forms the watershed between the Surkhab and Kabul rivers and is the highest point on the road between Safed Sang and Seh Baba.* The top of the *kotal* is about 10 miles from the Surkhab. Crossing the *kotal* the road descends by an easy gradient (maximum $\frac{1}{20}$), following generally the course of a winding ravine, varying in width from 100' to 200', between steep hills, covered with dwarf ilex. "Pudding Hill", a round conical hill about a mile below the *kotal*, completely commands this part of the pass, of which a considerable part can be enfiladed. The valley gradually opens out into a stony hollow as the village of Jagdalak is approached and several small streams of water come down from the hills on the left bank of the stream, and swell the small rivulet which takes its rise about a mile below the *kotal* and is known as the *Pari dara* or Jagdalak stream. There was a considerable amount of cultivation around Jagdalak and in a valley which extends to the S.

At Jagdalak there is an Afghan post occupied (September 1909) by—

1 company infantry.	} Found from Kabul.
1 squadron cavalry.	

This post is a loopholed mud fort of the square type, apparently well built, having barracks all round with verandahs. In the centre is a pond of water which is brought in by a pipe channel from the *nala* higher up. The supply could be cut off. Good spring drinking water, plentiful in the *nala*, 100' below. The post is $1\frac{1}{2}$ furlongs from the main road, and is situated on an uneven ridge, round which the road winds towards Seh Baba. Wood plentiful. The village of Jagdalak lies about half a mile away to the W. of the post. The village is small and situated amidst a grove of mulberry trees on the right bank of the stream. Another mountain path passing through a gorge, opposite to Jagdalak, leads to the ruby mines which were still being worked in December 1904.

* Garrison in 1879-80 was 130 British infantry.

The water-supply was only sufficient for the garrison itself and was obtained from two springs about 600 yards S. E. of the fort and drinking water from springs at the foot of "Pudding Hill" about $\frac{3}{4}$ mile to the N.W. Firewood is obtainable close to the fort; grass and supplies with difficulty from the neighbouring villages. The signal station was 1,500 yards N.E. from the foot, height 7,050', and communicating with Pezwan, Jagdalak and Lataband; the fort itself was only in direct communication with Pezwan. There are many traces of the British road in 1880 but much repair would be needed.

ROUTE No. 2—*contd.*

Camping ground.—For 3 battalions infantry and 1 regiment cavalry but valley is narrow and cramped and units would have to be scattered about. Rather more than a mile to the S. towards the Jagdalak *kotal* there is room for a brigade to encamp with a sufficient water-supply close by.

Water.—For 2 or 3 brigades at all times as already described. In addition there is a good spring of drinking water in the *nala* 100' below the fort.

Fuel.—Scanty.

Fodder.—Nothing appreciable; camel grazing negligible.

Supplies.—Nothing appreciable.

From Jagdalak Routes 2-F, and 2-G, lead to Tezin *viâ* the Karkacha and Iro Manzil passes respectively.

10	KATA SANG	10 m. Metalled road 24'.
	(4,750')	

112 m. 7 f.

Descending from the Jagdalak plateau, the new road crosses a dry *nala* and then following the contour of the hills winds in and out of a series of valleys, passes the *chauki* of Firman Beg (3 miles) and reaches Sang Toda at mile 7.* Here Route 1-J from Kats Muhammad Ali (Route 1, stage 8) *viâ* the Dabeli pass joins this route from the E. forming another connection between the main Routes 1 and 2.

Leaving Sang Toda † the road crosses an open, undulating stony plain for about 3 miles more to the mouth of a gorge where the camping ground of Kata Sang lies.‡

Camping ground.—“A” camp, camping space 2,200 × 220 paces; surface level, fields in places, stony in others. This camp is in the watercourse whose banks are 60' high and sloping; 3 battalions could find room to camp on this site, which would not be touched by floods even if the river came down in spate. “B” camp on the right bank, camping space 2,400 × 700 paces, surface stony; this site is more liable to be “sniped” from the surrounding hills.

* An alternative track from Jagdalak *viâ* the bed of the *Pari dara* joins the main road at Sang Toda, mile 7. This road which was traversed by Colonel Malleson in March 1905 is described as suitable for laden camels, but too rough for wheeled vehicles: the track is simply the rocky bed of the stream. By this route also Sang Toda is about 7 miles from Jagdalak.

† A cairn of stones, some ancient land mark.

‡ General Gough's brigade of two regiments cavalry and three battalions infantry encamped here on the 6th November 1879.

ROUTE No. 2—*contd.*

Water.—For 1 infantry brigade with a proportion of divisional troops from 3 perennial springs in the *nala* bed ; below the springs are pools which could be set aside for animals.

Fuel.—The surrounding hills are wooded in parts, and wood therefore in appreciable quantities could certainly be brought in daily from distance of 2 to 5 miles.

Fodder.— }
Supplies.— } *Nil.*

At Kata Sang, Route 1 lies only 1 mile to the N. a track running to Maroda joining these routes.

11 **TEZIN RIVER** 11 m. 4 f. Metalled road 24'.

124 m. 3 f.

From Kata Sang the new road crosses first a low spur and then a stream which flows E. past Maroda into the Kabul river; the road than zigzags N.W. over a high ridge, from the summit of which it changes its direction to due W. The road keeps to the N. side of the main ridge* winding in and out of a series of spurs, but maintaining an easy gradient throughout. Barikab (4,900') is reached at mile 3. Here the Kabul Mission camped in 1904; the ravine is very narrow, being only 80' to 100' wide.

Camping ground.—Very cramped and only room for about 1 infantry brigade with a proportion of divisional troops.

Water.—For 1 division if necessary from the Tezin Rud; $\frac{1}{4}$ mile above camp there is also a fine spring.

Fuel.—Scanty.

Fodder.— }
Supplies.— } *Nil.*

From Barikab the road at first strikes in a northerly direction down the left bank of the Barikab stream, a tributary of the Tezin river; after $\frac{1}{2}$ mile it bends round the contour of a spur to the W., crosses a stream similar to the Barikab and then a spur and at $4\frac{1}{2}$ miles enters the Tezin valley and at $4\frac{3}{4}$ miles reaches the camping ground of Seh Baba, situated at the foot of a high, and nearly inaccessible, rock which covers it

* The old British graded road from Kata Sang to Barikab, which can still be traced, and appears to be in fairly good order, passes to the S. of this ridge over the Barikab *kotal*; this road could be easily repaired, as the soil is gravelly with no hard masses of rock.

ROUTE No. 2—*contd.*

completely on its S.E. side. The rocks advance somewhat in a crescent shape, on either flank, and give it some protection.

The camp is, however, exposed to rifle fire from the lower slopes of the Lataband range on the far side of the Tezin *nala*, a wide stony bed 400× to 500× broad. During the last war this was a regular halting place; there is ample water for a brigade from the Tezin stream, but it is liable to be cut off (it was quite dry in September 1893). Water could then be obtained by sinking wells in the bed of the Tezin stream or from a good spring 1½ miles up the Tamkani *nala*. There are no supplies of any sort.

From Seh Baba Route 2-H proceeds due W. to Butkhak *viâ* the Lataband pass.

Leaving Seh Baba the road turns sharply S.W. and ascends the right bank of the Tezin *nala*; at 11½ miles, just before camp, it crosses to the left bank; crossing easy. The road throughout this stage is closely confined by hills. At 11½ miles (8½ miles from Barikab) the camping ground now known as "Tezin River."

Camping ground.—On the right bank; camping space 1,400×400 paces, surface hard and slightly sloping; this site is in constant use by travellers to Kabul and all carts and camels which do not go by the Lataband halt here for the night. On the left bank, camping space, 1,400×200 paces, surface stony. Both sites are commanded from hills on the W. at distances varying from 1,000× to 2,000×; on the N.W. by an inaccessible hill 2,500× distant; on the E. from hills between 500× and 800× distant; at least 5 piquets are necessary.

Water.—For 1 division from the Tezin *nala*. In May 1912, breadth of the stream was 6× depth 1½'; current 2½ miles per hour; quality of the water is excellent.

Fuel.—Scanty.

Fodder.—Camel grazing negligible.

Supplies.—Nil.

At Tezin River camp Routes 2-F. and 2-G. from Jagdalak *viâ* the Karkacha and Iro Manzil passes respectively, come in.

12 **TARAKI** .. 12 m. Metalled road 24'.

136 m. 3 f.

The Tezin valley is now left, the road leading first S.W., then

W. up the left bank of a tributary *nala*. The road crosses the Tezin watershed at 5 miles by a pass known as the *Haft kanda*

ROUTE No. 2—*contd.*

(8,200') by easy gradients ; pass so called from its being the 7th pass since leaving Dakka ; once known as the Balutokh pass but this name is scarcely ever used now. Beyond the *Haft kandao* the road skirts the northern slopes of an isolated hill just N.E. of Khak-i-Tabar and reaches the Khak-i-Tabar stage at $9\frac{1}{2}$ miles. Here there is a government *sarai*, telephone office and bungalow.

Camping ground.—For 1 infantry brigade with a proportion of divisional troops.

Water.—30,000 gallons daily.

Fuel.—

Fodder.—

Supplies.—

} *Nil.*

Leaving Khak-i-Tabar the road ascends the right bank of a small *nala* for 1 mile when it crosses the Taraki *kotal* (8,030') at mile $10\frac{1}{2}$; *kotal* low and easy.

A high hill commands the pass from the N. ; to the S. the hills are lower. The descent is easy along the left bank of a small *nala*. At $11\frac{3}{4}$ miles the road crosses the *nala* by a wooden bridge $12\times$ long and 12' broad. Immediately below this bridge a branch *nala* from Taraki village, 1 mile to the S.E., joins in, and the road now keeping to the right bank, enters the Taraki *tangi*. The banks are high and steep and the road keeps well above the river-bed. Hills rise perpendicularly on both sides of the road, those on the right being the higher. The defile is $200\times$ long. The road throughout this stage is closely confined by hills.

At 12 miles Taraki camp situated at the W. exit of the defile.

Camping ground.—Space $2,050\times 420$ paces ; camp commanded from hill on the S.W. $2,500\times$ distant ; there is another hill $2,000\times$ N. of camp, but it is rugged and inaccessible, so it might be disregarded.

Water.—For a division from the stream which is perennial ; stream sufficient to work a large mill ; water excellent,

Fuel.—Scanty.

Fodder.—

Supplies.—

} *Nil.*

At Taraki the following routes converge :—

Route 2-D.—From Gandamak.

Route 2-J.—From Lataband.

Route 2-K.—From Ali Khel (Route 3, stage 2).

ROUTE No. 2—*contd.*

13 **BUTKHAK** .. 12 m, 4 f. Metalled road 24'.
 (5,980') *t.o.*
 148 m. 7 f.

General direction N.W. Leaving Taraki the road follows the right bank of the *nala*. At $3\frac{1}{2}$ miles, a path branches off to Khurd Kabul (7,220') about one mile distant.* The road now bears N., and leads through fields down the right bank of the Khurd Kabul stream. At $5\frac{1}{2}$ miles enter the Khurd Kabul defile. Elevation of S. end of defile, 7,030'. This defile is flanked by high mountains, between which flows the Khurd Kabul river in a narrow confined channel. The length of the pass is about 6 miles and its width varies from 100 to 200 yards. The mountains are of basalt and iron stone, quite barren, broken into crags and precipices, and apparently inaccessible. The deep gorge is almost entirely sheltered from the sun's rays and the cold is often intense.†

On entering the defile the new road crosses to the left bank and follows it throughout. The hillsides have been blasted, and embankment walls built up from the river-bed where necessary.

From the N. exit of the gorge the road still follows the left bank of the Khurd Kabul stream until Butkhak camp is reached at $12\frac{1}{2}$ miles.

Camping ground.—For a division on the W. of the road in a kind of amphitheatre surrounded by hills, 1 mile S.E. of Butkhak.

Water.—For a division from the Khurd Kabul river.

Fuel.—Obtainable but limited.

* From Taraki or Khurd Kabul, there is a direct route to Kabul.

† NOTE.—This would prove a difficult march, in the face of opposition. Sir G. Pollock when advancing and returning through the Khurd Kabul pass, got through without opposition, having crowned the heights. But Sale's brigade in 1841 and the British force returning in 1842 suffered heavy loss.

The Khurd Kabul pass can be turned by the Gospan *dara* to the W. Leaving Khurd Kabul keep along the main road for 3 miles, when turning to the left, the ascent to the *kotal* begins. It is fairly easy and appears to be about 2 miles in length. The descent is through a defile some 30 to 40 yards wide, bounded by precipitous rocks, and about 5 miles in length. The road is very rough. There is no water along the route. From the mouth of the defile the road runs over fairly level ground for the rest of the stage. The route is practicable for cavalry, but not for camels. Its only advantage is that the adjoining hills can be easily crowned, and it would be useful in turning the Khurd Kabul if held by an enemy.

The route was followed by General Pollock in 1842. Total distance from Khurd Kabul to Butkhak by this route is 13 miles.

ROUTE No. 2—*contd.*

Fodder.—For 12,000 animals for one day from Butkhak; camel grazing scanty.

Supplies.—About 1,600 maunds unground grain normally available.

From Butkhak Bala Hisar, but not Kabul city, is visible. Fine view of Kabul valley obtainable from a hill to S. of Butkhak. To the S. lie hills shutting in Khurd Kabul; to the W. lies the Sang-i-Nawishta gorge, held by the Afghans against Sir F. Roberts' advance in October 1879 (Chaharasia). Further N. lies the Takht-i-Shah and Sher Darwaza heights, at the foot of which is the Bala Hisar and Kabul city, covering the Deh-i-Mozang gap, which separates these heights from those of Asmai, where severe fighting took place prior to Sir F. Roberts' being invested in Sherpur. In the foreground is the Siah Sang spur, and to the right the Bimaru hills, at the S. foot of which lies the Sherpur cantonment.

14	KABUL	..	11 m.	Metalled road 24'; the
-----	(5,850').			section Butkhak to the
159 m. 7 f.				Pul-i-Bagrami bridge
				(mile 1 to mile $5\frac{3}{4}$) road is double, second road metalled 16'.

Road continues down left bank of the Khurd Kabul stream. At 1 mile Butkhak* (400 to 500 houses); inhabitants very fanatical; formerly residence of the late Hada Mulla. From Butkhak to the Pul-i-Bagrami bridge reached at $5\frac{3}{4}$ miles, the road is doubled and both roads kept up for motor traffic; the 2 roads are parallel and only a few yards apart; the northern road is the ordinary 24' metalled road, the southern is about 16' wide and only metalled to such an extent as to facilitate the passage of motors. The doubling of the road on this section is due to the fact that as *kafilas* cannot leave the road owing to the swampy nature of the country, the traffic on one road alone became too congested. At $4\frac{1}{2}$ miles pass the site of Sir C. Gough's camp of 23rd December 1879, marked by a mud enclosure, now in ruins; on that date, good water was obtainable from a canal skirting the camp. From here to the Logar river the country on both sides of the road is boggy and reported impassable for troops.

* In 1879-80 the post at Butkhak consisted of two native forts: a mud wall forming a square and enclosed the whole. The British garrison consisted of 120 infantry and 50 cavalry.

In 1893 there was an Afghan post with a garrison of 50 sowars. There is believed to be no garrison there now (1912).

ROUTE No. 2—*contd.*

At $5\frac{1}{2}$ miles cross a canal by a strong masonry bridge, and at $5\frac{3}{4}$ miles the Logar river by the old Pul-i-Bagrami bridge. The Logar is in October merely a trickling stream, but in December, January, February, March, July and August, a bank high rapid running river. The channel between banks is 100 yards wide. When running high the Logar river is a serious obstacle. There is a ford $1\frac{1}{4}$ miles below the bridge. During the summer months, the volume of the river is greatly reduced by the drain caused by the numerous irrigation canals and channels.

Immediately beyond the Logar river is a large canal running round the eastern skirt of the Siah Sang range. This is crossed by a bridge. From here a road avoiding the Bala Hisar leaves the Siah Sang on its left and skirting its foot leads across the bridge into the Sherpur cantonment.

At mile $6\frac{1}{2}$, road bends N.W., and at $7\frac{3}{4}$ miles crosses a col in the Siah Sang range by easy gradients. The Siah Sang plateau is an important position, and dominates Kabul from the E. and S.E. At 9 miles a road, suitable for wheels, leads up to the gate of the Bala Hisar, now a ruin, with the exception of the citadel, which is used as a magazine and store. The new road leads on direct from Siah Sang to Kabul city, which it enters at $10\frac{1}{2}$ miles.

Fort of Siah Sang on low hills commanding the city $\frac{1}{2}$ mile from Bala Hisar to the N. of the road. Sherpur cantonment is about $1\frac{3}{4}$ miles from Bala Hisar, or $1\frac{1}{2}$ miles from the E. gate of the city, by a good shady road.

<i>Camping ground.</i> —	} <i>Vide Route 1.</i>
<i>Water.</i> —	
<i>Fuel.</i> —	
<i>Fodder.</i> —	
<i>Supplies.</i> —	

SIGNALLING STATIONS.

NOTE.—The following were the principal signalling stations during the 1878-80 war :—

- | | |
|---------------|---|
| A.—Jamrud | .. Station on highest point of fort. There is also a good station on Sarkai hill between the two entrances to the Khaibar pass. |
| B.—Fort Maude | .. Stations at fort, at top of Mackeson's incline, |

ROUTE No. 2—*contd.*

- C.—Ali Masjid .. Station in the fort.
- D.—Kata Kushta .. Station on top of Kata Kushta hill. Permanent hut built for the signaller in 1879. Water had to be carried up from the pass. Very bad site for tents. Station E. only just visible over hills S. of pass.
- E.—Landi Kotal, North Camp. .. Station on top of small rocky hill in the pass, protected by high *sangar*.
- F.—Landi Kotal, Headquarters. .. Station in a *sangar* close to telegraph and other offices of the 3rd Brigade headquarters.
- G.—Pisgah, 4,000 feet Permanent hut for signallers and guard built on the hill. Signalling at night carried on from interior of hut through windows.
- H.—Dakka .. Station on small room in centre of fort; or on a flat-topped hill in centre of Khurd Khaibar range, 1 mile W. of fort.
- I.—Basawal .. Station 1,000 yards S. of fort. Messages carried to and from by mounted orderlies.
- J.—Barikao .. Station in the fortified enclosure.
- K.—Ali Boghan .. Station on spur of hills, 3 miles from signallers' camp, situated on a low hill near well at Ali Boghan and protected by high *sangar*. In 1879-80 a special party was sent out with an escort of 20 men and camped near the river. Hill $1\frac{1}{2}$ miles from camp—a very hard and rough climb.
- L.—Jalalabad, 1,850 feet. Station on large barrack of fort, N.E. bastion.
- M.—Bawali .. Hill 500 yards S. of *sarai*.

ROUTE No. 2—*concl'd.*

N.—Fort Battye	.. Station 200 yards S.W. of fort.
O.—Safed Sang, 4,513 feet.	Station $\frac{3}{4}$ mile from camp, on hill close to the road. From here communication was once opened on 30th May 1879 with the Kurram Force, whose signallers ascended the Safed Koh by the Bodin pass.
P.—Ditto ..	.. Station in Brigade headquarters camp.
Q.—Pezwan, 4,700 feet	Station in camp.
R.—Pezwan <i>kotal</i> , 5,180 feet.	Station on <i>kotal</i> 2 miles from camp; occupied during the day only, and then so as to communicate with Jagdalak <i>kotal</i> .
S.—Jagdalak <i>kotal</i> , 6,200 feet.	Station in the old fort, close to the road.
T.—Ditto, 7,000 feet (approx.).	Station on Siah Koh range, half an hour's climb from the <i>kotal</i> ; occupied during the day only.
U.—Jagdalak, 5,500 feet.	Station in the fort.
V.—Darunta, 2,300 feet.	Station on end of Siah Koh range; climb of 1,000 feet to communicate with Laghman; occupied during the day only.

The lettering in above table refers to "Map showing Signal Stations of Khaibar Division K. F. F., 1878-79" (M. O. 3, Simla).

Lataband completed the line from Peshawar to Kabul. Round Kabul itself stations were established at Sherpur, Bimaru hill, Paiminar *kotal*, Bala Hisar, Siah Sang, Takht-i-Shah and Sher Darwaza. For any operations carried on in the vicinity of Kabul the Sher Darwaza is the most important and convenient signalling station, much better than the Takht-i-Shah.

ROUTE No. 2-A.

BASAWAL TO SAFED SANG.

50½ miles.

4 stages.

Authority.—Roos-Keppel (from native information),
October, 1905.

Epitome.

General description.—This is an important alternative to stages 2 to 8* of Route 2.

Road.—First 6 miles to Batikot metalled road 24', thereafter camel road throughout, which could rapidly be improved for carts. The following *obstacles* are encountered:—

- (i) In the first stage the Kot *khwar* and the Hisarak Rud ; in both cases the banks are steep and would require ramping to be passable for carts.
- (ii) In the 3rd stage the Chapriar stream, always fordable, and the Wazir Rud temporarily impassable during spates.

Route open throughout the year and much used by travellers now that the Shinwaris have been subdued.

Camping grounds.—For a division at stages 1, 2 and 4 and for an infantry brigade with proportion of divisional troops at stage 3.

Water.—For a division at stage 1, and for an infantry brigade with proportion of divisional troops at the remaining stages.

Fuel.—Procurable at all stages ; considerable quantity at stage 3, scanty at stage 4.

Fodder.—For 3,000 animals for 1 day at stage 1 and for twice that number at stage 3 ; this includes *bhusa* ; camel grazing good at stage 2, otherwise scanty.

Supplies.—At Kandibagh (stage 2) 2,500 maunds unground grain procurable. At other stages, except Safed Sang (stage 4) where supplies are scanty, supplementary stores of grain and *bhusa* to a moderate extent can be reckoned on. It is stated that in winter meat is available, probably due to the flocks and herds of the *kuchis* whose winter encampments are all along this route.

* Safed Sang is in stage 8 of Route 2.

ROUTE No. 2-A—*contd.*

No. of stage and total dis- tance.	DETAILS.	
1	KAM BARU ..	14 m. Metalled road 24' to Batikot 6 miles; thence unmetalled cart road to end of stage.
14 m.		
<p>Road follows the motor road, direction W., to Batikot 6 miles, <i>vide</i> Route 2, stage 3; it then turns S.W. across the plain, road good and hard. At 10 miles cross the Kot <i>khwar</i>, large ravine with precipitous banks, which would require ramping to be practicable for carts. At 12½ miles Mohmand village of Loi Baru or Baru-i-Kalan (1,000 houses) situated on the right bank of the Hisarak, which is crossed here by an easy ford; river contains perennial stream of good water but banks require ramping to be passable for carts.</p> <p>At 14 miles Kam Baru or Baru-i-Khurd (50 houses); nomad winter encampment. Country throughout the stage consists of an open plain, intersected occasionally by ravines running N. towards the Kabul river.</p> <p><i>Camping ground.</i>—For a division; good shade in parts, from clumps of trees.</p> <p><i>Water.</i>—For a division or more from the Hisarak stream, and several <i>karez</i>es in the vicinity.</p> <p><i>Fuel.</i>—An appreciable amount from the trees referred to.</p> <p><i>Fodder.</i>—For 3,000 animals for 1 day can be collected; camel grazing negligible.</p> <p><i>Supplies.</i>—About 500 maunds of unground grain would normally be available here.</p>		
2	KANDIBAGH ..	14 m. Camel road easily con- vertible for carts; sur- face hard.
28 m.		
<p>General direction W. At 3 miles Sharshahi or Shershai (1,500 houses); good camping ground, about 1,600 maunds unground grain and fodder for 8,000 animals for 1 day normally procurable here, also a little fuel. Donkeys of good stamp available in large numbers. At 4 miles the Banda villages (400 houses). At 5½ miles cross Route 1-E. a little N. of Roghani</p>		

ROUTE No. 2-A—*contd.*

(stage 3 of that route). At $6\frac{1}{2}$ miles Dehgan village of Kadab (300 houses); at 8 miles descend into the Zakhel ravine in which lies the village of Zakhel or Zango Kas (300 houses); water plentiful here.

At $8\frac{1}{2}$ miles cross the Nariob river by an easy ford. Thence the road, which is hard and good, ascends slightly for about a mile and runs on the level across a plain. At 11 miles Tarkhe Obo spring of excellent water, belying its name, which signifies "bitter water."

At 14 miles Kandibagh (250 houses) on the right bank of the Chapriar stream, winter encampment of the Amar Khel, Daulatzai *kuchis*.

Camping ground.—For a division, if necessary, on the plain W. of the village.

Water.—For at least one infantry brigade with proportion of divisional troops, from the Chapriar stream.

Fuel.—Limited supply procurable from the short scrub on the plains.

Fodder.—Good camel grazing.

Supplies.—Kandibagh is one of a collection of villages in the Chapriar valley which contain in all about 2,000 houses (inhabitants Tajiks and Mohmands). It has been calculated that about 2,500 maunds of unground grain and fodder for 12,000 animals for 1 day could normally be collected from these villages. *Ghi* in large quantities in the winter can also be obtained here.

3 SARA KILLI .. 14 m. Camel road easily convertible for carts.

42 m.

General direction W. Road good. At $\frac{1}{4}$ mile cross Chapriar stream; banks easy and river always fordable. At 1 mile Hafiz Kala (10 houses), near which a small water channel from the Safed Koh flows. Thence across Pathirai plain, road undulating in and out of dry ravines. At 4 miles cross the Kambo *khwar*; perennial stream of good water, banks easy; no difficulty for carts. On the left bank Pathirai or Pathar (few houses mostly deserted). Thence road winds over low hills passing at 11 miles collection of hamlets, most important being Wazir Khel (150 houses). At 12 miles

ROUTE No. 2-A—*concl'd.*

cross the Wazir Rud (tributary of the Surkhab) 9 miles distant to the N., stream perennial temporarily impassable during spates; *ku-hi* encampments on both banks. Thence road ascends to Sara Killi reached at 14 miles.

Camping ground.—For at least 1 infantry brigade with proportion of divisional troops.

Water.—For the above force from the Wazir Rud and from springs in a ravine $\frac{1}{2}$ mile W. of the village.

Fuel.—In large quantities from village of Kaja 2 miles S. of camp.

Fodder.— } About 1,000 maunds of unground grain and fod-
Supplies.— } der for 6,000 animals for 1 day from the
 Khugiani village of Arghach 1 mile N. of camp. Large number
 of camels also obtainable from this village.

4 **SAFED SANG** .. 8 m. 4 f. Unmetalled cart road.

50 m. 4f.

Direction at first S.W. At 3 miles Khugiani village of Kharan (80 houses) on the right bank of the Shagai Rud (tributary of the Surkhab) containing perennial stream of good water. Road then turns N.W. and at 6 miles crosses the Spinatiga, small pass just S. of the Nimla *bagh*, whence it turns at right angles S.W. and joins Route 2 at Safed Sang on the right bank of the Marki Khel stream. Here there is the remains of a British fortified post, used by us in the 2nd Afghan War.

Camping ground.—For a division or more if necessary.

Water.—For 1 infantry brigade with proportion of divisional troops from the Marki Khel stream.

Fuel.—Scanty.

Fodder.—Camel grazing negligible.

Supplies.—Nothing appreciable.

From Safed Sang a track impracticable for laden animals leads to Paiwar *viâ* Mama Khel and Tarakai, distance 27 miles. Another track also impracticable for laden animals leads to the Lakarai *kotal*, where Route 2-E., from Chartut to Ali Khel is joined. This road is called the Ughzan Lar and crosses the Ughzan *kandao*. Total distance to Lakarai *kotal* 30 miles.

ROUTE No. 2-B.

OGHAZ TO BARIKAO.

30 miles.

2 stages.

Authority.—Native information.*Epitome.*

General Description.—This route connects at Oghaz with Route 54, *Routes south of the Kabul River* and together they form a through route leading from the Kurram valley over the Oghaz* pass to Barikao, stage 3 on the principal main route (Route 2) from Peshawar to Kabul.

Road.—Camel road throughout, easily convertible for carts, but it must be remembered that the road from Oghaz pass to Oghaz, the last section of the connecting route, a distance of 8 miles, is only a track passable by laden mules with difficulty. The only obstacles encountered are several ravines which would cause delay to carts and wheeled artillery till improved. Route open throughout the year, though the Oghaz pass in the connecting route is blocked by snow for at least 6 months.

Camping grounds.—For at least 2 infantry brigades with proportion of divisional troops, at Mazina the intermediate stage.

Water.—For that force at Mazina.

Fuel.—Abundant at Mazina.

Fodder.— } Unground wheat and barely and an equivalent

Supplies.— } amount of *bhusa* obtainable in appreciable quantities at Mazina; camel grazing good along the route except in winter.

No. of stage and total distance.	DETAILS.
1 <hr/> 15 m.	MAZINA (4,000') 15 m. Camel road practicable with little repair for wheeled artillery.

Leaving Oghaz† situated at the northern base of the Safed

* Blocked by snow for at least 6 months in the year.

† At Oghaz *Routes south of the Kabul River*, Route 54 is joined, the road from the Oghaz pass (13,000') leading down a narrow zigzag path following the crest and slopes of a spur through dense forest for 8 miles. Road scarcely practicable for laden mules.

ROUTE No. 2-B—*concl'd.*

Koh, the road runs N.W. through low hills passing several villages. At 6 miles Deh Bala, a small hamlet with tower, also said to be an Afghan outpost with garrison of 1 company and 2 mountain guns. At 8 miles, Kotgai, a large, scattered village; at 10 miles Mahrez, large village on the Papin stream along whose banks the road now runs enclosed by high hills. At 15 miles Mazina village which contains numerous mud forts, surrounded by cultivation and orchards; inhabitants Saiyids and Dehgans.

*Camping ground.**—For at least 2 infantry brigades with proportion of divisional troops.

Water.—For the above force from the Papin stream.

Fuel.—Abundant from the wooded slopes of the Safed Koh, about 3 or 4 miles from camp.

Fodder.—Grazing for horses and mules on the grassy slopes of the Safed Koh adjoining camp; this grass could of course be *cheeld* for fodder; *bhusa* to an appreciable extent; good camel grazing except in winter.

Supplies.—Unground wheat and barley to an appreciable extent obtainable.

2	BARIKAO	..	15 m.	Camel road convertible for carts,
30 m.				but work necessary

at the several ravines before being easy for wheeled traffic.

General direction N.E.—Road now leads along either bank of the Papin through country studded with forts and broken by orchards, terraced fields and water courses. At 4 miles cross Route 1-E., just S. of Roghani (stage 3 of that route). Road now runs roughly paralld to Route 2-A, which is $\frac{1}{2}$ mile to the W. as far as Kam Baru 9 miles, passing Shershahi (1,500 houses) at 8 miles. At Kam Baru, Route 2-A, is crossed, the road thereafter running over a stony waste on the left bank of the Hisarak Rud. At 15 miles camp Barikao.

Camping ground.—

Water.—

Fuel.—

Fodder.—

Supplies.—

} *See Route 2, stage 3.*

* On the 20th May 1880, 250 sabres, 4 guns and over 700 infantry under General Gib bivouacked at Mazina after defeating the Mulla Fakir.

Also on the 27th July 1842 a British force under Brigadier Monteath encamped at Mazina after destroying 35 Shinwari forts.

ROUTE No. 2-C.

PAPIN TO BARIKAO.

24 miles.

2 stages.

Authority.—Native information.*Epitome.*

General description.—This route connects at Papin with Routes south of the Kabul River Route 53(a) and together they form a through route leading from the Kurram valley over the Papin pass* to Barikao, stage 3 on the principal main route (Route 2) from Peshawar to Kabul.

Road.—Mule road to Mahrez (4 miles), thence wide track easily convertible for carts. The only *obstacles* encountered are several ravines which in present state (1912) would cause considerable delay to carts and wheeled artillery.

Road open throughout the year (but *vide* footnote regarding the Papin pass).

Camping ground.—*Water.*—*Fuel.*—*Fodder.*—*Supplies.*—

} *Vide* Route 2-B.

No. of stage and total dis- tance.	DETAILS.	
1 <hr/> 9 m.	MAZINA (4,000')	9 m. Mule road to Mahrez (4 miles), thence track easily convertible for carts.

Leaving Papin camp† the road follows a valley, foot passengers keeping along the banks, mules along the stony bed of the stream to Mahrez (4 miles). Thence road follows Route 2-B, to Barikao.

* Blocked by snow for at least 6 months of the year.

† Papin camp (6,000'), at the foot of the Papin pass and connected thereto by a zigzag path practicable for lightly laden mules. No level ground for a camp, and a force would have to bivouac on the slopes above the stream, picquetting the surrounding heights in strength. At Papin Routes south of the Kabul River Route 53 (a) is joined.

ROUTE No. 2-C—*concl'd.*

2 **BARIKAO** .. 15 m. *Vide* Route 2-B.

24 m.

ROUTE No. 2-D.**GANDAMAK TO TARAKI.***38 miles.**3 stages.**Authority.*—Afghan War records, 1879-80.*Epitome.*

General description.—Alternative route between Gandamak, (intermediate stage between stages 7 and 8, Route 2) and stage 12, Route 2.

Road.—Camel road to Chartut (1st stage), thence mule road throughout, with the exception of the last $7\frac{1}{2}$ miles, which is a metalled cart road. The following *obstacles* are encountered, (i) The Sarkhab crossed at Chartut (stage 1) river always fordable; (ii) the Karkacha pass (8,000') crossed in the 2nd stage; difficult for laden animals and dangerous for camels; (iii) the Tezin Rud forded during the last march; no difficulty. The Karkacha pass is blocked by snow during December, January and February, possibly longer.

Camping grounds.—For 1 infantry brigade at stage 1, and for 2 infantry brigades at stage 2, with proportion of divisional troops in both cases.

Water.—For a division at stage 1 and for at least 2 brigades with proportion of divisional troops at stage 2.

Fuel.—Abundant along the route from the wooded slopes of the Safed Koh.

Fodder.—Limited quantity at both intermediate stages; camel grazing scanty throughout.

Supplies.—For troops could not be reckoned to on any extent at intermediate stages.

No. of stage and total dis- tance.	DETAILS.
1	CHARTUT .. 12 m. Camel road.
12 m.	

ROUTE No. 2-D—*contd.*

The Karkacha route leaves the Kabul road (Route 2) at the site of the old cantonments. At 1 mile it crosses a dry *nala*, and then rises over a stony spur from the high plateau above Ganda, which lies about a mile to the left of the road. Ganda is a large village with considerable cultivation about it. At 3 miles a stream. Half a mile further the road passes through a narrow defile, and is bad and rocky. At $5\frac{1}{2}$ miles Tutu, (5,100') which lies a mile or so to the S. of the road. Tutu consists of a large group of forts and hamlets. There is much cultivation, and water is usually abundant. The road after about 3 miles of level, sandy ground skirts the S.W. portion of the old Badshahi Kala. At $9\frac{1}{2}$ miles pass Aspan, where the Ghilzai country is entered, at 12 miles reach the Surkhab, which is here always fordable; cross over to Chartut. From Aspan onwards the road is stony and much cut up by *nalas*. At 12 miles Chartut, Ghilzai village, 300 houses.

Camping ground.—For at least 1 infantry brigade with proportion of divisional troops on an excellent site.

Water.—For a large force, probably for a division from the Surkhab.

Fuel.—Abundant.

Fodder.—For 300 animals for 1 day; camel grazing scanty.

Supplies.—400 maunds unground grain normally procurable here.

From Chartut Route 2-E., a connecting route between Routes 2 and 3, branches off S.W. and leads to Ali Khel (Route 3, stage 2).

2 **TEZIN** .. 14 m. Mule road.

26 m.

From Chartut the track leads N.W. At 7 miles Yaghiband and at $7\frac{1}{2}$ miles Manai, both small hamlets.

At 9 miles Route 2-E joins this route from the N.E., coming direct from the Jagdalak pass (4 miles distant) *viâ* Ghoanza, forming a connection here between this route and the main Route 2.

At $11\frac{1}{2}$ miles the Karkacha pass (8,000') described below. The hills here are of blue slate, capped with limestone and

ROUTE No. 2-D—*contd.*

bare of grass; a deodar forest existed formerly but it has been destroyed by charcoal burners. Within 200' of summit are the ruins of a once strongly built brick fort.

Wood says of the route from Hisarak: "It then enters the bed of a tributary of the Surkhrud, along which it continues to wind till near the top of the pass. The hills continue to increase in height and to draw near each other till the bottom of the defile is but 10' wide. On each side the mountains are now bare, precipitous and craggy. Trees of a large size are found scattered along the torrent bed; at one place the trunk of a fir, 12' in circumference and 24' long, barricades the passage.

Two hundred yards before coming to this pass of the fir tree a ledge of stone, 4' high, crosses the path and is the first obstruction to wheeled carriages. As the summit is approached, the road leaves the bed of the torrent on the left, and winds along the face of the mountains, which are here more open. The descent of the pass to the W. is more direct than on the opposite side, but here a fall of 20' in the bed of the torrent presents more formidable obstructions to wheeled vehicles than those before enumerated. Karkacha is not a gun-road; it is dangerous for camels, and is traversed with difficulty by laden mules and *yabus*. The hills on both sides are clad with pine, holly and almond trees. An inferior description of indigo is plentiful. During the months of December, January and February, snow blocks up the road and the weather is said to be so severe that stones are fractured by the intensity of the cold. The black wolf and leopard are sometimes met here; and these, with many other kinds of wild animals, are said to be numerous in the neighbouring mountains of the Safed Koh".

The following is an extract from a report by Colonel Jenkins, C.B., Commanding Corps of Guides, of a reconnaissance made by him on the 15th November 1879 of the Karkacha pass:—

"I marched from Jagdalak *kotal* about 7 A. M., with a company of the Guides and a small party of the Guides Cavalry. We went along the ridge which joins the Karkacha mountains with the Siah Koh range up to the valley of Wadat, and then up a spur leading to the Karkacha pass. We reached the top of the pass about 11 o'clock, the distance being nearly 9 miles. The road was steep after leaving Wadat, and goes along a narrow ridge with precipices on each side. We saw the Karkacha

ROUTE No. 2-D—*concl'd.*

road, which is the most S. of all the roads from Jalalabad to Kabul. It appeared easy up to about 1,000' from the top of the pass. I do not consider it practicable for our baggage animals. There is a fine view from the top of the pass. We saw Basawal hill plainly and the Khaibar hills to the E. To the N. and W. we saw the Hindu Kush and a part of the Kabul plain. There was no grass on the Karkacha hill; nothing but the bush called (in Pushtu) *irrika*, which is not eaten by any animals, except perhaps the *kuchi* camel."

After crossing the Karkacha pass the track descends through Tora China to Tezin, a large group of villages at the head of the valley of the same name.

Camping ground.—For 2 infantry brigades with proportion of divisional troops.

Water.—For the above force at least from the Tezin Rud 1 mile W. of camp, with a supplementary supply from a small stream adjoining camp.

Fuel.—Abundant; many of the slopes of the Safed Koh are wooded from base to summit.

Fodder.—For about 1,000 animals for 1 day.

Supplies.—Practically *nil*; it is estimated that only about 150 maunds unground grain is normally available.

3	TARAKI	..	12 m.	Mule road for 4½
38 m.				miles, thence metall-
				ed cart road, 24', to
				end of the stage.

Leaving camp the road runs N.W. to Malakhel reached at 1½ miles. Here Route 2-F, from Jagdalak *viâ* the Iro Manzil pass joins in. The track now takes a sharp bend to the left and runs nearly due W. till the metallated road (Route 2) is reached at 4½ miles, the Tezin Rud being crossed just before the road is reached. The crossing of the Tezin Rud presents no difficulty.

The road now follows Route 2 to Taraki.—

Camping ground.—

Water.—

Fuel.—

Fodder.—

Supplies.—

} *Vide* Route 2, stage 12

ROUTE No. 2-E.**CHARTUT TO ALI KHEL.***Viâ* the Lakarai pass.

45 miles.

4 stages.

Authority.—Native surveyors, 1879, and native information, 1909.

Epitome.

General description.—Lateral route connecting the 2 main Routes 2 and 3. To join up with Route 2, however, the first stage of Route 2-D (Chartut-Gandamak) a distance of 12 miles must be traversed, making the total distance by this route between Gandamak and Ali Khel 57 miles, divided into 5 stages.

This route is regularly used by *kuchi* camels.

Road.—A well used path averaging about 4' in breadth, but wide enough for laden camels. To improve this road some digging on both sides of the Lakarai *kotal* is necessary, and if this were done the route should be fit for Indian transport camels. Lord Roberts was of opinion that it is impassable for an army without considerable labour, and that the summit of the Lakarai *kotal* being narrow could be easily blocked. Country mountainous throughout.

The following *obstacles* are encountered:—

(i) Ghaughiza *kotal* in the 1st stage; no difficulty.

(ii) Hazrah *kotal* in the 2nd stage; no difficulty.

(iii) Lakarai pass (10,400') in the 3rd stage; described above.

Local traffic is mostly on mules and donkeys travelling between Jalalabad and Hariob. General Bahawal Khan with 2 regiments of Afghan infantry and 2 troops of cavalry used this route in advancing from Ningrahar to Hariob on the occasion of the Jaji disturbances in 1901; he crossed the Lakarai *kotal* on the 9th October.

The Lakarai pass is closed by snow from the 15th December to the 15th April in normal years, though men on foot can get through all the year round.

Camping grounds.—For at least 1 infantry brigade with proportion of divisional troops at each intermediate stage.

Water.—For the above force at least from the Surkhab, N. of the Lakarai, and from the Lalidar stream S. of that pass.

Fuel.—Abundant throughout the route.

ROUTE No. 2-E—*contd.*

Fodder.—A little camel grazing along the route but none in winter.

Supplies.—Nothing appreciable.

No. of stage and total dis- tance.	DETAILS.
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1	ASPANDO KATS. 11 m. Camel road.
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11 m.

General direction S.W. Leaving Chartut the road follows the left bank of the Surkhab and at $\frac{1}{2}$ a mile crosses the Muhammadzai *nala* up which Route 2-D runs N.W. to Tezin. On the left bank of this *nala* is the small village of Ganji Khek. Road traverses the Hisarak district which contains large number of villages dotted about its wide plain; inhabitants Jabar Khel Ghilzais. At 2 miles Muhammad Shah Khan Kala, principal village in the district (100 houses) with fort on the right bank of the Surkhab here 25 broad and 2' deep. In the village there is a small *bazar* where a certain amount of trade in cloth from the Kurram is carried on. Considerable cultivation. One company of infantry (on detachment from Kabul) is stationed here in two small posts.

The road now leaves the Surkhab and keeps to a branch stream called Ghaughiza but there is also a path used by local baggage animals which follows the Surkhab. A little above this, the river flows through a precipitous defile, and the path is actually in the river bed and is impassable in spring and after heavy rain. It is consequently little used. Following the Ghaughiza stream the village of Miz Ghondai (40 houses) is passed at $2\frac{1}{2}$ miles. Opposite the village there is a hill to the left of the road, and from here to the end of the stage a steep spur covered with a few trees separates the road from the river. At $4\frac{1}{2}$ miles Ghaughiza (20 houses). Here the Ao Zanzan stream joins in on the left bank and the Hisarak district is left. The inhabitants of the Ao Zanzan valley are Miran Khel, supposed to number 15,000 fighting men. Road continues up the Ghaughiza valley to Ali Sher * (30 houses)

* There would probably be room for a brigade with a proportion of divisional troops to encamp in the fields here with sufficient wood and water for its requirements.

ROUTE No. 2-E—*contd.*

reached at 7 miles. The road now leaves the stream and ascends a low and easy pass (Ghaughiza *kotal*); no difficulty. From the foot of the pass the road continues for 4 miles along the valley to Aspando Kats (10 houses) reached at 11 miles; inhabitants Akbar Khel Ghilzais.

Camping grounds.—For an infantry brigade with proportion of divisional troops.

Water.—For the above force at least from the stream a tributary of the Surkhab, $\frac{1}{4}$ mile W. of camp.

Fuel.—Abundant; a large quantity of firewood could be brought in from within 2 miles of camp.

Fodder.— }
Supplies.— } Practically *nil*.

2 TAGHAN .. 11 m. 4 f. Camel road.
(8,500').

22 m. 4 f.

The road continues to lead through low hills covered with grass and bushes, which still separate the road from the Surkhab; there is a very slight ascent to a low pass (Hazrah *kotal*), and then a descent of about 1 in 10 to the banks of the Surkhab, reached at 7 miles. Road crosses by an easy ford (stream 6" deep and 12' wide in November), but the crossing is said to be difficult, though never impassable, in spring. Slight repairs are required to make the banks easier. The Surkhab, which above this is known as the Babar *nala*, flowing from the W. makes a bend to the N. here, and the Lakarai *nala* flowing N. joins it at the bend. At the junction is the village of Amrut (10 houses), Ghilzais. The road continues S. of the left bank of the Lakarai *nala*; slight repairs are required above Amrut. The valley is about 200 \times wide, high hills on right bank, low broken hills on the left. At 8 miles, Mangal Stir Kala, 50 houses, *bhusa* and a little grain procurable (Indian corn and wheat); water and wood in plenty. Room to camp in fields. Keeping up the valley the road crosses to the right bank near Taghan (8,500'); inhabitants Mangals, vassals to the Ghilzais.

Camping ground.—For 1 infantry brigade with proportion of divisional troops in the fields.

Water.—For the above force at least from the stream.

Fuel.—Plentiful within 1 mile of camp.

Fodder.— }
Supplies.— } *Nil*.

ROUTE No. 2-E—*contd.*

3 **BAGHUCHINA** 9 m. Camel road.

31 m. 4 f.

Leaving Taghan the road keeps to the left bank of the *nala*. The valley gradually contracts and the hills are higher. Only the hills on left bank are wooded; piquets could move up the hillsides. General direction of road, S.E. At 2 miles cultivation ends, and at 3 miles the path leaves the *nala* and ascends the left bank. There is also a path up the right bank, but the left is better. The ascent of the Lakarai pass is now commenced. For 1 mile the ascent is steep, 1 in 7, up the wooded hillside; this is the most difficult part of the pass. At 4 miles there are zigzags at a gradient of 1 in 9. The top of the Lakarai *kotal* (10,400') is reached at 5 miles. From the pass spurs run up to the E. towards Sitaram, to the W. the range is practically level with the pass. The hills are thinly wooded at the top, but more densely wooded lower down. They could be piqueted without difficulty. There is no level ground at the top of the pass. Troops advancing on the Lakarai *kotal* from either side in the face of opposition could move on a fairly broad front; they would not be compelled to keep to the *nala* but extend along the spurs on either side. The upper spurs E. of the pass are the key to the position. The descent is down a spur at an average gradient of 1 in 10; it is not difficult. At 6 miles the path descends the right bank of the Lalidar *nala*, and continues down the *nala* bed. From the foot of the pass the road lies down an easy slope of from 5° to 7° to Baghuchina reached at 9 miles. Above are the precipitous sides of the Safed Koh, up which a difficult path leads to the Zera *kandao*, a short route to Gandamak through the Khugiani country.

Camping ground.—For at least 1 infantry brigade with proportion of divisional troops, on an open, grassy plain.

Water.—For the above force from several good springs in the vicinity of camp.

Fuel.—Plentiful, within a mile of camp.

Fodder.—An appreciable amount of grass could probably be *cheeled* from the grassy plain referred to; a little camel grazing but *nil* in winter.

Supplies.—*Nil.*

ROUTE No. 2-E—*concl'd.*4 **ALI KHEL** .. 13 m. 4 f. Camel road.

45 m.

The path leads down the bed of Lalidar (Lulidar) stream and is first comparatively easy, but is rough and stony further on. The valley is wooded with large juniper trees and gradually opens out; the hills on both sides are densely wooded. At 1 mile there is a path which leads *viâ* Sirgul to Zabardast Kala in the Hariob valley passing over the Tarakai *kotal*. At 3 miles, the junction of the Mithai stream from the W. with the Lalidar is reached. The two streams enclose a large, open grassy space about $\frac{1}{2}$ mile long and a $\frac{1}{4}$ of a mile broad; here was a small rough wooden hut, Jaji post held for our Government by the villagers during the last war. From this point there is another path from the Lakarai *kotal* which follows the Mithai stream, but that above described is the best and is the one used by caravans. The route lies down the *nala* of the Lalidar stream, at first through low pine-clad hills which here and there retire from the stream leaving open spaces. The *dara* is then open, the hills on either side being easily accessible and covered with fir. Bed of the river is $150\times$ to $200\times$ yards wide; banks 50' to 140' high. At 3 miles, an alternative path follows the left bank through cultivation joining the *nala* route at Bilut reached at 4 miles. There are three villages called Bilut situated on the banks of the Lalidar stream. Average height above the sea 8,100'. A gun-road was made in April 1879 connecting Bilut with Zabardast Kala. At 6 miles villages of Mushingi and Bar Bilut situated amongst fields are passed on the left and route continues along the ravine to 7 miles, where the military road (fit for field artillery during the Afghan War, 1879-80) is met whence it is $4\frac{1}{2}$ miles to the Paiwar *kotal*. At 8 miles the road strikes the through Route 3, which it follows down the right bank of the Hariob to Ali Khel reached at $13\frac{1}{2}$ miles.

Camping ground.—

Water.—

Fuel.—

Fodder.—

Supplies.—

} *Vide* Route 3, stage 2.

ROUTE No. 2-F.

JAGADLAK TO TEZIN RIVER.

Via the Karkacha pass.

15 miles.

1 stage.

Authority.—Routes on the North-West Frontier, 1892.*Epitome.*

General description.—This route forms one of the short cuts between stages 9 and 11 of the main Route 2.

Road.—Metalled cart road, 24' to mile 3½, then mule road to mile 14 and metalled cart road once more to Tezin river camp, mile 15.

The Karkacha pass is the only serious *obstacle* encountered; it is difficult, but passable for laden mules. This pass is closed by snow from December to February, thus blocking the route for that period.

Camping ground.—

Water.—

Fuel.—

Fodder.—

Supplies.—

} There is no intermediate stage in this route.

No. of stage and total dis- tance.	DETAILS.		
1	TEZIN	..	15 m.
15 m.			Metalled cart road, 24', to mile 3½, then mule road to mile 14, and finally metalled cart road 24' for the last mile.

For the first 3½ miles road follows the motor road back to the Jagdalak pass* (6,200'), direction S.E., *vide* Route 2, stage 9. At the fort on the *kotal* the present route bends almost at right angles S.W., the track following the crest of the ridge running in that

* The Jagdalak *kotal* is the lowest point on the ridge connecting the Siah Koh range with the Karkacha range, which again is a spur thrown out from the Safed Koh chain of mountains.

As the ridge connecting the Siah Koh with the Karkacha range joins close to the Karkacha pass, the road from the fort to the pass may be said to run along the line of watershed nearly the whole way, the water to the right all draining towards Jagdalak and N. to the Kabul river, and all on the left draining E. into the Surkhab river.

ROUTE No. 2-F—*contd.*

direction. At 5 miles Wadat (10 houses), also known as Ghoanzat; inhabitants Maruf Khel Ghilzais. A path runs N.W. from here and joins Route 2-G., $2\frac{1}{2}$ miles distant, 2 miles E. of the Iro Manzil pass. The track now follows the banks of a stream which flows down towards Jagdalak. The stream is bounded on either side with high banks of sandstone rocks, topped with conglomerate and loose boulders. The banks reach a height of 300' above the stream, and are very steep. At about 7 miles the road leaves the stream, and ascends the bank to the right, and enters another ravine which runs down to Jagdalak. The ascent of the Karkacha pass is now commenced. The track ascends the left bank of this stream by a zigzag path, and proceeding up the spur, reaches the crest of the watershed. Here the ridge narrows, and the road sometimes passes along the top of it, as over a knife-edge, with steep precipitous sides falling into deep yawning chasms many hundred feet below, and some times it passes to the left and right of the ridge, with a roadway just sufficient for one person at a time. At this height the loose boulder formation is passed and the basalt beds of the range are reached, which consist chiefly of soft clay of a red and brown colour, with an occasional layer of harder rock. These run about N. and S. and are nearly vertical, the road passing over their outcrop; and, although the drops into either ravine are very fearful to look at, yet the ground is firm to the tread, and sure-footed animals can pass without danger. In this way the top of the pass is reached. At 200 feet from the summit is a piece of level ground, on which are remains of a brick building said by some to have been a fort built in the time of the Chaghatai dynasty.

The view from the top is much the same as that from the Iro Manzil pass, while the road is more difficult and water further from summit.

From the *kotal*, the track follows Route 2-D, nearly W. to Malakhel reached at 13 miles, when the present route branches off N. W., striking the metalled cart road at 14 miles which it follows back for 1 mile, due N. to camp Tezia river reached at 15 miles.

At $13\frac{1}{2}$ miles Route 2-G, joins this route from the Iro Manzil pass, and follows it to the end of the stage.

ROUTE No. 2-F—concl'd.

<i>Camping ground.</i> —	} <i>Vide</i> Route 2, stage 11.
<i>Water.</i> —	
<i>Fuel.</i> —	
<i>Fodder.</i> —	
<i>Supplies.</i> —	

NOTE.—In addition to Routes 2-D, 2-F and 2-G, the following routes run through the Karkacha mountains:—

- (1) The Chapar or Sapatrai route, avoiding Gandamak and Khugiani country, difficult but traversed by *kafilas*.
 - (2) Angur Tak road by Tatang-i-Wazir, Surkhab bridge; easy.
 - (3) The Chinari route, avoiding the Haft *kotal*. After crossing the Chinari pass, one road joins the Royal road at Kabar-i-Jabar, which is as easy as the Haft *kotal* road. Another and a more difficult road goes to Butkhak.
 - (4) The Lakari road over hills, but short and practicable for laden animals.
 - (5) The Minari road from Tarakai, near Khurd Kabul, direct to Kabul. Most of the wood from the Karkacha range of hills reaches Kabul by this route, it being the most direct. It receives its name from the ruins of a lofty minar, or minaret, on the hills.
- (1) Leads from Sultanpur to Jagdalak.
 - (2) From Fatehabad to Surkhpul.
 - (3) From the Tezin valley to Kabul.
 - (4) From Jagdalak to the Tezin valley.

None of these are routes which would be of much use to troops except for turning movements, but they are routes which might be used by a guerilla enemy and should, therefore, be observed.

ROUTE No. 2-G.

JAGDALAK TO TEZIN RIVER.

Viâ the Iro Manzil pass.

12 miles.

1 stage.

Authority.—Afghan War records, 1879-80.

Epitome.

General description.—This route forms another short cut between stages 9 and 11 of the main Route 2.

Road.—Mule road throughout. The only serious *obstacle* encountered is the Iro Manzil pass which is blocked by snow from December to February, thus blocking the route for that period.

ROUTE No. 2-G—*contd.*

Camping grounds.—
 Water.—
 Fuel.—
 Fodder.—
 Supplies.—

} There is no intermediate stage^f on this route.

No. of stage and total distance.	DETAILS.
1	TEZIN RIVER.. 12 m. —Mule road.
12 m.	

From Jagdalak village the road runs for $\frac{1}{2}$ mile up a stony gradual ascent between two converging *nalas*; the track then enters the *nala* bed at the point of bifurcation. The bed is about 100' broad, stony, but not difficult. At $\frac{3}{4}$ mile another *nala* joins it on the left, but the track follows the *nala* which comes from the right. This *nala* is not more than 30' broad, and unfit for camel traffic. At one mile enter the Ulai *nala*, which is over 200' broad, with trees and cultivation on both sides. Close by is a *burj* or tower, and a good spring of water. For the next two miles continue to follow the bed of the *nala*, which has steep banks and rolling hills, about 100 or 150 feet high, on both sides; the gradient becomes gradually steeper. Direction S.W. At 3 miles another spring; other *nalas* from the left join the main one but the road continues to keep to the right. At $3\frac{3}{4}$ miles leave the *nala* by the proper left bank and ascend the hill on the right by a very steep ascent of $\frac{1}{5}$. Pass a few deodars. At $4\frac{1}{4}$ miles the road becomes easy, and may be called a good hill path. At 7 miles from Jagdalak village reach the top of the Iro Manzil pass by a good zigzag of $\frac{1}{30}$. Height 9,250'. The descent on the other side (W.) is very steep and bad, the Tezin valley being about $4\frac{1}{2}$ miles further on.

At $10\frac{1}{2}$ miles this route joins Route 2-F., $\frac{1}{2}$ mile N. of Malakhel, the 2 routes then being identical to the end of the stage.

Camping ground. —
 Water.—
 Fuel.—
 Fodder.—
 Supplies.—

} *Vide* Route 2-D., stage 2.

ROUTE No. 2-G—*concl'd.*

The Iro Manzil pass (probably the Yara Manzal—the “fearful” stage or march ; in some reports it is spoken of as the Tro Manzil pass) is a point of great strategical importance, and if occupied would effectually ensure the security of the main road between Pezwan and Seh Baba. Colonel Jenkins of the Guides says of it: “ I was very much struck by the position of Iro Manzil. It commands all the roads leading from Peshawar to Kabul and the Ghilzai settlements of Hisarak, Jagdalak and Tezin. As a military position it seems to me very superior to any point that we could hold on the main ridge of the Safed Koh. We found water within 200 feet of the top, and there are very easy roads up to it which can be improved by country workpeople without much expense.”

NOTE.—The usual route to follow from Safed Sang over the Iro Manzil pass leaves the main Kabul road about 1 mile S. of the Jagdalak *kotal*, passing the village of Wadat or Ghoanza (*vide* Route 2-F).

ROUTE No. 2-H.

SEH BABA TO BUTKHAK.

Viâ the Lataband pass.

22 miles.

2 stages.

Authority.—Afghan War records, 1879-80, and native information, 1911.

Epitome.

General description.—Alternative, but direct, route between Seh Baba and Butkhak and one which forms a short cut between stages 10 and 13, Route 2, reducing the distance between these stages from 31 to 22 miles. *Road.*—Formerly a cart road and used as such in the 2nd Afghan war, but as no effort has been made for 32 years to keep it in repair, it is now (1912) reduced to a camel road and could only be made passable for carts throughout after several months' work. The above was conclusively confirmed by reliable European information dated March 1911. The Lataband pass (7,950') passed at 6 miles is the only serious *obstacle* encountered ; gradients moderate, but work is necessary in removing loose boulders, etc., to make it easy for even camel transport. Pass blocked by snow for at least 4 months in the year.

ROUTE No. 2-H—*contd.*

Camping ground.—For a division at the intermediate stage.

Water.—For 2 or 3 infantry brigades with proportion of divisional troops at the intermediate stage.

Fuel.—Firewood abundant but inferior at camp Lataband.

Fodder.—Fair camel grazing except in winter along the route.

Supplies.—*Nil.*

No. of stage and total distance.	DETAILS.	
1	CAMP LATABAND (5,900').	11 m. Camel road.
11 m.		

General direction S.W. Leaving Seh Baba and crossing the extremely stony bed of the Tezin stream, which is so rough as seriously to impede all baggage animals, especially camels, the road first leads straight up the gently sloping skirts of the Lataband range, and then bearing away to the S.W. winds gradually up the side of the hills, the path being in many places narrow and rough, with a steep precipice below.

In many places the road has fallen in or been banked up by slips from above. As the hillside is almost entirely composed either of soft sandstone or easy conglomerate, small repairs could be quickly carried out. For heavy traffic, however, it would be absolutely necessary entirely to re-align the road for considerable distances, as the gradients of the existing track are quite steep and prohibitive for wheeled transport.

Having ascended well on to the spurs of the range, the road again bends more to W., and losing sight of the Tezin valley, enters the heart of the hills. Winding through narrow valleys, whence no view can be obtained: it is necessary to have flankers on the heights on either hand, but the hills being rounded and of no great elevation are easily crowned, and when once occupied, no enemy could approach unobserved. About 4 miles above Seh Baba the road dips into a ravine, after crossing which a *kuchi* camping-ground is reached; here there is a very scanty supply of water, and there are one or two caves.

ROUTE No. 2-H—*contd.*

Up to about this point the old road and the new cart-road, made in 1880, cross and re-cross each other, but here at about 5 miles from Seh Baba the cart-road bears entirely to the right, escapes the *kotal* altogether, and winds round each successive hill, never exceeding a height of 7,000'. The new road makes the march from Seh Baba about 4 miles longer but is far more easily defended. Water from two or three springs obtainable. In the second Afghan war the cart transport service ceased at Gandamak, light pony carts only traversed the road over the Lataband. This road had entirely disappeared for considerable lengths in 1904, and carts sent along it had to turn back. No effort has been made by the Afghans to keep it in order and 25 years of weather-wear and disrepair have almost obliterated large portions of it. It would probably take months of work before it would be suitable for carts.

Continuing along the old road, after leaving the so-called cart-road, it then enters a more confined valley, the hills on either side being both loftier and steeper than those hitherto met with. They are formed of conglomerate and where their sides have been exposed to the action of water they have been cut away, and the formation clearly exposed.

About three-quarters of a mile above the caves, there is a very narrow and difficult place, the passage between the walls of conglomerate rock barely giving room for a cart to pass. The ascent through the narrowest part was also steep and slippery and strewn with loose boulders. It is only about 30× in length but was (December 1904) a serious impediment to all traffic and extremely difficult for wheeled vehicles. A few days' work would, however, make it much easier.

Above this *tangi* there are no difficulties met with, the path continuing to ascend by moderate gradients to the summit of the main *kotal* (elevation 7,950') reached at about 6 miles. From the top a good view of the Kabul valley and city is obtained. By using short cuts, of which there are many, infantry can reduce the ascent by about 2 miles. The last portion is too steep for carts, but is practicable for guns, and the guns captured in Kabul in 1879 were brought down it.

In 1904 lightly laden carts could only be got up this portion by using double teams of mules, with frequent rests. Bullocks were useless and refused to pull.

ROUTE No. 2-H—*contd.*

Between the main *kotal* and the next lower one which overlooks the Lataband camp, a considerable valley has to be crossed. The descent is easy and pretty direct, the bed of the stream, near which is a *kuchi* camp, being a little more than 2 miles from the top of the *kotal*.

Following the course of the stream for about a mile, the road from the *kotal* passes through a very similar *tangi* to that described above, with rough, boulder-laden bed, and precipitous cliffs on either side, then the junction of the old and new roads is reached at a point where the latter bends sharp to the W., and ascends the lesser *kotal* by a long series of zigzags.

A similar descent leads to the camping-ground at Lataband, which is situated in the centre of a basin, surrounded by lofty hills on three sides. Streams of water flow close past the camp, which is to some extent protected by a piquet house on the *kotal*. The camping ground is known locally as Samuch Mulla. In 1880 there was a post at Lataband for 1,000 men. On the N. the Kabul river is distant about 2 miles, and is passable by bridges above Gogamand, some 4 miles down stream, one at the foot of the Samuch Mulla peak and another below, all on the Tangi Gharu road. The camp is not difficult to defend if the three piquet posts, established in 1879, are held. The old post is now in ruins.

The piquet posts are all distinguishable and the walls mostly standing. Some little cultivation, but practically no supplies. From Lataband heliographic communication with Sherpur can be maintained.

Camping ground.—Probably for a division by locating units on suitable sites where they occur.

Water.—For 2 or 3 infantry brigades with proportion of divisional troops at least, from the Lataband stream, and from several springs, not liable to be cut off and little influenced by seasons.

Fuel.—Firewood abundant but inferior.

Fodder.—Fair camel grazing except in winter, when there is none.

Supplies.—*Nil.*

2	BUTKHAK ..	11 m.	Camel road, rapidly convertible to a cart road.
(5,986').			

22 m.			

ROUTE No. 2-H—*concl'd.*

General direction W. The road from camp is in good order throughout and at first a gradual ascent fit for wheeled traffic. Leaving Lataband, and crossing a small rivulet, a low *kotal* has to be surmounted, and then the road leads through small ravines, with trifling undulations. At $2\frac{1}{2}$ miles there is the small native fort of Samuch Mulla, which is the regular Afghan stage. Fair amount of space for camp. Water but no supplies. At $3\frac{1}{2}$ miles a small stream is crossed; another small stream at $4\frac{1}{2}$ miles. The road for the first 6 miles winds along through low hills, and then enters the Kabul valley, here some 8 miles broad and very fertile. By taking short cuts the distance can be reduced by $1\frac{1}{2}$ miles for unladen animals.

The old road which is rough, stony and in some parts steep crosses and re-crosses the new road several times, it is shorter and though fit for mules is not so for wheels. The latter half of the march is $\frac{1}{2}$ across a stony plain until nearing Butkhak the country becomes cultivated, with villages on both sides. At 10 miles cross the dry bed of a stream; no difficulty. At 11 miles Butkhak.

Camping ground.—

Water.—

Fuel.—

Fodder.—

Supplies.—

} Vide Route 2, stage 13.

ROUTE No. 2-J.

LATABAND TO TARAHI.

15 miles.

1 stage.

Authority.—Captain Young, 1880.

Epitome.

General description.—Route connecting Route 2-H, the route over the Lataband pass, with the main Route 2. *Road.*—Mule track through mountainous country.

Camping ground.—There is no intermediate stage.

Water.—For one brigade with proportion of divisional troop. At Tsagai (6 miles) in the stage.

ROUTE No. 2-J—*contd.*

Fuel.—No details, but several of the hillsides of these ranges are densely wooded.

Fodder.—Fair camel grazing except in winter along the route.

Supplies.—*Nil.*

No. of stage and total dis- tance.	DETAILS.
1	TARAKI .. 15 m. Mule-road.
15 m.	

On leaving camp, shown on some maps as Samuch Mulla, the path leads in a southerly direction along the watershed, which lies E. of the Lataband stream. The path winds up and down over the tops of the hills until, at three hours from Lataband, it reaches a place called Tsagai, and the *kuchi* encampment lying in a hollow among the hills. These hills here form the head of the valley of the Lataband stream, and are gently undulating, the whole ground being here open and easily traversed. There is plenty of good water, grass and some fuel.

From Tsagai easy paths run in several directions. One to the E. leads to Seh Baba, another S.E. to Tezin (distant 6 or 7 miles); another to the S. leads over a low ridge and down to the Tezin and Khurd Kabul road (joining it near the Haft *kotal* near the place called Balutak); a fourth path leads to the S.W. over the same ridge towards Khurd Kabul, passing at one mile from the ridge, the southern end of the Chinari pass. Following the latter path for one hour from Tsagai, the top of the above mentioned ridge is reached. From here a very extensive view is obtained to the S. including the greater part of the Tezin and Khurd Kabul road, including the Haft *kotal*. The road is apparently distant about 4 miles from the ridge. Three miles nearer, and parallel to, the first road, runs the Chinari road. There is another route, that by the Lataband stream, which lies in a narrow valley with precipitous sides.

As regards the practicability of the two routes, that by the watershed along the hills is perfectly practicable for both mountain guns and infantry, and by it such a force could cut in on the Tezin and Khurd Kabul road at the western side of

ROUTE No. 2-J—*concl'd.*

the Haft *kotal* in about five and a half to six hours from Lataband. The route by the Lataband stream is only practicable for infantry, there being one place where guns could not be got over. In going along the first route a force would be very conspicuous, but, on the other hand, a good view is obtained of all the surrounding valley; while, in going by the stream, nothing whatever can be seen, and strong flanking parties would be necessary, which would cause the usual delays.

At about 15 miles Taraki, stage 12 of Route 2, on the main metalled road.

<i>Camping ground.</i> —	} <i>Vide</i> Route 2, stage 12.
<i>Water.</i> —	
<i>Fuel.</i> —	
<i>Fodder.</i> —	
<i>Supplies.</i> —	

ROUTE NO. 2-K.

ALI KHEL TO TARAKI.

Viâ the Kharshatal and Katarai passes.

53 miles.

5 stages.

Authority.—Native reconnoitrer, 1910.

Epitome.

General description.—Part of the most direct route from the Kurram valley to Kabul and an important connecting route between the 2 main Routes 2 and 3.

Road.—Mule road and one much used by villagers of Hariob and Babar, who take wood, etc., to Kabul on ponies and donkeys; difficult route to force in the face of opposition.

The following *obstacles* are encountered:—

- (i) In the first stage the Kharshatal pass (10,000'); southern ascent steep, gradient 1 in 8, but passable for laden mules; descent on northern side easier.
- (ii) In the 3rd stage the Kagah Wagah pass (11,260'); ascent from the E. very steep but passable for laden mules; descent on its western face much easier.
- (iii) In the 4th stage the Katarai pass (10,965'); passable for laden mules.

ROUTE No. 2-K—*contd.*

All the above passes would normally be blocked by snow from early in December to the end of April, thereby closing this route for that period.

Camping grounds.—For at least one infantry brigade with proportion of divisional troops at each intermediate stage.

Water.—For the above force at each intermediate stage.

Fuel.—Abundant throughout the route from the wooded hill, in the first 4 stages, but appreciably less in the last stage.

Fodder.—Grass procurable at stage 2; camel grazing good (moderate at stage 3) along the route, except in winter, when there is none.

Supplies.—Nothing appreciable at any stage.

No. of stage and total dis- tance.	DETAILS.
1 <hr/> 15 m.	SPIN JUMAAT .. 15 m. Mule-road. (9,304').

Leaving Ali Khel the road follows Route 3 for 3 miles towards the Paiwar as far as Bian Khel, when it branches off N.E. up the Karshatal valley. The path now enters the hills crossing and recrossing the stream; hills on both sides wooded and difficult; at 8 miles (9,140') the main ascent of the Karshatal pass begins; average gradient 1 in 8, but steeper towards the top. Hillsides precipitous in places, and thickly wooded. The top of the Kharshatal pass (10,000') is reached at 6 miles; this pass would be difficult to capture in the face of opposition; the summit is commanded on both sides by high peaks at a distance of 400^x. There is a *ziarat* on top of the pass. (The Lakarai pass, which is somewhat higher than the Kharshatal, appears to lie about 5 miles almost due N.)

The descent is much easier. At 10 miles the path enters a *nala*, enclosed between wooded hills. At 10½ miles a larger *nala* from the direction of the Lakarai pass comes in on the right; up to this point the direction has been generally W. but the united *nalas* now bend northwards. Continuing along the *nala* Spin Jumaat (9,304') is reached at 15 miles, the valley here being about 200^x wide.

ROUTE No. 2-K—*contd.*

Camping ground.—For 1 infantry brigade with proportion of divisional troops on a good site.

Water.—Sufficient for the above force from the *nala* mentioned.

Fuel.—To any extent required from the wooded hills within 1 mile of camp.

Fodder.—Good camel grazing except in summer.

Supplies.—*Nil.*

2	BABAR	..	9 m.	Mule-road.
(8,200').				Leaving Spin Jumaat
24 m.				the path continues

down the *nala* ; the stream is crossed frequently, but the water is shallow. At 3 miles a *nala* joins in on the left bank ; this is known as the Wuch Algad and up it a good path, fit for local camels, leads to Kharoti.

Below this the valley is known as Ghazin. At 5 miles a large dry *nala* joins in from the E. The path continues down the Ghazin stream, mostly along the left bank, and is quite easy. The valley is about 30^x wide. At 8½ miles the Ghazin joins the Surkhab, which is now crossed by a ford (quite easy, with only 1½' of water in September), and the path then goes down the left bank to Babar village (8,200') reached at 9 miles ; 45 Ghilzai houses. At the village the Surkhab is not fordable in summer, and the villagers make a rough bridge.

Camping ground.—Sufficient for 1 infantry brigade with proportion of divisional troops.

Water.—For the above force at least, probably more from the Surkhab.

Fuel.—Plentiful within 1 mile of camp.

Fodder.—Grass plentiful in summer, good camel grazing except in winter.

Supplies.—Nothing appreciable.

3	KATARAI	..	8m. 4f.	Mule-road.
(10,160').				Leaving Babar the
32m. 4f.				direction is N.W. most-

ly on the left bank but sometimes in the bed of a small branch stream ; left bank wooded, both banks steep. The path ascends at a gradient of 1 in 10. At 3½ miles there is no longer

ROUTE No. 2-K—*contd.*

any stream flowing. At $5\frac{1}{2}$ miles reach the foot of the Kagah Wagah pass, where a path joins in from Hazro in the main Surkhab valley above Babar. The ascent of the Kagah Wagah is steep, the top (11,260') being reached at $6\frac{1}{2}$ miles. The pass lies over a high range separating the Surkhab and Katarai valleys. There is no open ground at the top; there is a very lofty peak to the E., and other peaks to the W. The Katarai is the highest pass on this route. The range is slightly wooded on the northern slope. The descent is by fairly easy zigzags for 2 miles. At the bottom (10,160') the Katarai stream is crossed by an easy ford. There are summer encampments of Ghilzai nomads here, and there is a little wheat cultivation. (The Katarai *nala* here flows N.E. and is believed to join the Surkhab somewhere near Ghauhiza.)

Camping ground.—For at least 1 infantry brigade with proportion of divisional troops, on a good site on the left bank of the stream.

Water.—Sufficient for the above force and more from the Katarai stream.

Fuel.—Abundant within 2 or 3 miles of camp.

Fodder.—) No details; probably *nil*, excepting a little

Supplies.—) camel grazing in the summer.

4 **CAMP RAJAN** .. 8m. 4f. Mule-road.

————— (8,980'). Leaving Katarai camp
41 m. the road goes up a
branch stream, direction W., gradient easy. At $1\frac{1}{2}$ miles the stream ceases to flow, and at $2\frac{1}{2}$ miles the *nala* disappears. The path then climbs the hillside, direction still W., gradient 1 in 8. At 3 miles, the top of the Katarai pass (10,965'). There is a high hill to the W. from which both the Katarai and Kagah Wagah spurs branch off; the hills to the E. are lower. The top is open and stony; no trees. From the pass there are two routes one to the N. and the other to the N.W., the latter is the longer, but the easier for laden animals; a high precipitous peak separates the two routes which rejoin at $8\frac{1}{2}$ miles. Following the former route the path is almost on the level, keeping 100' to 150' below the crest of the range on the E. At $5\frac{1}{4}$ miles a small, open, grassy space is reached where there is a depression in this range; this known as the Kirki Dand *Kotal* (10,697'). There are some springs here, and it is used as a grazing ground;

ROUTE No. 2-K—*contd.*

a path drops down from here to Tezin. The road now descends along a small *nala* (a branch of the Rajan *nala*); descent by easy zigzags. At $6\frac{1}{2}$ miles the *nala* bed, here a narrow gorge, is entered; hills on left bank very high and precipitous. At 7 miles the path ascends the hillside on the right to avoid a very deep and steep gorge through which the *nala* now runs. This ascent of the right bank is steep and difficult; the hill is precipitous and rocky, and the path runs along a narrow ledge which, however, is just practicable for laden mules; it is probably to avoid this that the longer route from the head of the Rajan *nala* is usually taken. At $7\frac{1}{2}$ miles the path again descends steeply to the *nala*, and follows down it at an easy gradient to $8\frac{1}{2}$ miles where the Rajan *nala* is joined (8,980'). The valley opens out and there is a summer grazing encampment here. The path which branched off N.W. at the top of the Katarai pass joins in here.

Camping ground.—For 1 infantry brigade with proportion of divisional troops, but site inferior.

Water.—For the above force from the Rajan stream.

Fuel.—Procurable within 1 or 2 miles of camp.

Fodder.—Camel grazing plentiful except in winter.

Supplies.—*Nil.*

5 **TARAKI** .. 12 m. Mule-road.

General direction N.W.

53 m.

The road now runs

straight down the Rajan *tangi*, lying in the stony *nala* bed and crossing and re-crossing the stream; the stones are, however, small, the water low, and there is no difficulty. The valley is only 20 yards wide and the hills on either side are high and steep, their lower slopes being especially precipitous. The *tangi* ends at $4\frac{1}{2}$ miles (8,080'), and an open, stony plain is entered. A small village (Gul Dara) lies to the left of the road, and at 6 miles Chakari village (8,030') $\frac{1}{2}$ mile to right, on right bank of *nala*. Chakari is a village of 50 houses with some water-mills. There is some cultivation in the *nala* bed. To shorten the stage this would be a good place to camp, on open ground on left bank. The path continues over an open strip of ground between the Rajan and another *nala* on the W. At 8 miles Malang village, 40 houses, Ghilzais. At 9 miles the western *nala* is crossed,

ROUTE No. 2-K—*concl'd.*

crossing easy, and path leads by the left bank of what is known as the Khurd Kabul *nala* to Khurd Kabul, (7,220') reached at 10 miles. The *nala* bed is highly cultivated.

Khurd Kabul (150 houses) ; inhabitants Tajiks, is a halting place for *kafilas* coming from Kabul. From Khurd Kabul the road runs N.E. to Taraki reached at 12 miles.

<i>Camping ground.</i> —	} <i>Vide</i> Route 2, Stage 12.
<i>Water.</i> —	
<i>Fuel.</i> —	
<i>Fodder.</i> —	
<i>Supplies.</i> —	

ROUTE NO. 3.

PARACHINAR TO KABUL.

Viâ Ali Khel, the Shutur Gardan pass and the Logar valley.

103½ miles.

10 stages.

Authority.—Afghan War records and native information to 1912.

Epitome.

General description.—The principal through route to Kabul from the Kurram valley. Owing to the pronounced salient formed by the Indian frontier at the head of the Kurram valley this is considerably the shortest through route to Kabul from any point on our frontier, but the importance which this gives it is out of proportion to the facilities it affords to the advance of an army, as the construction of a cart road over the Paiwar, Surkai, Shutur Gardan and Shinkai passes would be an arduous undertaking.

Road.—First stage, unmetalled cart road 10' to 15', thence camel road passable for wheeled artillery, to Kushi, Stage 7; this section which traverses the Hariob and Hazardarakht valleys could be converted into a cart road without difficulty but for the passes mentioned above. The last 3 stages, 8 to 10, unmetalled cart road through

ROUTE No. 3—*contd.*

the highly cultivated Logar valley; road easy. This route was followed by the Kurram and Kabul Field Forces accompanied by field artillery in 1878-79.

The following *obstacles* are encountered—

- (i) Paiwar *kotal* (8,531') in 2nd stage; ascent from eastern side very steep, though remains of a good road made by the British in 1879 exist. Pass only temporarily blocked by snow.
- (ii) Surkai *kotal* (10,200') in 4th stage; ascent from eastern side very steep, but soil easy and good, road could easily be made. Normally blocked by snow during December, January and February.
- (iii) Shutur Gardan (11,200') in 5th stage. Road over pass in extremely bad repair (July 1911) and possibly a new alignment necessary if a cart road is to be made. Pass normally blocked by snow from December to March.
- (iv) Shinkai pass (about 8,000') in the 6th stage. Ascent from the eastern side though only 500' in length very steep and severe trial to laden animals, but good road could easily be made.
- (v) Bridge over Logar river, $\frac{1}{2}$ mile E. of Zahidabad, 5th stage; bridge in good repair but not suitable for wheeled artillery.

It was reported, however, in June 1911, that the existing bridge was to be replaced by a "strong" bridge.

The Shutur Gardan and Surkai Passes being snowbound from December to March, this route should ordinarily be considered as being closed during that period, but it is known that small parties succeed in crossing these passes throughout the year, and Lord Roberts was of opinion that the Shutur Gardan (the highest pass on this route) could always be kept open with special measures.

Camping grounds.—For 1 division, at least, at all stages, except at stage 3, where there is space only for 1 infantry brigade with proportion of divisional troops and at stage 5, where there is only room for 1 or 2 battalions.

Water.—For a division at all stages, except at stages 3 and 5, where it is only sufficient for 2 and 1 infantry brigades with proportion of divisional troops, respectively.

ROUTE No. 3—*contd.*

Fuel.—Practically unlimited supply at all stages, except at stage 5, where wood is scarce, and at stage 6, where there is only a moderate quantity.

Fodder.—Grass abundant except in winter in the Hariob valley and Ali Khel (stage 2); lucerne in considerable quantities during March, April and May at Kushi (stage 6) and at stages 7, 8 and 9 in the Logar valley; *khasil* for the horses of a cavalry brigade daily during March and April in the Logar valley, stages 7, 8 and 9; *bhusa* to a considerable extent can be collected from villages commencing at stage 6, and thence forward to Kabul; camel grazing only fair to scarce till the Logar valley is reached, where it is illimitable, but scarce in winter.

Supplies.—Nothing appreciable until Kushi (stage 6); thence to Kabul all supplies for 1 division for at least 3 months could be collected in the rich Logar valley. It is stated that the supplies obtainable in this valley are practically inexhaustible.

No. of stage and total dis- tance.	DETAILS.
1	TERI MANGAL 12m. 4f. Unmetalled cart road 10' to 15'.
12m. 4f.	

From Parachinar the direction is a little N. of W., the route running parallel to, and about 2 miles below, the skirts of the Safed Koh range; road fairly level and crossing numerous stony *nalas*, but no very deep ravines. At 4 miles, Nurkhai where there is ample water for a large force from a channel leading out of the Shalozan *tangi*. At 5½ miles the Shalozan villages (5,950'), at the mouth of the Shalozan glen at the head of which is the Masharao pass, on the Safed Koh. Shalozan consists of a collection of villages with an old fort, remains of which are still visible on the plain about 1½ miles to the S.W. and which contained the European base hospital, in the 2nd Afghan war.

At Shalozan there is :—

Camping ground.—For a division, at least, on an open, stony plain between the Shalozan villages.

Water.—For a division probably, from a channel leading out of the Shalozan glen, as at Nurkhai.

ROUTE No. 3—*contd.*

Fuel.—Practically unlimited supply obtainable within 1 mile of camp.

Fodder.—Fair camel grazing, except in winter.

Supplies.—Negligible.

From Shalozan there is a route into Ningrahar over the Safed Koh *viâ* the Shalozan tangi and Wrekhmin, over which unladen animals can be taken.

Between the last 2 Shalozan villages, a broad stony *nala* bed is crossed, which is sometimes rendered impassable by floods for as long as 4 hours at a time. This *nala* receives the drainage of the Sitaram mountain and as its bed is steep and the catchment area bare, the floods are very sudden and violent, but quickly subside.

The road continues over a fairly level plain intersected by *nalas* to Paiwar village reached at 9 miles; here there is:—

Camping ground.—For a division and more on the open plain.

Water.—For the above force, at least, from several *nalas*.

Fuel.—Unlimited supply of firewood obtainable at short notice.

Fodder.—Fair camel grazing, except in winter.

Supplies.—Negligible.

Leaving Paiwar village, the road crosses a series of deep ravines, and passes through a jungle of low *ilex* scrub. At 12½ miles the Kurram Militia post of Teri Mangal on the W. of the road; post consists of a roofed courtyard and a double-storied keep built of stone, garrison 20 men. Near the post is the Ali Mangal bungalow with an enclosed courtyard. The enclosure wall is of mud and not loopholed nor are there any machicoulis.

*Camping ground.**—At Teri Mangal for infantry; camping space 156,500 square yards extensible to 216,000 square yards. At Ali Mangal for mounted troops; camping space 160,000 square yards extensible to the S.

Water.—At Teri Mangal from 2 springs.

(a) Spring rising N. of the Paiwar *kotal*, estimated supply in October 1909, 20,000 gallons per hour; on 7th June 1909 sufficient for 2 infantry brigades.

* On the conclusion of the first phase of the 2nd Afghan war the following force was located at Paiwar cantonment, *i.e.*, Paiwar village and Teri Mangal, from June to September 1879:—

F. R., Royal Horse Artillery.

C. 4, Royal Artillery.

G. 3, Royal Artillery.

9th Lancers, 1 squadron.

5th Punjab Infantry.

ROUTE No. 3—*contd.*

(b) Spring 200 yards N. of Teri, supply on 6th June 1909, 80,000 gallons in 24 hours, but on the 7th June 1911 200,000 gallons in that time.

At Ali Mangal for a division from 2 irrigation channels flowing from the Spin Gawai *nala*, for animals from a third channel 800,000, gallons in 24 hours.

Fuel.—Practically unlimited supply could be collected from the surrounding hills within 500 yards of camp.

Fodder.—Fair camel grazing except in winter.

Supplies.—Negligible.

2	ALI KHEL ..	15 m.	Camel road 8'.
————— (7,565').			
27m. 4f.			

The road now leads direct to the Paiwar *kotal*, a pass in the range of hills running S.W. from Sitaram peak in the Safed Koh and separating the Hariob valley in Afghanistan from the British valley of Kurram. The summit of the pass is $2\frac{1}{2}$ miles distant. The last mile to the *kotal* is very steep, but there are remains of a good road, gradient 1 in 9, made during the 2nd Afghan war, which could be repaired for wheeled artillery. Laden carts, it is believed, have never used the road up to the crest. Elevation of Paiwar *kotal* 8,531'; climate good in summer, but the cold in winter is very severe.

Camping space on the *kotal* 30,700 square yards, but there is only 1 spring of good water sufficient for about $\frac{1}{2}$ battalion; this, however, can be supplemented from the Teri Mangal supply.

Unlimited timber for building purposes in vicinity. In 1908, however, the forests on the Kurram side of the watershed were closed for 20 years to permit reforestation and to arrest denudation in progress, owing to ruthless cutting in the past. Afghan post called Wucha Margha on the *kotal*, N. of the road and not visible from it; garrison 1 company infantry.

A bridle-path in Afghan territory leads to the right from the Paiwar *kotal* to the Spin Gawai *kotal*, situated about 3 miles to the N. This path leads for $1\frac{1}{2}$ miles round steep and thickly wooded hillsides till it debouches on an open plateau, $\frac{1}{2}$ mile broad and covered with turf. Excellent camping ground, water and wood in abundance. Crossing the plateau the summit of the Spin Gawai *kotal* is reached. To the W. of the

ROUTE No. 3—*contd.*

plateau a path leads to the villages of Ghandi and Zabardast Kala, the latter on the main road from the Paiwar *kotal* to Ali Khel and the Shutur Gardan pass.

The Paiwar *kotal* could be easily defended on the Afghan side from a direct attack from the E. or Kurram side, as the steepness of the hillsides allows of but few approaches, and these could be defended by a few men. On the other hand, an attack from the W. by an enemy advancing up the Hariob valley would be difficult to guard against as the formation of the hills affords facilities for turning the position. The country to the N. is bounded by the steep slopes of Sitaram, the highest peak of the Safed Koh, elevation 15,620'; while to the S. the ridge is crossed by the Istiar and Starimandar *kotals*, and the Mangiar or Tsapri Pass descends to the Kurram river. The latter pass is the easiest, though the most circuitous.

The Spin Gawai *kotal* is far less capable of defence from the Afghan side, as the approach to it lies through a comparatively open valley, and is not very steep except close to the summit. But the path leading to it from the Paiwar village (up the Spina Shagga) was found by General Roberts' turning force to be extremely difficult marching, the *nala* being nothing but a mass of stones heaped into ridges and furrowed into deep hollows by the action of water: the infantry marching by night took 8 hours from Habib Kala to the foot of the *kotal*. A line for the proposed cart road has been surveyed and a path cut.

The road descends from the Paiwar *kotal** to the Hariob valley by an easy gradient of about 1 in 30, the road at first passes through a narrow defile commanded on each side at about 150 yards by low, pine-clad hills which could be easily traversed by infantry. These hills are themselves commanded by other and higher ones to the N. and S. At $1\frac{3}{4}$ miles from the *kotal*, on the left of the road are springs of good water from which the garrison was supplied during the war. At these springs a small stream rises and flows into the Hariob. Just before arriving at these springs, the defile through which the road runs, is joined by another defile from the N. (through which a path runs to the Spin Gawai *ko'al*) and widens out, forming an almost circular

* The Paiwar *kotal* was stormed and captured by Sir Frederick Roberts on the 2nd December 1878. Thereafter throughout the war a detachment was always stationed at the *kotal*. In the spring of 1880 the strength of this detachment was 800 infantry with 2 guns.

ROUTE No. 3—*contd.*

grassy basin about 300 yards in diameter, narrowing at its eastern end, through which the stream from the springs finds exit between steep banks about 10' high. The road runs through a cutting here on the stream's right bank, and all arms except infantry would have to confine themselves to it for about 70.× Having traversed this distance the hills on each side recede from the road and for about 1 mile the route runs along fairly open country to the Hariob stream which it crosses by a rough bridge with stone (*kachcha*) piers. This bridge is liable to the action of floods. The banks of the Hariob stream are low and it affords no obstacle save when the snows are melting.* The average height of the Hariob valley is 7,500', and in winter snow often lies thickly on the ground preventing communication between villages.

Having crossed the stream, the road bifurcates, the northern road being the longer by about 1 mile.

(i) The southern or river road follows the right bank of the Hariob, running S.W., to Bian Khel, being commanded throughout by the pine-clad heights of the Mangiar range.

(ii) The northern road takes a line W. for about $2\frac{1}{2}$ miles and then turns S.W. It is not commanded by the Mangiar heights.

(i) *River road.*—From bifurcation, $2\frac{1}{2}$ miles from Paiwar *kotal*, continue along right bank of Hariob under Zabardast Kala, which commands it; hence for next mile over stony ground. At 7 miles pass the village of Kotkai and shortly after Sharif Kala where road crosses mouth of Shergul *nala*. At $7\frac{1}{2}$ miles cross mouth of Lalidar stream at its junction with the Hariob. At 9 miles the road passes under the village of Stir Kala; at $9\frac{1}{2}$ miles ascends by steep cuttings of 200 yards (too narrow for guns meeting to pass) from river bed, and by a similar descent drops into the Kharshatal stream, which crosses and joins northern road at 10 miles. This "river road" is commanded throughout by the Mangiar range to the

* Snow usually falls in Hariob in December, after which cattle and mules are unable to move about or march.

ROUTE No. 3—*contd.*

S. and by the right bank of the Hariob, and the various villages beneath which it passes.

- (ii) *Northern road* ascends from the bed of the Hariob, by a zigzag of easy gradient, and passes hamlet of Zabardast Kala, consisting of a small enclosure, forming a detached fort with dilapidated tower. Camping-ground for two infantry brigades; used by Afghan troops as a cantonment prior to 2nd December 1878. At 5 miles cross Sargal stream, bed about 200 yards wide, banks low; water runs in several channels, the main one being crossed by bridge similar to above (see Hariob); no obstacle. At 7 miles Bilut *nala*, crossing which road runs S. This *nala* has precipitous banks about 15' high; descents and ascents by gradients of 1 in 17. At 8½ miles passes through village of lower Bilut on left bank of Lalidar stream consisting of about 5 houses, each detached and forming a small fort in itself. This is typical of all Jaji villages. About 800 yards up this stream and on the same bank is the village of Bilut at the mouth of the Lakarai pass, Lalidar stream is about 200 yards wide, with precipitous banks, of which the left commands the right. The road descends into the *nala* by a zigzag of 60 yards, gradient 1 in 20, and leaves it by a ramped ascent $\frac{3}{4}$ mile long, cut at an easy gradient in the right bank of the *nala* parallel to its course. This ascent is commanded by the village of Petta on the right bank of the *nala* and by that bank itself. About 10 miles pass Ali Sangi, a hamlet 100 yards to right of road beyond a small *nala*. From opposite this village the road traverses a high, uncultivated plateau on which (on left of road) is ample camping-ground for a large force. Here are some ruined buildings left by troops of Sir F. Roberts' force which was cautioned on the plateau, in Bian Khel camp in 1878. Wood and water plentiful. At 10½ miles descent by zigzag of easy gradient into the Karshatal stream, which the road crosses and passes. At 11½ miles village of Bian Khel, situated on low ground, surrounded by cultivation. Bed of this stream about 250 yards

ROUTE No. 3—*contd.*

wide, banks high, steep, and grassy. Water supply fair, from springs in the *nala* banks. This northern road passes through terraced fields for the most part, and all wheels and animals would have to keep to it between Zabardast Kala and Bilut; especially to the N., however, cavalry might work, though not with facility, the ground being very stony and much cut up by *nalas*. Bian Khel, near which the first, or river, road rejoins the northern road, is a collection of small hamlets, like all Jaji villages. From Bian Khel a route leads through Ali Sangi up a stony, rough, narrow defile to the crest of the Karshatal pass, between pine-clad hills, craggy towards the crest; whence a route leads to Kabul *viâ* the Rogun valley, Chakari and Khurd Kubul. The road to the crest is bad, but practicable for lightly laden baggage animals. Little is known of the route beyond.

From the junction near Bian Khel the road continues along the right bank of the Hariob to within 200 yards of Ali Khel, where it turns off to the right.

At 13 miles pass under Ahmad Khel opposite to which village a track leads *viâ* the Istiar *kotal* to Kachkina in Kurram, passable for mules and infantry and forms an alternative route to the Paiwar. At 15 miles the road, which from the junction near Bian Khel is commanded by the spurs of the Mangiar range, passes through the village Ali Khel, situated on the right bank of the Karaia stream which is the name given to the Kurram river above Kharlachi. Ali Khel was (1878) a village of the usual Jaji type and consisted of some 50 enclosures but is now said to contain 600 houses.

Just N. of Ali Khel village the road bifurcates, that to the left leading S. down the Karaia to its junction with the Hazardarakht stream, while that to the right leads E. through the village of Ali Khel to the camping-ground of 1879, distant about 1 mile. The camping-ground for one division is divided into 3 plateaux by two deep ravines and lies in the angle formed by the Hazardarakht and Karaia streams, extending about 1½ miles along the left bank of the former. Each of the plateaux was approached by a gun road cut out of the face of their slopes;

ROUTE No. 3—*contd.*

all were commanded within a range of 2,000 to 3,000 yards from many points, especially from the high ground on the right bank of Hazardarakht stream. The most southern plateau was also commanded by a conical hill near the junction of the two streams, which must be occupied. The Hazardarakht is here wide and stony, fordable in most places during dry weather; the Karaia similar but narrower. Lord Roberts was of opinion that this is a very strong and the only available position in the Hariob valley. It commands the entrance to the defiles leading to the Shutur Gardan and the approaches up the Karaia stream from the Mangal country, but the camp would be untenable against a civilized enemy with rifles and rifled guns if they should once obtain possession of the neighbouring heights.

The only Afghan troops in the Hariob valley consist of the garrison at Ali Khel, which furnishes the small infantry detachment at the Paiwar; see note at end of stage.

Camping ground.—For a division on the 3 plateaux lying in the angle between the Hazardarakht and Karaia streams.

Water.—For a division from these two streams.

Fuel.—Wood plentiful within 1 or 2 miles of camp.

Fodder.—Grass abundant except in winter; camel grazing to a considerable extent, but on hills difficult of access.

• *Supplies.*—Nothing appreciable.

The following routes converge on or radiate from Ali Khel:—

Route 2-E from Chartut (Route 2-D., Stage 1).

Route 2-K to Taraki (Route 2, Stage 12).

Route 3-A from Kharlachi.

Route 3-B from Parachinar.

Route 3-C to Loi Kila (Route 4, Stage 1).

Route 3-D to Ahmad Khel (Route 4 Stage 2).

NOTE.—A fortified cantonment has been built at Ali Khel; garrison in June 1911 consisted of 2 battalions infantry and 1 mountain battery (4 guns), from which is furnished the detachment of 1 company infantry for the post at the Paiwar *kotal*.

3	DRE KHULA	..	9 m.	Camel road, fit for wheeled artillery; easi- ly convertible for carts.
36 m, 4 f.				

General direction N.W. Road passing over high plateaux above the village descends into the bed of the Hazardarakht

ROUTE No. 3—*contd.*

stream and follows left bank. Valley at first about 2 miles broad but narrows continually and at Rokian (5 miles) it becomes a narrow defile 250 yards wide with steep slopes on either side. The road through the Rokian defile is above flood level at all the narrowest places and consequently is not liable to interruption by floods. At $5\frac{1}{2}$ miles the Jaji village of Shamu Khel. It is reported that there is a slope near the village on which a large force could encamp, with abundant water from the river. Immediately after Shamu Khel the worst bit of the road is met with, as the defile is confined and commanded by broken and high hills. At about $6\frac{1}{4}$ miles, valley opens out once more and road continues along the left bank to Dre Khula (30 houses) reached at 9 miles.

Camping ground.—For one infantry brigade with proportion of divisional troops; 2 or 3 battalions in the cultivation, the remainder of the brigade at the junction of the 2 streams; camping ground is commanded by several hills or spurs which would have to be piqueted.

Water.—For at least two infantry brigades with proportion of divisional troops from the Hazardarakht stream.

Fuel.—No details, but it is probable that the higher hills in this valley are covered with pine trees.

Fodder.—Camel grazing scanty; *nil* in winter.

Supplies.—*Nil.*

From Dre Khula Route 3-E. leads N.W., to camp Rajan (Route 2-K, stage 4), and as this latter route joins the main Route 2 to Kabul at Taraki, an alternative direct road to Kabul *viâ* Surkhab is made.

4	KASIM KHEL	..	11 m, 4 f.	Camel road fit for wheeled artillery, easily convertible for carts.
<hr style="width: 10%; margin-left: 0;"/>				
48 m.				

Road turns S.W. and runs generally along the left bank of the Hazardarakht stream, occasionally dipping down into its bed. The width of bed is first about 100' but gets narrower. For the first three miles the hills on the left recede and are bare, those on the right bank being more thickly wooded, craggy, and difficult for infantry to work over. Between the third and fourth miles, the hills recede on either side, and there is fairly level and stony ground on both banks where three or four regiments could encamp. At the end of the fifth mile

ROUTE No. 3—*contd.*

reach Jaji *thana*, a small *khasadar* post, garrison 6 men (June 1911).* Just beyond this the Tabbi *nala* comes in on the N. (*vide* note at end of stage). Here the hills on either side get more bare and open. Infantry protecting the right of advance could gain high ground W. of the Tabbi *nala* and keep along it up to the Surkai *kotal*. At the seventh mile, the hills close in a little and become steeper but open out again at the eighth mile, near where the old Karatiga *thana* is passed, and the Loi (or Lewah Algad) ravine runs in from the S. At this point opposition might be expected as the *nala* extends far back and the ground is much broken; the position should be held until all baggage has passed. At just over 10 miles the ascent to the Surkai *kotal* is reached, at the foot of which there is a small old *thana*. Up to this point the road is good and passable for all arms, up a general gradient of about 1 in 25, in a few places cutting and walling would be necessary, but for the rest only a little clearing.† For a portion of the ninth mile, the road to be made good would require some blasting, building, and excavation. (May 1879.) The rise to *kotal* is from 250' to 300'. The road now is steep with an average slope of 1 in 9 and some sharp turns, and it would be difficult but not impossible to drag guns up it. In September 1879 a battery of Royal Horse Artillery was man handled to the top. A good road could easily be made as the soil is easy. Summit of the Surkai *kotal*. *Kotal* is 10,200'.

The *kotal* position is untenable from the Afghan side without artillery and even then can be turned by the Tabbi route (*vide* Note at end of stage). But the hills to the S. of the *kotal* might, if held, form an obstacle to the advance until the higher hills on the left bank of the stream had been seized. Behind the *kotal* and to the N. of it, is a hill commanding or covering it, occupied by a small Ghilzai tower; this is again commanded or covered by a high hill to its W. called Kamran Tang,

* An alternative road to Kabul used by men on foot in winter to avoid the more difficult Shutur Gardan leads from here across the Machalgu hills to the Altimur pass (Route 4). The Shutur Gardan is normally closed by snow during December, January and February.

† In July 1911 it was reported that the road from the old *thana*, *i.e.*, from about 10 miles, up to and over the Surkai *kotal* was in bad repair, fit however for "plain" camels, and could easily be made passable for carts, the present alignment merely requiring clearing or building up.

ROUTE No. 3—*contd.*

which lies between the Surkai and Shutur Gardan *kotal*s and is the key of the position between them. The road passes along between these two hills and round the N. of the larger or Kamran Tang. The descent from the Surkai *ko'al* to the Surkai or Surkhab valley is more gentle, the fall to the open valley being about 100 feet. But about 300 yards from the summit, just at the bottom of the slope, the road originally wound round the S. side of a hill, with a deep *khud* on the left and a track, in some places, barely wide enough for gun-carriages to pass. The steepness of this short decline rendered it by far the worst part of the whole road; the roadway here was about 7 feet wide, covered with loose stones and there was nothing to prevent gun-carriages going over the *khud* at the bottom, where the road turned sharp to the right round a big rock. This part of the road was afterwards improved, but by now (1902) may have relapsed to its former state again. From the bottom of the descent the road for about a mile lies across an almost level plain to Kasim Khel.

Camping ground.—For a division.

Water.—For a division from the Surkhab.

Fuel.—Procurable to an appreciable extent within 2 or 3 miles of camp.

Fodder.—Fair camel grazing except in winter.

Supplies.—Nothing appreciable.

NOTE.—The Tabbi *nala* offers a route turning the Surkai *kotal*, but is impassable for baggage or a large number of troops. If opposition in force was not met with, good infantry could gain the high ground by the spur to the S. of the *nala* and mountain guns could be passed up the *nala* over the *kotal* into the Surkai valley. The route is as follows:—From Jaji *thana* a steep path ascends into the Tabbi *nala* thence fairly level, going along a small footpath crossing and recrossing the stream. At about two miles reach a steep zigzag ascent of about 600 feet in 600 yards to the very narrow rocky Tabbi *kotal*, and then down a steep and stony path to fairly open ground again. At about 4 miles the *nala* becomes very difficult, only a few yards wide with steep and craggy side, and the bed of the stream blocked with boulders. A led horse could only be taken along this bit, which lasts for about a mile, with difficulty. The Loi Koi valley is then reached, and the going is easy but mules should skirt the hills to the E. to avoid marshy ground. At about 7 miles reach a small *kotal* which, though difficult for guns, could be easily improved. This leads into the Surkhab valley, nearly 2 miles N. of Hazara *thana*. Cross two streams and join the main route.

5 DOEANDI ..

8 m. Camel road fit for
wheeled artillery.

56 m.

ROUTE No. 3—*contd.*

The road now runs S.W. direct to the Shutur Gardan, whose summit is distant about $2\frac{1}{2}$ miles. At $\frac{1}{2}$ mile on the right of the road, Hazara *Thana*, 150', square, in fair repair during 2nd Afghan war. The road up to the crest of the *kotal* is easy with a general gradient of 1 in 12, increasing as the top is neared. The hills on either side are open, bare and easy of ascent and no important opposition could be made; at the top of the pass there was a small watch tower (1879). A grand and extensive view of the Logar valley and the country beyond is obtained from the summit of the Shutur Gardan, height of which is 11,200'. In July 1911 it was reported that the road on both sides of the pass was in extremely bad repair, and that in order to make a cart road over the pass a realignment would probably be necessary, but that the pass was then negotiable, but difficult for "plain" camels.

Almost immediately after the pass is surmounted the road turns sharp round to the left, and winds down a spur, which runs out in a south-westerly direction, by a very rough path. The descent is difficult and presents a striking contrast to the ascent as the footpath is steep and tortuous, though practicable for all baggage animals. Gun-carriages were taken down it without much difficulty, but it would be almost impossible to take guns up under similar conditions. As the soil consists generally of disintegrated rock, the path could, with slight manual labour, be made into a fair road for wheeled traffic, were a cutting made into the side of the hill with the outer bank supported by stones. Timber is not procurable on the spot. The descent is about $1\frac{1}{2}$ miles in length, and merges into the Dobandi *nala*, which carries off all the water of the neighbouring gorges running down from the Safed Koh. At a point about 1 mile from the bottom of the pass at Akhund Khel the *nala*, whose bed forms the road, runs between precipitous rocky cliffs about 80' high, 21' broad, and 120' long. Infantry could move on either side, on the high ground above, covering the *nala*. The next $3\frac{1}{2}$ miles of road are along the bed of the *nala*, which is very stony and gradually opens out. On the right are a few detached houses and patches of cultivation until the village of Dobandi is reached, lying on the right bank of the *nala*.

On high ground on the left bank opposite Dobandi is an old unoccupied fort, which commands the road up the stream.

ROUTE No. 3—*contd.*

There is little water in the stream and apparently from there being no sign of a high water mark the road is rarely impassable from excess of water.

Camping ground.—For one or two battalions only, on a very bad site.

Water.—For at least 1 infantry brigade with proportion of divisional troops from the Dobandi stream.

Fuel.—Scanty.

Fodder.—Fair camel grazing except in winter.

Supplies.—*Nil.*

6	KUSHI	..	7 m, 4 f.—Camel road.
————— (7,829')			
63 m. 4 f.			

Leaving Dobandi the road runs for about $\frac{3}{4}$ mile nearly due W., when it bends sharply to the N., and leaving the bed of the stream leads direct for the Shinkai *kotal*. Although the road leading to the summit of the pass is only about 500 \times in length, still the ascent is steep and a severe trial to laden animals. The steep ascent with its sharp turns took the battery of Royal Horse Artillery in 1879, 5 hours to accomplish. A good road could easily be cut in 3 or 4 zigzags. There is a watch tower, built by the Babar Ghilzais to mark their boundary, about 500 \times from the crest of the pass on the Kushi (W.) side.

The report dated August 1911, on the road over the Shinkai pass stated that it was in fair order and merely required clearing, and building up or cutting back, where washed away, and that it was then fit for "plains" camels. From the top of the *kotal* to Kushi is about $5\frac{1}{2}$ miles and the decline very gradual. On the right of the road running down from the foot of the Ghilzai hills lies the extensive barren plain of Dasht-i-Surkhab. Kushi lies on the left bank of the Dobandi stream, and contains 300 houses in numerous walled enclosures or forts, and is surrounded by extensive orchards which occupy the bed of a wide ravine opening into the Logar plain.

Camping-ground.—For a division.*

Water.—Probably for a division from the Dobandi stream.

* The Kabul Field Force under Sir Frederick Roberts amounting to 7,500 men with 6,000 followers concentrated at Kushi on the 1st October 1879, prior to the advance on Kabul.

ROUTE No. 3—*contd.*

spur ending in Kalagai peak, which is 2,000' above the plain, and which lies three miles to the N. of the first. Zahidabad lies at the northern end of this plain, which is well cultivated, being intersected by the Logar river, and contains the large Ghilzai villages of Kuti Khel and Sangar Khel, besides numerous other villages and forts. On the left bank of the Logar river, which is generally within from 1 to 3 miles of the road, some good villages are visible, particularly that of Muhammad Aga, which is inhabited by a Persian-speaking community. The Ghilzai hills are about 4 miles distant on the right (E.), a low, disconnected range intervening between them and the Logar river on the left. Two unimportant Ghilzai forts are passed on the right about half-way. The last 3 miles into Zahidabad lie over ground with a slight descent towards that village with the spur bounding the Dasht-i-Surkhab on the S., lying close up to the road to the right (E).

Half a mile before reaching Zahidabad, the Logar river is crossed by a bridge, usually in good repair and practicable for infantry and laden animals but not for wheeled artillery. It was reported in June 1911, that this bridge was to be replaced by a "strong" bridge, *i. e.*, probably one suitable for the Amir's motors. Zahidabad is a large village on the left bank of the Logar river, containing a small square fort; inhabitants Tajiks and Ahmadzai Ghilzais.

*Camping ground.**—For a division.

Water.—For a division of more from the Logar river.

Fuel.—No information.

Fodder.—*Khasil* for the horses of cavalry brigade daily in March and April, lucerne in considerable quantities during March, April and May; about 500 maunds *bhusa* normally available; camel grazing unlimited, scarce in winter.

Supplies.—About 500 maunds unground wheat and barley normally available.

9 **CHAHARASIA** 10 m.—Unmetalled cart road.

92 m. 4 f.

* On the 9th August 1880 the following troops of the Kabul-Kandahar force camped at Zahidabad.—

1 Cavalry Brigade.

1st, 2nd and 3rd Infantry Brigades.

ROUTE No. 3—*contd.*

The road is excellent all the way, and crosses the Dasht-i-Saka, a level plain about $3\frac{1}{2}$ miles broad, which is entered after descending, by an easy gradient, a spur called Sum-i-Duldul at about $4\frac{1}{2}$ miles. At the southern end of this plain and on the left (W.) of the road is the large Tajik village of Rahmatabad, and on the right bank of the Logar river, which is now E. of the road, lies the large Ghilzai village of Musai (or Loi Musa). The road to Chehil Dukhtaran diverges to the left about half-way across the Saka plain, at the northern end of which is the village of Namunias, situated at the southern end of a spur running W. and S. Between the road and the river are lofty spurs except at Rahmatabad, where the plain is open to the E. Hills also bound the view to the W., at a distance of 2 or 3 miles. For the last 2 miles into Chaharasia the road passes over a perfectly level plain.

Chaharasia (1,200 houses) is situated on the southern slope of a low range, running across the plain from E. to W. A mile to the E. flows the Logar river; but the village is irrigated from the Kabul river, which flows immediately behind the low hills N.W. of the village, a water-cut being taken through a gorge in the low range above mentioned. It is a very rich, well cultivated village, possessing numerous gardens, orchards and vineyards, and there are many trees. The Kabul Government often send out troops to this village for a season. The population is a mixed one of Afghans and Tajiks. N.E. of Chaharasia, and beyond the Logar river, rises a prominent sharp-pointed mountain called Sakh-i-Baranbai, on the eastern side of which is the Khurd Kabul pass.

Camping ground.—For a division on open plain S. of village near main road.

Water.—For a division from the water-cut referred to, supplemented by the Logar river, 1 mile distant.

Fuel.—Wood to some considerable extent probably procurable.

Fodder.—For 10,000 animals for 1 day normally procurable (1880). *Khasil* for the horses of 1 cavalry brigade daily during March and April; lucerne in considerable quantities during March, April and May; unlimited camel grazing except in winter.

Supplies.—1,000 maunds unground grain normally available.

ROUTE No. 3—*contd.*

10 **KABUL** .. 11 m. Unmetalled cart road.
 (5,895')

103 m, 4 f.

From Chaharasia to the low ridge of Khairabad, crossed at $4\frac{1}{2}$ miles, the road is level and good, and crosses a plain, over which all arms can manoeuvre. The Khairabad *kotal* is about 100 feet above the plain and presents no difficulties. At 6 miles the road enters the Sang-i-Nawishta, a defile about $1\frac{3}{4}$ miles in length, through which it is confined between a lofty hill on the left and the Logar river on the right. The defile is commanded on the right by inaccessible and precipitous cliffs, and though practicable for all arms, it offers cramped passage for a large force. At 7 miles reach Bin-i-Hisar, where there is room for a camp, but the ground is much cut up by irrigation channels. At 9 miles pass the Bala Hisar on the left; the fort, with the exception of the citadel, is now in ruins. From thence to Sherpur is about $1\frac{3}{4}$ miles; for the most part a shady road. An alternative and perhaps better road from Chaharasia to Kabul, inasmuch as it is less confined or commanded, runs to the W. of the road described. This road runs due N. for 4 miles till it reaches the Kabul river, whose right bank it then follows passing through the Deh Mozang gorge at 10 miles. This road is also an unmetalled cart road and is approximately the same length as the road through the Sang-i-Nawishta.

Camping ground.—

Water.—

Fuel.—

Fodder.—

Supplies.—

} *Vide* Route 1, stage 13.

The following were the principal signalling stations along this line during the Afghan war of 1878-80:—

Paiwar kotal.—Hill to the N. connects with Ali Khel *via* the peak S. of Zabardast Kala.

From Ali Khel communication can be continued to Matungi, whence Dre Khula is visible. To get Karatiga, the party must ascend Matungi and on reaching the first rocky bit immediately above the tree level, will be able to see the hill lying N. of the *sarai* at Karatiga; and to obtain the Shutur Gardan the party must again ascend Matungi, but this time not quite so high, just clear of the trees. The Shutur Gardan party must

ROUTE No. 3—*concl.*

get to the highest point of the downs S. of *kotal* the first day, whence they will be able to select a suitable station. From this same place at the Shutur Gardan can be seen Shinkai *kotal*, the highest point on the ridge above Kushi the hill W. of Zarghan Shahr, and the hill S. W. of the camping ground at Zahidabad more properly called Safed Sang. On the highest point of the ridge S. of Kushi, Sher Darwaza, a gorge near Kabul, is easily obtained.

To get the station on Matungi 3 hours should be allowed; for that at Karatiga, three-quarters of an hour; that at Shutur Gardan, three-quarters of an hour; and that at Kushi, half an hour.

ROUTE NO. 3-A.

KHARLACHI TO ALI KHEL.

19 miles.

2 stages.

Authority.—Reconnaissances from Ali Khel and Paiwar *kotal*, 1879.

Epitome.

General description.—An important connecting route between Routes 3 and 4, two of the main through routes from the Kurram valley into Afghanistan. The route practically throughout its course follows the Istiar ravine, which is commanded on both sides by hills covered with dense forest of pine trees, affording excellent cover both to a force advancing and to an enemy opposing an advance. The heights on both sides could be crowned and the pass thus rendered secure.

Road.—Camel road throughout and one much used by the inhabitants of the Hariob and Ali Khel for communication with the Istiar villages and the Lower Kurram valley. The Istiar pass (9,700') in the 2nd stage is the only *obstacle* encountered, and may be blocked after heavy fall of snow, otherwise route open throughout the year.

Camping ground.—For 1 infantry brigade with proportion of divisional troops at Istiar Bala, the intermediate stage.

ROUTE No. 3-A—*contd.*

Water.—For the above force at Istiar Bala, from the Istiar river.

Fuel.—Inexhaustible supply throughout from the pine forests on both sides of the ravine.

Fodder.—No details; probably camel grazing for a few hundred camels along the route.

Supplies.—Practically *nil* along the route.

No. of stage and total dis- tance.	DETAILS.
1 <hr/> 6 m.	CAMP near ISTIAR BALA. 6 m. Camel road.

General direction N.W. Leaving Kharlachi the road moves up the Istiar valley crossing and recrossing the stream at several points. At 2 miles the Mangal village of the Istiar Pain (30 houses), which commands the entrance from the Istiar *kotal* to the plain; this village is at the highest point of a glacis-like slope with low rounded hills on both flanks, and forms a remarkably strong position for the defence of this valley.

At Istiar Pain Route 3-B joins this route from the N.E., coming from Parachinar 11½ miles distant.

The road continues up the ravine, whose sides are densely wooded. The gradient is slight, 1½° to 2°, the track well-worn though no steps have been taken to improve it artificially. At 6 miles Istiar Bala (40 families of Hasan Khel Jajis).

Camping ground.—For 1 infantry brigade with proportion of divisional troops, 1 mile E. of the village. General Roberts accompanied by 1 mountain battery and 1 company infantry encamped here in 1879.

Water.—For the above force at least from the Istiar stream.

Fuel.—Practically inexhaustible supply from the pine forests on both sides of the ravine.

Fodder.—No details; possibly only a little camel grazing

Supplies.—*Nil.*

ROUTE No. 3-A—*concl'd.*

2	ALI KHEL	13 m. Camel road.
19 m.	(7,565').	

General direction, N.W. The track continues up the densely wooded Istiar ravine; at the 2nd mile the path zigzags up a narrow, dangerous ravine and in the 3rd mile has 2 difficult places each about 100 yards long. The track now zigzags up the right slope of the ravine to the crest of the Istiar *kotal* (9,700') reached at 5 miles from Istiar Bala. The Istiar *kotal* is a pass in the Mangiar range, which forms the water-parting between the Hariob and the Kurram valleys and is the most notable saddle of this ridge; its rocky surface is almost bare of trees. After crossing the *kotal* the first 250 yards is down a steep zigzag which could be improved without difficulty. At about 2 miles from the crest the Istiar *nala* widens and the Dre Khula *algad* joins this ravine from the S, from the *kotal* of the same name 2 miles distant (see note). About a mile further on, *i.e.*, at 8 miles, the road passes between high and rocky cliffs, the ravine narrowing to 20× to 30× for about $\frac{1}{4}$ of a mile, when it attains an average width of 100×. The height of the ravine where it is joined by the Dre Khula *algad* is 8,400', and the hills all along this section are steep and thickly wooded. The road continues down the valley, Ali Khel being reached at 13 miles.

Camping ground.—

Water.—

Fuel.—

Fodder.—

Supplies.—

} See Route 3, stage 2.

NOTE.—The Dre Khula *algad* route *via* the Dre Khula *algad* pass (9,800') connects with the Mangiar route, Route 4-B. It is much used by the Mangals, but is not practicable for laden baggage animals. The ascent to the *kotal* is steep and fit only for a slow advance in single file.

From the top of the *kotal* (of which there are 2 about 400 yards apart) a most extensive view is obtained of the Hariob, Mangiar and Hazardarakht valleys.

The track then descends a deep ravine to the village of Shekhun above the Mangiar defile. A track also leads to village of Mangiar Sapri.

ROUTE NO. 3-B.

PARACHINAR TO ALI KHEL.

28 miles.

2 stages.

Authority.—Reconnaissances from Ali Khel and Paiwar kotal, 1879.

Epitome.

General description.—An alternative route to the first 2 stages of the main through Route 3, and approximately the same length. It joins Route 3-A, in the 1st stage at Istiar Pain (11½ miles) and thereafter the 2 routes are identical.

Road.—Camel road throughout. The Istiar pass (9,700') in the 2nd stage is the only *obstacle* encountered and may be blocked after heavy fall of snow, otherwise route open throughout the year.

Camping ground.—

Water.—

Fuel.—

Fodder.—

Supplies.—

} See Epitome to Route 3-A.

No. of stage and total distance'	DETAILS.
1 <hr style="width: 10%; margin: 0 auto;"/> 15 m.	CAMP near ISTIAR BALA. 15 m. Camel road.

Leaving Parachinar, the road crosses the Kurram plain, direction S.W. At 8 miles, the Spin *k'war*, a tributary of the Kurram river, is crossed; no difficulty but stream is liable to spates in spring though never impassable. At 8 miles the Mangal village of Burkhi S. of the road; at 11½ miles this route joins Route 3-A at the village of Istiar Pain, the two routes then being identical and running N.W. to Istiar Bala.

Camping ground.—

Water.—

Fuel.—

Fodder.—

Supplies.—

} See Route 3-A, stage 1.

ROUTE No. 3-B—*concl'd.*

2	ALI KHEL (7,565')	13 m. Camel road.
<hr style="width: 10%; margin-left: 0;"/>		
28 m.		

This stage is identical with stage 2, Route 3-A.

ROUTE NO. 3-C.
ALI KHEL TO LOI KILA.

15 miles.

1 stage.

Authority.—2nd Afghan War records, 1879; native surveyor, 1911.

Epitome.

General description.—A connecting route between Routes 3 and 4, two of the main through routes from the Kurram valley into Afghanistan.

Road.—Practicable for lightly laden hill camels throughout. The only *obstacle* encountered is the Sapri (Sappari) pass (9,079'), crossed in the 1st stage; pass temporarily blocked after heavy falls of snow, otherwise route open throughout the year.

Camping grounds.—No intermediate stage.

Once the Sapri pass is crossed (at 3 miles), there is sufficient water for at least 1 infantry brigade along the road to the end of the stage.

Fuel.—Plentiful from the wooded hills throughout this route.

Fodder.—No details; probably camel grazing for 200 to 300 camels along the route.

Supplies.—*Nil* along the route.

No. of stage and total dis- tance.	DETAILS.
1	LOI KILA (5,121')
<hr style="width: 10%; margin-left: 0;"/>	
15 m.	15 m. Camel road. Leaving Ali Khel track runs S.E. up a

ROUTE No. 3-C—*concl'd.*

wooded valley. At $1\frac{1}{2}$ miles village of Maran Sapri (30 houses) ; valley here overlooked from the W. by the Utmandeha peak (8,496'), a trigonometrical survey point. The track now zigzags* up the Sapri (Sappari) pass, the crest of which (9,079') is reached at 3 miles. Here this route joins Route 4-B, which it follows down the Mangiar *nala* to Loi Kila, which is the first stage of the main through route from Karlachi to Kabul, Route 4 *viá* the Mirzakai and Altimur passes.

<i>Camping grounds.</i> —	} <i>Vide</i> Route 4, stage 1.
<i>Water.</i> —	
<i>Fuel.</i> —	
<i>Fodder.</i> —	
<i>Supplies.</i> —	

ROUTE NO. 3-D.

ALI KHEL TO AHMAD KHEL.

13 miles.

1 stage.

Authority.—2nd Afghan War records, 1879; native surveyor, 1911.

Epitome.

General description.—A connecting route running down the Karaia (Kurram) valley, between Routes 3 and 4, two of the main through routes from the Kurram valley into Afghanistan.

Road.—Practicable for camels and could easily be made passable for wheeled artillery. No *obstacle* encountered along the route, which is open throughout the year.

Camping grounds.—There is no intermediate stage.

Water.—For 2 or 3 infantry brigades at least with proportion of divisional troops from the Karaia river, along the whole route.

Fuel.—To an appreciable extent from the hillsides which are wooded in places.

Fodder.—No details. It is probable that grazing for 200 to 500 camels exists along the route.

Supplies.—To an appreciable extent could be collected from the villages in the valley if required.

* No details of the ascent of the pass from the northern side are available.

ROUTE No. 3-D—*concl'd.*

No. of stage and total dis- tance.	DETAILS.	
1 <hr/> 13 m.	AHMAD KHEL (6,950').	13 m. Camel road.

Leaving Ali Khel the road runs S.E. down the right bank of the Karaia, the river-bed here being about 60× wide. The road for the most part to Bara Karmana, 4 miles, passes through cultivation and would require repairs before being passable for wheeled artillery. Other arms and baggage animals would proceed along the river-bed. At 2½ miles the Jaji hamlet of Kotkai on the right of the road. Thence the valley narrows somewhat till at Karmana, reached at 4 miles, valley is only about 200× broad. Stream here in April 1911 was 20× to 30× broad, 2' to 3' deep with firm bottom. Karmana consists of 300 two-storied houses whose inhabitants are Hasan Khel Jajis. This route then follows route 4-B down the Karaia valley to Ahmad Khel, reached at 13 miles.

Camping grounds.—

Water.—

Fuel.—

Fodder.—

Supplies.—

} *Vide* Route 4, stage 2.

ROUTE NO. 3-E.

DRE KHULA TO CAMP RAJAN.

22 miles.

2 stages.

Authority.—Norman, from native information.

Epitome.

General description.—This route in the first instance connects the main through Route 3 with Route 2-K at camp Rajan, and together with this latter route forms another connection between 2 main through Routes 2 and 3.

ROUTE No. 3-E—*contd.*

Road.—It is known that this route is used by traders and it is said to be practicable for horsemen and laden mules. The Mula Khak and Ghorband passes crossed in stages 1 and 2 respectively are the only *obstacles* encountered, but little is known of these passes though it is reported that they present no serious difficulty to laden mules. It is believed that this route is open throughout the year.

<i>Camping ground.</i> — <i>Water.</i> — <i>Fuel.</i> — <i>Fodder.</i> — <i>Supplies.</i> —	}	Nothing definitely known about camp Surkhab, the intermediate stage, except that <i>kafilas</i> regularly halt there.
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No. of stage and total dis- tance.	DETAILS.
1 <hr/> 11 m.	<p style="text-align: center;">CAMP SUR-KHAB.</p> <p style="text-align: center;">11 m. Mule road.</p> <p style="text-align: right;">Leaving Dre Khula the road runs N.W. up the Rokian <i>nala</i>. At 3 miles Ghogazai, a few scattered hamlets, on the right of the road. The road then crosses a range of hills by the Mula Khak pass, the crest of which is passed at about 6 miles and descends into the Surkhab valley.</p> <p>At about 11 miles reach the Surkhab near its source at a point where it is joined by a stream or <i>algad</i> from the N.</p> <p><i>Camping ground.</i>—No details. It is probable that a suitable camp for at least 2 or 3 battalions could be found near the junction of these 2 streams, as <i>kafilas</i> encamp here.</p> <p><i>Water.</i>—From the 2 streams referred to for the above force and more.</p> <p><i>Fuel.</i>—No details.</p> <p><i>Fodder.</i>— } No details; probably <i>nil</i>.</p> <p><i>Supplies.</i>— }</p>
2 <hr/> 22 m.	<p style="text-align: center;">CAMP RAJAN (8,980').</p> <p style="text-align: center;">11 m. Mule road.</p>

General direction due N. The road continues up the *algad* for about 4 miles, when the ascent of the Ghorband

ROUTE No. 3-E—*concl.*

pass is commenced; the summit is reached at 5 miles; no difficulty; the track then descends into the Rajan valley, camp Rajan being reached at 11 miles where Route 2-K from Ali Khel to Taraki *via* the Karshatal and Katarai passes, is joined.

<i>Camping ground.</i> —	} <i>Vide</i> Route 2-K, stage 3.
<i>Water.</i> —	
<i>Fuel.</i> —	
<i>Fodder.</i> —	
<i>Supplies.</i> —	

ROUTE NO. 3-F.

ZARGAN SHAHR TO PATKHAI ROGHANAI.

17 miles.

2 stages.

Authority.—2nd Afghan war records, 1880; native surveyor, 1911.

Epitome.

General description.—A connecting route between the 2 through Routes 3 and 4.

Road.—Camel road, 8' to 12', probably easily convertible to a cart road. The Logar river crossed twice by wooden bridges and the Sarkh river forded in 2nd stage. In all these cases interruptions liable in case of floods, as bridges are only 3' above waterway. These are the only *obstacles* encountered. Route open throughout the year.

Camping ground.—For 1 infantry brigade with proportion of divisional troops at Hisarak, the intermediate stage.

Water.—For a division or more from the Logar river at Hisarak.

Fuel.—Plentiful at Hisarak.

Fodder.—At Hisarak, *khasil* for the horses of a cavalry brigade daily, during March and April; about 1,000 maunds *bhusa* normally available. Excellent camel grazing except in winter, when it is scarce.

Supplies.—About 1,000 maunds unground wheat and barley could normally be collected here.

ROUTE No. 3-F—*contd.*

No. of stage and total distance.	DETAILS.	
1 <hr/> 11 m.	HISARAK (6,412')	11 m. Camel road 8' to 12'.

Leaving Zargan Shahr the road runs S.W. and passes at $\frac{1}{4}$ mile the famous *ziarat* of Khwaja Sadar Ulla a few hundred yards W. of the road. At 1 mile the ascent of the Kotal-i-Ashabi is commenced, gradient 1 in 15. The crest (6,412') is reached at $1\frac{1}{2}$ miles; the ridge here is $25\times$ broad and would form a good signalling station between Zargan Shahr and Hisarak. The descent of the pass on its S. side is if anything easier than the northern ascent and wheeled artillery could be taken over the pass without difficulty. At 3 miles Dado Khel (350 houses) whose fields are irrigated by *karez* in the hills to the E. The road now turns due W. and heads direct for the main Kabul-Altimur road which is crossed at 5 miles at Purak (400 houses). Direction changes once more to S.W. till a state *sarai* of the usual pattern is reached at 6 miles, whence road runs due S. to Hisarak (500 double-storied houses) lying on the right bank of the Logar river.

Camping ground.—For 1 infantry brigade with proportion of divisional troops.

NOTE.—From Hisarak to Kala Durani (stage 4, Route 15), *via* the Surkh Bedak pass, 23 miles.

Road good over plain, practicable for field guns. Pass Shuluk at 9 miles. From here the track continues in a north-westerly direction over a barren plain called Chil Pakan; the ground is undulating but perfectly practicable for all arms until within about 300 yards from the crest of the Surkh Bedak pass, when the rise becomes too steep for field guns. The soil is easily worked, and there would be no difficulty in making a road up to the top. Distance from Shuluk 8 miles. The track continues from the *kotal* towards Kala Durani, bearing 340° , where it joins the main Ghazni-Kabul road. The descent is steep for about 2 miles, and is quite impracticable for field guns, nor would it be possible to make a road within a reasonable time. The road was traversed to about half a mile from the top from which point a good view was obtained. At about 5 or 6 miles distance in the valley below, the Ghazni-Kabul road is visible, and also the villages of Bin-i-Badam, Kala Durani, and the Maidan district. There is no water on the route followed beyond the village of Piru Khel. Laden camels can be, and are, taken over the Surkh Bedak pass but the route is not suited for the baggage animals of an army.—(*Gaselee, June 1880.*)

ROUTE No. 3-F—concl'd.

Water.—For a division or more from the Logar river.

Fuel.—Plentiful.

Fodder.—*Khasil* in March and April for the horses of a cavalry brigade; about 1,000 maunds *bhusa* normally available; excellent camel grazing except in winter, when it is scarce.

Supplies.—About 1,000 maunds unground wheat and barley could normally be collected here.

From Hisarak a camel road 8' to 12' running due E. strikes the main Kabul-Altimur road at 1 mile.

A second road, similar to the above, leads S.E. to Patkhai Shahana, distant 2½ miles, on the Kabul-Altimur road.

2 PATKHAIRO- 6 m. Camel road 8' to 12'.

GHANAI

17 m.

(6,381')

General direction
S.W. At ½ mile cross

the Logar river by a wooden bridge, fit for carts, 40× long 10' roadway, 3' above water, supported on piers of stone and earth. Roadway consists of branches and earth.

Road now runs parallel to the river which is about 200× distant. On the right (W.) of the road is a low sandstone range 100' to 200' high. At 2½ miles Saiyid village of Uni Saiyidan (180 double-storied houses). At 3½ miles recross the Logar river by a bridge, very similar to the bridge near Patkhai Roghanai. River is 10' to 12' deep here. Road now turns due W. and at 5 miles the Sarkh river is forded; river 15× wide, about 2' deep, current 4 miles an hour, sandy bottom, banks steep and 8' to 10' high; river unfordable when in flood. At 6 miles Patkhai Roghanai.

Camping ground.—Probably for a division. Two infantry brigades camped here together in August 1880.

Water.—For a division or more from the Logar river.

Fuel.—Wood plentiful, within 1 or 2 miles of camp.

Fodder.—*Khasil* for the horses of a cavalry brigade daily during March and April; excellent camel grazing except in winter, when it is scarce.

Supplies.—Size of village and rich cultivation indicate that *bhusa* and unground grain to a considerable extent should normally be procurable.

ROUTE NO. 3-G.

ZAHIDABAD TO KALA AMIR.

Viâ the Waghjan defile.

34½ miles.

4 stages.

Authority.—2nd Afghan war records, 1880.*Epitome.*

General direction.—A connecting route along the left bank of the Logar between the main through Routes 3 and 4, followed by the cavalry brigade of the Kabul-Kandahar Force* 9th—12th August 1880.

Road.—Camel road, convertible to a cart road without much difficulty. Waghjan defile in stage 2 and the Hisarak pass in stage 3 only *obstacles* encountered; the former very difficult for wheeled artillery. Route open throughout the year.

Camping ground.—For a division at all intermediate stages.

Water.—For a division and more throughout from the Logar river.

Fuel.—Fuel is very scarce* once the Waghjan defile is passed in stage 2.

Fodder.— } From the fact that the entire route lies in

Supplies.— } the richly cultivated Logar valley, it may safely be assumed that at each stage the following could be collected during the day:—

Khasil—Sufficient for the horses of a cavalry brigade daily during March and April.

Bhusa—Between 1,000 and 2,000 maunds. Unground wheat and barley, between 1,000 and 2,000 maunds.

1	DEH-I-NAO	9 m. Camel road.
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9 m.	
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Leaving Zahidabad the road runs S. W. along left bank of the Logar river, through much cultivation. Between miles

* The Kabul-Kandahar Force marching along this route 9th—12th August 1880 experienced the greatest difficulty in procuring wood, even sufficient for the bakeries attached to British regiments. Huts were actually bought for the wood in their roofs, and fatigue parties were daily employed in digging up roots and cutting down shrubs for fuel.

ROUTE No. 3-G—*contd.*

No. of stage and total dis- tance.	DETAILS.
	<p>1 and 2 the road strikes the base of a range of hills on the W. of the road ; these hills run from E. to W. and extend to the Kabul-Ghazni road (Route 15). Several villages and hamlets passed on both sides of the river. At $4\frac{1}{2}$ miles the Tajik village of Muhammad Aga (200 houses) standing amidst highly cultivated fields ; thereafter the Tajik villages of Kati Khel, Kala Wazir, Kala Mulla Bahadur and Kala Alam are successively passed, the last village at about 8 miles. At 9 miles camping ground of Deh-i-Nao, the village (150 houses in 1880, inhabitants Tajiks) is on the opposite (right) bank of the river.</p> <p><i>Camping ground.</i>—For a division, if necessary.</p> <p><i>Water.</i>—For a division or more from the Logar river.</p> <p><i>Fuel.</i>—In large quantities from the hills enclosing the Waghjan defile 3 miles from camp.</p> <p><i>Fodder.</i>— } No details, but it is probable that at least <i>Supplies.</i>— } 1,000 maunds of unground grain and a similar amount of <i>bhusa</i> could normally be collected from villages within 2 or 3 miles ; good camel grazing except in winter, when it is scarce.</p>

2 **KALANGAR**

9 m. Camel road.

18 m.

General direction S.W. Road continues along the left bank of the Logar river ; at 2 miles Tajik village of Waghjan (500 houses) on left bank of river, and near by is Kala-i-Rahim Khan. From these 2 villages about 400 maunds unground grain and fodder for about 4,000 animals for 1 day would normally be procurable and fuel is also obtainable in the vicinity. Waghjan stands just to the N. of the ridge separating the upper from the lower reaches of the Logar valley. This ridge is pierced by a defile running N. and S. known as the Tangi Waghjan, due to the Logar river forcing a passage through the ridge. The road enters this defile at about $2\frac{1}{2}$

ROUTE No. 3-G—*contd.*

miles ; defile is about $1\frac{1}{2}$ to 2 miles long and about $\frac{1}{2}$ mile wide, the road through which on both sides of the river is fit for laden camels but very difficult for wheeled artillery ; on the S. of the defile is the small hamlet of Kala Shahghasi with a watch tower. After quitting the defile cultivation extends for about a mile on either side of the river to the end of the stage. At 9 miles Kalangar (1,000 houses) divided into several detached fortified hamlets, inhabitants Khwajas (Hazaras), Tajiks and Saiyids.

Camping ground.—For a division on a large open plain on the left bank of the river.

Water.—For a division or more from the Logar.

Fuel.—Considerable quantities from the Waghjan hills $4\frac{1}{2}$ miles distant.

Fodder.—*Khasil* in March and April daily for the horses of a cavalry brigade ; about 2,000 maunds *bhusa* normally available ; good camel grazing except in winter, when it is scarce.

Supplies.—About 2,000 maunds unground wheat and barley could normally be procured in the vicinity.

There is a ford over the Logar river opposite Kalangar.

3 **BARAKI-BARAK** 9 m. Camel road.

27 m.

Road continues along the left bank, direction due S. It is possible to ford the river at Kalangar and then follow a camel road on the right bank. At 2 miles Upper Hisarak, an Ibrahim Khel village of 300 houses. At 4 miles Logar Hisarak (500 two-storied houses), main village on right bank with hamlets on both banks ; inhabitants Tajiks, Kizilbashis and Popalzais. Road now crosses a range of hills by an easy pass, known as the Hisarak pass, fit for wheeled artillery. At $5\frac{1}{4}$ miles road conforming to a bend made by the river, runs due W. and continues thus to end of the stage. At 9 miles Tajik village of Baraki-Barak (500 houses).

Camping ground.—At least 2 infantry brigades with proportion of divisional troops.*

* On the 11th August 1880 the following troops of the Kabul-Kandahar Force encamped at Baraki-Barak : one cavalry brigade, 2nd Infantry Brigade.

ROUTE No. 3-G—*concl'd.*

Water.—For a division or more from the Logar river.

Fuel.—Very scarce.

Fodder.—*Khasil* in March and April daily for the horses of a cavalry brigade; about 2,000 maunds *bhusa* from neighbouring villages; excellent camel grazing except in winter, when it is scarce.

Supplies.—About 2,000 maunds unground wheat and barley, at least from the surrounding villages.

4 KALA AMIR 7 m. 4f. Camel road.
(6,440').

34m. 4f.

Road continues along left bank of the Logar due W. for 2 miles, then N.W. to end of the stage. At 7½ miles Kala Amir consisting of 3 forts surrounded by some cultivation.

Camping ground.—

Water.—

Fuel.—

Fodder.—

Supplies.—

} *Vide* Route 4, stage 10.

ROUTE NO. 4.

KHARLACHI TO KABUL.

Viâ the Mirzakai and Altimur passes, Gardez and the Ghazni-Kabul cart road.

161 miles.

15 stages.

Authoritu.—Stages 1 and 2, second Afghan war records; stages 2 to 11, native surveyor, 1902-05.

The above, *i.e.*, stage 1 to 11, revised from information by native surveyor, 1911.

Stage 11 to 15, second Afghan war records, revised from native information up to 1912.

Epitome.

General description.—One of the main through routes from the Kurram valley to Kabul. Though never explored by Europeans between stages 2 and 11, this is undoubtedly an important

ROUTE No. 4—*contd.*

route into Afghanistan; it is constantly used, in preference to the Shutur Gardan route (No. 3) by Ghilzais and others, who say that the Shutur Gardan route was used in past times on account of the hostility of the tribes surrounding this, the Koshin route. The route is physically easier and said to be open all the year round. Lord Roberts, who reconnoitred as far as Ahmad Khel from Ali Khel in 1879, reported: "I believe this to be the easiest commercial and military route between Afghanistan and India. All information regarding the road describes it as fairly level and capable of being made a good road for wheeled carriages without difficulty. It is said that the late Amir Sher Ali brought his bullock guns into Kurram by this route." All later information tends to confirm this opinion, and since the subjection of the Jajis, Mangals, and Zadrans by Abdur Rahman this may be said to be the main route from Kurram to Kabul or Ghazni.

Road.—Camel road, 6' to 8' wide to Gardez, 59 miles, stage 6; stages 7 and 8 partly unmetalled cart, partly camel road; stages 9 and 10, unmetalled cart road; stage 11 camel road *viâ* the Tangi Wardak, mule road *viâ* the Zamburak pass; thence a motor road 24' wide with 15' light metalling, no soling, to Kabul. The last 4 stages of this route are identical with the first four stages of Route 15. The following *obstacles* hinder wheeled artillery between stages 1 and 11.

- (i) Sarwai *tangi* in 2nd stage; completely blocked in spring by floods due to melting snow, and always after heavy rain.
 - (ii) Mirzakai *khula* in 3rd stage
 - (iii) Altimur *kotal* in 8th stage
 - (iv) Tangi Wardak in 11th stage
- } Owing to rocks and boulders only removable after considerable blasting. In addition, as regards (c) western descent of the Altimur *kotal* too precipitous for wheeled artillery.

Route open all the year round with, the exception of the Sarwai *tangi* in spring already mentioned, when diversion *viâ* the Mangiar (Mangal) *nala* to Ahmad Khel (Route 4-B) would be necessary.

Camping ground.—At stages 1 to 3, 5 and 7 for 1 infantry brigade with proportion of divisional troops; at all other stages for 1 division.

Water.—At stages 1 to 4, 7 and 8 for 1 infantry brigade with proportion of divisional troops; at other stages for 1 division.

ROUTE No. 4—*contd.*

Fuel.—At stages 1 to 7 abundant, except at stage 5, where it is scarce; from stage 7 onwards scarce throughout.

Fodder.—A little grass for horses in summer at stages 2 and 4; *khasil* daily during March and April at Gardez (stage 6) and at stages 9 and 10 in the fertile Logar valley; *bhusa* in small quantities could be collected from villages near by at practically every stage; in large quantities at Gardez (stage 6) and at stages 9 and 10, and in a lesser degree but to an appreciable extent, at stages from Shekhabad (stage 11) to Kabul.

Supplies.—For troops to any extent could not be counted on till Gardez (stage 6) is reached where all supplies for 1 division for about a week could be collected and where there are also large flocks of sheep and goats in the neighbouring villages; about 5,000 sheep and goats are also to be found in the Ahmad Khel villages (stage 2); a considerable amount of unground wheat and barley could be collected at stages 9 and 10 in the Logar valley and to a lesser degree at stages 2, 5, 8, 11 and thereafter at the remaining stages to Kabul.

No. of stage and total dis- tance.	DETAILS.
1 <hr/> 9 m.	LOI KILA .. 9 m. Camel road. 6' to 8'. (5,121').

Leaving Kharlachi the road enters Karaia (Kurram) valley, following left bank of the river; direction S.W.; valley highly cultivated; river fordable everywhere except during floods. For the first 4 miles hills to the N. are 1 mile distant, to the S. wooded Mukhbil hills are about 1000× away; afterwards valley narrows. At $\frac{3}{4}$ mile pass between posts of Pathan (garrison 1 company armed with Martinis) and Dand. At $2\frac{1}{2}$ miles, Chapri (100 houses). At 4 miles Landi (few scattered hamlets); here a track leaves right bank of the river and runs S.E., up the Mukhbil valley to Khost. At 5 miles, Nargisia (100 houses); at 9 miles Loi Kila octroi post; village also known as Chinarai, 500 scattered, 2 storied houses.

Camping ground.—Between the village and river for 1 infantry brigade with proportion of divisional troops.

Water.—For the above force at least from the Karaia river.

ROUTE No. 4—*contd.*

Fuel.—Abundant from the Mukhbil woods, within 2 miles of camp.

Fodder.—*Bhusa* from Chinarai and Hisarak 1 mile S. of river, for about 500 animals for 1 day; fair camel grazing.

Supplies.—No appreciable supplies for troops, or grain for horses.

2 **AHMAD KHEL** 15 m. (camel road 6' to 8'.
 ——— (6,212').
 24 m.

Road continues along the left bank of the Karaia, direction nearly due W. At 1 mile, Hisarak (800 houses) S. of river, eastern hamlets known as Darmian Khel. From Hisarak Route 4-A runs S.W., up the Chakmani (Chamkani) glen to Matun. At 2 miles Pir Sarai, *sarai* 60 square. Here there is:—

Camping ground.—S. of village for 1 infantry brigade with proportion of divisional troops.

Water.—From the Karaia, for the above force.

Fuel.—Abundant supply from the Mukhbil woods.

Fodder.—*Bhusa* for 500 animals for 1 day available in this village; fair camel grazing.

Supplies.—*Nil*

From Pir *sarai* Route 4-B., runs N.W. up the Manga (Mangia) *dara*, rejoining this route at Ahmad Khel.

At 2¼ miles road enters *dara* 300 × long, 70 × broad, hills steep on both sides; road follows bed of stream crossing it frequently (2½ of water in September 1906). At 3 miles Bagiar (customs house and 100 houses,) track runs N. from here, joining the Mangiar *dara* route. At 6 miles enter Sarwai *tangi*, most difficult part of route. *Tangi* continues off and on for about 7 miles; greater part of it about 70 × to 100 × broad, but in one or two places only 30 × wide with steep cliffs on either side; path along edge of stream; *tangi* completely closed for traffic in spring, owing to floods from melting snows, also after heavy rain. Only diversion possible *viâ* Mangiar *dara*, (Route 4-B), which rejoins this route at Ahmad Khel. At 10 miles Lajha (Lajhi), about 50 Mangal hamlets; *tangi* widens here temporarily.

Route 4-C runs S.W. from Lajhi to Gardez, up Lajhi *nala*.

ROUTE No. 4—*contd.*

At 12 miles Doda and at 13 miles Kala Jan Khan where *tangi* ceases and succession of villages known collectively as Ahmad Khel commence. Opposite Kala Jan Khan there is:—

Camping ground.—For 1 infantry brigade with proportion of divisional troops N. of the village.

Water.—For the above force at least from the Karaia stream.

Fuel.—

Fodder.—

Supplies.—

} As for Ahmad Khel.

At 14 miles pass the tollbar, opposite which there is a ford. At 15 miles Ahmad Khel consisting of a group of villages at the junction of the Karaia and Mirzakai streams.

Camping ground.—For 1 infantry brigade with proportion of divisional troops on the right bank of the Mirzakai stream.

Water.—For the above force and more from the 2 streams.

Fuel.—In large quantities from the surrounding hills.

Fodder.—Grass for the horses of 1 cavalry regiment for 1 or 2 days; about 500 maunds *bhusa* could normally be collected in these villages; good camel grazing.

Supplies.—About 500 maunds unground wheat and barley normally procurable; some 5,000 sheep and goats belonging to the surrounding villages.

At Ahmad Khel, Route 3-D, coming from the N.W., connects the Shutur Gardan route (Route 3) with this route.

Also Route 4-B, the diversion to this last stage *viâ* the Mangiar *nala*, rejoins the present route.

§ **HAZAR-** 8 m. Camel road 6' to 8',
 ——— **DARAKHT**
 32 m. (6,891').

General direction S.W. Leaving the Ahmad Khel villages the road ascends the left bank of the Mirzakai, the hills closing in considerably, leaving the valley only about 300× wide. At 5 miles the well-known Mirzakai *khula* (Surkai *tangi*) is reached.

Tangi is 100× to 300× long and about 15× wide, with precipitous sides 30' high; track runs through the defile and is only wide enough in places to enable a laden camel or mule to pass between boulders, in places 10' high; defile temporarily closed by heavy rain but the boulders referred to could be removed by blasting.

ROUTE No. 4.—*contd.*

Emerging from the *khula* the road ascends shaly *nala* down which a stream flows. At 6 miles Mangal (50 houses) and at 8 miles Hazar Darakht, comprising hamlets of Nur Khan and Shahbazi on right and left banks respectively, in all 300 houses; also *khasadar* and toll post.

Camping ground.—For 1 infantry brigade with proportion of divisional troops on right bank of the stream adjoining Nur Khan. Alternative camp, $\frac{1}{2}$ mile further on, on left bank opposite point where Mirzakai is joined by *nala* from the S.; camping space about the same as on the right bank.

Water.—For the above force at least from the Mirzakai stream adjoining camp.

Fuel.—In considerable quantities from the western slope of the *khula*.

Fodder.—*Bhusa* for about 300 animals for 1 day; fair camel grazing, *nil* in winter.

Supplies.—*Nil.*

4	KAREZ	..	5 m. Camel road as before.
	(8,492').		
37 m.			

General direction S.W. Track rises gradually into more open and level country with fortified hamlets on either side of the road. At $1\frac{1}{2}$ miles hills recede and road leaves the Mirzakai stream, which bears away N.W., to its source. At 2 miles, Mirzakai post (8,331'); post is oblong 70 × by 40 ×, loop-holed walls 20' high and $4\frac{1}{2}$ ' thick at the base; towers at corners, gate 10' wide facing E; garrison, (1911) 2 officers and 100 men furnished from Gardez. There are no springs or wells near post and garri on is dependent for water on stream.

Leaving the post the ascent of the Mirzakai *kotal* is at once commenced; ascent which continues for about 1 mile is quite easy for laden camels. At 3 miles the *kotal* (8,492') is reached; pass is never blocked by snow, though deep snow was lying there on the 2nd April 1911. When not under snow, summit of pass is an open, grassy plateau with only a slight depression in watershed; accordingly the road descends very gradually to Karez (250 houses), enclosed within fortified walls reached at 5 miles.

Camping ground.—Between *kotal* and Karez for a division.

Water.—For 1 infantry brigade with the proportion of divisional troops from a good spring N. of the village near the

ROUTE No. 4—*contd.*

mosque; also from a tank $\frac{1}{4}$ mile E. of the mosque, 3' deep, 100 × in circumference, fed by a stream 1' wide, 6" deep; overflow from tank used for cultivation; this tank would be useful for watering animals.

Fuel.—An appreciable amount could be brought in from the hills within 2 miles of camp.

Fodder.—*Bhusa* to a limited extent procurable; good camel grazing except in winter; it is probable there would be good grazing for horses on the plateau between April and October.

Supplies.—*Nil.*

5 **NESTI KOT** .. 10 m. Camel road as before.

47 m.

Road continues S.W. and leads for 4 miles over an uninhabited plateau, after which several fortified hamlets, surrounded by a little cultivation, are passed. At 8 miles Gharak or Khan Khel (500 houses), chief village in Koshin, and inhabited by Ahmadzai Ghilzais. Here the Lajha *nala* road, Route 4-C, rejoins this route.

At 9 miles road crosses Spin or Sapeza Rud, banks 120 × wide; the actual stream (in April 1911) was 40' wide and 2' deep and is never dry. Height at this point 8,121'. A track leaves the left bank here and leads S.W. to Bala Deh, 5 miles distant. Two roads lead hence to Gardez, one on either bank of the Sapega Rud. The northern road (right bank) is the better and shorter road. At 10 miles Nesti Kot; group of some 10 villages (700 houses); inhabitants Ahmadzai Ghilzais. Usual pattern *sarai*.

Camping ground.—For 1 infantry brigade with proportion of divisional troops near the *sarai*; there are also several places where single battalions might encamp separately between the irrigation channels.

Water.—For a division from the Sapega Rud, an irrigation channel from which passes just N. of camp.

Fuel.—Scarce, probably only stunted bushes in places.

Fodder.—About 300 maunds *bhusa* normally available; good camel grazing except in winter, when it is scarce.

Supplies.—About 300 maunds unground barley normally procurable.

ROUTE No. 4—*contd.*

6 **GARDEZ** .. 12 m.—Camel road 10'.
 ——— (7,511').

59 m.

Road leads S.W. throughout the stage over an open and flat country; soil *pat*; several fortified villages are passed *en route*. At 12 miles Gardez, capital and civil headquarters of Zurmat situated at the confluence of the Sapega and Altimur streams, which below Gardez is known as the Jilga river; contains about 3,000 houses, inhabitants mostly Tajiks with a few Ghilzais; large *bazar*; great quantities of wheat and barley produced here and taken to the Kabul market, also *ghi* and flocks of sheep, Gardez receiving in return fruit, tobacco and cotton cloth.

Two forts outside the town; older one occupied by *khasadars*, new fort by regular troops. This latter is situated on a mound commanding extensive view over surrounding flat country, but is itself commanded by hills 2 miles to the S. on left bank of the Sapega on which guns could easily be got up; it stands among small, fortified villages surrounded by gardens and fields, irrigated from canals. Walls of the new fort 800 yards in circumference 8' to 12' high and about 5' thick at the base; no bastions or ditches; 3 gates, but northern gate alone covered by traverse. Sapega Rud flows about 1 mile to the S. of this fort.

Garrison in 1911 was as follows:—

1 cavalry regiment armed with Martini carbines.

1 battery field artillery, of 6 muzzle loader guns, 3" to 4" bore but ill cared for and rusty.

2 battalions infantry armed with Martinis.

There are no regular barracks, but rifles and ammunition are kept in this fort, where 1 year's supplies of grain, etc., for the garrison are also stored.

Camping ground.—Several alternative camping grounds in vicinity of the fort; each would accommodate approximately 1 infantry brigade with proportion of divisional troops.

Water.—Abundant for a division or more from both streams, and canals leading from the same.

Fuel.—Could be collected from the surrounding hills within a distance of 5 miles sufficient for the requirements of a division for at least a month.

Fodder.—*Khasil* daily during March and April for the horses of a cavalry brigade at least. *Bhusa* in large quantities, good camel grazing.

ROUTE No. 4—*contd.*

Supplies.—For a division for probably at least one week. Gardez is a collecting centre for grain (barley and wheat) which is sent to the Kabul marts. Large flocks of sheep and goats in surrounding villages.

7 ----- 72 m.	TANDAN	..	13 m.—Unmetalled cart road 20' to 30' over the plain, and about 6' to 10' in the hills.
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Leaving Gardez the road now leads N.E. over an open plain; this is the regular *kafila* road over the Altimur pass to Kabul, passable for all arms, but there are no cuttings, embankments nor bridges.

At 1 mile state *sarai* of usual pattern, *viz.*, about 80 yards square with loop-holed walls, 15' high and 4' to 5' thick; towers at each corner; a little *bhusa* and grain usually stored in these state *sarais*. At 2 miles Dehgan village of Shaikhan (300 houses). At 6 miles Spin Kala (8,431'), 70 houses. Here the Tirah Dara is crossed; riverbed 200 yards wide with steep banks 6' to 8' high in which flows a stream 8 yards to 12 yards broad and about 1½' deep. The plain is now left and the road leads up the *nala*. At 8½ miles Khak Hazara (25 houses) where Route 4-D joins this route from Karez (stage 4) and whence a track runs back S.E. to Nesti Kot 6 miles distant. The road now curves to the N.W.; at 9 miles the Tirah Dara opens out and is 300 yards to 400 yards broad. At 13 miles Tandan (8 houses).

Camping ground.—N. of village for 1 infantry brigade with proportion of divisional troops; site is commanded from the neighbouring hills.

Water.—Sufficient for the above force from springs.

Fuel.—An appreciable amount procurable from the deodar covered hills to the W. about 2 miles from camp.

Fodder.—Camel grazing scarce after the Tirah Dara is entered at 6 miles.

Supplies :—*Nil.*

8 ----- 85 m.	ALTIMUR (8,419').	..	13 m. Road as in the last stage to the Altimur <i>kotal</i> (2 miles), there- after camel road.
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General direction N.W. Leaving Tandan the road ascends, gradient 1 in 25, for 2 miles when a *kotal* is reached, which marks

ROUTE No. 4—*contd.*

the head of the Tirah Dara and the commencement of the Altimur *kotal* (9,831') which consists of a defile 60' long by 50' broad, through which wind 2 tracks each about 6' to 8' broad, separated by rocks; these tracks would have to be cleared of boulders before being passable for wheeled artillery.

On emerging from the *kotal* the road leads down the Altimur *nala* which falls away somewhat steeply, the road 6' to 8' wide is cut out of the hill side on the eastern face and at $3\frac{1}{4}$ miles it is 200' above the torrent bed.

At 4 miles, the road zigzags steeply into the *nala* 180' below, and even camels make this descent with difficulty; cause of sudden descent is to avoid 3 groups of rocky projections which, however, could be removed after considerable blasting; guns would have to be man-handled down this zigzag, which has a gradient 1 in 5. In 1841 field guns descended to Tandan from the pass without much difficulty and a week later recrossed the Altimur pass. The guns were man-handled by Afghans and were much shaken, some seriously damaged. At 8 miles Niazi village (40 houses) and at 13 miles Altimur (500 houses) whence an unmetalled cart road 10' proceeds due N., joining the through Route 3 just N. of Zargan Shahr (stage 3).

At Altimur there is:—

Camping ground.—For 1 infantry brigade with proportion of divisional troops on a site adjoining the village.

Water.—For the above force and more from the Altimur stream.

Fuel.—Scarce.

Fodder.—About 300 maunds *bhusa* normally available; fair camel grazing; *nil* in winter.

Supplies.—A few hundred maunds unground grain normally procurable.

9	PATKHAI ROG-	10m. 4f.	Unmetalled cart road
—————	HANAI.		12'.

95m. 4f.

Leaving Altimur the road proceeds N.W., across a *pat* plain. At $9\frac{1}{2}$ miles the Sarkh (Charkh) river is forded; river 15 yards wide, 2' to $2\frac{1}{2}'$ deep, banks easy, unfordable when in flood. At $10\frac{1}{2}$ miles Patkhai Roghanai; (600 two-storied houses standing in highly cultivated country irrigated by the Logar river.

ROUTE No. 4—*contd.*

Camping ground.—Probably for a division; 2 infantry brigades (8 battalions) of the Kabul-Kandahar Force encamped here in August 1880.

Water.—For a division and more from the Logar river.

Fuel.—Scarce.

Fodder.—*Khasil* for the horses of a cavalry brigade daily during March and April; about 2,000 maunds *bhusa* could be collected in the vicinity; excellent camel grazing except in winter, when it is scarce.

Supplies.—About 2,000 maunds unground grain normally available.

10	KALA AMIR	9m. 4f.	Unmetalled cart road
-----	(6,440').		10'.
105 m.			

Road proceeds up the cultivated Logar valley direction N.W.; road is difficult for wheeled traffic owing to numerous water cuts and the softness of the soil. At 2 miles Tajik village of Baraki Rajan (1,000 houses) where an infantry battalion is said to be stationed. At 9½ miles Kala Amir consisting of 3 forts, surrounded by some cultivation.

Camping ground.—For a division, though brigades and units would have to be scattered about.

On the 1st May 1880, the Ghazni Field Force, strength 7,249 fighting men with 7,273 followers, 1,942 horses and 6,581 transport animals, encamped at Kala Amir.

Water.—For a division at least from the Logar river.

Fuel.—Very scarce.

Fodder.—A little *khasil* in March and April; about 1,000 maunds *bhusa*; good camel grazing except in winter, when it is scarce.

Supplies.—About 1,000 maunds unground wheat and barley normally available.

11	SHAIKHABAD ..	10 m.	Camel road to Shaikh-
-----	(6,950').		abad <i>viá</i> the Tangi
115 m.			Wardak defile. Mule
			road to Saiyidabad <i>viá</i> the Zamburak pass.

Leaving Kala Amir road continues N.W. along the right bank of the Logar. At 1½ miles Ursak (100 houses). Here 2 roads lead to the main Kandahar-Kabul road, one *viá* the Tangi Wardak to Shaikhabad, the other *viá* Zamburak pass to Saiyidabad. Shaikhabad is 5 miles nearer Kabul than Saiyidabad.

ROUTE No. 4—*contd.**Route to Shaikhabad.*

Road continues N.W. and immediately enters the Tangi Wardak defile, through which the Logar river flows, a camel track proceeding up both banks of the river; there is an easy ford just opposite Ursak river; projecting rocks and boulders, which are difficult to remove, would prevent wheeled artillery from using either track. The Tangi Wardak defile extends from Ursak to near Shaikhabad about 8 miles, and is an opening in the hills through which the Logar river finds its way; it is for the most part a cultivated valley 1 to $1\frac{1}{2}$ miles wide, but at narrowest point the hills, which are studded with fortified houses, command the road within a few hundred yards on both sides, rendering the forcing of the defile difficult, especially as nature of ground prevents employment of artillery other than mountain guns. In face of opposition a turning movement *viâ* the Zamburak pass would probably be advisable.

River 1' to 2' deep, fordable everywhere in dry season; at other seasons the river is only fordable at recognised fords, which themselves are temporarily impassable during spates which are of frequent occurrence in the spring; there are several foot-bridges. At 5 miles Doaba (50 houses) at junction of Shiniz and Wardak (Logar) rivers. Here a road follows Shiniz river S.W. to Saiyidabad, $3\frac{1}{2}$ miles distant. At 10 miles Shaikhabad on main Kabul-Kandahar road.

Shaikhabad.

Camping ground.—For a division.

Water.—For the above force, and more, from the Wardak river.

Fuel.—Scarce.

Fodder.— } Unground grain and *bhusa* in considerable

Supplies.— } quantities could probably be collected from the villages in the fertile Shiniz and Wardak valleys; good camel grazing except in winter.

Route to Saiyidabad.

Leaving Ursak the road turns due W. and the ascent of the Zamburak pass is immediately commenced; the first two miles are fairly easy up the dry bed of a mountain torrent, but the last mile is very steep, gradient in places 1 in 4; the ascent of the

ROUTE No. 4—*contd.*

pass is only feasible by laden mules with some difficulty. Summit of pass (8,100'), 5 miles from Kala Amir; descent on western side much easier and at 2 miles from the *kotal* the road debouches into the Shiniz valley opposite Saiyidabad, which is 8 miles from Kala Amir. In April 1880, one horse and one field battery were brought over the Zamburak pass from the Ghazni side; the guns were lowered down the steep gradient and it was calculated that a battery could pass this obstacle in 2½ hours.

Saiyidabad.

Camping-ground.—On left bank of Shiniz river for a division.

Water.—For the above force and more from the Shiniz river.

Fuel.—Scarce.

Fodder.— } Unground grain and *bhusa* in considerable

Supplies.— } quantities could be collected from the various villages in the Shiniz and Unkai valleys.

Saiyidabad was used both by Sir Donald Stewart marching to Kabul and Sir F. Roberts marching to Kandahar, in 1880, as halting places for their forces.

12

TOP

5m. 6f. Metalled road 24'.

(7,400').

120m.6f.

NOTE.—If marching from Saiyidabad length of stage is increased by 5 miles, the distance to Shaikhabad along the metalled road.

Saiyidabad-Shaikhabad.

Leaving Saiyidabad the road runs N.E., and leads up the Shiniz valley for the first 2 miles following the left bank of that river; the valley here is only about 1,000 × wide and is much cultivated. At 2 miles the road, continuing N.E., leaves this valley, as the river here curves more to the E. and joins the Logar river about 2 miles further on, in the Tangi Wardak defile. The country now is more open, the hills receding on both sides. At 4½ miles the Wardak river is crossed by a masonry bridge. At 5 miles Shaikhabad.

Leaving Shaikhabad the road follows the left bank of the Wardak river, direction N.E., the road and river are only a few hundred yards apart throughout the stage, the valley

ROUTE No. 4—*contd.*

varies from 500 to 1,000 yards in width, and is enclosed by high hills on both sides ; throughout the stage the road gradually ascends ; there is but little cultivation till the Top villages are reached at $5\frac{3}{4}$ miles ; here there is:—

Camping ground.—For a division.

Water.—For the above force from the Wardak river.

Fuel.—Scarce.

Fodder.—Fair camel grazing, *nil* in winter.

Supplies.—Nothing appreciable.

13 **KALA DURANI** 10m. 4f. Metalled road 24'
 _____ (7,100').

131m. 2f.

General direction N.E. The road continues to ascend till a distinct watershed is reached at $5\frac{1}{2}$ miles ; from the ridge of the watershed signalling communication can be carried on with Sher Dahan *kotal*, 10 miles short of Ghazni. At 6 miles Bin-i-Badam and Anda (about 100 houses). The country throughout the stage is open and undulating and passable for all arms ; there are high hills about 3 miles W. of the road and also 1 mile to the E. At $10\frac{1}{2}$ miles Kala Durani, a fortified hamlet, inhabitants Wardak Saiyids.

Camping ground.—For a division.

Water.—For the above force from a tributary of the Kabul river, $\frac{1}{4}$ mile E. of camp.

Fuel.—Scarce.

Fodder.— } No details, but probably negligible ; but there

Supplies.— } is possibly fair camel grazing, except in winter.

14 **ARGHANDEH** $14\frac{3}{4}$ m. Metalled road 24'
 _____ (7,200'). General direction N.E.

146 m.

At 1 mile the road runs through a narrow gorge in a low range of hills, affording fair position to an enemy blocking the road. Just before the Kabul river is reached at 3 miles, a gorge leaves the road running S.E. through the hills into the Logar valley ; this was the route taken by Brigadier-General Baker's brigade in November 1879. The Kabul river is easily fordable here and is crossed by a masonry bridge. The road now leads up the cultivated valley of the Kabul river and runs parallel and a few hundred yards from its left

ROUTE No. 4—*contd.*

bank. At the bridge the valley is nearly a mile wide, but it gradually contracts, the hills to the E. closing in somewhat rapidly on the road; at Pain Maidan, reached at $7\frac{1}{4}$ miles, the valley is only quarter mile broad. Here there is a:—

Camping ground.—For a division N. of the village.

Water.—For the above force from the Kabul river, from which several irrigation channels pass close to camp.

Fuel.—Scarce.

Fodder.— } No details, but a limited supply of *bhusa* and

Supplies.— } unground wheat and barley should normally be procurable, fair camel grazing, *nil* in winter.

From Pain Maidan two valleys branch off westward, being separated by a not very high range of hills; one is called Balla Maidan through which the Kabul flows. It contains numerous villages, and a path runs through it joining the Bamian road just beyond Rustam Khel. The other is called the Nirkh valley. It contains a good many villages, and is highly cultivated, but it leads nowhere in particular and ends in the hills.

Leaving Pain Maidan the country once more opens out to mile 10, when the hills again close in on the road, which now commences the gradual ascent of the Takht pass.

At $11\frac{1}{2}$ miles the Kotal-i-Takht (7,600'); country on both sides slopes very gradually from this *kotal*, and the descent is accordingly very gradual to Arghandeh (1,500 houses) reached at 14 miles.

Camping ground.—S.E. of Arghandeh-i-Bala for a division.

Water.—For a division from the Sadik ravine near camp.

Water can be also turned on into the several irrigation channels.

Fuel.—Scarce.

Fodder.— } Unground wheat and barley and *bhusa* for trans-

Supplies.— } port animals, for probably two infantry brigades for 2 or 3 days, from the large villages of Arghandeh-i-Bala and Arghandeh-i-Pain. Arghandeh was a place of great importance during British occupation in 1879-80 as it commands the road by which supplies are brought to Kabul from the S. and S.W.

15 **KABUL** .. 15 m. Metalled road 24'.

———— (5,895').

161 m.

Leaving Arghandeh the road at first continues N.E. At $\frac{1}{2}$ mile pass Arghandeh-i-Bala about 2 miles N.W. of the

ROUTE No. 4—*contd.*

road. At 1 mile two roads branch off from this main road, one running nearly due W. to Jaokul, where it bifurcates leading—

(a) to Herat *viâ* Daulat Yar;

(b) to Mazar-i-Sharif *viâ* Bamian;

and the other running N.E. over the Surkh *kotal* to Charikar *viâ* Istalif.

The road now turns nearly due E. and at $\frac{3}{4}$ mile passes through a short, broad defile between the spur of the Paghman range and the Korogh mountain; at 2 miles Kala Jafir Khan (50 houses); and at $3\frac{1}{4}$ miles Kala Ghulam Haider (100 houses); both Tajik villages.

At $4\frac{3}{4}$ miles cross Changar stream by wooden bridge, 6' long, 8' broad, practicable for wheeled artillery; just beyond the bridge, S. of the road, is the Tajik village of Murghir or Murgh Giran (100 houses). At $7\frac{1}{4}$ miles Kala-i-Kazi (200 houses), to the E. of which lies the Chardeh valley. Kala Kazi or Kala-i-Kazi was the farthest point reached by the Royal Horse Artillery and Cavalry in General Massy's engagement on the 11th December 1879.

Here there is—

Camping ground.—For a division, though the greater part is usually under cultivation.

Water.—Ample for a division from streams flowing into the Kabul river, and from numerous irrigation channels.

Fuel.—Very scarce.

Fodder.—About 1,000 maunds *bhusa* could normally be collected in the immediate vicinity.

Supplies.—About 1,000 maunds unground wheat and barley procurable in the immediate vicinity.

At 10 miles pass the Amir's garden house and grove known as the *Mahtab bagh*. Road now crosses the Chardeh plain covered with fields and gardens, seamed with irrigation canals, and studded with fortified villages. At 12 miles Deh Bori, a collection of 3 Tajik villages (about 200 houses); at 13 miles the Deh Mozang gorge, 1 mile in length, in which the Kabul river is crossed by a wooden bridge $30\times$ long and $6\times$ wide; river only 4' deep owing to water removed for irrigation. At 14 miles Deh Mozang (500 houses), inhabitants Tajiks and Kizilbashis, at the eastern exit of the gorge.

ROUTE No. 4—*concl'd.*

At 15 miles suburb Deh-i-Afghan adjoining city.
For description, etc., of Kabul, *vide* Route 1.

ROUTE NO. 4-A.

HISARAK (PIR SARAI) TO MATUN.

38 miles.

5 stages.

Authority.—Reconnaissances under Sir F. Roberts, 1879 ; Kennedy and Lorimer, 1898 ; native information up to 1912.

Epitome.

General description.—A connecting route between the main through Routes 4 and 5 ; used by traders and reliefs for the Matun garrison marching from Kabul to the Khost valley ; the latter half of the route also by the Matun garrison in their annual move to Gabar for the summer. *Road* : Camel road throughout. No *obstacles* are encountered. Route open throughout the year.

Camping grounds.—Probably for 1 infantry brigade with proportion of divisional troops at all intermediate stages, though there are no details regarding camps at stages 2 and 3 ; camping space at Matun for at least 2 or 3 infantry brigades with proportion of divisional troops.

Water.—Probably for at least 1 infantry brigade with proportion of divisional troops at all intermediate stages and for double that force at Matun.

Fuel.—No details, but the heights overlooking the Chakmani glen are known to be wooded.

Fodder.—*Khasil* to an appreciable extent at Matun in March and April ; *bhusa* probably in small quantities at the intermediate stages and from 2,000 to 3,000 maunds at Matun ; good camel grazing throughout.

Supplies.—For troops to any appreciable extent cannot be reckoned on, except at Matun, where from 2,000 to 3,000 maunds unground wheat and barley should normally be available in the Matun villages.

ROUTE No. 4-A—*contd.*

No. of stage and total dis- tance.	DETAILS.	
1	HUKAMZAI	5 m. Camel road.
5 m.		

General direction due S. Leaving Hisarak the Karaiia stream is at once crossed at its junction with the Chakmani; current very rapid; rough, stony bottom; maximum depth water 3' (June 1879). At $\frac{3}{4}$ mile pass between the mud forts of Shalim and Saleh Khan, where the valley is about 700 × wide; path keeps along western base of hills. At 2 miles cross a spur near the Mangal village of Alim. Thence valley narrows to 200 yards and continues so till the end of the stage. Between 2nd and 4th miles pass Niazak and Baram Khel. At 5 miles Hukamzai.

Camping ground.—No details; according to the map the valley opens out, and there is probably camping space for 1 infantry brigade with proportion of divisional troops.

Water.—For the above force from the Chakmani stream.

Fuel.— } No details; Hukamzai comprises a collection of
Fodder.— } Chakmani hamlets and it is, therefore, probable
Supplies.— } that a few hundred maunds of unground wheat
 and barley and an equivalent amount of *bhusa*, could always be collected; good camel grazing.

2 **GABAR** .. 7m. 4f. Camel road.

12m. 4f.

General direction due S. Paths now lead on both banks of the Chakmani stream. Valley narrows once more to about 300 × in width, at 3 miles reach boundary of Mangal country, though Gabar is a Mangal village. Throughout the stage the track winds through the high Gabar Mangal hills. At 7½ miles Gabar.

Camping ground.— } No details, but it is known that there
Water.— } is a permanent detachment of 1 squad-
Fuel.— } ron cavalry at Gabar from Matun.
Fodder.— } Also that nearly all the infantry of
Supplies.— } the Matun garrison (4 battalions)
 move to Gabar for the summer; good camel grazing.

ROUTE No. 4-A—*contd.*

3 **ZAMBAR** .. 12 m. Camel road.

24m. 4f.

General direction S.E. Road proceeds along a tributary of the Kaitu as far as Matun, which stands at the confluence of the Kaitu and Matun rivers. At 8 miles Balkhel. Between Gabar and Balkhel the village of Durmandai is also passed, hitherto the track has been closely confined by high hills on both sides, but the hills now begin to recede. At 9 miles Sabari (100 houses), surrounding country well cultivated up to the doors of the village, water being taken from 2 of these tributary streams between which the village lies. At 11 miles Arwani. At 12 miles Sabari village of Zambar.

<i>Camping ground.</i> —	} No details, but Zambar stands on
<i>Water.</i> —	
<i>Fuel.</i> —	
<i>Fodder.</i> —	
<i>Supplies.</i> —	

river of the same name, a tributary of the Kaitu, and it is reasonable to assume that the valley would be cultivated by its waters; there is water sufficient for at least 1 infantry brigade with proportion of divisional troops. Good camel grazing.

4 **YAKUBI** .. 7m. 4f. Camel road.

32 m.

General direction S.E. Road proceeds down the valley of the Zambar river. The Sabari villages of Ragma and Tsaparra are passed during this stage. At 7½ miles the Lewan Khel village of Yakubi.

Camping ground.—For 1 infantry brigade with proportion of divisional troops, on right bank of Zambar river N. of village.

Water.—For the above force at least from the Zambar river.

<i>Fuel.</i> —	} No details; but there is good camel grazing.
<i>Fodder.</i> —	
<i>Supplies.</i> —	

5 **MATUN** .. 6 m. Camel road.

(3,892')

38 m.

Road continues S.E. down the Zambar valley to Matun, the Sabari village of Muli being passed during this stage. At 6 miles Matun.

ROUTE No. 4-A—*concl'd.*

Matun is the winter capital of Khost and consists of a large group of villages on both banks of the Matun river (tributary of the Kaitu). There are 2 small square, mud-walled, loop-holed forts at Matun, one garrisoned by a regiment of cavalry and the other by a battalion of infantry and some artillery. In 1905 it was reported that 4 machine guns were mounted on the walls of the latter fort, but it is believed these have since been dismantled.

The *garrison* at Matun in 1912 was reported to be as follows :

3 mountain batteries (12 guns).	1 regiment cavalry.
2 field batteries (12 guns).	3 battalions infantry.
4 machine guns.	Also 600 <i>khasadars</i> .

In the summer the Governor and most of the garrison move to Gabar in the hills separating Khost from the upper waters of the Kurram river.

The following routes converge on, or radiate from, Matun :—

- (i) Route 5 running N.W. to Gardez.
- (ii) Route 5-A., from Alizai in the Kurram valley, *viâ* the Spin Tangi pass.
- (iii) Route 5-C., from Hazar Pir in the Kurram valley.

In addition 2 camel tracks lead from Matun as follows :—

- (a) One running due S. joining Routes in Waziristan, Route 10 to Miram Shah in stage 2 at the Ghorostinala.
- (b) The other running S.E. joining Routes in Waziristan, Route 13 to Spinwam at the Dunikot *targi*.

At Matun there is—

Camping ground.—For at least 2 or 3 infantry brigades with proportion of divisional troops.

Water.—For the above force, and more, from the Matun and Kaitu rivers.

Fuel.—Sufficient for a large force could be collected within a distance of 5 miles from the surrounding hills.

Fodder.—No details, but probably *khasil* to an appreciable extent in March and April ; about 2,000 to 3,000 maunds *bhusa* should be ordinarily procurable from the Matun villages ; good camel grazing.

Supplies.—No details, but probably about 2,000 to 3,000 maunds unground wheat and barley would be normally procurable.

ROUTE NO. 4-B.**LOI KILA TO AHMAD KHEL,***Viâ the Mangiar Dara.*

27 miles.

2 stages.

Authority.—2nd Afghan war records, 1879; native surveyor, 1911.

Epitome.

General description.—An important route, as it affords the only deviation possible to avoid the Sarwai *tangi* (in stage 2 of Route 4) when this defile is blocked by floods in spring; the last 9 miles of this route lies in the Karaia (Kurram) valley and is identical with that section of Route 3-D, from Ali Khel. *Road:* Camel road throughout. The following *obstacles* are encountered:—

(i) The Sapri pass (9,079') in the first stage.

(ii) The Uchmanki pass (7,361') in the second stage.

Both passes are only feasible for lightly laden camels. The Sapri pass from its altitude would certainly be blocked by snow from December to the end of February, and the Uchmanki pass temporarily after heavy falls of snow. With these exceptions the route is open at all other times of the year.

Camping ground.—For a division at Sapri, the intermediate stage.

Water.—For 1 infantry brigade with proportion of divisional troops at Sapri.

Fuel.—Wood abundant at Sapri.

Fodder.—Good supply of grass from the plateau at Sapri in summer; good camel grazing, except in winter, when there is *nil*.

Supplies.—Nothing appreciable.

No. of stage and total distance.	DETAILS.
1	SAPRI (MANGIAR SAPRI). 14 m. Camel road.
14 m.	

Leaving Loi Kila the road follows Route 4 due W. for 2 miles to Pir Sarai to the passport post where it leaves

ROUTE No. 4-B—*contd.*

the main route and branches off N.W. up the Mangiar Dara valley, here 200^x broad. The track, which continually crosses the Mangiar stream, 6' to 8' broad, and about 18" deep (April 1911), is completely commanded by steep wooded heights. At 10 miles the Mangal village of Tarosti (50 houses). At 11 miles the ascent of the Sapri *kotil* is commenced, track zigzagging up the steep side of the hill for about a mile to the crest of the *kotil* (9,079'). This zigzag ascent is difficult and trying for baggage animals, but a *kafila* of 150 camels crossed the pass on the 1st April 1911, when 2½' of snow was lying for about 1,200 yards on either side of the crest. The track down the further (N.W.) slopes of the pass is 6' to 8' broad cut out of the sandstone hillside, gradient 1 in 7; from the foot of the pass the track heads due W. for the Mangal village of Sapri (30 houses) reached at 12 miles and situated at the southern and most elevated extremity of Sapri plateau 1½ miles long by 1 mile broad.

Camping ground.—For a division on the plateau, 1½ miles by 1 mile, N. of village,

Water.—From the Sapri stream, tributary of the Karaia, for 1 infantry brigade with proportion of divisional troops even in dry weather.

Fuel.—Wood plentiful from the surrounding wooded hills within 1 or 2 miles of camp.

Fodder.—Good supply of grass in summer from the plateau and its slopes; good camel grazing except in winter, when there is *nil*.

Supplies.—Nothing appreciable.

2 **AHMAD KHEL** .. 13 m. Camel road.
 (6,212').

27 m.

At 1 mile leave the Sapri plateau and pass down a narrow ravine, the track running along the right bank of the stream 8" to 15" deep and 4' to 6' broad (April 1911). At 2¼ miles an obstruction is passed, consisting of a small defile 5^x long and only 7' broad, which camels only traverse with difficulty, their loads touching the sides, and for the next half mile the track lies in the slippery bed of the *nala* itself. Thence *nala* widens to about 100^x and is flanked by

ROUTE No. 4-B—*concl'd.*

terraced fields. At $3\frac{1}{2}$ miles the track enters the Karaia valley down which it runs S.W. to Ahmad Khel. The Karaia stream in April 1911 was $20 \times$ to $30 \times$ broad, 2' to 3' deep with firm bottom; valley at this point varies from $100 \times$ to $300 \times$ in breadth; hills to the W. rise in easy, open slopes about 200' high, those to the E. are steep, deodar-covered heights from 300' to 600' high; track on right bank of the stream. At 4 miles the Jaji (Hasan Khel) village of Kharmana (6,791', 300 two-storied houses). At 5 miles Hasan Khel village of Sikandar Khel (200 two-storied houses). Immediately below Sikandar Khel the river has to be forded and $\frac{3}{4}$ mile further on it is re-crossed and the right bank regained. The necessity for these crossings is not apparent, but travellers on foot avoid these fords by a deviation through the hills, which, however, is too steep for baggage animals. At 6 miles Upper Hasan Khel (120 two-storied houses, 6,641'). Up to here field artillery could be brought down the bed of the river from Ali Khel, but onwards to Ahmad Khel field guns could not travel owing to stones and boulders. At 8 miles Lower Hasan Khel (3 groups of double-storied houses about 1,000 in all; 6,231') shut in by hills on all sides. Thence track runs over low, undulating hills to the foot of the Uchmanki pass reached at 12 miles. *Kotal* (7,361') reached after an easy climb of 1 mile, but was covered with $1\frac{1}{2}$ feet of snow early in April 1911. Descent of pass is steep, gradient averaging 1 in 5 throughout, but it is quite feasible for laden camels. At 13 miles Ahmad Khel.

Camping ground.—

Water.—

Fuel.—

Fodder.—

Supplies.—

} *Vide Route 2.*

ROUTE NO. 4-C.

LAJHI TO NESTI KOT.

Authority.—2nd Afghan war records, 1879.

32 miles.

3 stages.

Epitome.

General description.—An alternative route between Lajhi in the Sarwai *tungi*, in stage 2 of Route 2, and stage 5 of that route *viâ* the Lajhi *nala*.

ROUTE No. 4-C—*contd.*

Road.—Stages 1 and 2, mule track ; 3rd stage camel road.

The *kotal* met with in the second stage is the only *obstacle* encountered, which, however, is passable by laden mules.

Route open throughout the year.

Camping grounds.—For 2 or 3 battalions at both intermediate stages.

Water.—Sufficient for the above troops at both intermediate stages.

Fuel.—In large quantities for the first half of the route.

Fodder.—No details, but a little *bhusa* should be procurable at Shesnak, Stage 2.

Supplies.—No details ; probably nothing appreciable except at Shesnak, where about 100 maunds unground grain should be normally procurable.

No. of stage and total distance.	DETAILS.
1 <hr style="width: 10%; margin: 0 auto;"/> 12 m.	TASHNAK .. 12 m. Mule road.

If a force is moving by this route into Koshin, camp should be formed at Lajhi, mile 10, stage 2, Route 2. Lajhi is at the junction of the stream of that name with the Karaia.

Leaving Lajhi the track proceeds S.W. up the Lajhi *nala* which winds through high and, in places, almost precipitous hills ; at 6 miles Pathak (30 houses). At 12 miles Tashnak (100 houses).

Camping ground.—For 2 or 3 battalions only.

Water.—For the above force and more from the Lajhi and other small feeder streams.

Fuel.—In large quantities as some of the hills are densely wooded.

Fodder.—Good camel grazing.

Supplies.—*Nil.*

2 <hr style="width: 10%; margin: 0 auto;"/> 24 m.	SHESNAK .. 12 m. Mule track. Track continues S.W. up the <i>nala</i> bed for 6 miles, when an ascent, fit for mules only, commences up the steep side of a hill ; <i>kotal</i> reached at 7 miles where the wood ends ;
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ROUTE No. 4-C—*concl'd.*

descent is less steep but longer. From the foot of the pass the road heads due W. for Shesnak. At 10 miles it enters a small valley, down which it runs with an easy gradient. At 12 miles Shesnak (about 250 houses, comprising groups of 4 or 5 small villages).

Camping ground.—For 2 or 3 battalions only.

Water.—For the above force only from small stream adjoining camp.

Fuel.—Nothing nearer than the eastern slopes of *kotal* referred to, 5 miles distant, from which wood in large quantities is obtainable.

Fodder.—No details, but it is probable that about 100 maunds *bhusa* could be collected from the villages mentioned; good camel grazing.

Supplies.—No details; probably 100 maunds unground grain procurable.

3 **NESTI KOT** .. 8 m. Camel track.

32 m.

Track leads N.W. across an open undulating plain, till Route 4 is joined at 8 miles at Gharak or Khan Khel (500 houses), the chief village in Koshin and inhabited by Ahmadzai Ghilzais. Thereafter the road follows Route 4. S.W. to Nesti Kot, reached at 8 miles.

Camping ground.—

Water.—

Fuel.—

Fodder.—

Supplies.--

} *Vide*, Route 4, Stage 5.

ROUTE NO. 4-D.

KAREZ TO TANDAN.

19 mile.

2 stages.

Authority.—Native surveyor, 1911.

Epitome.

General description.—An alternative route between stages 4 and 7 of Route 4, and a considerable short cut between these

ROUTE No. 4-D—*contd.*

stages as the track runs straight across instead of the long diversion *viâ* Gardez taken by Route 4. This route also forms part of the direct summer *kafila* route between Mirzakai and Altimur *viâ* the Urus-i-Maidan pass, hitherto (1912) not explored but well known to exist; the present route is much used by *kuchis* when the Urus-i-Maidan is closed by snow.

Road.—Camel road throughout. There are no *obstacles* and the route is open throughout the year.

Camping grounds.—No details at Zandi Khel, the intermediate stage.

Water.—For 2 or 3 battalions at Zandi Khel.

Fuel.—

Fodder.—

Supplies.—

} Probably negligible at Landi Khel.

No. of stage and total dis- tance.	DETAILS.
1 <hr style="width: 10%; margin: 0 auto;"/> 6m. 4f.	ZANDI KHEL .. 6m. 4f. Camel road. (8,631').

Road leads S.W. across unirrigated fields. At $1\frac{1}{2}$ miles it is possible to cross a spur from the Machalgu hills, which would save about 1 mile, but the ascent and descent of this spur is not feasible for camels, the camel track making a detour along the base of the hills. At $3\frac{1}{4}$ miles Mamuzai (75 two-storied houses); at 4 miles Machalg (100 two-storied houses) where the road crosses the Machalgu stream, $25\times$ wide about 1' deep, water muddy; there is a small rocky hill 150 feet high on right bank of the stream with a tower on top, which would make a good signalling station. The road now crosses a stony, level plain, direction S.W. to Zandi Khel (35 houses) situated on the right bank and 150' above the *nala* of the same name; *nala* has steep banks, but the path zigzags up and down them in easy gradients. In April 1911 the Zandi Khel *nala* contained a stream of water $15\times$ broad, $1\frac{1}{2}'$ deep, water was brackish though drinkable.

Camping ground.—No details.

Water.—For 2 or 3 battalions from the Zandi Khel stream.

ROUTE No. 4-D—*concl'd.*

Fuel.—
 Fodder.—
 Supplies.— } No details; probably negligible.

NOTE (i).—Opposite Zandi Khel on the left bank of the *nala* is the tomb of Mian Umar, with 3 houses adjoining it.

NOTE (ii).—It is reported that a track leads N.W. up the *nala* to the village of Zarin Khel 2 miles distant, thence over the Urus-i-Maidan Pass, a plateau or *marq* on the mountain top, *viâ* Shawaz to Altimur. This road is reported to be the usual summer *kafila* camel route between Mirzakai and Altimur, being appreciably shorter than the corresponding stages described in Route 4. The Urus-i-Maidan Pass is reported to be closed throughout the winter and was known to be so on the 15th April, 1911.

2 TANDAN 12m. 4f. Camel road.
 ——— (7,658').
 19 m. General direction near-ly due W. Leaving

Zandi Khel the road continues across a stony, level plain; at 3 miles a path is crossed leading S. to Nesti Kot, 3 miles distant; between the 4th and 5th miles the road winds through a succession of low hills. At 6 miles cross *nala* 150× broad with banks of an average slope of 1 in 15, and stream of good water 5' to 6' broad and about 1' deep, which is dry in summer. At 8 miles, Khak Hazara (25 houses) where Route 4 is joined, and which is followed to Tandan, which is stage 7 of that route.

Camping ground.—
 Water.—
 Fuel.—
 Fodder.—
 Supplies.— } *Vide* Route 4, stage 7.

ROUTE NO. 4-E.
 GARDEZ TO GHAZNI.
Viâ Khwar Makawa.

47 miles. 5 stages.

Authority.—Native surveyor, April, 1911.

Epitome.

General description.—The more direct and shorter route between Gardez and Ghazni.

ROUTE No. 4-E—*contd.*

Road.—Unmetalled cart road 10', except¹ at the commencement of stage 3 to Lulu Kila when the road 6' to 8' broad winds for about a mile through the Band-i-Daulat Khan range; this section of 1 mile could probably be rapidly converted into a cart road. With this exception no *obstacle* of any kind is encountered, the road generally running over an open plain. Route open throughout the year.

Camping grounds.—For a division at stages 1 and 3, and for 1 infantry brigade with proportion of divisional troops at the remaining intermediate stages.

Water.—For at least 1 infantry brigade with proportion of divisional troops at all intermediate stages.

Fuel.—No trees, but stunted scrub universal.

Fodder.—No grass for horses; *khasil* daily in March and April at stages 1 and 4 for the horses at least of 1 cavalry regiment; also a few hundred maunds *bhusa* at both these stages. Camel grazing for 200 to 300 camels along the route.

Supplies.—For troops could not be reckoned on, except at Hisak and Rahmak, stages 1 and 4, where a few hundred maunds of unground wheat and barley would normally be procurable; there are 2,000 to 3,000 sheep usually in the Hisak villages. (Stage 1.)

No. of stage and total distance.	DETAILS.	
1 <hr style="width: 50px; margin: 0 auto;"/> 11 m.	HISAK (7,021').	.. 11 m. Unmetalled cart road 10'.

Leaving Gardez the road proceeds across a level plain covered with small scattered bushes affording good camel grazing. Once clear of the town the Band-i-Daulat Khan hills are visible to the W. At 5 miles the road turns somewhat sharply S.W. and maintains this direction, still across an open, level plain, to the end of the stage. At 11 miles Hisak (7,021', 500 houses). Hisak comprises about 100 fortified hamlets, each surrounded by its own land and called after its *malik*; crops irrigated by snow water and from *karezes* running to 50' in depth.

Camping ground.—For a division, if necessary, on the Hisak plain, which is about 10 miles in length from N. to S.

ROUTE No. 4-E—*contd.*

Water.—For about 1 infantry brigade with proportion of divisional troops in the dry season from the several *karezes*

Fuel.—No wood, but scrub could probably be collected affording sufficient fuel for one infantry brigade for a night.

Fodder.—No grass for horses; *khasil* for 500 horses daily in March and April; 500 maunds of *bhusa* could certainly be collected from the various hamlets; camel grazing for about 1,000 camels throughout the stage.

Supplies.—About 500 maunds unground wheat and barley should always be available; there are also from 2,000 to 3,000 sheep in the Hisak villages.

2	KHWAR	8 m.	Unmetalled cart road
————	MAKAWA.		10'.
19 m.	(7,161').		

Road now leads due W. across a level, uncultivated plain suitable for movements of all arms. At $5\frac{1}{2}$ miles pass a *ziarat* named Diwan Khel Baba (7,162'); 2 tall poplar trees here form a landmark for miles round. At 8 miles cross the Khwar Makawa *nala*, $20\times$ to $30\times$ broad, barely perceptible banks; stream in April 1911, $13\times$ broad, $1\frac{1}{2}'$ to 2' deep. On the right bank of the stream immediately S. of the road is a water mill surrounded by willow trees with a watch tower commanding a view to Gardez to the N.E. and over the Zirmana Ilaqua plain to the S. There are only a few small hamlets at Khwar Makawa.

Camping ground.—For a division if necessary on the right bank of the Khwar Makawa, on the open plain. The camping-ground is bounded on the N. by low sandstone hills $250\times$ N. of the road; on the E. by the *nala* and on the W. by the Band-i-Daulat Khan range $1,000\times$ distant. Hills referred to can easily be piquetted.

Water.—For at least one infantry brigade with proportion of divisional troops even in dry weather from the Khwar Makawa.

Fuel.—No details.

Fodder.—Camel grazing for about 1,000 camels throughout the stage.

Supplies.—Nothing appreciable.

3	LALU KILA	11m. 4f.	Unmetalled cart road
————	(7,161').		10', except for the
30m. 4f.			portion through the

ROUTE No. 4-E—*contd.*

Bandi-i-Daulat Khan range, 1 mile in length, where road is only a camel track, 6' to 8', but easily convertible to a cart road.

General direction N.W. At 1 mile reach the Band-i-Daulat Khan hills, through which the road winds its way, emerging on to an open plain beyond. Hills here about 200' to 300' above the road. At 1½ miles when leaving the hills a group of about a dozen houses one mile N. of the road and a round fort about 500× S. of the road. A level plain is now traversed, bounded by low sandstone hills rising sharply from the plain 1½ miles to the N. and on the S.W. by the Bandi-i-Daulat Khan range. At 4½ miles a range of sandstone hills 500' high commence, flanking the road on the S. and continuing alongside it to the 9th mile when this range recedes to the S. At 7½ miles Kandi Khel (a dozen houses) and at 8½ miles Kala Daulat Khan same size, both N. of the road. From mile 9 to mile 11½ (Lalu Kila) valley is about 2 miles broad. Lalu Kila (60 houses within walled mud enclosure).

Camping ground.—For a division if necessary on the open plain.

Water.—For 1 infantry brigade with proportion of divisional troops from a spring N. of the village.

<i>Fuel.</i> —	} No details; probably nothing appreciable,
<i>Fodder.</i> —	
<i>Supplies.</i> —	

but camel grazing for about 300 camels throughout the stage.

4	RAHMAK	..	6½ m.	Unmetalled cart road
————	(7,091').			10.'

37 m.

General direction W.

Road continues across an open flat plain, irrigated in places from 2 hill streams, coming from the N. At 4 miles a water-course 6' wide 1½' deep is crossed, on which 4 miles to the N. of the road the Tajik village of Robat (250 houses) stands amongst walled gardens. At 6½ miles Tajik village of Rahmak (500 houses) (7,041') in a fortified enclosure surrounded by fruit gradens; soil fertile and watered by *karez*s; mill inside the enclosure; two miles S.W. of Rahmak is Tasang (800 houses) surrounded by its own cultivated fields.

Camping ground.—For 1 infantry brigade with proportion of divisional troops N. of the road.

Water.—For the above force and more from several *karez*s.

ROUTE No. 4-E—*concl'd.*

Fuel.—No details.

Fodder.—*Khasil* for about 500 horses daily throughout March and April; about 300 maunds *bhusa* could normally be collected in the 2 villages.

Supplies.—Probably 300 maunds unground grain could be collected.

5	GHAZNI	..	10 m.	Unmetalled cart road
—————	(7,279')			10'.
47 m.				

Road proceeds W. across a stony uncultivated plain varying from $\frac{1}{2}$ a mile to 2 miles broad, bounded N. and S. by low sandstone hills about 200' high. At $1\frac{1}{2}$ miles an unmetalled cart road 10' from Tasang joins this route. At $7\frac{3}{4}$ miles, path proceeds N.W. to Roza village on the Ghazni-Kabul Road, where Mahmud of Ghazni's tomb is. At $9\frac{1}{2}$ miles cross small water-course, with small perennial stream which offers no obstruction. Suburbs of Ghazni are now entered, the road leading past houses and gardens.

At 10 miles Ghazni. For description, camping ground, water, etc., see Route 6, stage 10.

ROUTE NO. 4-F.

GARDEZ TO GHAZNI.

60 miles.

5 stages.

Authority.—Native surveyors, 1902 and 1905, 1907 and 1908.

Epitome.

General description.—An alternative route to Route 4-E. From Band in the third stage to Ghazni this route is identical with the main Route 6 from the Tochi valley to Ghazni.

Road.—Suitable for one line of carts, but carts could probably pass one another at any point along the route, except in the last stage, when the road leaving the Shilghar plain enters the valley of the Ghazni river. In this valley the passing of carts would be difficult owing to the irrigated fields on either side of the road. No *obstacle* is encountered along the route, which is open at all seasons of the year.

ROUTE No. 4-F—*contd.*

Camping grounds.—For a division at stage 1, no details as regards stage 2, and for 1 infantry brigade with proportion of divisional troops at stages 3 and 4.

Water.—For a division at stages 1 and 2, and for at least 1 infantry brigade with the proportion of divisional troops at the remaining 2 stages.

Fuel.—No details; probably scarce throughout.

Fodder.—*Bhusa* to an appreciable extent at stage 3; good camel grazing throughout.

Supplies.—For troops to any extent cannot be reckoned on except at Ghazni, for details of which *vide* Route 6, stage 10.

No. of stage and total dis- tance.	DETAILS.		
1 <hr style="width: 50px; margin: 0 auto;"/> 15 m.	CAMP	..	15 m. Unmetalled cart road 12'.

Road follows the valley of the *Jilga* stream, direction S.W. Camp at 15 miles.

Camping ground.—No details, but it is probable that a division could encamp in the valley in this vicinity.

Water.—Probably for a division from the *Jilga* river.

Fuel.—No details; probably nothing appreciable.

Fodder.—No details; probably nothing appreciable.

Supplies.—No details; probably *nil*, there being apparently no village in the vicinity.

2 <hr style="width: 50px; margin: 0 auto;"/> 29 m.	KALALGU	..	14 m. Unmetalled cart road 12'.
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The road continues S.W. down the valley of the *Jilga*. At 14 miles the *Tajik* village of *Kalalgu* (100 houses).

Camping ground.—No details.

Water.—Probably for a division from the *Jilga* river.

Fuel.—

Fodder.—

Supplies.—

} No details; probably negligible.

ROUTE NO. 4-F—*concl'd.*

3 **KALA NIAZ** .. 12 m. Unmetalled cart road
12'.

41 m. Road continues S.W.
down the Jilga valley and for the first 2 miles it is much
intersected by *nalas*; as far as the Mursal hill at the 8th mile
it is commanded on the N. by low hills, under features of the
Machalgu range, but to the S. it is quite open. At 8 miles, Band
(40 houses), where the road leaves the Jilga valley and turns
N.W. and leads over the Shilghar plain. Here the main Route
6 is joined, the 2 routes hereafter being identical to Ghazni.

For description of rest of stage, etc., to Kala Niaz, *vide*
Route 6, Stage 8.

4 **ABDUR RAHMAN** 10 m. Unmetalled cart road
12'.

51 m. For description of
stage, etc., *vide* Route 6, Stage 9,

5 **GHAZNI** .. 9 m. Unmetalled cart road
(7,279'). 12'.

60 m. For description of
stage, and of Ghazni, *vide* Route 6, Stage 10.

ROUTE NO. 4-G.

ALTIMUR TO ZARGAN SHAHR.

21½ *miles.*

2 *stages.*

Authority.—Native surveyor, 1911.

Epitome.

General description.—A connecting route between the 2 main
Routes 3 and 4. For the first 12½ miles the road forms part
of the main Kabul-Altimur-Gardez road. At mile 12½ the pre-
sent route branches off N.E. from the main road and leads across
an open plain to Zargan Shahr, the main Kabul-Gardez route,
continues due N., and strikes Route 3 at some point a few miles
N. of Zargan Shahr. This length of about 10 miles of road
has not been surveyed, but the fact stated above is well known
and amply corroborated.

ROUTE No. 4-G—*contd.*

Road.—From Altimur to mile 12½, unmetalled cart road 20' to 30'; thereafter to Zarghan Shahr unmetalled cart road 8' to 10'. The Kotal-i-Ashabi is the only *obstacle* encountered, but it presents no difficulty. Route open throughout the year.

Camping grounds.—No details at Patkhai Shahana, the intermediate stage.

Water.—At least for 1 infantry brigade with proportion of divisional troops at Patkhai Shahana.

Fuel.—No details.

Fodder.—About 500 maunds *bhusa* normally available at the intermediate stage; good camel grazing along the route except in winter, when there is *nil*.

Supplies.—About 500 maunds unground wheat and barley normally available at Patkhai Shahana, the intermediate stage.

No. of stage and total dis- tance.	DETAILS.
1 <hr style="width: 50px; margin: 0 auto;"/> 9m. 4f.	PATKHAI SHAHANA* (7,140'). 9m. 4f. Unmetalled cart road 20' to 30'.

General direction due N. At 1 mile Tagher (20 houses) about ½ a mile E. of the road. At 4½ miles pass a tower guarding a small tank filled by snow water. At 5½ miles road crosses a small ridge through which a cutting was being made in April 1911. For the last 4 miles of the stage the road crosses a level, uncultivated plain. At 9½ miles Pathkai Shahana (500 houses), whence a road suitable for carts runs S.W. to Patkhai Roghanai (Route 4, stage 9), 5 miles distant.

Camping ground.—No details.

Water.—For at least 1 infantry brigade with proportion of divisional troops, from water cuts from the Logar river 2 miles distant.

Fuel.—No details.

* Brigadier-General Palliser totally defeated a large gathering of *ghazis* from Zurmat at Patkhai Shahana on the 1st July 1880.

ROUTE No. 4-G—*concl'd.*

Fodder— } About 500 maunds^s unground wheat and barley,
Supplies.— } and an equivalent amount of *bhusa* normally
 available. Good camel grazing except in winter, when there is *nil*.

2 ZARGAN SHAHR..12 m. Unmetalled cart road
 12'.

21 m. 4 f.

General direction N. veering gradually N.E., in latter half of stage. At 1 mile a camel track branches off from this route and leads due W. to Hisarak on the right bank of the Logar river, 3 miles distant. At 2½ miles Daulat Khel (10 houses); at 3 miles the present road begins to veer N.E. and leaves the main Kabul-Gardez route, which though unsurveyed is known to continue roughly due N., and to join Route 3 near Zargan Shahr, stage 7 of that route. The road now crosses a stony, uncultivated plateau intersected by 2 or 3 dry *nalas* forming no *obstacle*. At 10¼ miles commence ascent of the Kotal-i-Ashabi, gradient 1 in 15, summit reached at 11 miles, no difficulty; thence across level plain to Zargan Shahr reached at 12 miles.

Camping ground.—

Water.—

Fuel.—

Fodder.—

Supplies.—

} *Vide* Route 3, stage 7.

ROUTE No. 4-H.

PATKHAI ROGHANAI TO GHAZNI.

Viâ Kharwar.

45 miles.

4 stages.

Authority.—Native surveyor, 1905.

Epitome.

General description.—Connecting route, *viâ* the Charkh valley and Kharwar, between the main Routes 4 and 15.

Road.—Camel road throughout except the Kharparchak pass (8,530') crossed in stage 2 which is reported unfit for laden Indian camels though feasible for lightly laden *kuchi* camels.

[ROUTE No. 4-H—*contd.*

The Kharparchak pass in stage 2 and the Zanakhan pass in stage 3 are the only *obstacles* encountered; the former already described, the latter is passable by Indian camels, but requires improvement before being fit for wheeled artillery. Route open throughout the year.

Water.—Plentiful for 1 infantry brigade with proportion of divisional troops at all intermediate stages.

Fuel.—No details.

Fodder.— } Details scanty, but it is probable that about

Supplies.— } 500 maunds unground grain and an equivalent amount of *bhusa* would normally be procurable at stage 1; it is also probable that there is good camel grazing throughout, which, however, would be very scarce in winter.

No. of stage and total dis- tance.	DETAILS.	
1	KHAORO ..	9 m. Camel road.
9 m.		

Leaving Patkhai Roghanai the road follows the main through Route 4 towards Altimur village (stage 8) for $2\frac{1}{2}$ miles, direction S.W. At 1 mile Charkh river is forded, river normally $15\times$ wide, 2' to $2\frac{1}{2}'$ deep, but unfordable when in flood. At $2\frac{1}{2}$ miles road leaves Route 4 and runs S.E., across a *pat* plain to Khaoro reached at 9 miles.

Alternative road.—10 miles, camel road. Follow Route 4 for 2 miles W. towards Kala Amir (stage 10) to the Tajik village of Baraki Rajani (1,000 houses). Road then turns S.E. up the broad, open valley of the Siah Ab or Charkh river; valley is well cultivated from *karazes*; at 5 miles village of Kala Ghulam Sadik, and at 6 miles Shamazar, both on the right of the road, which here approaches to within $\frac{1}{2}$ mile of the Charkh river along whose left bank it continues to Khaoro, reached at 11 miles.

Camping ground.—For 1 infantry brigade with proportion of divisional troops.

Water.—For the above force at least from the Charkh river.

ROUTE No. 4-H—*contd.*

Fuel.—No details.

Fodder.—No details, but it is probable that 500 maunds *bhusa* could ordinarily be collected in the valley within 5 miles of camp.

Supplies.—No details; it is probable that about 500 maunds unground grain would normally be available in this vicinity.

2	GADAI KHEL ..	9 m.	Camel road except
—————	(7,980')		over the Kharparchak
18 m.			pass,* which lightly

laden *kuchi* camels can only just negotiate.

Road continues S.W. At 3 miles a group of hamlets is passed known as Pingram or Kala Nao on the right bank of the Charkh river, and as Naushahr on its left bank. River is here forded; no details regarding ford, but no difficulty is anticipated. At 6 miles the Kharparchak pass (8,530') is crossed. This pass is reported to be impracticable for Indian camels, and only feasible for lightly laden *kuchi* camels and mules. At 7 miles Aman Khel and at 9 miles Gadai Khel.

Camping ground.—For 1 infantry brigade with proportion of divisional troops.

Water.—For the above force at least from the Charkh river.

<i>Fuel.</i> —	}	No details.
<i>Fodder.</i> —		
<i>Supplies.</i> —		

3	KHOJAL KHEL ..	14 m.	Camel road.
—————			
32 m.			

Road continues S.W. At 1 mile a track running N.E. leaves this route and joins Route 4 just N. at Altimur village (stage 8). At 2½ miles Karez Gul Muhammad. Here the road gradually veers due W. and enters the Kharwar district, through the north-eastern limits of which it runs to the end of the stage. Kharwar is an elevated plateau, cultivated without artificial irrigation and surrounded basin-fashion with a rim of high ranges. At 4 miles Shaikhan and at 6 miles Yusuf Khel. Here a track leaves this route and running N.W. joins the main Ghazni-Kabul road (Route 15) some 10 miles N. of Ghazni. At 10 miles the

* Shewn in map as Khar Peckak pass.

ROUTE No. 4-H—*concl'd.*

Zanakhan pass (8,750'), ascent steep, descent easy; pass is fit for Indian camels, but would require improvement on its eastern face before being practicable for wheeled artillery. At 11 miles Rashid Kafir; at 13 miles Herat Khel and at 14 miles Khojal Khel on the right bank of a tributary of the Ghazni River.

Camping ground.—For 1 infantry brigade with proportion of divisional troops on the N. bank of the stream.

Water.—For the above force from the stream.

Fuel.—

Fodder.—

Supplies.—

} No details; probably nothing appreciable.

4 **GHAZNI** .. 13 m. Camel road.

————— (7,279').

45 m.

General direction S.W. along an open valley on the right bank of the stream. At 4 miles Purdil Khan where road crosses to the left bank; no details. At 7 miles Miandaḍ, and at 9 miles Zakawal $\frac{1}{2}$ mile S. of the stream. At about 10 miles the main Ghazni-Kabul road (Route 15) is joined and followed to Ghazni.

Camping ground.—

Water.—

Fuel.—

Fodder.—

Supplies.—

} *Vide* Route 6, stage 10.

ROUTE No. 5.

THAL TO GARDEZ.

Viâ Matun and the Khiddi Ghakhai pass.

125 miles.

11 stages.

Authority.—Stage 1, Ross, 1909; thence to Shabak pass in stage 3, Maconochy, 1894; Shabak pass to Matun (stage 4) Spratt (Khost expedition, 1879); Matun to end of route, native surveyors, 1906 and 1909.

Epitome.

General description.—A through route from Thal in the Kurram valley to Gardez, where Route 4, Kharlachi to Kabul,

ROUTE No. 5—*contd.*

is joined. Gardez being connected with Ghazni by Routes 4-E and 4-F, the present route thus forms a through connection from the railhead at Thal with both Kabul and Ghazni, and *viâ* Ghazni with Kandahar. The Ghazni mails and the relief of the Afghan troops are said to follow this route. At Thal this route connects with Route 28, Routes South of the Kabul River.

Road.—First stage cart road suitable for 2 streams of carts, but first 3 miles only metalled; thence a camel road easily convertible for wheeled artillery throughout, with the exception of the ascent of the Khiddi (Khandi) Ghakhai pass (10,150') on its S.W. face, in the 10th stage, which in its present condition is unfit for camels, but up which a road with easier gradients could easily be made as the soil is soft. The following *obstacles* are encountered:—

- (i) Kurram river in second stage which has to be forded; liable to be temporarily impassable owing to spates.
- (ii) Shabak pass (4,126') in third stage; no difficulty.
- (iii) Khiddi (Khandi) Ghakhai pass (10,150') in 10th stage; ascent on S.W. face at present unfit for camels; owing to its altitude this pass would be blocked by snow for at least 2 months in the winter.

With these exceptions the route is open throughout the year.

Camping grounds.—For a division at stages 2 and 5 and at Gardez; for at least 1 infantry brigade with proportion of divisional troops at all other stages.

Water.—For at least 1 infantry brigade with proportion of divisional troops at all stages.

Fuel.—At Matun, 4th stage, and thenceforward at all stages in abundance, as the route traverses wooded hills throughout this section.

Fodder.—Details very scanty; but *bhusa* and *khasil* at Matun and Gardez as described. Fair to good camel grazing throughout.

Supplies.—Nothing appreciable except at Matun and Gardez.

No. of stage and total dis- tance.	DETAILS.
1 <hr style="width: 20%; margin: 0 auto;"/> 13 m.	<p>MANDURI .. 13 m. Metalled cart road 20', 10' metalling, for the first 3 miles; thence unmetalled cart road.</p>

ROUTE No. 5—*contd.*

General direction N.W. along left bank of the Kurram river. Road drops down from Thal Fort and crosses the bed of the Sangroba *nala*, here about 250× wide. After heavy rain in the Zaimukht hills it is impassable for 3 or 4 hours.

At $\frac{1}{2}$ mile Thal Border Military Police post, Thal village and large *sarri* to S. of road. Cross deep *nala* by masonry bridge. At 1 mile Yusuf Khel village, just beyond which two *nalas* are crossed. At $1\frac{1}{2}$ miles old camping ground on high ground, overlooking the bed of the river but commanded by hills to the N. Space for 3 regiments. At $2\frac{1}{2}$ miles cross a *nala*, on banks of which are abutments of an incomplete bridge, one abutment being partially demolished. At $2\frac{1}{2}$ miles pass hamlet of Chaode Kalai to S. of the road. From 3 miles the road rises and runs along the edge of a cliff to 7 miles, and up to 3 miles is metalled 10' wide. At 6 miles pass Tutkas village. At $6\frac{3}{4}$ miles cross a bridged *nala* and the Administrative Frontier. At $7\frac{1}{2}$ mile cross a *nala* whence the Khoidad Khel path to Dilragha ascends. In 9th mile pass the Chapri militia post and the two hamlets of Chapri. Here there was a fortified post and *sarai* during the 2nd Afghan war, and there is—

Camping ground.—For 1 infantry brigade with proportion of divisional troops on 2 sites N. and N.W. of the old post.

Water.—For the above force at least.

Fuel.—Scarce.

Fodder.—Fair camel grazing, on the right bank of the Kurram and grass after rain.

Supplies.—From Thal.

At $12\frac{3}{4}$ miles pass village of Char Khel and ruin of old militia post on conical hill.

At 13 miles Manduri, Watizai village. There is a Military Works Department rest-house, accommodation for 2 officers, and 2 subordinates, 2 godowns, 2 stables and store in a small walled enclosure between the 2 villages of Manduri and close to the camping ground. There is also a railway rest-house and walled enclosure, built on the site of the old camping ground with accommodation for 2 officers and 10 subordinates, 10 servants and stabling for 2 horses.

Camping ground.—For 1 infantry brigade with proportion of divisional troops. Camp stony and confined, and built upon by the railway authorities. An alternative camp for 1 battalion lies between the cultivation and the road S. of Manduri village.

ROUTE No. 5—*cont'd.*

Water.—For the above force from an irrigation cut, on the roadside, and for a division or more from the Kurram river, 1 mile distant.

Fuel.—No details.

Fodder.— } About 1,000 maunds unground grain and an

Supplies.— } equivalent amount of *bhusi* would normally be procurable. Good camel grazing.

2	SKARDAND	.. 6 m.	Camel road. Easily made fit for wheeled artillery.
<hr style="width: 10%; margin-left: 0;"/>			
19 m.			

At $\frac{1}{2}$ mile the present route leaves the Kurram valley by making a right angle turn to the S.W. and crossing the Kurram river heads direct for Skardand. The Kurram is forded at this point; hard, stony bottom and no difficulties except when river is in flood, when ford may be temporarily impassable. On reaching the right bank road continues S.W. and at 2 miles leads over a small *kotil* on to the Shabak plain; the road now follows the course of the Shabak *nala*, but keeps on the plain; the country throughout the stage is open and there is no cultivation. At 6 miles Skardand is reached.

Camping ground.—Unlimited camping space probably sufficient for a division.

Water.—Only a limited supply, but water could be obtained anywhere on the plain by sinking wells.

Fuel.—Scarce.

Fodder.— } No details, but there should be at least fair

Supplies.— } camel grazing.

3	LANDHA	.. 14 m.	Camel road easily made fit for wheeled artillery.
<hr style="width: 10%; margin-left: 0;"/>			
33 m.			

From Skardand to the Shabak pass, locally known as Batai Kandao, there are many tracks; general direction S.W.; the road crosses the Shabak plain and enters low, rolling hills. Where the road crosses ravines, it is in places narrow but fit for all pack transport.

At 6 miles the Shabak pass (4,126'), a pass in the range of hills separating the Kurram and Kaitu valleys, is crossed.

ROUTE No. 5—*contd.*

The ascent of the pass from the E. though steep in places is practicable for camels and could easily be made fit for wheeled artillery. The descent on the western face is also steep in places, but if anything is easier than the eastern face. There is an Afghan *khasadar* post about a mile from the summit on the Afghan (W.) side of the pass. From the foot of the *kotal* the road passes through a small open valley. At 11 miles Ghilzai where the Landha stream is also met; from here a mule track running due N. joins Route 5-A at the Spin Tangi pass 7 miles distant. At 14 miles Landha on the left bank of the Kaitu (Katur) or Shamil river, which is met here; river has a sandy bed with low banks.

Camping ground.—For 1 infantry brigade with proportion of divisional troops at least.

Water.—For the above force from the Kaitu.

Fuel.—No details.

Fodder.—Fair camel grazing; no other details.

Supplies.—No details; probably nothing appreciable.

4	MATUN	.. 12 m.	Camel road.
—————			
45 m.			
	(3,892')		

Road now runs along the left bank of the Kaitu, direction N.W., to Habib Khel reached at 5 miles. The valley up to this point is about 1 mile wide flanked by comparatively high hills.

At Habib Khel the Kaitu valley is left, the road continuing N.W. to Arun Khel (8 miles), then S.W. to end of stage. From Habib Khel the road is a well defined track passing over a level plain, easy going in fine weather, but difficult for camels after rain.

At 12 miles Matun, capital of Khost, at the junction of the Kaitu and Matun rivers. Matun consists of a large group of villages situated on both banks of the Matun river which issues from the *Ghalang dara* in the Mangal hills. There are 2 small square, mud-walled loop-holed forts at Matun, one garrisoned by a regiment of cavalry, the other by a battalion of infantry and some artillery. In 1905 it was reported that 4 machine guns were mounted on the walls of the latter fort, but it is believed these have since been dismantled.

ROUTE No. 5—*contd.*

Garrison at Matun in 1912 was reported to be as follows:—

- 3 mountain batteries, 12 guns
- 2 field batteries, 12 guns
- 4 machine guns
- 1 regiment cavalry
- 3 battalions infantry
- also 600 *khasadars*.

In the summer the Governor and most of the garrison move to Gabar situated in the hills separating Khost from the upper waters of the Kurram river.

*Camping ground**.—For 2 or 3 infantry brigades with proportion of divisional troops at least.

Water.—For the above forces at least from the Matun and Kaitu rivers.

Fuel.—Sufficient for a large force could be collected from the surrounding hills within a distance of five miles.

Fodder.—No details, but *bhusa* probably to the extent of 2,000 to 3,000 maunds should ordinarily be procurable, also *khasil* to an appreciable extent in the spring; good camel grazing.

Supplies.—No details, but probably about 2,000 to 3,000 maunds unground wheat and barley would normally always be procurable from the Matun villages.

The following routes converge on, or radiate from Matun:—

- (i) Route 4-A to Hisarak (Pir Sarai); this is a connecting route between the main through Routes 4 and 5.
- (ii) Route 5-A from Alizai in the Kurram valley *viâ* the Spin Tangi pass.
- (iii) Route 5-C from Hazar Pir in the Kurram valley.

* The following troops were encamped at Matun from the 7th to the 13th January 1879:—2 squadrons cavalry, 2 batteries mountain artillery, 1 infantry brigade.

| ROUTE No. 5—*contd.*

In addition 2 camel tracks lead from Matun as follows :—

- (a) One running due S., joining Routes in Waziristan, Route 10 to Miram Shah, in stage 2 at the Ghorost *nala*.
- (b) The other running S.E., joining Routes in Waziristan, Route 13 to Spinwam, at the Dunikot *tangi*.

NOTE.—Mr. J. S. Donald crossed the Shabak range in January 1895, and wrote as follows :—

“ From the Shabak plain into Khost there are two important roads which lead over the main range which divides the Kurram valley from the northern drainage of the Shamil and Kaitu streams. The Shamil and Kaitu are the names of one and the same stream which is known as the Shamil near Kotkai and becomes the Kaitu lower down.

These two roads lead over the Shina Algad and the Batai passes, both fit for laden camels. On the Khost side these roads run through the Karangi valley, and the distance between the Shabak plain and the Shamil villages of Landar and Sadik by these two roads is about 16 miles. To the south of the Batai pass and close to the Kaisara mountain is the Hassan Khel Gawi road. By this road there is direct lateral communication between Kurram and the country of the Hassan Khel Wazirs. By following this road the Wazir country can be entered without going through the limits of Afghanistan as fixed by the recent demarcation. Laden camels can go up to the Hassan Khel Gawi pass from Shabak, but the descent into the Kaitu is steep and it is only passable for horsemen. The summer settlements of the Wazirs, by this road, from Shabak, are about 16 miles, while their winter encampments are not more than 7 or 8 miles. Their flocks graze right up to the pass. Next to the Hassan Khel Gawi pass and to the south of the Kaisara mountain is the Lalaka pass. I rode up to the top of this pass and came to the conclusion that laden mules could go with difficulty. It could, however, with very little trouble be made passable for laden mules. The descent into the Kawantra valley is the most difficult part of this route. To the north-east of the Lalaka is the Larumai pass. The Larumai is situated on the ridge which divides the drainage of the Shabak plain from that of the Kawantra and Gaur Obo valleys which lie to the south-west of Khapianga. It is by far the easiest pass in this neighbourhood and all the routes to Thal, Biland Khel, Medanui, Shaur, and Zaka go over it. In case it was ever necessary to surprise the Kabul Khel Wazirs from Alizai this route would serve the purpose admirably.”

5 **Haidar Khel** .. 12 m. Camel road.

57 m.

General direction W. Leaving Matun camping ground the road passes between the *bazar* and a mud-walled fort; the road here is a made camel road and is kept in good repair with drainage ditches on either side; soon after leaving the *bazar* a large walled garden is passed on the right and opposite this is a second mud-walled fort. The road now enters the Zadran (Jadran) country, following the northern side of the open cultivated valley of the Shamil (Kaitu) river, descending at an almost imperceptible gradient with many villages on either side. At about 8 miles a stream joins the Shamil from

ROUTE No. 5—*contd.*

the N.W. and here a long spur runs down from the hills to the N. and commands the road. At 9 miles pass the ruins of an old fort on the left. At 10 miles the dry *Zani nala* is crossed ; no difficulty.

At 12 miles reach the Haidar Khel villages.

Camping ground.—For a division on a grassy plain on the right of the road.

Water.—For 2 infantry brigades, at least, with proportion of divisional troops, from the Shamil river and from tributary streams from the N.

Fuel.—Plentiful within 2 miles of camp from the wooded hills to the N.

Fodder.—About 500 maunds *bhusa* normally available ; good camel grazing.

Supplies.—About 500 maunds unground wheat and barley normally procurable.

6 **CAMP ALMARAHAH** : 11 m. Camel road.

68 m.

Road continues W, and gradually approaches the left bank of the Shamil. For the first 6 or 7 miles it is still a good camel road, but is not kept up to the same extent as in the last stage. It runs through an open, fertile, and populated plain. At about 8 miles pass a *sarai* near left bank of river; opposite on the right bank is the village of Babrak Paian, the residence of Babrak, an influential Jadran malik (1908). All villages below Babrak Paian are inhabited by Khostwals and those above by Jadrans. Beyond this village hills commence on the right bank of the river. Continuing past the *sarai* a good position for a camp, on high ground, is reached at about 11 miles.

Camping ground.—For an infantry brigade with proportion of divisional troops, on the position mentioned.

Water.—For the above force from the stream.

Fuel.—Plentiful within 2 miles of camp from the wooded hills to the N.

Fodder.— } No details, probably nothing appreciable ;
Supplies.— } fair camel grazing.

ROUTE No. 5—*contd.*

7 **BABRAK BALA** .. 11 m. Camel road.

79 m.

Leaving camp the road, still fit for camels, follows the left bank of the Shamil, general direction W. At about 1 mile the hills, to the N. approach close to the river. At 2 miles pass Almarah village on right bank lying at the foot of a longspur, which commands the road up and down the valley. At about 4 miles pass Kahi village on the left bank opposite the junction, from the S., of the Kahi stream with the Shamil. Above this point the Shamil valley narrows and camels can only move with difficulty. At about 6 miles pass the village of Babrak Miana, the former residence of Malik Babrak. At 11 miles reach Babrak Bala hamlets on left bank.

Camping ground.—For 1 infantry brigade with proportion of divisional troops on a good site.

Water.—For the above force from the Shamil stream.

Fuel.—Plentiful from the wooded hills about one mile N. of camp.

Fodder.— }
Supplies.— } No details; probably nothing appreciable.

8 **WAZHA** .. 13 m. Camel road.

92 m.

The track, still fit for camels, continues up the bed of the Shamil which makes a bend to the N. W. The river-bed is full of smooth, round stones, no big boulders. For the first 6 miles the valley is fairly open, the hills on either side being easy and sparsely wooded. At six miles the Spilgin *nala* joins the Shamil on the right bank, and in the angle formed by the two streams is the village of Darak. From Darak the track follows the bed of the Shamil to 13 miles where the two villages of Wazha are reached, on the left bank. Here a *sarai* is in course of construction (1906). The valley is here, about 300^x wide.

Camping ground.—For 1 infantry brigade with proportion of divisional troops; site is often partially under cultivation.

Water.—For the above force at least from the Shamil stream,

ROUTE No. 5—*contd.*

Fuel.—Plentiful within 1 mile of camp.

Fodder.—
Supplies.— } No details.

Note.—From Darak to Wazha there is an alternative track which, though about 2 miles shorter, is only fit for mules. This track leaves the Shamil at Darak, and follows up the right bank of the Spilgin *nala* for about 3 miles. Crossing the Spilgin it then leads over the spur in the V between the two streams by an easy path, and descends again to the Shamil, rejoining the main road near Wazha.

9 JADRAN HAMLETS.. 10 m. Camel road.

102 m.

General direction nearly due N. The track continues up the bed of the Shamil, continually crossing and recrossing the stream (average depth 2' to 2½' in September). At about 9 miles it leaves the bed of the stream and ascends to level cultivation on the right bank, thus avoiding a bend in the stream. At about 10 miles reach a cluster of Jadran hamlets near which there is :—

Camping ground.—For 1 infantry brigade with proportion of divisional troops on cultivated ground between the road and the right bank of the river.

Water.—For the above force and more from the river.

Fuel.—Plentiful within 1 mile of camp.

Fodder.—
Supplies.— } Probably nothing appreciable.

10 LAL GUL .. 11 m. Camel road.

113 m.

The track continues for ¼ mile over level cultivation and then descends again to the bed of the Shamil, it then ascends the latter at a fairly easy gradient to about mile 4, the valley becoming more and more confined. At 4 miles (elevation 7,950') the *nala* bifurcates. The track follows the more northerly of the two branches (almost dry in September), and ascends to the summit of the Khiddi (Khandi) Ghakhai pass, reached at about 7 miles (10,150'). The gradient is thus very severe, and the pass in its present condition would be difficult for camel transport at any time. The soil is, however, soft and a road with easier gradients could easily be

ROUTE No. 5—*contd.*

made. Wooded hills rise on either side of the track, but flanking parties could move along them without difficulty.

The summit of the pass is open, the hills on the right (E.) rising only slightly above the level of the road and the range on this side having a general downward trend; to the left (W) the hills rise to a great height (12,640'). The range is well wooded, chiefly with *chilgoza* (edible pine) trees. Snow is said not to lie very deep on the pass and Ghilzai camels are reported to be able to cross throughout the winter.

The descent on the northern side is easy, the track leading gently downwards over spurs and undulating ground. The foot of the descent is reached at about $9\frac{1}{2}$ miles, elevation 9,650' (i.e., a drop of only 500 feet in $2\frac{1}{2}$ miles); at 11 miles reach village of Sardar Lal Gul Khan (Governor of Hariob in 1906), about 70 houses.

Camping ground.—For 1 infantry brigade with proportion of divisional troops.

Water.—For the above force from an excellent spring on the road just beyond the village.

Fuel.—In large quantities from the hills 2 miles distant.

Fodder.—Fair camel grazing.

Supplies.—Nothing appreciable.

11	GARDEZ	..	12 m.	Camel road. General
—	(7,511').			direction N.W.
125 m.				

At about $\frac{3}{4}$ mile road crosses an under-feature of the main range and continues to descend gently, over undulating ground with gravelly soil to the cultivated Koshin plain. At 11 miles two detached hills are passed, to the right of the road and opposite, to the left is the village of Jahandad Khan, the well-known Ghilzai horse-dealer. The Spin or Sapega Rud is crossed at $11\frac{1}{2}$ miles by a very easy ford, and Gardez is reached at about 12 miles.

Gardez, capital and civil headquarters of Zurmat, is situated at the confluence of the Sapega and Altimur streams, which, below Gardez, is known as the Jilga river; contains about 3,000 houses, inhabitants mostly Tajiks with a few Ghilzais; large *bazar*; great quantities of barley and wheat produced here and

ROUTE No. 5—*concl'd.*

taken to the Kabul market, also *ghi* and flocks of sheep, Gardez receiving in return fruit, tobacco and cotton cloth.

Two forts outside the town, older one occupied by *khasudars*, new fort by regular troops. This latter is situated on a mound commanding extensive view over surrounding flat country, but is itself commanded by hills 2 miles to the S. (on left bank of the Sapega) by which guns could easily be taken; it stands among small fortified villages surrounded by gardens and fields irrigated from canals. Walls of the new fort 800^x in circumference, 8' to 12' high and about 5' thick at the base; no bastions or ditches; 3 gates, but northern gate alone covered by traverse. Sapega Rud flows about 1 mile to the S. of this fort.

Garrison in 1911 was as follows:—

- 1 cavalry regiment armed with Martini carbines.
- 1 battery field artillery of 6 muzzle loader guns, 3" to 4" bore, but ill-cared for and dusty.
- 2 battalions infantry armed with Martinis.

There are no regular barracks, but rifles and ammunition are kept in the fort where one year's supplies of grain, etc., for the garrison are also stored.

Camping ground.—Several alternative camping grounds, each for a brigade, in vicinity of the fort.

Water.—For a division or more from both streams, and canals leading from the same.

Fuel.—Could be collected from surrounding hills within a distance of 5 miles, for a division for at least a month.

Fodder.—*Khasil* daily during March and April for the horses of a cavalry brigade at least; *bhusa* in large quantities; camel grazing good.

Supplies.—For a division for, say, one week. Gardez is collecting centre for grain (barley and wheat) which is sent to the Kabul marts. Large flocks of sheep and goats in surrounding villages.

ROUTE No. 5-A.

ALIZAI to MATUN.

Viâ the Spin Tangi pass.

26 miles.

2 stages.

Authority.—Alizai to the Spin Tangi pass, Crosthwait, 1906; thence to Matun, Carr (Khost expedition, January 1879) and Maconochy, 1894.

Epitome.

General description.—Probably the best line for a cart road from the Kurram valley into Khost. The road itself is far easier than that over the Shabak pass and it offers greater facilities for defence.

Road.—Camel road throughout. At Alizai the Kurram river has to be forded which may cause temporary delay in case of spates; the only other *obstacle* is the Spin Tangi pass crossed in the first stage, which presents no difficulty. Road open throughout the year.

This route connects at Alizai with Route 28, Routes South of the Kabul River.

Camping ground.—For 2 or 3 battalions only at Sabari, the intermediate stage.

Water.—Precarious at Sabari, the intermediate stage, where transport animals might have to be watered at the Kaitu river 3 miles S. of camp.

Fuel.—Scarce *en route*.

Fodder.—Only a little camel grazing *en route*.

Supplies.—Nothing *en route*.

No. of stage and total distance.	DETAILS.	
1	SABARI ..	15 m. Camel road.
15 m.		

Leave the main road at Alizai, in stage 7 Route 28, Routes South of the Kabul River, and cross the Kurram river at Bagzai village; river always fordable except after very heavy rain. Road then runs S.W., sometimes in the bed, sometimes on the banks of the Khadand or Sarkalo stream. At about 4½ miles cross the Khadand Mela, a large open space

ROUTE No. 5-A—*contd.*

surrounded by low hills easily crowned and defended. This would make a good camping ground; there is a certain amount of water and more could probably be got by digging. From here the road follows the right bank of the *nala*; the valley is everywhere easy and with comparatively little work the road could be made fit for wheeled artillery. At 9 miles the road bifurcates; the branch to the right (the present route) leads to the Spin Tangi pass, that to the left runs due S. and at 7 miles joins the main Route 5 at Ghilzai village in stage 3. At 9½ miles the Spin Tangi pass (4,028') is crossed; ascent easy, the total rise from the Kurram river to the crest of the pass is only some 800'.

Road gradually descends, direction S.W., on to a level uncultivated plain called Tor-i-Oba. At 13 miles Route 58 joins this Route from the N.W. At 15 miles Sabari.

Camping-ground.—Good and open; probably sufficient for 2 or 3 battalions at least.

Water.—Precarious; it might possibly be necessary for all animals to be watered at the Kaitu river 3 miles to the S.

Fuel.—Sufficient for the requirements of 1 infantry brigade for the day, could probably be collected within 2 or 3 miles of camp, owing to the existence of patches of dwarf palm (*mazrai*).

Fodder.— } No details; probably nothing appreciable;
Supplies.— } good camel grazing.

2	MATUN	..	11 m.	Camel road, but diffi-
-----	(3,892')			cult after rain.
26 m.				

The road passes over a level plain, direction S.W., good in fine weather, but very bad for camels after rain. Leaving the Sabari valley it crosses a low *kotal* and then runs S. till the Kam Khost *nala* is crossed at 5 miles. Thence S.W. to the villages of Bavi and Abkhel passed about 8 miles, when the road turns S.W. once more and continues thus to Matun.

<i>Camping ground.</i>	}	<i>Vide</i> Route 5, stage 4,
<i>Water.</i> —		
<i>Fuel.</i> —		
<i>Fodder.</i> —		
<i>Supplies.</i> —		

ROUTE No. 5-B.

HAZIR PIR (KURRAM) TO SABARI.

18 miles.

2 stages.

Authority.—Maconochy, 1894.*Epitome.*

General description.—One of the roads from the Kurram valley into Khost, and probably the best route into the Khost valley if opposition is expected. Starting opposite Arawali, stage 7 of Route 28, Routes South of the Kabul River, it joins Route 5-A, near its second stage and together with the last stage of this route forms an alternative route from the Kurram to Matun.

Road.—Good camel road throughout. No *obstacles* encountered.

Route open throughout the year.

Camping ground.—For 1 infantry brigade at Zer Kamar, the intermediate stage.

Water.—Sufficient for the above force at Zer Kamar.

Fuel.—No details.

Fodder.—Grass and forage procurable at Zer Kamar; fair to good camel grazing throughout.

Supplies.—*Nil.*

No. of stage and total dis- tance.	DETAILS.
1	ZER KAMAR 9 m. .. Camel road.
9 m.	

Road for about $\frac{1}{2}$ mile runs due S. down the Kurram valley when it ascends and crosses a stony plateau and ridge, descending into the Sam Gokh valley at about $1\frac{1}{3}$ miles. Thence across the valley, direction still S., passing Kach at about $1\frac{3}{4}$ miles; at 3 miles road turns S.W. maintaining this direction to end of the stage; at about 4 miles it passes over a low ridge into the Sherwani valley. At 5 miles another *kotal* is crossed and for the remainder of the stage the road runs among low hills, through which camels have to go in single file in places, crossing the Zer Kamar (Zeraki Kamar) near the end of the stage.

Camping ground.—Rather confined; probably sufficient for 1 infantry brigade.

ROUTE No. 5-B—*concl'd.*

Water.—Procurable in *nala* and more can be obtained by digging; probably therefore sufficient for the above force.

Fuel.—No details.

Fodder.—Little grass procurable in summer; good camel grazing.

Supplies.—No details; probably *nil.*

2 **SABARI** .. 9 m. Camel road.

18 m.

Road continues S.W. through a labyrinth of low hills, At 3 miles the Afghan border is crossed, after which the road emerges from the hills and runs over a stony plain, still S.W. which direction is maintained to the end of the stage. At 7 miles the road joins Route 5-A along which it continues to end of the stage. At 9 miles Sabari.

Camping ground.—

Water.—

Fuel.—

Fodder.—

Supplies.—

} *Vide* Route 5-A, stage 1.

ROUTE No. 5-C.

HAZIR PIR (KURRAM) TO MATUN.

Viâ Jaji Maidan and Yakubi.

36½ miles.

4 stages.

Authority.—Khost expedition, January 1879.

Epitome.

General description.—Route traversed by the Khost valley column under General Roberts from the Kurram to Matun in January 1879.

Road.—Camel road throughout and could easily be converted into a cart road. The Khawanich pass crossed in the 4th stage, is the only *obstacle* encountered and presents no difficulty. Route open throughout the year.

Camping grounds.—For 1 infantry brigade with proportion of divisional troops at all intermediate stages.

ROUTE No. 5-C—*contd.*

Water.—For the above force at least at all intermediate stages.

Fuel.—Scarce throughout.

Fodder.—Scarce, but grass is procurable in summer at Jaji Maidan and *bhusa* at Nawar, stage 2; fair to good camel grazing throughout.

Supplies.—Nothing appreciable except at Nawar, stage 2, where 1,000 maunds unground grain generally procurable. For supplies, etc., at Matun, *vide* Route 5, stage 4.

No. of stage and total dis- tance.	DETAILS.
1 <hr style="width: 10%; margin: 0 auto;"/> 10m. 4f.	JAJI MAIDAN 10m. 4f. Camel road, easily convertible to cart road.

General direction N.W. Leaving Hazir Pir the road follows the left bank of the Jaji Maidan river; the road is good and very little labour would make it fit for wheeled artillery. The country generally throughout the stage consists of open, rolling hills with occasional small plains; the hills are stony and bare except for the low, dwarf palms. At 7 miles the Afghan frontier is crossed. From here a camel road runs due N. to Ahmadzai in the Kurram valley about 15 miles distant, passing the Lakka Tigga frontier post at 2 miles and crossing the Darwazagai pass at 10 miles. At 10½ miles Jaji Maidan, consisting of a cluster of 7 villages situated in a small basin surrounded by easily accessible hills; the whole basin is under rice cultivation.

Camping ground.—No place for the troops to encamp except in the rice fields, which from January to August are dry and very suitable for a camp; probably sufficient for an infantry brigade with proportion of divisional troops.

Water.—For the above force and more from the Jaji Maidan river.

Fuel.—Scarce.

Fodder.—Grass scarce, but an appreciable amount was brought in by villagers in 1879 for sale when the Khost valley column halted at Jaji Maidan. Good camel grazing.

Supplies.—*Nil.*

ROUTE No. 5-C—*contd.*

2 **NAWAR** — 11 m. Camel road, easily convertible to a cart road.
21m. 4f.

General direction S.W. Between Jaji Maidan and Nawar the road passes over the Dumni *kotal*, the only bit of the route where opposition would be likely. Practicable for everything but wheels. The hills are devoid of cover.

Immediately beneath the camp, running through the Jaji Maidan valley, is a deep *nala* which delayed the camels very much. The road for $4\frac{1}{2}$ miles is up a fairly open valley with easily accessible hills on either side, and with several small villages in it, till the *kotal* is reached by a gentle ascent. Three more *nalas* are passed in the valley, but they can all be easily crossed by making a detour. The hills on either side are bare, not practicable for cavalry, but are easy for infantry. The *kotal* is a low ridge, commanding a fine view of the Khost valley. The descent is steep and rough for the first mile; it then passes along the top of a spur from the *kotal* range for about $\frac{3}{4}$ mile where the road descends into the bed of the large river, which runs through this part of the Khost district. The main valley, a broad open plain studded with numerous villages and covered with cultivation, is now entered.

The climate of the Khost valley is markedly warmer than that of Kurram.

Camping ground.—On good dry ground near the village of Nawar; probably sufficient for at least 1 infantry brigade with proportion of divisional troops.

Water.—Sufficient for the above force from the stream.

Fuel.—Scarce.

Fodder.—About 1,000 maunds *bhusa* should normally be procurable here; good camel grazing.

Supplies.—No details, but it is probable that in this cultivated valley at least 1,000 maunds unground grain could be collected from the villages within a few miles of Nawar.

3 **YAKUBI** .. 6 m. Camel road, easily convertible to a cart road.
27m. 4f.

Road now runs due S., over an open plain; road is good but on nearing Yakubi the plain is covered with saltpetre,

ROUTE No. 5-C—*concl'd.*

efflorescence, and dangerous bogs abound, so much so that the cavalry flankers of General Roberts' force had to be recalled. It is therefore important to remember that the transport should adhere closely to the road.

Camping ground.—For 1 infantry brigade with proportion of divisional troops on the right bank of the stream which flows just N. of Yakubi.

Water.—For the above force at least from the stream above referred to.

<i>Fuel.</i> —	} No details; probably nothing appreciable; good camel grazing.
<i>Fodder.</i> —	
<i>Supplies.</i> —	

4	MATUN	..	9 m.	Camel road. Easily convertible to a cart road.
————	(3,892')			
36m. 4f.				

Road continues due S. over an open plain. At 3 miles the Khawanich pass which leads through a low range of hills; no difficulty. Leaving these low hills the road once more emerges on to an open plain over which it runs, direction still due S. At 9 miles Matun, the capital of Khost.

<i>Camping ground.</i> —	} <i>Vide</i> Route 5, stage 4.
<i>Water.</i> —	
<i>Fuel.</i> —	
<i>Fodder.</i> —	
<i>Supplies.</i> —	

ROUTE No. 6.

STARA BIBI (TOCHI VALLEY) TO GHAZNI.

Viâ the Kotanni pass.

92 miles.

10 stages.

Authority.—Stage 1 Cockerill, 1897; native information, 1897; thereafter native surveyors, 1907 and 1908.

Epitome.

General description.—The main through route from the Tochi valley to Ghazni. It connects at Stara Bibi with Routes in Waziristan, Route 3, and it is reported that these two routes

ROUTE No. 6—*contd.*

offer the best alignment for a permanent cart road from the Tochi to Kabul or Ghazni.

Road.—First two stages camel road; thence to Patanna, stage 6, camel road easily convertible to a cart road; Patanna to Ghazni unmetalled cart road 12', trenched on either side.

The following *obstacles* are encountered:—

- (i) Several small *kotals* or *narais* in the 2nd stage: no difficulty.
- (ii) Kotanni pass (8,000'), in the 4th stage; ascent and descent easy, pass always open.
- (iii) Jilga river forded in the 8th stage; no difficulty even after rain.

Route open throughout the year.

Water.—For a division at stages 2 and 8, and at Ghazni, for at least 1 infantry brigade with proportion of divisional troops at the remaining stages.

Fuel.—Plentiful at stages 3 and 4; otherwise very scarce throughout.

Fodder.—*Khasil* in spring daily for the horses of a cavalry brigade; *bhusa* to an appreciable extent at stages 2, 5, and 8; good camel grazing throughout except in winter when it would be very scarce.

Supplies.—Unground wheat and barley to an appreciable extent at stages 2, 5, and 8; for supplies, etc., at Ghazni see stage 10.

No. of stage and total dis- tance.	DETAILS.
1	GUL MIR .. 9 m. Camel road.
	9 m.

Leaving Stara Bibi the road which is easy and open follows the Lwara Algad, direction S. W. At $4\frac{1}{4}$ miles the Afghan frontier is crossed at the watershed just S. of Usman Kusht; at this point Route 6-B joins this route from the N. from Mir Tsappar. The road then descends into the valley of the Dangai Algad down which the road continues. At 9 miles a Paipali village, known as Gul Mir in 1897, 20 houses,

ROUTE No. 6—*contd.*

Camping ground.—Probably sufficient for one infantry brigade with proportion of divisional troops, on an open space N. of the village.

Water.—For the above force at least from the Dargai stream $1\frac{1}{2}$ miles S. of camp and from a *karez*.

Fuel.—A limited supply of wood available.

Fodder.—Good camel grazing.

Supplies.—*Nil.*

2 **PIR KOTI** .. 11 m. Camel road.

20 m.

General direction W. From Gul Mir's village two roads lead towards Guian (Gyan) one along the stream, the other by the hill to the N.; the former is easier, but longer. Gyan (200 houses) is about 4 miles W. of Gul Mir's village. Here there is—

Camping ground.—For 1 infantry brigade with proportion of divisional troops on a good site.

Water.—For the above force from the stream.

Fuel.—No details.

Fodder.—No details, but it is probable that an appreciable amount of *bhusa* could be collected here, good camel grazing.

Supplies.—Probably a few hundred maunds unground grain normally procurable.

Beyond Guian the road crosses some cultivation, and is easy and fit for camels, gradually rising again into the hills. The highest *narai* is called the Inzak *narai* which is four hours from Guian (some 4 miles by the map). This is very high and difficult and the road narrows. Beyond the Inzak *narai*, a spring, called Aspi Dor, is reached, which is half-way between Guian and Pir Koti. There is no cultivation and no village. The road then winds about in the hills, and passes through several *kotals* called Kezhwa *narai* and Manra *narai*, and then opens out into the Pir Koti plain. From Gul Mir's village to Pir Koti is some 8 to 10 hours' march for camels, but the distance by the map can scarcely exceed 11 miles. It is a difficult march.

Pir Koti (500 houses) on the left bank of the Mastoi. It is a large *maidan* with 6 or 7 villages in close proximity. Many

ROUTE No. 6—*contd.*

water-mills; inhabitants, Kakars, Sulaiman Khel, Jadrans, Kharotis, and Saiyids.

NOTE.—According to Douglas, there is another road from Lwara to Pir Koti which leads down the Dangai Algad to its junction with the Mastoi, and thence up the Mastoi. This latter part was said to be quite easy for camels, but Browne says the road is scarcely used except by men on foot, as the valley is very narrow and winding, with frequent *tangis* which are impassable in the rains. There are several small villages on strips of cultivation along both banks.

Camping ground.—Probably sufficient room for a division, on a large *maidan*.

Water.—Probably sufficient for a division from several *karezes* and the river.

Fuel.—No details.

Fodder.—Probably 500 maunds *bhusa* normally procurable; good camel grazing.

Supplies.—At least 500 maunds unground wheat and barley should normally be available.

The following roads radiate from Pir Koti:—

- (i) Through the Jadran country by the Manzhai *narai* (a high pass) down the Shamil Algad to Matun—4 days' march.
- (ii) To Margha *viâ* the Gurbezhai *narai* (*vide* Route 6-A, Note a).
- (iii) to Urgan—
 - (a) By the Pozhai *narai*, very difficult for camels, but much used by men on foot;
 - (b) through Ghandai and Balisho. Road level and easy the whole way.

3	SHAHTORAI ..	9 m. Camel road, easily convertible to a cart road.
29 m.		

Leaving Pir Koti the road changes its direction and now leads due N. up a wide valley, with no cultivation or ravines to cross; road very easy for camels. To the E. are high hills inhabited by Kharotis. At 6 miles Pushtai and at 9 miles Shahtorai, both Kharoti villages. Here there is a fort about 1 mile W. of the cemetery.

Camping ground.—No information, but there is probably room for one infantry brigade with proportion of divisional troops on the plains.

ROUTE No. 6—*contd.*

Water.—For the above force at least from a stream near camp.

Fuel.—Wood to a considerable extent could be brought in from the hills to the E. within 2 or 3 miles of camp.

Fodder.—No information; probably good camel grazing.

Supplies.—*Nil.*

At Shahtorai Route 6-A joins this Route from the S.E.

4	SANGAR	..	9 m.	Camel road easily convertible to a cart road.
<hr style="width: 10%; margin-left: 0;"/>				
38 m.				

Leaving Shahtorai the road changes its direction once more and now leads due W., direct for the Kotanni pass over the Sarafsar range. At 6 miles the foot of the pass is reached; the range at this point runs nearly N. and S. and is crossed by the road at right angles. The country between Sangar and this range of hills consists of an open undulating plain, offering no obstacle to the movement of troops. At the foot of the pass there is a site for an alternative camp, and near by there used to be (1897) the temporary village of Gulidin, a Kharoti Ghilzai. Here there is—

Camping ground.—On a large *maidan* near a good spring; probably sufficient room for at least one or two infantry brigades, with proportion of divisional troops.

Water.—Probably sufficient for the above force, from the spring referred to, and also from a stream flowing along the foot of the hills.

Fuel.—Wood plentiful; the hills in the Sarafsar range are wooded, hence wood to a very considerable extent could be brought in from within 2 or 3 miles of camp.

Fodder.—Good camel grazing.

Supplies.—*Nil*; there is no cultivation.

Leaving this camp the ascent of the Kotanni *narai* is immediately commenced. The road follows a *nala* bed, gradient 1 in 20, and is very easy, having been improved by the Amir; camels are able to cross the pass even in winter. At $7\frac{1}{4}$ miles after an ascent of a mile and a quarter the *kotal* is reached; height by aneroid 8,000'; *ziarat* on the left (W.) of the road; *kotal* is enclosed by low hills, those to the N. being the higher. The descent of the pass on its western face is also very easy, gradient 1 in 25. The road now descends on to a large, open plain, across which the road runs, direction N.W. At 9 miles Sangar, a collection of Kharoti houses, with the usual type of fortified *sarai* (known

ROUTE No. 6—*contd.*

locally as *robat*); *sarai*, 300^x square, 3 faces loopholed for a total of 150 rifles, garrison (1911) 8 sepoys.

Camping ground.—For one infantry brigade with proportion of divisional troops on level ground W. of the *sarai*.

Water.—Abundant for the above force from a stream adjoining the *sarai*.

Fuel.—To a considerable extent from the wooded Sarafsar hills within 1 or 2 miles of camp.

Fodder.—No details; probably fair camel grazing.

Supplies.—*Nil.*

From Sangar the following routes radiate:—

Route 6-D, which runs nearly due N. to Gardez.

Route 6-E, which forms an alternative route to stages 5 and 6 of this main route (Route 6).

5	SARAFSAR ..	8 m. Camel road easily convertible to a cart road.
<hr style="width: 10%; margin-left: 0;"/>		
46 m.		

Leaving camp, the stream which is always fordable, has to be crossed immediately; no difficulty; the road then continues N.W., over the plain. At 4 miles Sultani is passed, 2 miles W. of road; throughout this stage the country consists of an open, uncultivated plain; at 8 miles the large group of villages known as Sarafsar, also as Shah Saruf, Sarfaraz and Sarup Sher; 800 houses; inhabitants Kharoti and Sulaiman Khel Ghilzais.

Camping ground.—No details, but it is probable there is camping space here for at least 2 infantry brigades with proportion of divisional troops, if not more.

Water.—For the above force at least from the Faltoi stream, 1 mile E. of camp.

Fuel.—No details.

Fodder.—No details; but about 500 maunds *bhusa* should normally be procurable.

Supplies.—It is probable that at least 500 maunds unground grain could ordinarily be collected from these villages. A large amount of camel transport is also to be obtained here.

6	PATANNA ..	9 m. Camel road, easily convertible to a cart road.
<hr style="width: 10%; margin-left: 0;"/>		
55 m.		

The road continues over an open plain, direction N.W. and passes several Sulaiman Khel villages, surrounded by their

ROUTE No. 6—*contd.*

own cultivation. At 2 miles a well known spring is passed on the left of the road. At 9 miles Patanna (or Paltanna) which consists of 2 small fortified hamlets on the right bank of the Palt stream.

Camping ground.—For at least 2 infantry brigades with proportion of divisional troops on an open plain.

Water.—For the above force at least from Palt stream.

Fuel.—*Nil.*

Fodder.—Probably good camel grazing on the plain.

Supplies.—No details.

At Patanna Route 6-E, an alternative route from Sangar (stage 4) rejoins this route.

7 **KALA IBRAHIMZAI** .. 10 m. Unmetalled cart road
 ————— 12', trenched on either
 65 m. side.

The road still continuing N.W., now enters on the Zurmat plain which it traverses as far as Band in the next stage; this plain is devoid of all obstacles. At 3 miles Kala Hachanna (12 houses); at 4 miles Kala Ghundin (15 houses); at 5 miles the Sulaiman Khel village of Suwas; here small irrigation channels cross the road from the N. At 11 miles Kala Ibrahimzai (10 houses) on the right of the road.

Camping ground.—For at least 2 infantry brigades with proportion of divisional troops.

Water.—Sufficient for this force from irrigation channels and *karezes*.

Fuel.—*Nil*; dung cakes and thorn bushes are used by the inhabitants for fire-wood.

Fodder.—Probably good camel grazing.

Supplies.—No details.

In summer about 1,000 camels and 200 donkeys are always procurable here, but in winter the *Powindahs* migrate to India with their transport.

8 **KALA NIAZ** .. 8 m. Unmetalled cart road
 ————— 12', trenched on either
 73 m. side.

Road continues N.W. over the Zurmat plain. At 3 miles road rises slightly among low hillocks and then descends to the Jilga river reached at 4 miles. Here Zurmat ends and Shilghar

ROUTE No. 6—*contd.*

along the road from *karez*s. At 6 miles Godallai (30 houses) on the left of the road; here several irrigation cuts cross the road, the water flowing from the S. At 11 miles the Andar Ghilzai village of Abdur Rahman (50 houses).

Camping ground.—For 1 infantry brigade with proportion of divisional troops on a good site.

Water.—For at least twice the above force from the stream and several *karez*s.

Fuel.—Very scarce.

Fodder.—Good camel grazing.

Supplies.—Nothing appreciable.

10	GHAZNI	..	9 m.	Unmetalled cart road
————	(7,279').			12'.
92 m.				

At $2\frac{1}{2}$ miles the Sulaiman Khel village of Arzu (60 houses), and at 3 miles Shalez conspicuous by its fort. On the 23rd April 1880 Sir Donald Stewart with $1\frac{1}{2}$ infantry brigades, 1 cavalry brigade, one battery Royal Horse Artillery and 1 mountain battery inflicted a severe defeat on a large body of Afghans holding the villages of Arzu and Shalez. From Shalez a camel track runs N.E. to Gardez. At 6 miles Kala Abdul Ahmad, a fort on the right of the road built in 1908 by a *mirza* of that name, who has added a large garden, enclosed by a wall, just outside the fort. Nearing Ghazni several suburbs are passed. At 10 miles Ghazni.

GHAZNI (7,279') Population 6,000, Garrison (1912) 1 regiment cavalry (Logari), 1 mountain battery, 2 battalions infantry, (a third "Herati" battalion proceeded to Herat in 1910 and is unlikely to be replaced). Garrison commanded by a General. Ghazni is situated on the left bank of the river of the same name; town once so famous now decayed and of no military strength; shaped like an irregular square with total circuit of 2,175^x (exclusive of fort), surrounded by a high wall 30' high.

Fort is perched on an abrupt, detached knoll, 150' above the plain, on the N. side of the city, which it commands completely; fort circular with 3 gates, broad enough to admit carts, no bastions; outside walls varying from 10' to 24' high, generally about $4\frac{1}{2}$ ' thick, encircled by a moat 20' to 30' broad, 10' deep, though it has silted up greatly in places. Supply of water very

ROUTE No. 6—*contd.*

bad and confined to one well which is sometimes dry. Following extracts from a report by an Engineer officer of Sir Donald Stewart's force, dated April 1880 gives an idea of the fortress then; as far as it is known it is in the same condition at the present day. "A ruined citadel, broken and useless parapets, cracked and tumbled down towers, crumbling curtain walls and a silted up ditch, are all that remain of the once famous stronghold of Ghazni No further demolition would render Ghazni less important than it is as a fortress, and taking into consideration its very defective construction, and the fact that from its situation a command of fire and observation will always be obtainable over the whole of it, no amount of repair could give it any real importance or cause any loss of time in reducing it."

The river flows past W. face of the fort. In April 1911 it was 50 \times broad, 3' deep; sandy bed with pebbles; right bank 4' to 6' high, left bank flush with the river; excellent water, but decreases greatly in summer. There is a bridge over the river close to the W. angle of the town; bridge 42 \times long, roadway 15' wide, and 10' above the water, supported on wooden piles, strongly built, fit for all wheeled traffic and is never damaged by floods.

Camping ground.—For a division; the British camp in 1880 was about 1 mile N.E. of the town.

Water.—For a division and more from the Ghazni river.

Fuel.—Very scarce; wood is usually not to be had for fuel and its place is supplied by thorny scrubs which grow in the surrounding country.

Fodder.—Grass *nil*; *khasil* for horses of 1 cavalry brigade at least daily between the 15th March and 15th May; about 5,000 maunds *bhusa* normally procurable. Camel grazing excellent except in winter.

Supplies.—The food supplies normally available at Ghazni are :—

<i>Ata</i>	..	..	..	..	800	maunds.
<i>Dal</i>	..	..	..	..	50	"
<i>Ghi</i>	..	..	..	..	200	"
Salt	..	..	..	..	80	"
Wheat	..	..	..	..	4,000	"
Barley	..	..	..	..	5,000	"
Rice	..	..	..	..	500	"

ROUTE No. 6—*concl'd.*

On the capture of Ghazni by the army of the Indus in 1839 500,000 lbs. of wheat, and barley and about 80,000 lbs. of flour were found in the place.

ROUTE No. 6-A.

·DOTOI (TOCHI VALLEY) TO SHAHTORAI.

Viâ Urgun.

52 miles.

5 stages.

Authority.—Stage 1, Kemball and Cockerell, 1897; thereafter native surveyors, 1907 and 1908.

Epitome.

General description.—An alternative route from the Tochi valley to the first section of the through Route 6, which is joined at its 3rd stage. It is also part of a *Powindah* route between the Tochi and Kabul. It connects at Dotoi with Routes in Waziristan, Route 1.

Road.—1st stage, mule road; thence camel road throughout with the exception of the first 4 miles of the last stage which is an unmetalled cart road 12'.

The following *obstacles* are encountered along the route :

- (i) Landslips near Taki in the 1st stage, making this portion of the road difficult even for mules.
- (ii) *Kotal* in the 4th stage marking the Wazir-Afghan boundary; no difficulty.
- (iii) Several streams forded; temporary obstruction possible after heavy rain. Route open throughout the year.

Camping ground.—For a division at stage 4; for 2 infantry brigades with proportion of divisional troops at stages 1 and 2 and for half that force at stage 3.

Water.—For a division at stages 2 and 4, and for at least 2 infantry brigades with proportion of divisional troops at the remaining intermediate stages.

Fuel.—Scarce throughout: hills in last stages wooded with *chilghoza*.

Fodder.—*Khasil* at Margha (stage 2) and probably at Urgun (stage 4) for horses of a cavalry regiment daily during

ROUTE No. 6-A—*contd.*

March and April; *bhusa* at Margha about 500 maunds and in large quantities at Urgun; fair camel grazing throughout.

Supplies.—At Margha (stage 2) supplies for an infantry brigade for at least 1 week and at Urgun (stage 4) possibly for a division for 2 or 3 days.

No. of stage and total dis- tance.	DETAILS.		
1	PIYAODIN ..	7 m. 4 f.	Mule road.
7m. 4f.			

Leaving Dotoi, road runs up the Margha stream, direction S.W. along the Afghan border; bed is very narrow and the stream is crossed frequently. At 2 miles pass the mouth of the Sind Algad, up which is the easiest route into the Zawe valley (Routes in Waziristan, Route 41). At 5 miles Domandi, at the mouth of the Gorwekh ravine, up which a road (Routes in Waziristan, Route 42) leads to Mangrotai in Birmal. At 6 miles Gulin, a large Macha hamlet on the left bank, and at 6½ miles Taki, the last Madda Khel village in this direction, on the right bank. Here the frontier is crossed, the road passing into Afghan territory. About ¼ mile beyond Taki there have been heavy landslips on the left bank. The river-bed becomes narrow and impassable, the road accordingly rises over a landship called Kamkai (or small) Maramuli Ghasha; path narrow and steep but passable for mules. About 200× further on, the road again leaves the river-bed, and rises over the Loi (or big) Maramuli Ghasha; higher and more difficult than the Kamakai Maramuli. At 7½ miles the Paipali village of Piyaodin, where there is a *khasadar* post: garrison 1 officer and 50 men.

Camping ground.—For at least 2 infantry brigades with proportion of divisional troops.

Water.—For the above force and more from the Margha stream.

Fuel.—Scarce.

Fodder.—No information.

Supplies.—A few supplies can usually be obtained.

ROUTE No. 6-A—*contd.*

2 **MARGHA** .. 10m, 4f. Camel road.

18 m.

Road continues S.W. up the Margha valley crossing the stream several times (2' deep in November 1908), and leaving it occasionally to cross a spur; road easy and no *kotals*, but with high hills on the left of the road. Many temporary villages of the Kabul Khel Wazirs passed on the way, but there is little or no cultivation till near Margha, where the country is highly cultivated. At $7\frac{1}{2}$ miles a few Paipali forts. At $8\frac{1}{2}$ miles the hills open out and at 9 miles the road crosses to the right bank; no difficulty in fording the stream. At $10\frac{1}{2}$ miles Margha (300 houses), a square walled village belonging to the Saifali section of the Kabul Khel Wazirs. It is the principal settlement in Birmal and the Amir has an agent here.

Camping ground.—For at least 2 infantry brigades with proportion of divisional troops.

Water.—For a division from the river, which is joined here by several streams.

Fuel.—Very scarce.

Fodder.—In March and April *khasil* daily for the horses of 1 cavalry regiment; 500 maunds *bhusa* normally available; fair camel grazing.

Supplies.—500 maunds unground grain usually procurable; also *ata*, *ghi* and rice sufficient for 1 infantry brigade for at least a week; about 500 sheep and a large number of fowls always procurable.

3 Camp **RAH-I-KHAR**.. 12 m.—Camel road.

30 m.

Leaving Margha the road runs nearly due N. and at $\frac{1}{4}$ mile crosses the Margha river; 2' deep and 15' wide in November 1908. Valley here is $1\frac{1}{2}$ miles wide flanked by high hills; the road runs through cultivation for $\frac{3}{4}$ mile, and begins to ascend the hills on the N. side of the valley at $1\frac{1}{4}$ miles; ascent easy but ground much broken and unfit for wheels. At 6 miles the Mastoi river is reached and is crossed twice;

ROUTE No. 6-A—*contd.*

no difficulty. At $6\frac{1}{2}$ miles Daran Kala, where the road turns sharply S.W. and crossing a spur leaves the Mastoi valley.

NOTE (a).—From Daran Kala a camel track continues nearly due N., up the Mastoi valley, and over the Gurbezhai *nara*i, an easy pass to Pir Koti, stage 2 of Route 6, which is reached at 7 miles, thus forming a connection between the present Route (6-A) and the main through Route 6.

The road now is known as Rah-i-Khar and continues S.W. to the end of the stage, reached at 12 miles.

Camping ground.—For one infantry brigade with proportion of divisional troops.

Water.—For double the above force from the Khar *Algad*.

Fuel.—Scarce.

Fodder.— } No information; probably nothing appreci-
Supplies.— } able.

4 URGUN .. 12 m.—Camel road.

42 m.

Road runs up a ravine with steep hillsides, direction S.W. At $2\frac{1}{4}$ miles a *kotal* is reached, this is the Wazir-Afghan boundary. The ascent and descent of the pass are easy, but road would require improvement before being passable by wheeled artillery. Shortly after the pass is crossed the road begins to bear away N.W., which direction is maintained to Urgun. The descent of the pass is very gradual and continues for 3 miles when the road emerges from the hills to a sloping plain (*daman*) on which there is good camel grazing and several Kharoti *kirris*. At 9 miles the Len Rud is crossed and at $10\frac{1}{2}$ miles, Deh Shaikhan (50 houses) is passed. At $12\frac{1}{2}$ miles the large, fortified town and civil station of Urgun (1,000 houses) where the governor of the district resides; inhabitants mostly Tajiks, though the surrounding country outside is occupied by Kharoti Ghilzais. There are 2 powder and 3 flint-gun manufactories here: *garrison* (1908) 2 squadrons cavalry, 6 mountain guns, 3 battalions infantry and 900 *hasadars*, a weekly post runs between Urgun and Kabul and is said to take 8 days on the road.

Camping ground.—For a division on large plain outside the town.

Water.—Probably sufficient for a division from a stream E. of the town and from several *karezes*.

ROUTE No. 6-A—*concl'd.*

Fuel.—Very scarce.

Fodder.—*Bhusa* to a large extent; excellent camel grazing.

Supplies.—Supplies of all sorts are available in large quantities, probably sufficient for a division for 2 or 3 days, but flour for the troops is imported from Zurmat.

At Urgun 4 other routes converge, as follows:—

(i) From Pir Koti—

(a) a short route *viâ* the Pozhai *Narai*; very difficult for camels, but much used by men on foot;

(b) a longer route, along open ground the whole way, through the village of Balisho (20 houses), and thence to Urgun, quite easy going.

(ii) From Sarafsar, through Sultani, Roshun village (20 houses) and by the Zameh *kotal*, $1\frac{1}{2}$ miles from Urgun. The *kotal* is difficult on the E. side and the track lies over rock for 500 yards. It is fit for mules only. This route is very difficult owing to frequent abrupt ascents and descents.

(iii) From Kamkai Sarafsar, said to be fit for laden camels.

(iv) Route 6-C from Shakin.

5	SHAHTORAI	..	10 m.	First 4 miles un-
52 m.				metalled cart road 20', thence camel road.

General direction N.W. Leaving Urgun the road leads for the first 4 miles across the open Urgun plain, after which it enters the hills and follows up the bed of the Shahtorai *nala*; the stream has to be forded periodically and normally presents no obstacle as the banks are low and easy, but after heavy rain it is temporarily unfordable. At $5\frac{1}{2}$ miles high but not steep hills, wooded with *chilghoza*, shut in the road on either hand. Between the 6th and 7th miles some broken bridges with fords alongside. At 10 miles the road joins the through Route 6 at Shahtorai (stage 3).

<p><i>Camping ground.</i>— <i>Water.</i>— <i>Fuel.</i>— <i>Fodder.</i>— <i>Supplies.</i>—</p>	}	<p><i>Vide</i> Route 6, stage 3.</p>
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ROUTE No. 6-B.

MIR TSAPPAR TO GUL MIR.

15 miles.

1 stage.

Authority.—Douglas, 1895.*Epitome.*

General description.—Route through Afghan territory from Mir Tsappar which joins the main through route from the Tochi to Ghazni (Route 6) in its first stage.

Road.—Mule road, possibly also passable for camels. No obstacles met with, route open throughout the year.

Camping ground.—

Water.—

Fuel.—

Fodder.—

Supplies.—

} There is no intermediate stage.

No. of stage and total dis- tance.	DETAILS.	
1	GUL MIR ..	15 m. Mule road, probab- ly also passable for camels.
15 m.		

The most direct route descends the Mir Tsappar *Algad* for 3 miles to Pucha Mela, it then turns S.W. and after crossing three low *kotals*, descends into a dry *nala* called Shangai at $6\frac{1}{2}$ miles, follows down it to the S.W., to 10 miles. Here the Shangai is joined by another branch and the road follows the stream turning sharp to the left through a narrow *tangi*. Two miles further on Usman Kusht is reached, a ruined fort and open ground above stream on left bank. Stream here called Sar-kandao, it drains into the Dangar *Algad*, and the latter into the Mastoi, and this is the route to Urgun. Usman Kusht is a little N. of the road. Usman Kusht can also be reached by following the Mir Tsappar *Algad* down for $8\frac{1}{2}$ miles to the upper Zhambai Khel villages, whence there is an easy road across Lwara.

ROUTE No. 6-B—*concl'd.*

At Usman Kusht the main Route 6 is joined which is followed for 3 miles to Gul Mir, the first stage of that route,

<i>Camping ground.</i> —	} <i>Vide, Route 6, stage 1.</i>
<i>Water.</i> —	
<i>Fuel.</i> —	
<i>Fodder.</i> —	
<i>Supplies.</i> —	

ROUTE No. 6-C.

SHAKIN TO URGUN.

Viâ the Spidar *narai*.

33 miles.

3 stages.

Authority.—Browne, from native information, 1897.

Epitome.

General direction.—A direct route connecting S. Waziristan with Urgun (Route 6-A, stage 4) in the first instance, and *viâ* Urgun with Ghazni and Gardez. Information is only from native sources and is very incomplete.

Road.—Said to be fit for camel transport throughout. The Spidar *narai* in the 2nd stage is the only *obstacle* encountered; it presents no real difficulty. Route open throughout the year.

Camping ground.—For 1 infantry brigade at both intermediate stages.

Water.—Sufficient for an infantry brigade at both intermediate stages.

Fuel.—Scarce throughout.

Fodder.—Fair camel grazing along the whole route.

Supplies.—*Nil.*

No. of stage and total dis- tance.	DETAILS.	
1	CAMP	.. 12 m. Camel road.
12 m.		

ROUTE NO. 6-C—*contd.*

Leaving Shakin the road runs due N. parallel to a low range of hills which flanks the road on the W. At 4 miles the road follows the hills which bend N.W. At about 12 miles there is a good site for a camping ground.

Camping ground.—Probably for an infantry brigade, at least.

Water.—For the above force from a stream near camp.

Fuel.—Very scarce.

Fodder.—Good camel grazing.

Supplies.—*Nil.*

2 **SAROBI** .. 12 m. Camel road.

24 m.

General direction N. Road now runs through low hills separated at intervals by open plains. At about 6 miles cross the Spidar *narai*, a pass over the watershed between the head waters of the Shakin and Urgun streams; ascent and descent of the pass easy at all times of the year. At 12 miles, Sarobi, on the left bank of the Urgun stream.

Camping ground.—For one infantry brigade at least.

Water.—For the above force and more from the Urgun stream.

Fuel.—Very scarce.

Fodder.—Good camel grazing.

Supplies.—Nothing appreciable.

3 **URGUN** .. 9 m. Camel road.

33 m.

Road now follows the left bank of the Urgun stream to Urgun, direction N.E. On each side of the valley are easy, rolling downs and several villages are passed on the way, especially when nearing Urgun.

Camping ground.—

Water.—

Fuel.—

Fodder.—

Supplies.—

} *Vide* Route 6-A, stage 4.

ROUTE No. 6-D.

SANGAR TO GARDEZ.

44 miles.

3 stages.

Authority.—Native surveyor, 1908.*Epitome.**General description.*—A connecting route between the 2 through Routes 6 and 4.*Road.*—Camel road throughout, probably convertible to a cart road without much difficulty. The only *obstacles* met with are (i) the Sirko *kotal* in the 2nd stage, the ascent and descent of which are easy; and (ii) the Jilga river, which is forded just before Gardez is reached; the ford is easy and, even after heavy rain, the passage of the river presents no difficulty. Route open throughout the year.*Camping ground.*—For a division at stage 1 and for 2 infantry brigades with proportion of divisional troops at stage 2.*Water.*—For a division at both the intermediate stages from *karezes*.*Fuel.*—Very scarce.*Fodder.*—Fair camel grazing along the route.*Supplies.*—*Nil* at intermediate stages. For supplies, etc., at Gardez, see Route 4, stage 6.

No. of stage and total distance.	DETAILS.
1	SAR DIWAL .. 15 m. Camel road.
15 m.	

Leaving Sangar the road immediately crosses a stream which is always fordable; no difficulty. The road then begins to bear slightly away to the eastward from the main road to Ghazni (Route 6), and traverses somewhat broken country, interspersed with low, bare hills. At 6 miles, Sarozai (400 families of *Powindahs*), on a spur $\frac{1}{2}$ mile E. of the road.

Here there is:—

Camping ground.—For an infantry brigade at least.*Water.*—For a division probably from several *karezes*.

ROUTE No. 6-D—*contd.*

Fuel.— }
Fodder.— } No information ; probably nothing appreciable.
Supplies.— }

From Sarozai a camel road runs S.E. to Sarafsar (Route 6, stage 5) which is only 3 miles distant.

Leaving camp the road veers round to the N. and continues in this direction to the end of the stage. At 11 miles the Sirko *kotal* is crossed ; ascent and descent very gentle, the pass being merely a road through low hills. At 15 miles Sar Diwal, name given to a fortified *sarai* of the usual type near the Ghilzai village of Gadezai.

Camping ground.—For a division on a large, open plain adjoining the *sarai*.

Water.—For a division from several good *karez*s.

Fuel.—Very scarce.

Fodder.—Fair camel grazing.

Supplies.—Practically *nil*.

2 **LAK DIWAL** .. 15 m. Camel road.

30 m.

The road continues due N. across a bare, open plain intersected at intervals by *nalas*. At 10 miles the Ghilzai village of Kala Dehri, W. of the road, near which there is a good *karez* ; no water can be relied on until this is reached. At 12 miles an easy but broad *nala* is crossed. At 15 miles Lak Diwal, near which is a village and fortified *sarai* of the same name.

Camping ground.—For at least 2 infantry brigades with proportion of divisional troops on an open plain.

Water.—For a division from good *karez*s.

Fuel.—Wood very scarce.

Fodder.—Good camel grazing.

Supplies.—Nothing appreciable.

3 **GARDEZ** .. 14 m. Camel road.

44 m.

Road continues across the plain, direction N.E. Between the 4th and 6th miles several Muhammadzai villages on either side of the road, obtaining their water from *karez*s ;

ROUTE No. 6-D—*concl'd.*

other villages are visible some distance from the road. At 9 miles Ibrahim Khel, also known as Jana Khel (400 houses), Here the Jilga river is reached, and the road continues along its left bank to about 14 miles where it crosses the river by an easy ford; bottom firm, banks low and easy, current slow. Across the river is the Ghilzai village of Kala Shaikhan. At 14 miles Gardez, the capital and civil head quarters of Zurmat.

<i>Camping ground.</i> —	} <i>Vide</i> Route 4, stage 6.
<i>Water.</i> —	
<i>Fuel.</i> —	
<i>Fodder.</i> —	
<i>Supplies.</i> —	

ROUTE No. 6-E.

SANGAR TO PATANNA.

15 miles.

1 stage.

Authority.—Native surveyor, 1908.

Epitome.

General description.—An alternative route to stages 5 and 6 of Route 6.

Road.—Camel road; could only be made passable for carts after considerable labour.

No *obstacle* encountered. Route open throughout the year.

Camping ground.—

Water.—

Fuel.—

Fodder.—

Supplies.—

} There is no intermediate stage on this route.

No. of stage and total dis- tance.	DETAILS.	
1	PATANNA ..	15 m. Camel road.
15 m.		

ROUTE No. 6-E—*contd.*

Leaving camp, the Sangar stream, which is always fordable, has to be crossed at once. Here Route 6 is left and the road branches off nearly due W. The country now traversed is much broken and would require considerable labour to be made passable for carts. At 2 miles enter low hills. At 6 miles the Kharoti village of Kala Sultani (30 houses), where the Sangar stream is joined once more. At 6½ miles Kala Haji (10 houses). At 9 miles Kala Jabar (15 houses) where the road emerges from the hills on to an open plain. At about 15 miles Patanna (or Paltanna) which consists of 2 small fortified hamlets on the right bank of the Palt stream.

<i>Camping ground.</i> —	}	<i>Vide</i> Route 6, stage 6.
<i>Water.</i> —		
<i>Fuel.</i> —		
<i>Fodder.</i> —		
<i>Supplies.</i> —		

ROUTE No. 7.

DOMANDI (GOMAL VALLEY) TO GHAZNI.

Viâ Staghai *kotal*, Kala-i-Babakar and Pannah.

162 miles.

14 stages.

Authority.—Broadfoot, 1839 ; native surveyor, 1904.

Epitome.

General description.—The main through route from the Gomal valley to Ghazni, and part of the main *kafilā* route between India and Ghazni. For centuries past this route, generally known as the Gomal Route, has been a recognised road for *kafilas* travelling from Afghanistan to the plains of India and has twice formed the route for an army invading India.

It connects at Domandi with Routes in Waziristan, Route 66 and at Nani (stage 13) with the main Kabul-Kandahar route (Route 15) which it follows for the last stage.

Road.—Camel road to Pannah (stage 11); thence over the Shilghar plain to Nani, stage 13, camel road which could rapidly be improved for carts; last stage to Ghazni, metalled cart road 24' (12' to 16' metalling.)

The following *obstacles* are encountered.

(i) The Zawar stream in the 1st stage; ford easy.

ROUTE No. 7—*contd.*

- (ii) The Staghai *kotal* (5,000') in the 2nd stage; ascent and descent easy.
- (iii) *Kotal-i-Sarwandi* (7,500') in the 8th stage; ascent and descent easy.
- (iv) Gazdarra pass or defile in the 10th stage; for a distance of $\frac{1}{2}$ a mile defile is only 20' wide and with frequent sharp windings. Here a few hours' work on the road would be necessary to make it easy for laden camels.
- (v) The Jilga and Ghazni rivers, in the 13th stage; fords easy.

Route open throughout the year.

Camping grounds.—For a division at stages 1, 3, 12 and 13 and at Ghazni, for 1 infantry brigade at least at all other stages.

Water.—For a division at stage 3 and at Ghazni, and for an infantry brigade at least at all other stages.

Fuel.—Scarce except at stages 7 and 8, where thorny bushes and low trees are abundant.

Fodder.—Grass for horses plentiful in spring and summer at stages 1 and 2; *bhusa* procurable at stages 11, 13 and 14, and *khasil* in March and April at stage 14; camel grazing good at all stages in the spring and autumn, scarce in summer and *nil* in winter.

Supplies.—Nothing appreciable except at stages 11, 13 and 14, where unground grain to a considerable extent could always be collected.

For supplies, etc., at Ghazni see Route 6, stage 10.

No. of stage and total dis- tance.	DETAILS.
1 <hr/> 15 m.	BATSUL (BATSAI) .. 15 m. Camel road.

Leaving Domandi, the road, direction † N.W., follows along the channel of the Gomal, which is wider here than below Domandi and not so stony. At $5\frac{1}{2}$ miles pass the isolated rock with a flat top called Khazana Ghundai, which the Lohanis believe to be full of the treasure of Nadir Shah.

ROUTE No. 7—*contd.*

At $7\frac{1}{2}$ miles Jani Kats, standing in about 3 acres of cultivation. At $8\frac{1}{2}$ miles the Zawar stream is crossed by an easy ford 1 mile N. of its junction with the Gomal river; a short distance beyond pass Khairodangar, name given to a few wretched huts by the roadside; then leave the river and ascend the hill of Staghai. The road now leaves the valley of the Gomal and leads for $4\frac{1}{2}$ miles over the desolate plain of Sumblabar Raghza, the boundary as it is called between Khorasan and India. Batsul is a collection of graves of Lohanis who have died in the pass. The finest tomb, covered with a marble slab, is that of Alani Khan, Miani.

Camping ground.—For a large force, probably a division, on the plain.

Water.—For at least 2 infantry brigades, with proportion of divisional troops, from the Ghat river W. of camp and from a good *karez*.

Fuel.—Scarce.

Fodder.—Grass plentiful; good grazing for horses, mules and camels.

Supplies.—*Nil.*

2 STAGHAI .. 15 m. Camel road.

30 m.

The road throughout this stage runs N.W. between 2 long ridges running parallel to the road, about $1\frac{1}{2}$ to 2 miles distant on either side.

The road leads over a stony plain, then ascends the Gat Kai by the bed of a rivulet which drains part of the Wazir country and must be large in the rains, as it has cut a bed, 30' wide, in the hard slate. At Gat Kai there are some troublesome large stones. The road then ($3\frac{1}{2}$ miles) runs along the side of a hill. At $6\frac{1}{2}$ miles pass a fine spring (Toda China), then ascend an easy ravine; at 13 miles cross the *Kotal-i-Staghai* (about 5,000').

This is a low ridge crossed by three paths, all equally good. The descent is easy by a broad road. From the foot of the pass the road follows the ravine to Staghai.

This march is one of the most difficult, and a road could not be made under a day's hard work. The ravine is crossed by camel-tracks, but none of them are fit for guns, the first 3 miles about Gat Kai being very difficult.

If necessary, this obstacle could be avoided by keeping up the bed of the Gomal.

ROUTE No. 7—*contd.*

At 15 miles Staghai, which is merely a halting place.

Camping ground.—For an infantry brigade at least on a dry plain 300× wide.

Water.—For the above force from a spring in a ravine nearly a mile N. of camp.

Fuel.—Scarce.

Fodder.—Grass abundant, probably at least fair camel grazing.

Supplies.—*Nil.*

At Staghai Route 7-A, from S. Waziristan joins this route.

Route 7-B, alternative route to Gomal Kats, stage 5, branches off.

3 **CAMP MARANAI** .. 5 m. 4 f. Camel road.

35 m. 4 f.

Leaving Staghai the road turns W. and leads down to the Gomal river reached at 3½ miles, which is crossed there by an easy ford. The road then runs N.W. up the Maranai *Alqad* for 2 miles to camp Maranai. Caravans generally follow the stony bed of the Gomal northwards but the route on the right bank is preferable for troops.

Camping ground.—For a division at Maranai where the valley opens out.

Water.—Sufficient for a division from the Maranai stream and *karezes*.

Fuel.—Scarce.

Fodder.—Fair camel grazing.

Supplies.—*Nil.*

4 **CAMP** (1½ miles 12 m. 4 f. Camel road fit for
 beyond **ZAMIN TOI**). wheeled artillery ex-

48 m.

cept the last 3 miles
 through the defile.

Track turns off N.E. and crosses low hills; easy going, fit for field artillery until the Shahbekh Toi is reached at 7 miles. This ravine is usually dry, bed stony, and a little clearance would enable field artillery to pass. The track continues good until at 9½ miles a defile is reached. Follow the defile and cross the Zagemand Toi at 11 miles. Continue up the defile until at 12½ miles the country opens out, and camping ground suitable for a brigade is reached.

ROUTE No. 7—*contd.*

It is estimated that a Pioneer battalion would take two days to make the three miles through the defile fit for the passage of field artillery.

Camping ground.—For an infantry brigade.

Water.—For the above force from the Zamin Toi.

Fuel.—No details.

Fodder.—Fair camel grazing.

Supplies.—*Nil.*

5 **GOMAL KATS** .. 6 m. Camel road. Suitable
 ----- for wheeled artillery,

54 m.

Road runs nearly N. for 6 miles when the Gomal is reached. Here there are 2 patches of cultivation, which makes a good site for a small camp.

Very little is known about the country in this stage.

Camping ground.—For an infantry brigade near the stream.

Water.—For the above force and more from the stream.

Fuel.—No details.

Fodder.—A little camel grazing.

Supplies.—*Nil.*

Route 7-B, alternative route from Staghai (stage 2) rejoins this route here.

6 **KALA-I-BABAKAR** .. 10 m. Camel road.
 ----- or **BABA.**

64 m.

Follow the Gomal nearly due W. for one mile, then ascend the left bank and the going is easy as far as Kala-i-Babakar (10 miles). There is a slight ascent in places and a little repair would be required for field artillery. Kala-i-Babakar Khel (Ghilzai) was formerly known as Kharoti Kala. Several small sites suitable for camping grounds can be found along the bed of the stream and above the site of an old tower. Above the camping grounds is a graveyard, overlooking which is another old tower on the spur of a hill.

The camping ground is surrounded by hills on all sides, the highest being on the S. and W. In the summer there are no inhabitants, but in the autumn and spring many Ghilzai *Powindahs* pass through, and at these seasons there is a small Afghan *khasadar* guard stationed here. The main stream of the

ROUTE No. 7—*contd.*

Gomal rises here ; several springs join, near the fort, and flow over a fine small shingle, the stream rapidly increasing till near Utman.

Camping ground.—For 2 infantry brigades with proportion of divisional troops.

Water.—For the above force and more from the stream.

Fuel.—No details.

Fodder.—Camel grazing abundant.

Supplies.—*Nil.*

7 SURGHURGAI .. 6 m. Camel road.

70 m.

From Kala-i-Babakar the track turns due N. and follows a defile, a pebbly reach 400× wide and very straight. The rocks bounding it gradually increase in height from the Kala-i-Babakar onwards.

The country throughout this stage consists of low hills with occasional stony plains. At Surghurgai there is:—

Camping ground.—For an infantry brigade.

Water.—For the above force and more.

Fuel.—Abundant, owing to prevalence of thorny bushes and low trees.

Fodder.—Excellent camel grazing.

Supplies.—*Nil.*

8 SHINSHA .. 12 m. Camel road. General direction N.N.W.

82 m.

For the first 8 miles the track runs among hills covered with bushes ; between the 8th and the 10th mile it follows a level ravine 30× or 40× wide, winding among hills that are steep on the N. side and rounded on the S. At the 10th mile the ascent of the *Kotal-i-Sarwandi* commences ; gradient easy ; at 10½ miles the crest (7,500′) is reached. The descent towards Shinsha commences with a slope of 11 degrees for about 20 yards : there are a few boulders that require breaking ; after this there is a gentle undulating slope to Shinsha, passable for guns. This march would require a few hours' labour to facilitate the passage of laden camels.

There are no houses at Shinsha, the cultivators being migratory.

ROUTE No. 7—*contd.*

Camping ground.—For one infantry brigade.

Water.—For the above force from a spring.

Fuel.—Abundant owing to prevalence of thorny bushes and low trees.

Fodder.—Grass scanty, fair camel grazing.

Supplies.—*Nil.*

9 **KALA-I-** .. 13m. 4f. Camel road. General
 _____ **LANGAR.** direction N. W.

95 m. 4f.

Soon after leaving Shinsha ascend the Kohnak range by the Sargo pass, a ravine cut by water which winds in easy curves, its width never less than 30, being sometimes 100 yards. Two hours' work would make it an excellent road.

About 3 miles pass two ruined forts above the Sargo defile—one called Ghlo Kala, or thieves' fort.

Then there is a gradual descent to the deserted fields of Khuni Karez (the bloody spring), so called from the contests between two factions to possess it, as it gives a good supply of water. After this the road passes through the cultivated fields of Langar for 2 miles. There are two forts at Langar containing about 80 houses; the larger is 100 yards square; the walls 20' high, 6' thick, are made of mud and flanked by eight towers; the gate is uncovered. This is one of the strongest forts in Katawaz. Inhabitants Taraki Ghilzais.

Camping ground.—For at least one infantry brigade with proportion of divisional troops.

Water.—For the above force and more.

Fuel.—No details.

Fodder.—Fair camel grazing.

Supplies.—Nothing appreciable.

10 **DAND** .. 15 m. Camel road. General
 _____ direction N.W., veering
 110m. 4f. more to the N. than in

the previous stage.

On leaving Langar, cross a stream 20' wide, 1' deep, current 2' per second; the waters slightly brackish. Its banks are 4' high, but easily passable in many places, though in spring it is scarcely fordable. Then ascend gradually to the open plain of Katawaz, and pass Zargan Shahr (green city), a fort of about 50 houses of Banno Khel and Sulaiman Khel, with some 500

ROUTE No. 7—*contd.*

acres of cultivation. Then for 3 miles through Gazdarra, which is a pass formed by water flowing into Katawaz through the hillocks formed by the Zeru range and the end of Kata Sang. The Gazdarra gradually diminishes in width. In the middle, for about half a mile, the width at bottom is only 20', the hills at the side 200' high, and the windings frequent and sharp. On the Dand side the pass is 30' wide bounded on either side by hills that may be easily crowned. A few small springs issue from the crumbling rocks, but are soon lost. Guns could be dragged through the pass, and a few hours' labour would make it a good road.

There is another and similar pass a mile or two to the N. called the Gazdarra Khurd.

From Kata Sang the road leads over a plain for 4 miles, descending easily to Dand. This is a fort with 30 houses and about 150 acres of cultivation, but there is no water nearer than Dih sai or Nanai—the former a large village of Andari Ghilzais, with 100 houses; the latter a group of four or five forts of Andari and Sulaiman Khel Ghilzais.

Camping ground.—No information; probably sufficient for an infantry brigade at least.

Water.—For the above force would have to be brought in from Dih sai or Nanai, 3 and 2 miles distant respectively.

Fuel.—No information.

Fodder.—Fair camel grazing.

Supplies.—Nothing appreciable.

11 **PANNAH** .. 13 m. Camel road. Passable
for wheeled artillery.

123m. 4f.

The road now leads due N., and this direction is maintained generally to Ghazni. Leaving Dand, a dry water-course is crossed with banks 4' high; the road then leads through some low hillocks and bifurcates—one fork going over the ridge, the other round, and both joining again at Jarakaram 4 miles from Dand. The road over the ridge saves a few hundred yards. It then leads over a plain and crosses some easy hillocks near Pannah. The whole road is easy for field guns.

Near Pannah are a number of villages and forts which would supply a brigade with grain and forage, and water

ROUTE No. 7—*contd.*

abundant at all of them. Pannah itself is a village inhabited by about 500 Andari Ghilzais.

Among the hillocks here are camps of shepherds and Lohani merchants who emigrate in winter.

Camping ground.—For an infantry brigade at least.

Water.—For the above force and more from a good *karez*.

Fuel.—No information.

Fodder.—A considerable quantity of *bhusa* should always be available; fair camel grazing.

Supplies.—Unground grain, sufficient for the requirements of an infantry brigade for about one week, could normally be collected from the surrounding villages.

12 **JOGA** .. 10m. 4f. Camel road, easily convertible to a cart road.

134 m.

Road leads over an open plain in the Shilghar district which is entered at about 2 miles. At 10½ miles Joga consisting of a cluster of forts.

Camping ground.—For a division probably, on the large open plain.

Water.—No information, but there is probably sufficient water for an infantry brigade at least. The Jilga river which could probably supply the requirements of a division, is shown on the map as flowing 3 miles N. of Joga.

Fuel.—No details.

Fodder.—Fair camel grazing.

Supplies.—Probably nothing appreciable.

13 **NANI** .. 13 m. 6f. Camel road, easily convertible to a cart road.

147m. 6f.

Road continues N. over the Shilghar plain. At 4 and 7½ miles the Jilga and Ghazni rivers are forded respectively; the fords in both cases are easy. The Shilghar plain is for the most part sandy and is studded with many Andari Ghilzai villages, surrounded by their own cultivation. At 13¾ miles Nani, a large fortified village, with several smaller forts in the vicinity; inhabitants Andari Ghilzais; village is surrounded by a sandy plain, but there is a good deal of cultivation and much of the country is ploughed up.

ROUTE No. 7—concl'd.

Camping ground.—For a division on the open, sandy plain.

Water.—For the above force from several springs and karezes.

Fuel.—Scarce.

Fodder.—Grass plentiful; an appreciable quantity of *bhusa* should normally be available; camel grazing excellent.

Supplies.—Unground grain to some considerable extent should always be procurable from the surrounding villages.

A large number of transport camels can be obtained in the vicinity.

At Nani this route joins the main through route from Kabul to Kandahar (Route 15).

14	GHAZNI	..	14 m. 2f.	Metalled cart road,
—————	(7,279').		24'.	
162 m.				

This stage is identical with stage 8 of Route 15 which, however, in that route is described from Ghazni. General direction N.E. At $2\frac{1}{4}$ miles pass the Kizilbash village of Karabagh on the E. of the road and at $3\frac{1}{4}$ miles the Andari villages of Kala-i-Fakir and Kala-i-Sher about 1 mile E. of the road. At $5\frac{1}{4}$ miles Noghai on the E. of the road and a group of Ghilzai villages known as Bagla, 1 mile W. of the road, beyond which separated by a low range of hills is the district of Waghaz, beyond which again is the Hazara district of Kakrak.

At $7\frac{1}{4}$ miles a halting place known as Ispandi where there would be room for 1 or 2 infantry brigades to encamp if necessary. The road to Ispandi to this point leads over an open plain, but onwards to about mile 11 it is flanked on the W. by a low range of hills $1\frac{1}{2}$ miles distant, and on the E. by hills considerably farther off; the country in between is well cultivated and studded with villages. At 11 miles a garden called Chehil Bacha Gam beyond which the sandy bed of a river about 200 yards broad is crossed. At $14\frac{1}{4}$ miles Ghazni is reached.

Camping ground.—

Water.—

Fuel.—

Fodder.—

Supplies.—

and for description of Ghazni.—

} *Vide* Route 6, stage 10.

ROUTE NO. 7-A.

OBA SAR TO STAGHAI.

15 miles.

1 stage.

Authority.—Native surveyor, 1904.*Epitome.*

General description.—This is an important route used by *Powindahs*, when travelling between India and Mukur or Ghazni, who sometimes prefer to pass through Wana instead of *viâ* Domandi (Route 7).

It connects at Oba Sar with Routes in Waziristan, Route 73.

Road.—Camel road which could be made practicable for wheeled artillery with a little labour. The following *obstacles* are encountered: (i) The Khand pass (5,500'); descent on W. face rather difficult and a little labour necessary to make it passable for field artillery.

(ii) Staghai pass (5,000'); ascent and descent easy.

Route open throughout the year.

Camping ground.—

Water.—

Fuel.—

Fodder.—

Supplies.—

} There is no intermediate stage.

No. of stage and total dis- tance.	DETAILS.
1 <hr/> 15 m.	STAGHAI .. 15 m.—Camel road. Could be made passable for wheeled artillery with a little labour.

Leaving Oba Sar (5,200') the road follows Routes in Waziristan, Route 73, southwards for 1 mile, when this route is left and the road heads due W. for the Khand pass over the Spera range which marks the frontier at this point. At 3 miles the *kotal* (5,500') is reached; ascent easy.

The track leads off due W. from the pass, the descent from which is rather difficult, and a little work would be required to

ROUTE NO. 7-A—*concl'd.*†

make the path passable for field artillery. At 6 miles the Tirkha Oba stream is crossed, and the Zowara *Algal* reached at 11 miles. The Zowara stream forms no obstacle, the water being only a few inches deep, but has a rapid current when in flood; floods usually subside rapidly; bed rocky.

Ascend from the Zowara up a small *algal* to the N. W., and reach the Staghai *kotal* (5,000') at 13 miles. Road then follows Route 7 to Staghai, which is merely a halting place and is reached at 15 miles.

<i>Camping ground.</i> —	} <i>Vide</i> Route 7, stage 2.
<i>Water.</i> —	
<i>Fuel.</i> —	
<i>Fodder.</i> —	
<i>Supplies.</i> —	

ROUTE NO. 7-B.

STAGHAI to GOMAL KATS.

Viâ the Gomal river.

31 miles.

3 stages.

Authority.—Broadfoot, 1839.

General description.—An alternative route to stages 3 to 5 of the main through route (route 7); it is often preferred by *Powindahs*, but it is not so suitable for troops as it follows the river bed and the stream is constantly forded.

Road.—Camel road throughout. No *obstacles* encountered. Route open throughout the year.

Camping grounds.—No details regarding stage 1; for 1 infantry brigade at stage 2.

Water.—At least for one infantry brigade at the intermediate stages from the Gomal.

Fuel.—Scarce throughout.

Fodder.—Fair camel grazing throughout.

Supplies.—*Nil* at intervening stages.

ROUTE No. 7-B—*contd.*

No. of stage and total distance.	DETAILS.	
1	AHMADZAI KACH.	10m. 4f. Camel road.
10m. 4f.		

General direction N.W. For 3 miles the road follows a level ravine 40^x wide, bounded by low rocks, or hillocks, passable for cavalry, and then enters the bed of the Gomal, which winds so much that crossing is very frequent. The breadth of water here is 20' and the depth 1'. Pioneers would have some work in clearing away the stones of the Gomal, but there is no real difficulty for guns.

At 10½ miles Ahmadzai Kach (Kats), merely a halting place.
Camping ground.—No information.

Water.—For at least 2 infantry brigades with proportion of divisional troops, from the Gomal.

Fuel.—No details.

Fodder.—Fair camel grazing.

Supplies.—*Nil.*

2	SARMARGHO KACH.	10m. 4f. Camel road.
---	----------------------------	----------------------

21 m.

Road continues N.W. The Gomal still winds so much that it has to be crossed as often as seven times in a mile. Men on foot can climb the hills the whole march and thus avoid this constant crossing. It is never less than 30^x wide. The shingle is composed of large stones, some of them a foot in diameter, but there is no serious obstacle for guns.

At 4 miles is Mamatsalai, a great white rock in the centre of the pass and at 9 miles the salt rivulet of Ab-i-Talkh enters the stream.

At 10½ miles Sarmargho which is a halting place 500^x wide and a few feet above the level of the river.

Camping ground.—For one infantry brigade at least.

Water.—For the above force and more from the stream.

Fuel.—No details.

Fodder.—Fair camel grazing.

Supplies.—*Nil.*

ROUTE No. 7-B—*concl'd.*

3 GOMAL KATS 10 m.—Camel road.

31 m.

Road still continues N. W. Following the Gomal, at 6 miles the Dwa (second) Gomal makes its appearance from a narrow ravine. This stream rises in a hill called Durzlei near Paltu, and flows through the Kharoti country between the Kohnak and Wazir ranges. The Gomal valley, above its junction with the Dwa Gomal, is very confined, the curves become more frequent. Here the main through Route 7 is joined.

<i>Camping ground.</i> —	} <i>Vide</i> Route 7, stage 5.
<i>Water.</i> —	
<i>Fuel.</i> —	
<i>Fodder.</i> —	
<i>Supplies.</i> —	

ROUTE NO. 7-C.

KALA-I-BABAKAR TO KALA SARKARI (MUKUR DISTRICT).

64 miles.

5 stages.

Authority.—Native surveyor, 1904.*Epitome.*

General description.—Part of the direct route from India to the Mukur district *viâ* the Gomal valley. It is also a connecting route between the main through route from the Gomal valley to Ghazni (Route 7), and the Kabul-Kandahar main road (Route 15).

Road.—Camel road throughout and with a little labour (most needed in the first stage) could be made passable for wheeled artillery.

The following *obstacles* are encountered :—

- (i) Sarwand *kotal* 1,500' above Babakar, in the 1st stage; no difficulty.
- (ii) Chuola (Chola) pass in the 4th stage; for 2 miles road requires to be cleared of boulders.
- (iii) Tarnak river; forded in the 5th stage, no difficulty.

Route open throughout the year.

Camping ground.—For a division at stages 2 and 3; for an infantry brigade at stage 2, and for 2 infantry brigades with proportion of divisional troops at stages 4 and 5.

ROUTE No. 7-C—*contd.*

Water.—For a division at stages 2 and 3, for an infantry brigade at least, at all other intermediate stages.

Fuel.—Scarce throughout.

Fodder.—In spring, *khasil* for 1 cavalry regiment daily at Kala Sarkari (stage 5); *bhusa* at all stages except Jaffar (1st) in varying quantities; probably fair camel grazing throughout, being a *Powindah* route.

Supplies.—About 500 maunds unground grain at stage 2, and about 1,000 maunds at stages 4 and 5.

No. of stage and total dis- tance.	DETAILS.		
1 <hr/> 9 m.	JAFFAR	..	9 m. Camel road. Easily made passable for field artillery.

From Kala-i-Babakar the track is called Sragurghai* (or the red rushes road) and leads N.W. along the bed of the Gomal. Going rough. Several days' work would be required before field artillery could pass. The track ascends over the Sarwand range by the Jaffar or Sarwand *kotal* (6 miles) which is 1,500' above Babakar but not difficult. Two miles beyond the *kotal* Jaffar is reached. Jaffar is in reality a district as this name is given to several villages situated along the western side of the Sarwand range. The Jaffar near the camp is a Sulaiman Khel village (60 houses).

Camping ground.—For an infantry brigade.

Water.—For the above force from springs, but tanks would have to be dug for watering animals.

Fuel.—No details.

Fodder.—Fair camel grazing.

Supplies.—*Nil.*

NOTE.—(i) From Kala-i-Babakar a route goes direct to Ghazni *via* Birlak crossing the Sarwand range by another *kotal*.

NOTE.—(ii) From Kala-i-Babakar to Mukur there is an alternative route crossing the Sarwand range by a track to the W. past Bachu Khel to Mulla Samand, whence it leads either S. of the Ab-i-Istada *via* Malikdin or across open country to Dila.

* There is a little doubt about the true Sragurghai route. Broadfoot states that he came from Ghazni by the Sragurghai or Sur Ghur route, and the route he describes is evidently that mentioned in Route 6-C. The present informer states that the Sragurghai route is the route *via* the Sarwand *Kotal* to Jaffar, and not the one described by Broadfoot.

ROUTE No. 7-C—*contd.*

2 **ARZBEGI** .. 15 m. Camel road. Gen-
eral direction W.

24 m.

The track for the first 3 miles follows a gentle descent where a little improvement for field artillery would be required. After that, easy going across country to Jumjuma (14 miles).

Jumjuma, the first habitation reached, is a small village of Sulaiman Khel Ghilzais. There are three *karezes* for cultivation. Sufficient water for a brigade. About 150 maunds *bhusa* obtainable after harvest.

Road good from Jumjuma to Arzbegi (15 miles). The village of Arzbegi consists of about 200 households of Sulaiman Khel Ghilzais and Nasirs.

Camping ground.—For a division probably on the open plain.

Water.—For 2 or 3 infantry brigades from several *karezes*.

Fuel.—Scarce.

Fodder.—About 500 maunds *bhusa* normally available.

Supplies.—About 500 maunds unground grain could be collected from the Arzbegi villages.

3 **DILA (ADIN** 15 m. Camel road.
KHEL.)

39 m.

Follow track nearly N.W. across open country. At 1 mile enter dry sandy *nala* (Paltu river on map) and follow this for 1,000×. Field artillery can avoid the *nala* by keeping to the N. Beyond this point the track presents no difficulties, and leads across a waterless desert. The Paltu river does not exist as a running stream as shown on some maps.

At Dila there are three villages of Adin Khel Ghilzais about 15 houses in all. There are three *karezes* and water is led on to the cultivation from a stream coming from Aoband.

Camping ground.—For a division probably on the open plain.

Water.—For a division from the *karezes* and the Aoband stream.

Fuel.—Scarce.

Fodder.—About 300 maunds *bhusa* available after harvest.

Supplies.—*Nil.*

At Dila Route 8-A running northward is crossed. Dila is also stage 4 on Route 8-A.

ROUTE No. 7-C—*contd.*

4 **GHILAN** .. 15 m. Camel road.

55 m.

The track continues W. for 3 miles to Zara Kala (250 houses), belonging to the Na Khel, Taraki Ghilzais; 4 walled village with four watch towers, and 1 gateway facing E.; surrounded by cultivation; water from 2 *karezes*.

Track then turns due W. across open country, which extends as far as the Kargana range reached at about 11 miles and which is crossed by the Chuola (Chola) pass (summit at 13 miles); road for 2 miles in the pass requires to be cleared of boulders.

At 15 miles Ghilan where cultivation is once more met with; inhabitants Tarakis with a few Duranis.

Camping ground.—No information; probably sufficient for 2 infantry brigades with proportion of divisional troops.

Water.—For the above force from springs and *karezes*.

Fuel.—No information.

Fodder.—About 1,000 maunds *bhusa* procurable.

Supplies.—About 1,000 maunds unground grain normally available.

At Ghilan the main through route from Zhob to Mukur Route 8 is joined

Note.—Alternative roads from Dila towards the Mukur district—

1. North of the above track *via* Kargana. This route has not been reconnoitred, but is said to be more difficult than the Chola route.

1. South-west by a track called the Kurram road to Dand, 17 miles in the Shahjui direction. This has been reconnoitred, and found easy for all arms. It passes the north end of the Ab-i-Istada salt lake.

There is also a track leading along the east side of the Ab-i-Istada to Munurai, 19 miles, and to Malikdin, 19 miles. From Malikdin the track leads to Maruf, for all arms.

5 **KALA SAR-** 9 m. Camel road.

————— **KARI** (Mukur
64 m. District.)

Road leads N. W. across cultivated country and past numerous Ghilzai villages; road easy throughout. At 2 miles the Tarnak river, whose course is marked by a line of willow trees, is forded; river bed most tortuous, winding across the valley; lively, noisy current; stream here normally 20' to 30' wide about 1' deep but as the water is frequently led off in canals for irrigation stream is much reduced and in the summer is almost entirely exhausted.

ROUTE No. 7-C—*concl'd.*

At 4 miles Route 8-B is crossed.

At 6½ miles Kala Mirza on the right (E.) of the road. Thereafter the following Ghilzai villages are passed in turn all E. of the road, Merdil, Kamat, Manak and Yarkoh.

At 9 miles Kala Sarkari, where the main through route Kabul-Kandahar (Route 15) is joined.

Camping ground.—On a small plain E. of the road near the source of the Tarnak; it appears probable that there would be room for 2 infantry brigades with proportion of divisional troops on this plain.

Water.—For the above force from an excellent spring ¼ mile W. of the main road; animals would be watered at the many water channels.

Fuel.—Scarce.

Fodder.—In March and April *khasil* for horses of one cavalry regiment at least daily; *bhusa* could be collected to a considerable extent from villages in vicinity. Good camel grazing except in winter.

Supplies.—About 1,000 maunds unground grain should normally be procurable from the surrounding villages.

Cattle, sheep and goats are said to be kept in large numbers but the Mukur villages in 1880 were all deserted and neither supplies nor livestock were obtained, except such as were buried or otherwise hidden and afterwards found by foraging parties.

Near camp is a burial ground reputed to be a haunt of thieves.

ROUTE NO. 7-D.

DILA (ADIN KHEL) TO PANNAH.

40 miles.

3 stages.

Authority.—Benn from native information, 1894.

Epitome.

General description.—A connecting route between the branch Route 7-C, and the main Route 7. This route also with the first 3 stages of Route 7-C, forms an alternative route to stages 6 to 11 of Route 7, the through route from the Gomal valley to Ghazni.

ROUTE No. 7-D—*contd.*

Road.—Camel road throughout easily convertible to a cart road. No *obstacles* are met with. Route open throughout the year.

Camping grounds.—For 2 infantry brigades with proportion of divisional troops at stage 1 and for half that force at stage 2.

Water.—Sufficient for the troops for which camping space is available at both intermediate stages.

Fuel.—Scarce throughout.

Fodder.—About 100 maunds *bhusa* at the first stage; fair camel grazing throughout.

Supplies.—About 100 maunds unground grain at the first stage; nothing else at intermediate stages.

No. of stage and total dis- tance.	DETAILS.	
1 <hr/> 13 m.	SHAH GUL : KHEL.	13 m. Camel road, easily convertible to a cart road.
<p>Leaving Dila, the road follows Route 7-C for 3 miles to Zara Kala, where it leaves that route and runs due N. to the end of the stage. At 6 miles the Zhera (Zara) hills are reached, through which the road winds easily for about a mile and merges on to the Shah Gul plain beyond, on which are scattered several villages, surrounded by their own cultivation, belonging to the Badin Khel sections of the Taraki Ghilzais; water obtained from <i>karezes</i>.</p> <p><i>Camping ground.</i>—For at least 2 infantry brigades with proportion of divisional troops on the plain.</p> <p><i>Water.</i>—For the above force from several <i>karezes</i>.</p> <p><i>Fuel.</i>—Scarce.</p> <p><i>Fodder.</i>—100 maunds <i>bhusa</i> normally available; fair camel grazing.</p> <p><i>Supplies.</i>—About 100 maunds unground grain could normally be collected.</p>		
2 <hr/> 25 m.	NANAI ..	12 m. Camel road. Easily convertible to a cart road.

ROUTE No. 7-D—*concl'd.*

Track continues, general direction N., across an open plain, on which are scattered several Taraki villages as in the last stage. From 7 miles to the end of the stage the road skirts the foot of some low hills which flank it on the E. At 12 miles Nanai.

Camping ground.—For at least one infantry brigade with proportion of divisional troops.

Water.—No information, but the country here abounds with *karezes* and water for the above force could therefore easily be procured from a short distance.

Fuel.—Scarce.

Fodder.—Fair camel grazing.

Supplies.—Nothing appreciable.

3	PANNAH	..	15 m.	Camel road. Easily convertible to a cart road.
40 m.				

Road now runs N.E. across the plain which is studded with villages surrounded by much cultivation; water from *karezes*. At 15 miles Pannah, stage 11 of Route 7, the main through route from the Gomal valley to Ghazni.

Camping ground.—

Water.—

Fuel.—

Fodder.—

Supplies.—

} *Vide* Route 7, stage 11.

ROUTE NO. 8.

TARAKI TIRWAH TO KALA SARKARI (MUKUR DISTRICT).

Viâ the Zangala pass.

105 miles.

10 stages.

Authority.—Benn from native information, 1894.

Epitome.

General description.—A main through *kafila* route from Zhob to Kala Sarkari (Mukur district) on the Kabul-Kandahar road (Route 15). The first 2 stages of this route together with the branch Route 8-A, form the greater part of the main *kafila*

ROUTE No. 8—*contd.*

route from Zhob to Ghazni. It connects at Taraki Tirwah with Routes in Northern Baluchistan, Route 32, to Kamardin Karez, which is only $13\frac{1}{2}$ miles distant and through which many *kafila* routes pass, notably the camel road to Fort Sandeman.

Road.—Camel road throughout. In the 7th stage the road runs parallel to the western shore of the Ab-i-Istada Lake $1\frac{1}{2}$ miles distant. The following *obstacles* are met with.

- (i) The Wazikhwa range in the 4th stage, which is crossed by a difficult pass.
- (ii) The Zangala pass in the 5th stage; no difficulty.
- (iii) The Tarnak river, forded in the last stage; no difficulty.

Route open throughout the year.

Camping ground.—For a division at stages 8 and 10, and for at least 1 infantry brigade with proportion of divisional troops at all other stages.

Water.—For a division at stage 10, and for at least 1 infantry brigade with proportion of divisional troops at all other stages.

Fuel.—Scarce throughout.

Fodder.—At stages 2 and 10 *khasil* in March and April daily for horses of a cavalry regiment; *bhusa* at stages 1, 2, 8, 9 and 10 in varying quantities; good camel grazing throughout except in winter.

Supplies.—Unground grain to an appreciable extent at stages 1, 2, 8, 9 and 10. Cattle, cows and goats at stage 10.

No. of stage and total dis- tance.	DETAILS.
1	KHAZAN KAREZ. 11 m. Camel road. (6,875').
11 m.	

The road leaves Taraki Tirwah in a due northerly direction across open ground, and at 2 miles passes between the low hills at the northern extremity of Spitzao Ghar, a conspicuous red hill which flanks the road on the left.

Continuing N. across the Kuch Khwara plain, at $4\frac{1}{2}$ miles a road from the Kundar valley *viâ* Abdul Wahab meets the track at the Orsakai spring on the left bank of the Kafir Sinzala *nala*.

ROUTE No. 8—*contd.*

The direction now veers gradually to N.W. At 8 miles Khwaja Muhammad Kala on the right of the road ; this belongs to the Sulaiman Khels, and is situated on the right bank of the Kafir Sinzala *nala*. The fort of Dost Muhammad Kala is about 1 mile due N. of this ; at 10 miles the Kafir Sinzala *nala* is crossed, and the Taraki Ghilzai cultivated lands entered. At 11 miles is Khazan Karez or, as it appears to be more generally known, Bakhtawar Karez a walled village, and a few mud huts, belonging to the Taraki Ghilzais.

Camping ground.—For at least 2 infantry brigades with proportion of divisional troops.

Water.—For the above force and more from several *karezes*.

Fuel.—Scarce.

Fodder.—No grass ; *bhusa* to a moderate extent from the adjacent villages ; camel grazing good except in winter.

Supplies.—Probably 200 to 300 maunds unground grain would normally be available.

2 WAZIKHWA .. 15 m. Camel road.
 —————
 (MARJAN).

26 m.

Leaving Khazan Karez the road leads due N. across the Kuch Khwara plain.

At 3½ miles enter a patch of Sulaiman Khel cultivation, called Sarai Karez which extends for about 1 mile ; at 5 miles cross the Isar *Narai*, ascent and descent easy. At 6 miles the road crosses the Surkanrai *nala*, and then continues N.W. across open ground. At 8 miles a low range of hills is passed on the left, called Nahar. Here there are some Sulaiman Khel villages and a halting-place ; water from the Nahar *nala* which is good, but is liable to dry up in summer ; in the winter there is always a plentiful supply. From here the Wazikhwa plain stretches away to the N. and the track crosses this through cultivation and Sulaiman Khel villages until the Sulaiman Khel village of Marjan (250 houses), is reached at 15 miles. There are several other Taraki and Sulaiman Khel villages in the vicinity.

Camping ground.—For at least 2 infantry brigades with proportion of divisional troops on the plain.

Water.—For the above force and more from several *karezes*.

Fuel.—Scarce, only scrub available.

ROUTE No. 8—*contd.*

Fodder.—No grass; *khasil* for the horses of a cavalry regiment daily during March and April, about 200 to 300 maunds *bhusa* should be usually available; camel grazing good except in winter.

Supplies.—From 200 to 300 maunds unground grain should be normally procurable from the adjacent villages.

3 **SHAHDAK** 10 m. Camel road.
 ————— (SHAHIDHAK)
 36 m.

The road now enters the Taraki Ghilzai country and runs nearly due W. across a rugged country; several difficult ascents and descents have to be made in this march and no cultivation is to be seen.

Camping ground.—For at least 1 infantry brigade with proportion of divisional troops.

Water.—For the above force and more from several springs.

Fuel.—Scarce.

Fodder.—Fair camel grazing.

Supplies.—*Nil.*

4 **ZANGALA** .. 12 m. Camel road.
 —————
 48 m.

General direction N. W. through mountainous country. About 8 miles a difficult pass over the Wazikhwa range has to be crossed. The Tarakis in this vicinity are all shepherds and there is no cultivation.

Camping ground.—No information; there is probably room for an infantry brigade with proportion of divisional troops.

Water.—Probably for the above force from springs.

Fuel.—Scarce.

Fodder.—Good camel grazing (except in winter).

Supplies.—*Nil.*

5 **BARA KHEL** .. 12 m. Camel road.
 ————— (TARKAR-
 60 m. **KA-SIR).**

Road continues N. W. through rugged country. About 6 miles the Zangala pass is crossed; no difficulty. After

ROUTE No. 8—*contd.*

the 11th mile the country opens out somewhat, and at 12 miles a group of large, open villages belonging to the Tokhi Ghilzais is reached. Villages are known as Bara Khel and the halting place near as Tarkar-ka-Sir.

Camping ground.—For at least 2 infantry brigades with proportion of divisional troops.

Water.—For the above force from *karezes* and springs.

Fuel.—Scarce.

Fodder.—Good camel grazing except in winter.

Supplies.—Probably nothing appreciable.

6 **KALA KHAN** .. 9 m. Camel road.

69 m.

Road, general direction N., runs through a defile for the greater part of this march. At 9 miles on the W. of the road the Deh-i-Kazi villages belonging to the Akazi section of the Tarakis. Opposite these villages on the right (E.) of the road is the halting place known as Kala Khan. The S.W. corner of the Ab-i-Istada Lake is $1\frac{1}{2}$ miles due E. of Kala Khan.

Camping ground.—For at least one infantry brigade with proportion of divisional troops.

Water.—For the above force, and more, from *karezes* and the Lora river whose source is to be found near by, emanating from the rivulets percolating from the Ab-i-Istada.

Fuel.—No information.

Fodder.—Fair camel grazing except in winter.

Supplies.—Nothing appreciable.

7 **UTKAN** .. 9 m. Camel road.

78 m.

Road runs due N. parallel to the western shores of the Ab-i-Istada Lake (7,050'), about $1\frac{1}{2}$ miles distant. The lake is 17 miles long by 15 miles broad, with trifling depth of only 12' in the middle; water salt and bitter and banks deeply encrusted with salt; principal feeder Ghazni river, with its affluent the Jilga river which joins it near Mashaki and which together flow into the Ab-i-Istada at its N.E. angle

ROUTE No. 8—*contd.*

No large amount of water runs out of the lake but its waters percolate through the ground in streams which unite and form the Arghastan Lora. Surrounding country very barren and dreary and there are scarcely any inhabitants. At 9 miles Utkan, near which there are several Taraki villages.

Camping ground.—For at least 1 infantry brigade with proportion of divisional troops.

Water.—For the above force from wells, water brackish.

Fuel.—Scarce.

Fodder.—Fair camel grazing except in winter.

Supplies.—Nothing appreciable.

8 **DAND** .. 9 m. Camel road.

87 m.

Road continues N. across a large, open plain, partially cultivated; at 6 miles the road is crossed by a camel track running E. and W. from Dila (Adin Khel) stage 3 of Route 7-C, to join the main Kabul-Kandahar road, Route 15, which is met about 6 miles N. of Shahjui. At 9 miles Dand.

Camping ground.—There would probably be room for a division on the open plain.

Water.—For one infantry brigade at least from *karezes*.

Fuel.—Scarce.

Fodder.—About 100 maunds *bhusa* should always be procurable from the adjacent villages; fair camel grazing except in winter.

Supplies.—About 100 maunds unground grain could normally be collected.

9 **GHILAN** .. 9 m. Camel road.

96 m.

Road continues N. through an open and cultivated country. At 9 miles Ghilan; inhabitants Taraki Ghilzais with a few Durani hamlets.

Camping ground.—Probably sufficient for 2 infantry brigades with proportion of divisional troops.

Water.—For the above force from springs and *karezes*.

Fuel.—No information.

ROUTE No. 8—*concl'd.*

Fodder.—About 200 to 300 maunds *bhusa* procurable ; good camel grazing.

Supplies.—About 200 to 300 maunds unground grain normally available.

At Ghilan, Route 7-C, from Kala-i-Babakar, to Mukur joins this route.

10	KALA SARKARI	9 m.	Camel road,
-----	(MUKUR		
105 m.	DISTRICT)		
	(6,550').		

Road leads N.W. across cultivated country and past numerous Ghilzai villages ; road easy throughout. At 2 miles the Tarnak river, whose course is marked by a line of willow trees, is forded ; river bed most tortuous, serpentine across the valley ; lively, noisy current ; stream here normally 20' to 30' wide, about 1' deep, but as the water is frequently led off in canals for irrigation, stream is much reduced and in the summer is almost entirely exhausted.

At 6½ miles Kala Mirza on the right (E.) of the road. Thereafter the following Ghilzai villages are passed in turn, all E. of the road, Merdil, Kamat, Manak, and Yarkoh. At 9 miles Kala Sarkari where the main through Kabul-Kandahar route (Route 15) is joined.

Camping ground.—On a small plain E. of the road ; it appears probable that there would be room for a division.

Water.—For the above force from an excellent spring ¼ mile W. of the main road ; animals would be watered at the many water channels.

Fuel.—Scarce.

Fodder.—In March and April *hasil* daily for horses of one cavalry regiment at least ; *bhusa* to a considerable extent ; probably at least 2,000 maunds could be collected from the villages in the vicinity ; good camel grazing except in winter.

Supplies.—Some 2,000 to 3,000 maunds unground grain should normally be procurable from the surrounding villages. Cattle, sheep and goats are said to be kept in large numbers, but the Mukur villages in 1880 were all deserted and only such supplies and live stock were obtained, as were found by foraging parties. Near the camp is a burial ground reputed to be a haunt of thieves. At Kala Sarkari Route 15-C from Robat also joins in.

ROUTE NO. 8-A.

WAZIKHWA TO MASHAKI.

88 miles.

8 stages.

Authority.—Benn from native information, 1894.*Epitome.*

General description.—This route connects the two through Routes 8 and 15 and is part of the main *kafila* route from Zhob to Ghazni. Information regarding it, however, is not very definite and distances are only approximate.

Road.—Camel road throughout. *Obstacles:* (i) Shinkai *kotal* in the 1st stage; no difficulty.

(ii) The Ghazni river in the last stage: crossed by an easy ford.

Route open throughout the year.

Camping grounds.—Information is vague; it is probable there is camping space for a division at all intermediate stages except at stages 1 and 5, where there is room for at least 1 infantry brigade with proportion of divisional troops.

Water.—For a division probably at stage 4, and for at least 1 infantry brigade with proportion of divisional troops at the other intermediate stages.

Fuel.—Procurable at stage 3; practically no information on this point as regards other stages.

Fodder.—*Bhusa* obtainable at stages 2, 3, 4, 6 and 7; camel grazing good throughout, except in winter.

Supplies.—Unground grain to an appreciable extent obtainable at stages 3, 6 and 7.

No. of stage and total dis- tance.	DETAILS.
1 <hr/> 15 m.	NIAZA CHINA .. 15 m. Camel road.

Leaving Wazikhwa the road leads N. for 3 miles where the district known as Gwashta is entered; the road then turns N. E. and follows the Gwashta *nala* through much Jalalzai cultivation for 2 miles. At 8 miles the Shinkai hills are entered and are crossed by a *kotal* of the same name

ROUTE No. 8-A—*contd.*

ascent and descent easy. At about 15 miles Niaza China, a collection of Sulaiman Khel hamlets.

Camping ground.—Probably for at least one infantry brigade with proportion of divisional troops on the plain.

Water.—No information.

Fuel.—No information.

Fodder.—Good camel grazing except in winter.

Supplies.—No information.

2 **MUNARI** .. 9 m. Camel road.

24 m.

Road now leads N. W. At 2 miles the Gwashta *Sar is passed and at 4 miles the small fort of Zmak among low hills where there is room to encamp an infantry brigade, with sufficient water from several springs. At about 9 miles a collection of 6 villages on the Munari plain; inhabitants Nassu Khel, Sulaiman Khel.

Camping ground.—For a division on the open plain.

Water.—For at least 2 infantry brigades from several *karezes*.

Fuel.—Scarce.

Fodder.—No grass; a few hundred maunds *bhusa* usually procurable; good camel grazing except in winter.

Supplies.—Nothing appreciable.

3 **JAMBA** .. 8 m. Camel road.

32 m.

Road continues N. W. across an open plain, locally known as the Shiniya; road good throughout this march. At 8 miles a halting place known as Jamba in the vicinity of which are 6 villages belonging to the Adin Khel section of the Sulaiman Khel.

Camping ground.—For a division if necessary on the open plain.

Water.—For at least one infantry brigade with proportion of divisional troops from several *karezes*.

Fuel.—Procurable to some considerable extent within a few miles of camp, as there are numerous patches of low scrub on the plain.

* Probably in the Wazikhwa range through which according to the map the road runs in this vicinity.

ROUTE No. 8-A—*contd.*

Fodder.—A few hundred maunds *bhusa* should normally be procurable; good camel grazing except in winter.

Supplies.—It should always be possible to collect a few hundred maunds unground grain from the surrounding villages.

4 **DILA (ADIN** .. 10 m. Camel road.
 KHEL).

42 m.

Road continues N.W. across an open plain. At 5 miles, group of hamlets known as Nassu Khel, being probably inhabited by that section of the Sulaiman Khel.

At Nassu Khel Route 7-C, coming from Kila-i-Babakar is only 1 mile distant to the E. on the plains; thereafter the 2 routes gradually converge, crossing at Dila at the end of the stage, at 10 miles.

Camping ground.—For a division probably on the plain from *karez*s and the Aoband stream.

Water.—For a division.

Fuel.—Scarce.

Fodder.—A few hundred maunds *bhusa* normally available; good camel grazing except in winter.

Supplies.—*Nil.*

5 **SAR KALA** 12 m. Camel road.
 KAREZ.

54 m.

Road follows Route 7-C, for 3 miles to Zara Kala (250 houses), at which point that route branches off W. to meet the Kabul-Kandahar road, and the present route continues N.W. At 6 miles the Zhera (Zara) range is reached, the road winding for some 2 miles through low hills; no difficulty; road continues across an open plain. At 12 miles Sar Kala Karez.

Camping ground.—No information; it appears probable that there would be sufficient room for at least one infantry brigade with proportion of divisional troops.

Water.—For the above force at least from *karez*s.

Fuel.—No information.

Fodder.—Good camel grazing except in winter.

Supplies.—No information; probably *nil.*

6 **AOBAND** .. 10 m. Camel road.

64 m.

ROUTE No. 8-A—*concl'd.*

Road leads nearly due N. over an open plain. At 10 miles the Taraki village of Aoband (50 houses).

Camping ground.—For a division probably on the plain.

Water.—For at least 1 infantry brigade with proportion of divisional troops from *karezes*.

Fuel.—Scarce.

Fodder.—About 100 maunds *bhusa* normally available; good camel grazing except in winter.

Supplies—About 100 maunds unground grain procurable.

7 **BACHEGI** .. 12 m. Camel road.

76 m.

Road runs N. across the open Shilghar plain, on which are scattered several Andari Ghilzai villages. At 12 miles Bachegi.

Camping ground.—For a division probably on the plain.

Water.—For at least 2 infantry brigades with proportion of divisional troops from *karezes*: animals could be watered from the Ghazni river about 1 mile W. of camp.

Fuel.—No information.

Fodder.—A few hundred maunds *bhusa* should be procurable; good camel grazing except in winter.

Supplies.—A few hundred maunds unground grain normally available.

8 **MASHAKI** .. 12 m. Camel road.

(6,900').

88 m.

Road now leads N. E. across the plain and runs roughly parallel to the Ghazni river, whose left bank remains about a mile distant. At 7 miles the road bends nearly due N. and the Ghazni river is crossed by an easy ford, the road then continuing N. to Mashaki reached at 12 miles. Mashaki consists of a group of 5 Andari Ghilzai villages, each surrounded by its own cultivation.

Camping ground.—

Water.—

Fuel.—

Fodder.—

Supplies.--

} *Vide* Route 15, stage 9.

ROUTE NO. 8-B.**BARA KHEL TO MASHAKI.**

70 miles.

6 stages.

Authority.—1st Afghan war records, 1839.*Epitome.*

General description.—A connecting route between the two through Routes 8 and 15; the first 4 stages of this route also form an alternative to the last 4 stages of Route 8, with which it runs roughly parallel. This route was followed by the Bombay column accompanied by field artillery in 1839.

Road.—Camel road passable for wheeled artillery throughout.

No *obstacles* are encountered; route open throughout the year.

Camping grounds.—Probably for at least 1 infantry brigade with proportion of divisional troops at all intermediate stages.

Water.—For a division at stages 3 and 5 and for an infantry brigade with proportion of divisional troops at all other intermediate stages.

Fuel.—Practically no information.

Fodder.—*Bhusa* at stages 2, 3, 5 and 6; good camel grazing except in winter.

Supplies.—A few hundred maunds unground grain at stages 2, 3, 5 and 6.

No. of stage and total dis- tance.	DETAILS.
1 <hr/> 13 m.	MANSUR KAREZ. .. 13 m. Camel road; passable for wheeled artillery.

Leaving Bara Khel the road leads northwards over a plain for 5 or 6 miles, and then N. W. across the hills S. of the Ab-i-Istada, road practicable for wheeled artillery. The last 5½ miles are parallel to the W. shore of the lake. No difficulties being spoken of on this march, it is probable the road is good.

At Mansur Karez are 3 or 4 hamlets on the shore of Lake Ab-i-Istada, the water of which is salt. Very little cultivation was seen by the Bombay column in October 1839 in this vicinity.

ROUTE No. 8-B. —*contd.*

Camping ground.—For at least 1 infantry brigade with proportion of divisional troops on the shores of the lake.

Water.—For the above force from a stream of clear water running into the lake.

Fuel.—Probably *nil*.

Fodder.—Probably fair camel grazing except in winter.

Supplies.—*Nil*.

2 **TAZ (TAJH)** .. 12 m. Camel road passable
 ——— (Camp 2 miles for wheeled artillery.
 25 m. North of—)

Road now runs N.W. over undulating country. At 7½ miles a large, dry ravine is crossed; no difficulty. At 8 miles cross Route 8 which here runs nearly due N. and S. in its 8th stage. At 10 miles Taz, a fort and village about 2 miles W. of the main road (Route 8).

Taz is situated about the centre of a wide gap in the range which bounds the Tarnak valley on the S. E. About 2 miles N. of Taz is the site of the camp used by the Bombay column in 1839.

Camping ground.—For at least 1 infantry brigade with proportion of divisional troops.

Water.—For the above force from an irrigation channel.

Fuel.—No information.

Fodder.—A few hundred maunds *bhusa* could be collected in the vicinity; good camel grazing except in winter.

Supplies.—A few hundred maunds unground grain normally procurable.

3 **MUHAMMAD KALA** 12 m. Camel road passable
 ——— [MUKUR DISTRICT] for wheeled artillery.
 37 m. (6,550').

The Mukur district is now entered. The road turns N.E. and re-crosses Route 8 at about 3 miles and runs roughly alongside it till the Tarnak river is reached at 5 miles. Here Route 8 leads across the river and then heads due N. for Kala Sarkari, 7 miles distant, on the Kabul-Kandahar road, but the present route continues along the left bank of the Tarnak. At 6 miles Route 7-C., coming in from the S.E. and also leading to Kala Sarkari is crossed. The Bombay column passed the following 2 villages both on the W. of the road, which can no longer be identified by those names, Arzbegi at 3½ miles

ROUTE No. 8-B—*contd.*

and Karai Kala at 9 miles. At 12 miles, Muhammad Kala, identifiable with the Islam Kala, where the Bombay column encamped. The main Kabul-Kandahar road (Route 15) is only 6 miles distant here to the W. running under the hills on the opposite side of the valley.

Camping ground.—For at least 2 infantry brigades with proportion of divisional troops.

Water.—For a division from the Tarnak river.

Fuel.—No information.

Fodder.—*Bhusa* to an appreciable extent could be collected from the neighbouring villages. Good camel grazing except in winter.

Supplies.—An appreciable quantity of unground grain could be collected from the villages in this vicinity.

4 **ATAK (HOTAK)** 13 m. Camel road passable
for wheeled artillery.

50 m.

Road continues N. E. along the left bank of the Tarnak river. At 6 miles pass through the Taraki village of Badam Kechar and between the 7th and 8th miles pass the following villages in turn, Khwajazai, Piari and Solkhel. A range of low hills flanks the road now on the W. and there is a slight ascent onwards to the end of the stage.

At 13 miles Atak, a large fort and group of villages in the Jamrud district which is entered here; inhabitants Popalzai Duranis. Karez-i-Oba on the Kabul-Kandahar road (Route 15) is about 4 miles S.W. of Atak. Atak is practically on the watershed of the Tarnak river.

Camping ground.—No information.

Water.—Probably for one infantry brigade, only, from an irrigation stream.

Fuel.—No information.

Fodder.—Good camel grazing except in winter.

Supplies.—Nothing appreciable.

5 **BAKSHI KALA**.. 10 m. Camel road passable
for wheeled artillery.

60 m.

Road continues N.E. over undulating country and is still flanked by the low range on the W. Several watercourses and dry *nalas* are crossed. The Kandahar road runs

ROUTE No. 8-B—*concl'd.*

parallel, about 3 miles distant on the W. At 10 miles Bakshi Kala, inhabitants Tokhi and Andari Ghilzais.

Camping ground.—No information.

Water.—For a division if necessary from the Ghazni river.

Fuel.—No information.

Fodder.—A few hundred maunds *bhusa* procurable; good camel grazing except in winter.

Supplies.—A few hundred maunds unground grain could be collected.

6 **MASHAKI** .. 10 m. Camel road; passable
for wheeled artillery.

70 m.

Excellent road in the same direction (N.E.) over open and populated country.

Villages are passed both on and near the road, as well as Lohani camps in summer. Several watercourses, of no great difficulty, are crossed; they run from N.E. to S.W. and join the Ghazni river, which flows into the Ab-i-Istada. Mashaki is a large group of villages, inhabitants Andari Ghilzais. The plain here is extensively cultivated.

The Kandahar road is joined N. of the Mashaki villages.

<i>Camping ground.</i> —	} <i>Vide</i> Route 15, stage 9.
<i>Water.</i> —	
<i>Fuel.</i> —	
<i>Fodder.</i> —	
<i>Supplies.</i> —	

ROUTE NO. 9.

MIZAN TO KALAT-I-GHILZAI.

Viâ the Purshi pass.

95 miles.

9 stages.

Authority.—Benn from native information, 1894.

Epitome.

General description.—A main through route from Zhob to Kalat-i-Ghilzai on the Kabul-Kandahar road (Route 15). It connects at Mizan with Routes in Northern Baluchistan, Route 30, which with Route 32 leads to Kamardin Karez the centre of many *kafila* routes.

ROUTE No. 9—*contd.*

Road.—Camel road throughout; would probably easily be made passable for wheeled artillery as the greater portion of the route traverses open plains.

The following *obstacles* are encountered :—

- (i) The Zhait and Lora streams in the 4th and 7th stages, respectively; both crossed by easy fords.
- (ii) The Purshi or Surkai pass in the 7th stage; ascent and descent easy.
- (iii) The Tarnak river in the last stage; temporarily unfordable after heavy rain.

Route open throughout the year.

Camping grounds.—Probably for a division at all stages.

Water.—For a division at stages 1 and 9 and for an infantry brigade at least at all other stages:

Fuel.—Scarce throughout the route.

Fodder.—Grass at stage 1 only; *khasil* at stage 9 for horses of a cavalry brigade daily during March and April; *bhusa* to a moderate extent at stages 2, 4, 5, 7 and 8 and 3,000 to 5,000 maunds at stage 9; good camel grazing throughout except in winter.

Supplies.—Limited supply of unground grain at stages 2, 4, 5, 7 and 8; all supplies for a division for 1 or 2 weeks at stage 9.

No. of stage and total dis- tance.	DETAILS.
1	KAFIR CHAH 9 m. Camel road.
9 m.	

The road leaves Mizan (6,825'), direction S. W. down the Multanai *nala* which joins the Kand river at 1 mile. The track keeps to the river bed, being confined on the left by the low hills of the Multanai range for 2 miles, when the hills on the left cease and the country on both sides of the road is open. Here, too, the track leaves the river bed and ascends to the right bank, a rise of only 2' or 3'. At 3 miles a track comes in from the S. E. which is the road to Kafir Chah.

Following this the direction is almost due W. At 5 miles the N.E. spurs of the Spinkai Tsahan hills are passed on the left, and at 7 miles the Kafir Chah range comes in on the right. The

ROUTE No. 9—*contd.*

track skirts the southern slopes of this range for another mile, and then meets the Tirkah *nala* which it follows from this point in a due northerly direction until the Kafir Chah springs are met at 9 miles. As seen from the hills above Spinkai Tsahan, Kafir Chah appeared to be a wide grassy plain. The place belongs to the Hotak Ghilzais though the Mandarzai Kakars also graze their flocks on these plains.

Camping ground.—For a division on the grassy plain.

Water.—Probably sufficient for the above force from 5 or 6 excellent springs.

Fuel.—Scarce; only a limited supply of scrub being procurable.

Fodder.—Grass for about one week for the horses of a cavalry brigade, could be *cheeled* from the grassy plain, except in winter; *bhusa* to no appreciable extent; a limited supply is kept by the nomad shepherds in the neighbourhood, which they will not part with; camel grazing in abundance except in winter.

Supplies.—*Nil.*

2 **SARGARI** .. 8 m. Camel road; suitable
for wheeled artillery.

17 m.

Road now leads across the Shahidan plain, direction N.W. At about 5 miles road winds through some low hills and at 8 miles Sargari which lies at the foot of the Shua Ghar range. Sargari, large walled village surrounded by much cultivation, inhabitants Tokhi Ghilzais.

Camping ground.—Probably for a division.

Water.—Sufficient for at least 1 infantry brigade from springs.

Fuel.—Scarce.

Fodder.—*Bhusa* to a moderate extent; camel grazing good except in winter.

Supplies.—A few hundred maunds unground grain normally available.

3 **DARWAZA** .. 8 m. Camel road suitable
for wheeled artillery.

25 m.

Road continues N.W. across an open plain. At 8 miles Darwaza, where there is an encampment of Tokhi Ghilzais.

ROUTE No. 9—*contd.*

Camping ground.—Probably for a division at least.

Water.—Probably for at least 1 infantry brigade from springs in the bed of the Darwaza nala.

Fuel.—No information.

Fodder.—Good camel grazing except in winter.

Supplies.—Nil.

4	WUCHA	10 m.	Camel road suitable
—————	MURGHA.		for wheeled artillery.
35 m.			

Road continues N.W. across an open plain. At 4 miles the Zhait stream is crossed by an easy ford; thence road winds through low hills and emerges once more on to a plain. At 10 miles the halting place known as Wucha Murgha.

Camping ground.—Probably for a division^r at least.

Water.—For at least 1 infantry brigade with proportion of divisional troops.

Fuel.—Scarce.

Fodder.—No grass; *bhusa* obtainable to a limited extent; good camel grazing except in winter.

Supplies.—A few hundred maunds unground grain normally procurable here.

5	LAWARGAI ..	10 m.	Camel road suitable
—————			for wheeled artillery.
45 m.			

Road runs nearly due W. for about 6 miles and then veers gradually to the N. W. traversing an open plain throughout this march. At 10 miles Lawargai in the vicinity of which there are several Tokhi Ghilzai villages, also an old Ghilzai fort called Kanakah and a *ziarat* to one Khalifa Sahib. Lawargai appears also to be known as Halatakh.

Camping ground.—Probably for a division at least.

Water.—For at least 2 infantry brigades from several *karezes*.

Fuel.—Scarce.

Fodder.—*Bhusa* to an appreciable extent can be collected from the Tokhi villages; camel grazing good except in winter.

Supplies.—A few hundred maunds unground grain normally procurable.

At Lawargai this route is crossed by Route 9-A coming from Zhob and leading to Bara Khel (Route 8, stage 5).

ROUTE No. 9—*contd.*

6 **LANDI** 9 m. Camel road.

MURGHA.

54 m.

The country of the Hotak Ghilzais is now entered, the road running generally W. through low hills. At 6 miles the halting place of Landi Murgha.

Camping ground.—No information.

Water.—For an infantry brigade at least, from several wells.

Fuel.—No information.

Folder.—Fair camel grazing except in winter.

Supplies.—*Nil.*

7 **PSHAI** .. 15 m. Camel road.

69 m.

Road runs N.W. across a sandy plain. At about 7 miles the Lora river is crossed by an easy ford. Here a camel road runs N.W. to the Ab-i-Istada Lake, some 50 miles distant. At about 12 miles the Surkh Koh range, which forms the eastern boundary of the Tarnak valley, is crossed by the Purshi or Surkai pass, the ascent and descent of which is quite easy for camels. At 15 miles Pshai, near which are several Hotak Ghilzai villages, also a Ghilzai post where transit duty is collected.

Camping ground.—Probably for a division.

Water.—For at least an infantry brigade from a spring.

Fuel.—No information.

Folder.—Probably a few hundred maunds *bhusa* procurable; camel grazing good except in winter.

Supplies.—A few hundred maunds unground grain should normally be available in this vicinity.

8 **JANAT** 11 m. Camel road, suitable

KHWARAH. for wheeled artillery.

80 m.

Road changes its direction to S.W. across a level plain. At about 11 miles Janat Khwarah, the halting place.

Camping ground.—Probably for a division.

Water.—For at least an infantry brigade, if necessary, from the Tirwa stream, a tributary of the Tarnak.

Fuel.—No information.

ROUTE No. 9—*contd.*

Fodder.—A few hundred maunds *bhusa* normally procurable, fair camel grazing except in winter.

Supplies.—A few hundred maunds unground grain could usually be collected from the adjacent villages.

Route 15-C, from Robat to Kala Sarkari, both on the Kabul-Kandahar road, crosses this route at this stage.

9 **KALAT-I-** 15 m. Camel road.
 ——— **GHILZAI.**

95 m. (5,543')

Road runs due W. across a plain on which are a few low hills. At 9 miles the Tirwah stream is crossed by an easy ford; the road then turns N.W. heading straight for Kalat-i-Ghilzai, which stands on the far (right) bank of the Tarnak river, necessitating the crossing of this river. The Tarnak here in winter has a stream 20× to 50× broad and 2' to 3' deep, banks in most places rugged and precipitous; always fordable except after heavy rains. At 15 miles Kalat-i-Ghilzai.

KALAT-I-GHILZAI (5,543'). *Population* 1,500 chiefly Hotak and Tokhi Ghilzais. *Garrison* (1912) 1 squadron cavalry, 3 batteries and 3 battalions infantry. (Consists of two fortified villages on the right bank of the Tarnak, N.W. of the fort, and some felt tents on the plain around.

Fort.—In 1880 Major Gaselee described the fort as being a work of irregular profile, situated on a hill 100' above the surrounding plain. Roughly in the form of an oblong; N. and S. faces 300× long, E. and W. faces 150× long. Main gateway in the S. face; approaches are steep and fairly well flanked by a wall facing N.E.; rampart is surrounded by a loopholed wall 6' high, 2' thick; loopholes faulty and ill-constructed admitting of shelter being obtained under the wall; both wall and rampart are much out of repair. It would be necessary to breach the walls before attempting an assault. The weak point is on the N. side where there is an unused gateway; here the wall is very thin and the approaches to it not so steep as on the other side. There is a commanding hill 600× N.W., whilst to the W. lies high ground, on which batteries could be erected to enfilade completely the N. and S. faces. The fort was not considered, in 1882, as fit to resist troops armed with rifled guns and modern rifles. Inside the fort are some buildings which would serve as hospitals and store houses. In the centre on an artificial

ROUTE No. 9—*concl'd.*

earthen mound is a citadel or keep 80' above the main fort which it would be impossible to scale, but on the fort falling it could not hold out for want of water which is obtained from a perennial spring at the foot of the mound on which the keep is built. It has, however, a good command over the surrounding country.

Camping ground.—For a division on the open plain between the fort and the river.*

Water.—For a division and more from the Tarnak river.

Fuel.—Scarce; the country in the vicinity is generally bare of trees with the exception of a few fruit trees on the hill slopes.

Fodder.—*Khasil* for the horses of a cavalry brigade, daily, during March and April; probably from 3,000 to 5,000 maunds *bhusa* always procurable; good camel grazing except in winter.

Supplies.—Practically all supplies sufficient for a division for 1 or 2 weeks would normally be available.

On Sir F. Roberts' arrival at Kalat-i-Ghilzai on the 23rd August 1880 he found that the Officer Commanding the garrison had anticipated the arrival of the column by collecting a considerable quantity of stores and forage.

ROUTE No. 9-A.

KAJIR TO BARA KHEL.

94 miles.

9 stages.

Authority.—Afghan war records, 1839.

Epitome.

General description.—A *kafila* route from the Zhob valley to the Tokhi Ghilzai country; also a connecting route between the through Routes 8, 9 and 10, which are crossed at stages 9, 6 and 2 respectively; again this route together with Route 8-B and the last section of Route 8, both of which are joined at Bara Khel, form connections between the Zhob and the Kabul-Kandahar road which is met at Mashaki (stage 13) in the first instance and at Kala Sarkari (stage 16) in the latter. The greater part of this route was followed in the 1st Afghan war in 1839 by the Bombay column, accompanied by field artillery.

*The Kabul-Kandahar Force encamped here on the 23rd-24th August 1880.

ROUTE No. 9-A—contd.

It connects at Kajir with Routes in Northern Baluchistan, Route 6 to Kamardin Karez and Route 61 to Quetta.

Road.—Camel road throughout, passable for wheeled artillery, though guns would have to be man handled in places, in the present state of the road.

The following *obstacles* are encountered :—

- (i) Kadanai river in the first stage; crossed by an easy ford.
- (ii) The Shadikhak pass also in this stage; difficult for guns.
- (iii) The Surkhab range in the 2nd stage no difficulty.
- (iv) The Shiri *kotal* in the 6th stage; ascent and descent easy.
- (v) A mass of hills in the 7th stage, separating the Ghundan and Upper Lora valleys; first range crossed by the Jallu *kotal* presenting no difficulty, thence succession of ascents and descents with a very bad road over remaining hills.

Route open throughout the year.

Camping grounds.— } For at least 1 infantry brigade at all
Water.— } intermediate stages.

Fuel.—Very little information, probably scarce throughout.

Fodder.—*Bhusa* to an appreciable amount at stages 4, 6 and 7; fair to good camel grazing throughout except in winter.

Supplies.—Only a few hundred maunds unground grain procurable at stages 4, 6 and 7.

No. of stage and total dis- tance.	DETAILS.
1	KHUDU CHAMAN .. 10 m. Camel road.
10 m.	

Leaving Kajir the road leads N.W. and maintains this direction generally throughout this march. At 2 miles the Kadanai river, which marks the Afghan boundary here, is crossed near its source; no difficulty. At about 5 miles the Nakhas range is crossed by the Shadikhak pass which is difficult for guns. At the northern foot of the pass is the Barakzai Durani village of Poti. The road then runs down the bed

ROUTE No. 9-A—*contd.*

of a watercourse to Khudu Chaman, reached at 10 miles, where there is a small stream coming from the hills to the E.

Camping ground.—No information ; space appears to be confined ; probably not room for more than one infantry brigade.

Water.—For the above force from the stream referred to.

Fuel.—No information.

Fodder.—Good camel grazing except in winter.

Supplies.—Nothing appreciable, though there is a little cultivation in the vicinity.

2 **SAR-I-SURKHAB** 15 m. Camel road.

25 m.

Road runs N. throughout the stage at first over a small range, then across an undulating valley, and is generally difficult for guns. At 4 miles, wells called Babakar Chahan. Here Route 10, the main *kafila* route from the Zhob valley to Kandahar, coming in from the E. is crossed.

After crossing the first hills there is apparently a steady ascent to the summit of the Surkhab range, the highest point of which is about half-way to Sar-i-Surkhab. Thence a considerable descent to the valley of a stream called the Surkhab. The road follows its course for the last mile. Camp at the head of the valley near the source of the branch of this river.

The road on this march is described as being fatiguing for both horses and camels.

Camping ground.—No information as to space.

Water.—For at least 2 infantry brigades with proportion of divisional troops from the Surkhab stream.

Fuel.—No information.

Fodder.—Fair grazing except in winter.

Supplies.—Nothing appreciable.

3 **NADIR DEH** .. 8 m. Camel road.

33 m.

Road follows the Surkhab northwards, which winds through high hills. Its valley is apparently a narrow one, and the road in the bed of the water course is over loose stones, and difficult for guns. The descent is somewhat rapid. The halting-place is at a few huts called Nadir Deh, on the bank of the Surkhab stream.

ROUTE No. 9-A—*contd.*

At this hamlet the Bombay troops found some *bhusa* secreted by the people who had deserted the country on their approach.

NOTE—From Nadir Deh a track leads to Abdulla Kala on the Surkhab, whence it follows the river to Maruf.

Camping ground.—For an infantry brigade at least.

Water.—For at least 2 infantry brigades with proportion of divisional troops from the Surkhab.

Fuel.—No information.

Fodder.—Fair camel grazing in spring and autumn.

Supplies.—*Nil.*

4 SPINWARI .. 10 m. Camel road.

43 m.

Road runs N. throughout the stage. For the first 3 miles it follows the bed of the Surkhab through a narrow valley as in the last march. The Surkhab valley then opens into that of Maruf, and the stream bends N.W. to join the Arghastan, some 10 or 11 miles above Maruf fort. The Maruf or Arghastan valley, stretching S. W. appears to be open and traversable by all arms.

From where the Surkhab is quitted, the road continues northwards and winds among hills, with several ascents and descents. (It might be better to follow the Surkhab some miles further and then ascend the valley; the distance would be greater, but road probably better for artillery.) The Upper Arghastan valley appears to be entered at about 9 miles. It is cultivated, but the inhabitants are said to live in tents, which they no doubt shift according to the season.

Spinwari is a mound (the ruins of a city) on the left bank of the river which here runs in a deep bed (described as a large ravine) containing plenty of water. It is about 20 miles N.E. of Maruf fort and in the same valley. A *kafila* route from Dera Ismail Khan to Kandahar crosses here.

Camping ground.—For at least 2 infantry brigades with proportion of divisional troops.

Water.—For more than the above force from the Arghastan river.

Fuel.—No information.

Fodder.—An appreciable amount of *bhusa* normally available; fair camel grazing, except in winter.

Supplies.—A few hundred maunds unground grain ordinarily procurable.

ROUTE No. 9-A—*contd.*

5 **BASSUR KHEL** .. 11 m. Camel road.

54 m.

Road now runs N.E. up the Arghastan valley. At about $6\frac{3}{4}$ miles Musa Utak (Ulak), a settlement of Hotak Ghilzais, at the foot of a small range of hills known as Baireghar running E. and W. on the left of the road.

Thence the road winds among hills for 5 miles with a considerable ascent. Bassur Khel is a collection of small Hotak Ghilzai hamlets.

Camping ground.—No details.

Water.—For an infantry brigade, at least, from a small tributary of the Arghastan river.

Fuel.— } No information, but probably good camel grazing
Fodder.— } except in winter.

Supplies.—*Nil.*

6 **GHUNDAN** .. 10 m. Camel road.

64 m.

The road goes N.E. apparently along the hills, for about 5 or 6 miles, and then crosses a range by the Shiri *kotal*. The road is not good, but the light guns of the Bombay Column met with no obstruction. Immediately the *kotal* is passed, Route 9, the through route from Zhob to Kalat-i-Ghilzai, coming from the S.E. is crossed at Lawargai, stage 5 of that route.

Leaving Lawargai a large, dry watercourse is entered. There is an ascent from this at 8 miles, and then a gradual rise to the camping ground which takes its name from a lofty hill near by on the right (E.). The district is also called Ghundan. The camp of the Bombay Column was on the bank of a deep, dry ravine, with a good stream of water in an irrigation channel close to it. There is cultivation here, and 3 or 4 miles to the W. are several villages. The people of the district are Tokhi Ghilzais, and their chief has a fort 2 miles N.E. of Ghundan village. The valley in which it is situated appears to be of some size: it lies E. and W. and drains to the Lora river, an affluent of the Arghastan.

Camping ground.—For at least 2 infantry brigades with proportion of divisional troops on the site described above.

ROUTE No. 9-A.—*contd.*

Water.—For a force larger than the above from the stream referred to.

Fuel.—No information.

Fodder.—No details, but a few hundred maunds *bhusa* should always be procurable, good camel grazing except in winter.

Supplies.—A few hundred maunds unground grain normally available.

7 **KISHANI** .. 11 m. Camel road.

75 m.

Road continues N.E. A mass of hills separates the Ghundan valley from that of the Upper Lora river. The route northwards lies across an open plain for 4 miles, and then over these hills, which are, no doubt, a series of parallel ridges, resembling those frequently met with elsewhere in S. Afghanistan. The first range is crossed by the *Jallu kotal* which appears to be easy. Thence a succession of ascents and descents; the road is very bad, and it was with difficulty the Bombay Column got their artillery along it. The hills are not cleared till the end of the march, when a large valley is entered extending S.W. The watercourse running down this is the main branch of the (Arghastan) Lora river. The valley is cultivated and populous, the inhabitants being Tokhi Ghilzais. The road turns N.E. after leaving the hills, but the camping place of the Bombay Column was at their foot, near the Mapan hamlets.

The name Kishani is given to a tract of some size in which are various villages or hamlets.

Camping ground.—For at least 2 infantry brigades with proportion of divisional troops near Mapan hamlets.

Water.—For the above force, and more, from the Arghastan (Lora) river.

Fuel.—No information.

Fodder.—About 500 maunds *bhusa* should normally be collected here; good camel grazing except in winter.

Supplies.—At least 500 maunds unground grain from the adjacent villages should be available.

8 **JAMIAT** .. 8 m. Camel road.

83 m

ROUTE No. 9-A—*concl'd.*

Road continues N.E. veering more towards E. than in the last stage; road good and runs throughout the stage in a valley diverging from the main hills. At 8 miles Jamiat, a collection of small hamlets.

Camping ground.—For at least 2 infantry brigades with proportion of divisional troops.

Water.—For the above force from an irrigation stream.

Fuel.—No information.

Fodder.—Good camel grazing except in winter.

Supplies.—Nothing appreciable.

9 **BARA KHEL ..** 11 m. Camel road.

94 m.

Road continues N.E. over a plain intersected at intervals by dry watercourses. At 11 miles a group of large villages belonging to the Tokhi Ghilzais, known as Bara Khel. The halting place is also known as Tarkar-ka-Sir.

Camping ground.—

Water.—

Fuel.—

Fodder.—

Supplies.—

} *Vide* Route 8, stage 5.

ROUTE No. 9-B.

TIRKHA TO SAR-I-SURKHAB.

15 miles.

2 stages.

Authority.—Mardall, 1892; Benn, 1894.

Epitome.

General description.—A small, branch route from Tirkha in Zhob which joins Route 9-A at Sar-i-Surkhab (stage 2).

Road.—Camel road.

The only *obstacle* which is met is the Kand river in the 1st stage which is crossed by an easy ford.

Route open throughout the year.

Camping ground.—For at least 2 infantry brigades with proportion of divisional troops at the intermediate stage.

Water.—For the above force at the intermediate stage.

Fuel.—Scarce.

ROUTE No. 9-B—*concl'd.*

Fodder.—About 100 maunds *bhusa* at the intermediate stage; good camel grazing along the route, except in winter.

Supplies.—Nothing appreciable.

No. of stage and total dis- tance.	DETAILS.
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1	MURGHAI ..	6 m. Camel road.
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6 m.

Leaving Tirkha the road follows the Tirkha *nala*, direction N.W. At 3½ miles the Kand river is crossed, and the cultivated fields of the Tokhi Ghilzais entered on the opposite bank, the direction still being N. W. On the left is a *tope* of tamarisk jungle called Mundan jungle. Camp reached at 6 miles.

Murghai Kala is a small village, belonging to the Tokhi Ghilzais, near the low spur of the Zhiobai range to the N.

Camping ground.—For at least 2 infantry brigades, with proportion of divisional troops on the plain.

Water.—For the above force from *karezes*.

Fuel.—Scarce.

Fodder.—About 100 maunds *bhusa* procurable; good camel grazing except in the winter.

Supplies.—Nothing appreciable.

2	SAR-I-SURKHAB ..	9 m. Camel road.
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15 m.

Leaving camp, road continues N.W. across open plains for 4 miles when one of the southern spurs of the Zhiobai range is met, round which the road winds. At 6 miles cross a range of hills by an easy pass, the road thereafter emerging on to the plain beyond.

Camping ground.—

Water.—

Fuel.—

Fodder.—

Supplies.

} *Vide* Route 9-A, stage 2.

ROUTE NO. 10.

RASHID KALA (ZHOB) TO KANDAHAR.

Viâ Maruf and Amin Kala.

121½ miles.

10 stages.

Authority.—2nd Afghan war records, 1880, and native information.

Epitome.

General description.—A main, through *kafilâ* route from Zhob to Kandahar, the greater portion of which follows the Arghastan river. It connects at Rashid Kala with Routes in N. Baluchistan, Route 20 to Kamardin Karez.

Road.—Camel road to Mandi Hissar (stage 9); thence disused cart road made by the British in 1880, with slight repair passable for carts again.

The following *obstacles* are encountered.

- (i) Arghastan and Lora rivers, in the 5th stage, both crossed by easy fords.
- (ii) The Tarnak and Shorad rivers, in the last stage; both crossed by easy fords.

Route open throughout the year.

Camping ground.—For a division at stages 1, 3, 8 and 9 and for at least 3 at Kandahar; no information regarding stages 2 and 5; for at least an infantry brigade at remaining stages.

Water.—For an infantry brigade at least at all stages, but for a division also at stages 3, 5, 6, 7, 8 and 10.

Fuel.—Scarce, except at Maruf, (stage 3), where the hills surrounding the town are more or less wooded.

Fodder.—Grass only at stage 6; *khasil* for the horses of a cavalry brigade daily, during March and April at stages 3, 6 and 10, and for a cavalry regiment for the same period at stage 8; *bhusa* in varying quantities at stages 6, 7, 8, 9 and 10; fair to good camel grazing throughout except in winter.

Supplies.—Unground grain in varying quantities at stages 6, 7, 8, and 9; sheep and goats in large numbers at stages 6 and 9, and cattle also at stage 6; almonds, grapes, figs, apples, etc., at stage 3; for supplies, etc., at Kandahar see Route 12, stage 6.

ROUTE No. 10—*contd.*

No. of stage and total dis- tance.	DETAILS.
1	BABAKAR CHAHAN . . 10 m. Camel road. (6,375')
10 m.	

Leaving Rashid Kala there are 2 tracks, one each from the upper and lower camping grounds.

The track from the upper camping ground, on the left bank of the river leaves camp in a westerly direction, and at once drops by a rather steep descent into the Kand river bed, which it follows for about 1 mile and then ascends the right bank. A road would have to be made, here, as the ascent is steep and difficult. On reaching the right bank, it is joined by the track which comes from the lower camping ground and which is really the main track. The road now leads over the cultivated fields of the Tokhi Ghilzais along the right bank of the river, some 20' above the stream. This cuts off a large bend in the river, at this point, which would mean a long detour if the road in the river bed were taken. At 2 miles the track after crossing the cultivation drops into the river bed again. On the right and left are low hills; those on the right about $\frac{1}{4}$ mile distant and much higher than those on the left, which approach close to the river bank. The river bed here is 150 yards broad, with good flow of running water about 8 inches deep, over sand and shingle; the banks are 8 or 9 feet high. On the right is a small Tokhi village called Mulla Khel Kala. The track follows the river bed thus for about 3 miles, and the stream has to be crossed many times. A few quicksands were met, into which horses sank up to their hocks, but these were off the actual track. At 5 miles the river takes a bend to the N. and from this point it loses the name of the Kand and is called the Surkhab. This sharp bend to the N. is opposite the junction of the Wuchmande, or Wucha *nala* which comes in from the S.W. going up the left bank. In the bend on the right bank is a small Ghilzai village and cultivation. Up to this point there has been cultivation all along the right bank; none on the left. The river now appears to enter a gorge to the N. and the hills on either side are high and immediately over the river banks,

ROUTE No. 10—*contd.*

The track to Babakar Chahan leaves the river bed and ascends the left bank by a path and continues S.W. Passing over the spur of a low hill, it at once enters the Darai *nala* through cultivated fields between the Shalagai hills to the S. and the Darai hills on the N. which are about $\frac{1}{4}$ mile apart.

At 6 miles a small Tokhi Ghilzai habitation is passed on the right, and the Darai hills disappear to the N.W. The track now runs a zigzag course among cultivated fields and water channels, until the head of the Darai *nala* is reached, where there is a spring of good water in the cleft of a rock on the left. The Shalagai hills have now approached the track and the path passes over a low spur, rising 40 feet in 100 yards. A gradual rise is continued from this point with open country on both sides until at 7 miles a straggling village belonging to the Alizai Kakars is reached. The track runs through cultivation for another mile, when at 8 miles is a spring among some rocks, in the centre of the valley, and the cultivation ceases.

Beyond this spring the road is between hills on both sides and up a gradual ascent for nearly 2 miles. This valley is only 200 yards wide.

At $9\frac{3}{4}$ miles the top of the rise is reached (250' in $1\frac{3}{4}$ miles) and the track runs over level and open ground for $\frac{1}{2}$ mile; when it drops down over low hills and uneven ground until Babakar Chahan is reached at 10 miles. Babakar Chahan is a barren looking spot surrounded by low hills with four wells and a grassy plot at its S.W. side, and a well kept praying ground at its N.E. border. The space between these low hills is $250\times$ long by $250\times$ broad, but from its S.W. edge an open stretch of land, $150\times$ wide, extends for a considerable distance to the S.W. so that there would be ample room for a camping ground for a large force. The water in three of the wells was sweet and clear; that in the fourth was discoloured and was evidently polluted. The supply is plentiful and the springs are said to be perennial.

Camping ground.—For a division on the site described.

Water.—For an infantry brigade, only, from the wells mentioned.

Fuel.—Scarce.

Fodder.—No grass; good camel grazing except in winter.

ROUTE No. 10—*contd.*

Supplies.—*Nil.*

Here Route 9-A, running from Kajir in Zhob to Bara Khel, is crossed.

2 **GWANZA** .. 12 m. Camel road.

22 m.

Track leaves Babakar Chahan through the low hills immediately to the S.W. There is a well-defined track. Continuing N.W. it passes over the Kotkai hills, by an easy *kotal*. The road is said to be fit for laden camels. Camp is reached at 12 miles. There are many Barakzai Durani villages in the vicinity.

Camping ground.—No information.

Water.—For an infantry brigade or more from the *Kokacha nala*.

Fuel.—Scarce.

Fodder.—Good camel grazing except in winter.

Supplies.—Nothing appreciable.

3 **MARUF** .. 15 m. Camel road.
(6,000')

37 m.

Leaving Gwanza the track runs N.W. for 4 miles, where it turns at right angles to the left and heads S.W. for Maruf. At this turn a camel track runs roughly E. to Nadir Deh.

At 9 miles the Arghastan valley is entered, the track hitherto having lain among low hills which now cease. From this point to near Kandahar the route follows the Arghastan valley. At 15 miles Maruf.

Maruf is described as situated in the centre of an almost circular plateau, surrounded by hills more or less wooded, the plateau being very extensively cultivated. The town is on the left bank of the river, the fort on the right. The fort was partially demolished by Outram in 1840 to punish the Barakzais for massacring camp followers and it is believed that it has not been properly renewed.

Exports: almonds, grapes, figs, smuggled into Toba in large quantities, particularly *viâ* the Shahidan and Shishgar routes.

ROUTE No. 10—*contd.*

Grapes and figs are dutiable by the Amir's Customs, and the export of almonds is absolutely forbidden. Donkeys are generally used in this smuggling trade, as they are easier to hide than camels. These *kafilas* of almonds, however, are said never to be stopped by the Amir's posts except when they cannot afford to pay the *dastur* of three Kabuli rupees per camel load.

No manufactures either of arms or cloth are carried on in Maruf. The garrison consists of about 120 *khasadars*. The level is probably well below 6,000 feet, as grapes, etc., appear to ripen every year.

Camping ground.—For a division.

Water.—For the above force from the Arghastan river and many irrigation channels.

Fuel.—Abundant from the wooded hills referred to.

Fodder.—*Khasil* for the horses of a cavalry brigade daily during April and May; probably between 2,000 and 4,000 maunds *bhusa* ordinarily available; good camel grazing except in winter.

Supplies.—About 2,000 to 4,000 maunds unground grain should normally be procurable; almonds, grapes and figs as already described.

4 MEZKIN KHAN .. 14 m. Camel road,

51 m.

Road continues S. W. along the left bank of the Arghastan river.

At 11 and 12 miles pass the Barakzai villages of Arvat and Muhammad Aslam respectively, both on the right bank of the river. At 14 miles Mezkin Khan.

Camp on the left bank of the river, village on the opposite bank.

Camping ground.—No details, probably for one infantry brigade at least.

Water.—For an infantry brigade at least from the Arghastan.

Fuel.—Scarce.

Fodder.—Good camel grazing except in winter.

Supplies.—Nothing appreciable.

ROUTE No. 10—*contd.*

5 **NUR MUHAMMAD** 14 m. Camel road.
 KHAN.

65 m.

From the map it would appear that the Arghastan was forded here and that the track temporarily leaves this valley and crossing a range of hills descends into the valley of the Lora river which is also crossed. The fording of the Arghastan and Lora rivers in these upper reaches can present no difficulty. The Lora river is reached at 8 miles and the track continues nearly due W. along its right bank. At 14 miles Nur Muhammad Khan, a Barakzai village with a fort.

Camping ground.—No information.

Water.—For a division and more from the Arghastan.

Fuel.—No information.

Fodder.—Possibly 1,000 maunds *bhusa* could be collected. Good camel grazing except in the winter.

Supplies.—About 1,000 maunds unground grain normally available.

6 **AMIN KALA** . . 14 m. Camel road.

79 m.

The road now runs N.W. At 6 miles the Arghastan coming in from the S.E. joins the Lora, the 2 rivers thereafter being known as the Arghastan; at 10 miles the Khushk Rud is crossed by an easy ford, just prior to its junction with the Arghastan. Thence the road turns S.W. and heads direct for Amin Kala which is reached at 14 miles, the Wandoz *nala* being crossed just before camp.

Amin Kala, Barakzai village (100 houses); very wealthy, inhabitants owning broad tracts of well-irrigated lands; also a fort which, however, is commanded by an adjacent hill.

Camping ground.—For at least 2 infantry brigades with proportion of divisional troops.

Water.—For a division and more from the Arghastan.

Fuel.—No information.

Fodder.—Grass plentiful except in winter; *khasil* for the horses of a cavalry brigade daily during April and May; about

ROUTE No. 10—*contd.*

5,000 maunds *bhusa* should normally be procurable; good camel grazing except in winter.

Supplies.—There are 4 large Barakzai villages *viz.* Saifulla, Abdul Latif, Mir Aslam and Mir Alam within 2 miles of Amin Kala to the N. on the right bank of the Wandoz (Wuchanakar) *nala*. From these villages it is estimated that 5,000 maunds unground grain could normally be collected and there are several miles. Cattle, sheep and goats in large numbers can also be obtained.

7 **ATA MUHAMMAD** 9 m. Camel road.

88 m.

The road runs S.W. on the right bank of the Arghastan.

At intervals of about $\frac{1}{2}$ mile are Muhammad Hasan, Abdulla Khan, and Pir Muhammad. From Pir Muhammad to Ata Muhammad (about $6\frac{1}{2}$ miles), the road passing under the high hill to the N. of the latter place becomes very difficult for wheeled traffic. In a few places it would be necessary to leave the road and pass through the low gravelly hills to the N. owing to the rocky and dangerous nature of the path along the river bank. Between Pir Muhammad and Ata Muhammad is the village of Fakhr-ud-din, and on the left bank close to Fakhr-ud-din is the Lahar *nala*, 3 miles from the mouth of which is the village of Somailai. Between Amin Kala and Pir Muhammad, on the left bank of the river, is Tajao, to the S.E. of which are the villages of Muhammad Khan, Loi Karez, Kachnai Karez, and Inarat. To the four latter villages there is a rough road from Amin Khan.

Ata Muhammad (50 houses), inhabitants Muhammadzai Barakzais who own a large tract of cultivated land and a water-mill.

Camping ground.—For one infantry brigade.

Water.—For a division and more from the Arghastan.

Fuel.—Scarce.

Fodder.—About 500 to 1,000 maunds *bhusa* could be collected; good camel grazing near camp except in winter.

Supplies.—About 1,000 maunds unground grain could be collected from the Barakzai villages of Sagzai, Khogani and Fakhr-ud-din.

ROUTE No. 10—*contd.*

8 MURGHAN KECHAR .. 15 m. Camel road.
 (3,660')

103 m.

The road proceeds W. along the right bank of the river for about 12 miles, when it turns N. and leaves the valley of the Arghastan, crossing a low *kotal*, which offers little difficulty for the passage of guns. It then proceeds in a westerly direction towards Murghan Kechar.

The right bank of the Arghastan, along which the road runs, slopes gradually down to the water. The opposite bank is steep and only accessible at intervals to guns and cavalry.

Sangzai, Karwan Kats, and Batar are passed at 3, 5, and 7 miles, respectively.

Before reaching Sangzai the Sodanai and two small *nalas* are crossed. On the former is situated the village of Khogani, which consists of three hamlets about half a mile apart.

The *nalas* present no difficulty to the passage of guns. The drainage from the hills on the right of the road falling into the river crosses and cuts up the track at frequent intervals, but most of the *nalas* thus formed can be made practicable for guns with a few minutes' labour.

The road is commanded on the right, throughout almost its entire length, by low undulating hills. An enterprising enemy might seriously annoy convoys, all the ground being favourable for the concealment of large bodies of men.

At about 15 miles the Popalzai village of Murghan Kechar (200 houses), situated on a wide plain which extends to the left bank of the Tarnak river about 5 miles to the N.; village is thus about midway between the Tarnak and Arghastan rivers. Detachment of Afghan infantry was quartered here in 1878-80; heliographic communication can be established between the village and "Piquet Hill" at Kandahar.

Camping ground.—For a division and more on the plain referred to.

Water.—For the above force from tributary streams of the Arghastan and Tarnak rivers, a good stream flowing $\frac{1}{2}$ mile S. of camp; animals would probably have to be watered at either of the 2 rivers.

Fuel.—No information.

ROUTE No. 10—*concl'd.*

Fodder.—*Khasil* for the horses of a cavalry regiment at least, daily between the 15th March and the 15th May; about 1,000 maunds *bhusa* ordinarily procurable; good camel grazing except in the depth of the winter.

Supplies.—At least 1,000 maunds unground grain should be normally available.

9 **MANDI HISSAR** .. 8 m. Camel road.

111 m.

Road now proceeds nearly W.; at 1 mile *nala* is met which would be difficult to cross with guns during rainy weather, owing to the swampy nature of the ground near the road, and a slight detour to either bank would be necessary; between the 4th and 5th miles a second *nala* is met, which presents little difficulty; with these exceptions the road throughout the stage, which passes through a stony, undulating country is good. At 8 miles Mandi Hissar (100 houses) inhabitants Nurzais and Barakzais.

Camping ground.—For a division, though limits are liable to be restricted owing to cultivation; camping ground in 1879-80 was protected by a walled defensible enclosure and ditch, which was in good order in 1893, but this camp was only sufficient for 2 brigades.

Water.—For the above force from *karezes* near camp, and from the Tarnak river 2 miles N. of camp, where animals could be watered.

Fuel.—No information.

Fodder.—A few hundred maunds *bhusa* normally available; camel grazing only fair and *nil* in winter.

Supplies.—A few hundred maunds unground grain ordinarily procurable, also 300 to 500 sheep. About 100 transport camels could generally be relied on here.

10 **KANDAHAR** .. 10 m. 4 f. Disused cart road;
 ——— (3,462') with slight repair pass-
 121 m. 4 f. able for carts again.

For description of this stage and of Kandahar *vide* Route 12, stage 6.

ROUTE No. 10-A.
RASHID KALA TO KAJIR.

Viâ the Birka Pass.

26 miles.

2 stages.

Authority.—Native information, 1894.

Epitome.

General description.—One of the roads connecting Rashid Kala with the Kadanai. It connects at Kajir with Routes in Northern Baluchistan, Routes 6 and 63.

Road.—First stage camel road ; 2nd stage mule road.

The Birka pass (7,880') in the 2nd stage is the only *obstacle* met with ; it presents no serious difficulty to laden mules.

Route open throughout the year.

Camping ground.—For 1 battalion at stage 1, and for 1 infantry brigade at stage 2.

Water.—For 1 infantry brigade at least at both stages.

Fuel.—Scarce at intermediate stage, plentiful at Kajir.

Fodder.—A little *bhusa* at Kajir ; good camel grazing throughout.

Supplies—200 to 300 maunds unground grain procurable from Kajir.

No. of stage and total dis- tance.	DETAILS.
1	PASHGHBARGAI .. 11 m. Camel road. KHULA (6,625').
11 m.	

General direction S. ; road passable for all arms throughout the stage.

The track leaves camp in an S.E. direction across the Tanda Ragah, with the Tanda *nala* parallel on the left. At 2 miles it drops to the camping ground in the bed of the Tanda *nala* as described in above route. At 2½ miles the Tanda *nala* makes a sharp bend to the W. and has to be crossed. There is a good stream of running water, and the direction is temporarily altered to the E. in order to avoid the steep banks which here exist on the left bank of the river. The

ROUTE No. 10-A—*contd.*

nala is only some 10× broad, and on reaching the right bank which is almost flush with the adjacent ground, the direction is again S. E. From this point the track lies in the bed of the Tanda *nala* for 8½ miles. The *nala* is confined between low hills throughout, and zigzags considerably; the water has to be crossed many times. The hills on either side are often precipitous, and average 50 to 100' in height. At its narrowest point the valley is 30× wide, while it expands to 200× in places. A noticeable feature of this route is the amount of cultivation that exists almost entirely on the left bank and belongs to the Pseins. The Afghan system of water channelling on both banks is most striking.

At 6 miles Mulla Jullundur Kala is passed, belonging to the Pseins. It lies on the left bank and is surrounded by low hills. It consists of 6 mud huts and a few blanket tents, and there is much cultivation in the vicinity. The river and track now make a detour to the left, and circle round the high precipitous hill which commands the village from the S. Two tracks branch off from here; one to the N. E. to Ata Muhammad Kala and the Tirkha *nala*, and the other to the E. to the Lewa *tangi* and Psein Dag, also one to the N. W. to Babakar Chahan. The river bed now narrows down and is only 30× wide. It continues thus for 2 miles. At 7½ miles is Mahaka China, where there is a spring on the left bank, marked by a grassy plot in the vicinity. The water is sweet and the supply plentiful. The *nala* makes a bend to the E. here and the track cuts across the intermediate space over higher ground, meeting the river bed again ¼ mile further on.

At 8½ miles is another Psein village, and the valley widens to 200×. Hills on both sides are now much higher, and the valley is again confined. At 10 miles it is 200× wide again. At 11 miles the Tanda *nala* makes a sharp bend to the W. and the Pashghargai *nala* comes in from the E.; the camping ground is about 200 yards up the latter on the left bank.

Camping ground.—For 1 battalion.

Water.—For 1 infantry brigade at least from the Tanda *nala*.

Fuel.—Scarce.

Fodder.—Camel grazing excellent

Supplies.—*Nil.*

ROUTE No. 10-A—*concl'd.*

2 **KAJIR** .. 15 m. Mule road.

(6,970')

26 m.

General direction S. W. Follow the Tanda *nala* and ascend the northern spur of the Nakhas hills; at about 7 miles the Birka *kotal* (7,880') is reached, whence there is a descent of about 1 mile by the Birka *ziarat nala* to the Psein Dag; ascent and descent of the pass present no serious difficulty to laden mules. At 12 miles cross the Dag Lora, the track then running due S. to camp. At 14 miles Kajir, a collection of mud huts and blanket tents.

Camping ground.—About 1 mile W. of Kajir; dimensions 400× by 150×.

Water.—160,000 gallons in 24 hours from 2 springs in the Taghratu *nala*.

Fuel.—Plentiful; there is much tamarisk jungle to the E. and W. of camp.

Fodder.—*Bhusa* to a limited extent from Kajir itself; good camel grazing.

Supplies.—200 to 300 maunds unground grain procurable from Kajir.

ROUTE No. 10-B.

RASHID KALA TO KAJIR.

Viâ the Shadikhak pass.

27 miles.

20 stages.

Authority.—Native information, 1894.

Epitome.

General description.—An alternative to Route 10-A.

Road.—Camel road practicable for wheeled artillery except over the Shadikhak pass where guns would have to be man handled.

This pass met with in the 2nd stage is the only *obstacle* encountered.

Route open throughout the year.

ROUTE No. 10-B—*contd.*

Camping ground.—For 2 infantry brigades at stage 1 and for half that force at stage 2.

Water.—For 1 infantry brigade, at least, at both stages.

Fuel.—Scarce at intermediate stage, plentiful at Kajir.

Fodder.—A little *bhusa* at both stages ; good camel grazing throughout.

Supplies.—200 to 300 maunds unground grain procurable from Kajir.

1	PERSHAI NALA	.. 14 m. 4 f.	Camel road, reported fit for wheeled artillery.
14 m. 4 f.			

General direction S. W. Leave Rashid Kala in an S. W. direction across open ground and at $2\frac{1}{2}$ miles join the *Wuchanala* which flows to the Kand river. This is followed for about 2 miles further. At $5\frac{1}{2}$ miles a track going N. W. to Maruf, by the Sam Narai pass, is crossed and there is a little water in pools here and there. The track still continues in the *nala* bed. At 6 miles there is an old graveyard and some encampments of the Psein tribe, also an open space for halting. At 10 miles there is water in the *nala* bed which is absorbed after a short distance, also patches of cultivation belonging to the Pseins.

At 11 miles the road bifurcates. That to the right is the Shadikhak pass road, that to the left goes more direct to Kajir. The track then ascends a slight *kotal*, and $\frac{1}{4}$ mile further on is a Psein encampment, called Zaku. where are two ponds or tanks for collecting water for cultivation purposes. At $11\frac{1}{2}$ miles is a *chashma*, a spring which is the source of the water in the tanks mentioned above.

At 13 miles the road again divides into two, the right-hand one leads to the Shadikhak pass, and the left-hand one direct to Kajir, both following the course of branch *nalas* which meet at this point. That to the right is called the *Pershai nala*, and takes a southerly direction ; that to the left branches off E. and appears to be the main *nala*. In the *Pershai nala* water is procurable in large quantities from a running stream. The land belongs to the Pseins who have some villages in the vicinity. Country is generally passable by all arms.

ROUTE No. 10-E—*concl'd.*

Camping ground.—For about 2 infantry brigades on open ground.

Water.—For the above force and more from the Pershai *nala*.

Fuel.—Scarce.

Fodder.—*Bhusa* procurable to a limited extent; good camel grazing.

Supplies.—*Nil*.

2	KAJIR	..	12 m. 4 f.
————	(6,970').		Camel road reported fit for wheeled artillery, except over the Shadikhak pass where guns would have to be man-handled.
27 m.			

Leaving camp the road follows Pershai *nala* S. for $\frac{1}{2}$ mile and then strikes off S. W. A branch road here goes off S. E. which is the road *viá* the Sheganrai pass to Kajir. The Shadikhak road after leaving the *nala* runs over undulating ground, and at $2\frac{1}{2}$ miles joins the Pachaman *nala*, which it follows S. as far as its head which is reached at about $3\frac{1}{2}$ miles. The road is now through the main spurs of the Nakhas range, and the Shadikhak pass is reached at about $6\frac{1}{2}$ miles. The pass is impracticable for wheeled artillery and guns would have to be man-handled over it.

From the Shadikhak pass a camel track runs due N. to Babakar Chahan (Route 10, stage 1) 14 miles distant.

After the pass the road runs S. E. to Kajir.

Camping ground.—About 1 mile W. of Kajir; dimensions $400 \times$ by $150 \times$.

Water.—160,000 gallons in 24 hours from 2 springs in the Taghratu *nala*.

Fuel.—Plentiful; there is much tamarisk jungle to the E. and W. of camp.

Fodder.—*Bhusa* to a limited extent from Kajir itself; good camel grazing.

Supplies.—200 to 300 maunds unground grain procurable from Kajir.

ROUTE No. 10-C.

ALA JIRGHA TO BABAKAR CHAHAN.

30 miles.

2 stages.

Authority.—Native information, 1894.

Epitome.

General description.—Forms part of a *kafla* route between Dera Ismail Khan and Kandahar. It connects at Ala Jirgha with Routes in Northern Baluchistan, Route 6 leading to Kamardin Karez.

Road.—Camel road throughout, second stage passable for wheeled artillery though heavy in places.

The following *obstacles* are encountered.

- (i) a *tangi* in the first stage ; blocked by rocks and boulders, difficult for laden camels, and impassable for wheeled artillery ;
- (2) the Hissal Ghat pass (7,370'), and the Pashghbargai pass (7,300') both in the first stage ; both passes easy.

Route open throughout the year.

Camping ground.—For 1 battalion only at the intermediate stage.

Water.—For 1 infantry brigade at least at the intermediate stage and at Babakar.

Fuel.—Scarce throughout.

Fodder.—Camel grazing excellent throughout.

Supplies.—Nothing appreciable.

No. of stage and total dis- tance.	DETAILS.
1 15 m.	PASHGHBARGAI .. 15 m. Camel road. KHULA (6,625').

Leaving camp, track leads N. W. following the Ala Jirgha *nala* over good ground. At 1 mile it makes a *détour* over the hills to the N. ; the track amongst the hills is difficult for laden camels and would have to be much improved for guns. It rejoins the *nala* at a solitary tree on the left bank where there is a praying-place. It is said

ROUTE No. 10-C—*contd.*

that about 1860, the headmen of all the adjacent tribes assembled on this spot to discuss the demarcation of their respective lands.

At 2 miles the track passes through a *tangi* much blocked by rocks and boulders, through which a stream of water runs, and ascends over a slight rise. This part is difficult for laden camels and impassable for wheeled artillery. Hence due W. through open ground by a good road. The *nala* is again met issuing from the Nakhas hills on the left and at $2\frac{1}{2}$ miles at a confined place among rocks, the track crosses the *nala* and follows its right bank.

At 3 miles is the village of Torkabaz (7,110') on the left bank of the Ala Jirgha *nala*. This belongs to the Pseins, and there the Afghan Commission camp was pitched. The space for camping here is unlimited. Thence the track ascends a spur from the summit of which a good view of the Psein Dag, and the Zhob hills including the curious conical hill Yogwash is obtained to the S. E. At $3\frac{3}{4}$ miles the track again follows the *nala* bed. It then passes along the right bank of the Pinakul *tangi* and again drops into the *nala*, which is now called the Pshai *nala*, in which there is some water and boulders. At $4\frac{1}{2}$ miles the track leaves the Pshai *nala* which has become shallow and dry, and ascends through low hills, to a height of 7,410', thence by a gentle descent between two high parallel hills where the going is uneven and the pathway often only 2 yards wide, for about $\frac{3}{4}$ mile. Descent of about 20' by zigzag pathway into the Psein Khula *nala* 50 yards wide, dry, and with a thick saline deposit. At $6\frac{3}{4}$ miles the track crosses the *nala*. On the left close to the track is a spring of drinkable water. Thence by an easy ascent, to the summit of the Hissal Ghat pass (7,370'), and turning S. W. by a gentle descent of $\frac{1}{2}$ mile to Sarkar Suhai China, at 8 miles, a halting place on a foot-path to Ala Jirgha. Here is a spring of water. Thence by a gentle ascent over the Pashghbargai pass (7,300') at $8\frac{3}{4}$ miles. At 9 miles enter the Saleh Dwarah *nala*, which runs W. and then S.W. At $10\frac{1}{2}$ miles the track is confined between rocks just broad enough to permit of the passage of laden camels, but would have to be improved for guns. Thence the track is confined between precipitous rocky hills, and some marshy ground is entered. At 11 miles is a high hill on the left and two springs of water issuing from

ROUTE No. 10-C—*contd.*

the rock. The track takes a zigzag course among the hills, which are known as the Pashghbargai hills on the right and as the Babar Ghoargai hills on the left. Two or three Psein villages and some patches of cultivation are passed. The ground is strewn with boulders and loose stones through which the roadway 5 yards wide winds. At 14 miles the direction changes from W. to S. W. and the track enters the Pashghbargai *nala*. The river bed is only 6 yards wide, high rocks on left. Then through low hills, some Psein cultivation and a spring. Camp is on the left bank about 200 yards from the junction of the Tanda with the Pashghbargai *nala*. The camp is commanded on all sides by hills.

The high peaks of the Nakhas range to the S. appear quite close, from the camps, but two ranges, *viz.*, the Saleh Dwarah and Babar Ghoargai exist in the intermediate space.

Camping ground.—For 1 battalion.

Water.—For 1 infantry brigade at least from the Tanda *nala*.

Fuel.—Scarce.

Fodder.—Camel grazing excellent.

Supplies.—*Nil.*

2 **BABAKAR CHAHAN** 15 m. Camel road fit for
 ————— (6,375') wheeled artillery,
 30 m. though heavy in places.

General direction N. W. The track now follows the Tanda *nala*. At 1 mile the valley is 200× wide; it rapidly becomes confined between hills on both sides. At 2½ miles it again widens to 200× and a Psein village is passed. At 3½ miles Mahaka China where is a spring on the left bank giving a plentiful supply of good water. The river bed now narrows to 30× and continues thus until at 5 miles Mulla Jullundur, Kala is passed, belonging to the Pseins. It lies on the left bank and is surrounded by low hills. It consists of 6 mud huts and a few blanket tents, and there is much cultivation in the vicinity. The river and track circle round the high precipitous hill which commands the village from the S. Three tracks branch off here; one E. to the Lewa *tangi* and Psein Dag; the second N. E. to Ata Muhammad Kala and the Tirkha *nala*, the third N. W. to Rashid Kala. The track to Babakar Chahan here branches off in an N. W.

ROUTE No. 10-C—*concl'd.*

direction. At $6\frac{1}{4}$ miles the Isaka *nala* is crossed, and about $6\frac{3}{4}$ miles the Wucha Mandai. The track then runs along a branch *nala* for 1 mile and then among low hills, crossing four or five small *nalas* until at 11 miles it reaches the Sra Pinakai plain. This it crosses in an N. W. direction over level open ground, and reaches Babakar Chahan at 15 miles.

<i>Camping ground.</i> —	} <i>Vide</i> Route 10, stage 1.
<i>Water.</i> —	
<i>Fuel.</i> —	
<i>Fodder.</i> —	
<i>Supplies.</i> —	

ROUTE No. 10-D.

BAIANZAI TO GWANZA.

30 miles.

3 stages.

Authority.—Native information.*Epitome.*

General description.—Route connecting Baianzai on the Kadai river with the main through Route 10. It connects at Baianzai with Routes in Northern Baluchistan, Route 6, to Kamardin Karez.

Road.—Camel road throughout; second stage passable for wheeled artillery.

The Lakarai Band in the third stage is practically the only *obstacle* encountered, and that presents no difficulty.

Camping ground.—For 1 infantry brigade at both intermediate stages.

Water.—For 1 infantry brigade, at least, at all stages.

Fuel.—Plentiful throughout.

Fodder.—Good camel grazing throughout.

Supplies.—Nothing appreciable.

No. of stage and total dis- tance.	DETAILS.	
1	DEH MULIAN	11 m. Camel road,
11 m.		

ROUTE No. 10-D—*concl'd.*

General direction N. Road through undulating uncultivated country. At 5 miles reach the Saliso Mand river which is followed to the end of the stage. At 11 miles Deh Mulian, consisting of a few hamlets surrounded by cultivation.

From Mulian a camel track runs W.N.W. to Kokal Kach, Route 10-E, stage 1, about 6 miles distant.

Camping ground.—For 1 infantry brigade.

Water.—For the above force and more from the Saliso Mand.

Fuel.—Plentiful.

Fodder.—Good camel grazing.

Supplies.—*Nil.*

2 **AGARAH** .. 14 m. Camel road passable
 ———— for wheeled artillery.

25 m.

General direction N. Country generally suitable for passage of all arms. At about 9 miles the road winds through the low hills of the Kotkai range, no difficulty. At 10 miles enter the cultivated district of Agarrah, a broad and level valley in which both corn and cotton are grown. It belongs to the Popalzai section of the Duranis. At 11 miles the Durani village of Agarrah (100 houses).

Camping ground.—For one infantry brigade.

Water.—For the above force and more.

Fuel.—Plentiful.

Fodder.—Good camel grazing.

Supplies.—Nothing appreciable.

3 **GWANZA** .. 5 m. Camel road.

30 m.

General direction N. At 3 miles cross a low range, the Lakarai Band, practicable for all arms except wheeled artillery. This range is the boundary between Agarrah and the Maruf district which belongs to the Barakzai Duranis. The descent is about 2 miles long, but quite easy. At the foot of the pass is Gwanza where the through Route 10 is joined.

Camping ground.—

Water.—

Fuel.—

Fodder.—

Supplies.—

} *Vide* Route 10, stage 2.

ROUTE No. 10-E.**MANAK NIKAH TO MARUF.**

22 miles.

2 stages.

Authority.—Native information, 1901.*Epitome.*

General description.—This route connects at Manak Nikah with routes in Northern Baluchistan, Route 29, a small branch route of the through (North Baluchistan) Route 6, to Kamardin Karez.

Road.—Camel road, passable for wheeled artillery except over the Manak Nikah *kotal* at the outset, where some labour would be necessary before it is practicable for wheeled guns.

The following *obstacles* are encountered:—

The Manak Nikah *kotal* in the first stage; already described.

The Khankai *kotal* in the second stage; no difficulty.

Route open throughout the year.

Camping ground.—For one infantry brigade at least at Kokal Kach, the intermediate stage.

Water.—For 1 infantry brigade at the intermediate stage.

Fuel.—Procurable from tamarisk trees.

Fodder.—*Bhusa* to an appreciable extent at Kokal Kach; good camel grazing throughout.

Supplies.—A considerable amount of wheat and barley is normally stored at Kokal Kach.

No. of stage and total dis- tance.	DETAILS.	
1	KOKAL KACH	8 m. Camel road passable for wheeled artillery, except over the Manak
8 m.		Nikah <i>kotal</i> at the beginning of the stage.

Nikah *kotal* at the beginning of the stage.

General direction N. E. Leaving the frontier at Manak Nikah (7,800'), the *kotal* of the same name is immediately ascended. The pass in its present state is impracticable for wheeled artillery, but with a little labour it would be passable. The descent is very gradual *viâ* the Sanzala *nala* and continues the whole way to Kokal Kach reached at 8 miles. Kokal Kach or Kokachal Sar, a Barakzai village (200 houses), is an important

ROUTE No. 10-E—*concl'd.*

trade centre, as it is the point on which all caravan routes leading across Toba to Maruf converge.

Camping ground.—For 1 infantry brigade at least.

Water.—For the above force and more from the Kokal Kach and Daurai streams.

Fuel.—To a limited extent from tamarisk trees.

Fodder.—*Bhusa* to an appreciable extent obtainable; good camel grazing.

Supplies.—Wheat and barley to some considerable extent is normally stored at Kokal Kach.

2	MARUF	..	14 m.	Camel road. Pass-
—————	(6,000')			able for wheeled artil-
22 m.				lery.

General direction N. The road runs at first down the Kokal Kach stream for about two miles, passing through a gap in the Kotkai Sar range. This *tangi* is said not to offer any *obstacle* for wheeled traffic. About here the Kokal Kach stream is crossed and shortly after the Daurai, which unites within a few miles lower down with the Kokal Kach stream and form the Salesun river. The Obatu range is then crossed by a low *kotal* known as the Khankai *kotal* passable for wheeled artillery, and the road then descends into the Arghastan valley, reaching Maruf about 14 miles from Kokal Kach.

Camping ground.—

Water.—

Fuel.—

Fodder.—

Supplies.—

and for description of Maruf.

} *Vide* Route 10, stage 3

ROUTE No. 10-F.

DOBANDI ON THE KADANAI TO MARUF.

40 miles.

3 stages.

Authority.—Native information, 1894.

Epitome.

General description.—A connecting route between the through Route 10, and Routes in Northern Baluchistan, Route 6, which is joined at Dobandi.

ROUTE No. 10-F—*contd.*

Road.—Camel road throughout.

No *obstacles* are encountered along the route, which is open throughout the year.

Camping grounds.—Stages 1 and 2 for one infantry brigade, and for a division at Maruf.

Water.—For one infantry brigade at least at intermediate stages, and for a division at Maruf.

Fuel.—Plentiful throughout from the wooded hills.

Fodder.—*Bhusa* at stages 2 and 3; good camel grazing throughout.

Supplies.—1,000 maunds unground wheat and barley at stage 2; considerable supplies at Maruf.

No. of stage and total dis- tance.	DETAILS.
1 <hr/> 10 m.	GARAI OR KHAJOA 10 m. Camel road. (5,100')

On leaving camp the road follows the course of the Kadanai river in a north-westerly direction passing at once the Tashrabat river on the left. The valley is much more open, and the course of the river less zigzag. At $1\frac{3}{4}$ miles the Tajora *nala* comes in on the left, in which there is a plentiful flow of water, which is diverted on entering the bed of the main river into a water channel for the cultivation down stream. Up this *nala* is a path to Chaman by three stages, said to be passable though difficult for laden camels.

At $2\frac{3}{4}$ miles the Landai *nala* joins the main stream on the left. It is a dry water-course. At 3 miles is Wala and the Wala *nala* which comes down to meet the left bank of the river. It is a narrow water-course, with a good stream of water, between precipitous hills. It has a very abrupt descent to the Kadanai. The cultivation on the opposite banks belongs partly to the Alikozai and partly to the Achakzai tribe. There is a little room for a camping ground. The river now bends nearly N. and $1\frac{1}{2}$ miles further on the Samakai *nala* joins the right bank. This is at $4\frac{1}{2}$ miles. There is an open space here on the right bank of the Samakai *nala* where the mission camp was pitched

ROUTE No. 10-F—*contd.*

in 1894. The ground is sandy and covered with scrub, and has a gentle slope to the river bed. Here there is—

Camping ground.—For 1 infantry brigade.

Water.—For the above force at least from the river.

Fuel.—Plentiful from the hills close by.

Fodder.—No grass obtainable; fair camel grazing.

Supplies.—*Nil.*

Continuing N. W. down the Kadanai, at $5\frac{1}{2}$ miles on the right bank is the Afghan levy post of Manawa or Manah, where there is also much cultivation, and a *ziarat* belonging to the Alikozai Duranis. On the opposite bank about $\frac{1}{4}$ mile further on is a large amount of cultivation, and the place is called Shin Narai Karwinda. The direction is still N. W., and the road continues along the river bed which is wide, but flanked by generally inaccessible hills for 4 miles. At 10 miles is the Alikozai village and cultivation of Garai, and here the river makes a bend to the S. W.

Camping ground.—For 1 infantry brigade at least.

Water.—For a division if necessary from the river.

Fuel.—Plentiful from the adjacent hills.

Fodder.—Good camel grazing,

Supplies.—*Nil.*

2 **SALESUN** .. 15 m. Camel road.

25 m.

General direction N. E. The track at once leaves the bed of the Kadanai and enters the Sar Tash *nala*, which here is about $15\times$ wide, the going is good and the road fit for all arms for 2 miles. Here the *nala* branches into two; one branch going off to the N. E., the other to the N.; the track to Maruf runs up the latter (N.) branch, and the *nala* at once becomes confined. At $3\frac{1}{2}$ miles it is only about 1 yard wide, and this confined portion continues for $\frac{3}{4}$ mile. On both sides are soft hills of loose shale and it would be easy to widen this bit and make a road if necessary. In its present state it is practicable for laden mules. There is a small stream of water in the *tangi*. This confined portion culminates in a small rise on reaching the summit of which there is a gentle drop in an N. W. direction over low hills to the Narin *nala*. The road runs along the Narin *nala* which is excellent going and fit for all arms, for about 3 miles, when it branches

ROUTE No. 10-F—*concl'd.*

into two parts. At $4\frac{1}{2}$ miles, one continues N. E., the other turns off to the N. The latter runs up to the Narin peak on the left. The former (N. E.) is the road to the Salesun river. The remaining portion of this route is as it was seen from Narin peak (8,200'). Continuing up the Narin *nala* for another mile its limit is reached, and the direction changes more to the E. At 9 miles the Ghora *nala* is entered, and the road follows this for about 6 miles, joining the Salesun river, which comes in from the S. E., just above the junction of the latter river with the Arghastan river. There appear to be many villages and a quantity of cultivation along the Salesun, and ample room for a camping ground. The road by the Ghora *nala* appeared to be among low hills all the way. Camp is reached at 15 miles.

Camping ground.—For at least 1 infantry brigade.

Water.—For the above force and more from the Salesun river.

Fuel.—Procurable from the adjacent hills.

Fodder.—About 1,000 maunds *bhusa* normally procurable; good camel grazing.

Supplies.—About 1,000 maunds unground wheat and barley could be collected from the Salesun villages.

3

MARUF .. 15 m. Camel road.

40 m.

General direction N, E. At 3 miles the Arghastan river is reached whose left bank the road now follows. The Samai range flanks the right bank of the river and to the S. of the left bank are low hills, the northern spurs of the Kotkai range. Henceforward to Maruf the road is identical with that section of stage 4, Route 10.

Camping ground.—

Water.—

Fuel.—

Fodder.—

Supplies.—

} *Vide* Route 10, stage 4.

ROUTE No. 10-G.

SARBILAND TO DABRAI.

47 miles.

4 stages.

Authority.—Massy (from native information), 1894.*Epitome.*

General description.—A connecting route between the three through Routes 10, 11 and 12. It would appear to be the easiest for use in an advance from the Chaman plain to the Arghastan valley and thence to Kalat-i-Ghilzai.

Road.—Camel road throughout, probably passable for wheeled artillery.

The following *obstacles* are encountered :—

In the 1st stage the Lora and Arghastan rivers ; temporarily impassable during floods.

Route open throughout the year.

Camping ground.—For 1 infantry brigade at least at the intermediate stages.

Water.—For the above force at least, at all stages.

Fuel.—Procurable at all stages.

Fodder.—Good camel grazing throughout.

Supplies.—Nothing appreciable at the intermediate stages.

No. of stage and total dis- tance.	DETAILS.
1	BADOZAI .. 6 m. 4 f. Camel road.
6 m. 4 f.	

The road leaves Sarbiland in a south-westerly direction over sandy soil cut up by a small water-course. At about 1 mile from Sarbiland the main road is left, and the Lora river is crossed at a point opposite the pass over the Shaikh Khan hill ; crossing easy, except when river is swollen by floods, when it is temporarily impassable. An easterly direction is then taken along the bank until an old brick tower is reached, when the road turns to the S. and passes round the E. end of the Shaikh Khan hill. The ground between the tower and the Shaikh

ROUTE No. 10-G—*contd.*

Khan hill is under cultivation, and, when irrigated, is difficult for the passage of wheeled carriages and camels, and it would take a considerable time for a large force to get over it. Cavalry, laden mules and ponies should be sent over the Shaikh Khan pass. The ground between the hill and the Arghastan river is rough and stony, but passable for guns. The Arghastan is crossed opposite Badozai, crossing similar to that of the Lora river. Between the river and the village is a strip of cultivated land crossed by water-courses.

At 6½ miles the Popalzai village of Badozai (60 houses).

Camping ground.—For 1 infantry brigade S.E. of the village.

Water.—For 2 or 3 infantry brigades from the Arghastan.

Fuel.—Procurable from the adjacent hills.

Fodder.—Good camel grazing along the river bank and in low hills above the village.

Supplies.—*Nil.*

NOTE.—Although this is a short march it would be inadvisable to make it longer as 2 rivers have to be crossed.

2 **CAMP KAREZ ..** 10 m. 4 f. Camel road.

17 m.

General direction due S. On leaving Badozai the road leads S.W., through the low hills overlooking the village. At 5 miles the Kanaksai *nala*; no difficulty. The road then crosses a wide and level plain called Bala Jer leaving the village of Buka Khan about 1 mile to the right. With the exception of a few places near the Kanaksai *nala* and near camp Karez the road is good and passable for all arms. The *karez* is at the extremity of Buka Khan hill. At about 10½ miles camp Karez.

Camping ground.—For 1 infantry brigade, perhaps more.

Water.—For the above force and more from the *karez*; there is also a tank near camp where animals could well be watered.

Fuel.—Procurable to a limited extent.

Fodder.—Good camel grazing.

Supplies.—*Nil*; there is only 1 small village in the neighbourhood, called Ayubzai, about 1 mile N. of camp.

ROUTE No. 10-G—*concl'd.*

3 **LOI KAREZ** .. 15 m. Camel road,

32 m.

General direction due S. Leaving camp Karez the road runs S.W., across a sandy plain on which there are a few villages of about 8 to 10 houses each. A few small *nalas* are crossed at about $2\frac{1}{2}$ miles from the *karez*. At 12 miles, leaving the Torghar hills on the right, the road enters a large *nala*, and follows its bed, which is rough and stony, until it arrives at the village of Khwas Muhammad, on the left bank. The road then leaves the *nala*, crosses some low, rocky hills to the left, and after passing over an undulating, sandy plain arrives at the large village of Loi Karez.

Camping ground.—For 1 infantry brigade, perhaps more, E. of village.

Water.—For the above force from the *karez*.

Fuel.—Procurable to a limited extent.

Fodder.—Good camel grazing.

Supplies.—*Nil.*

4 **DABRAI** .. 15 m. Camel road. General
direction S.W.

47 m.

Leaving Loi Karez, Shah Pasand is passed at 1 mile on the right of the road. At 2 miles Route 11-A is crossed near the village of Asad. At about 6 miles Route 11, the northern of the 3 through routes from New Chaman to Kandahar, is crossed near the village of Mulla Dost Muhammad. The soil is here sandy and the ground undulating.

At the 11th mile the Kushobai *nala* is met, but it offers little difficulty for the passage of wheeled carriage. From the Kushobai *nala* to Dabrai, the country is perfectly open and easily traversed in any direction. The number of villages here show that this district is thickly populated. At 15 miles Dabrai, stage 2 of Route 12, the old cart road from New Chaman to Kandahar.

Camping ground.—

Water.—

Fuel.—

Fodder.—

Supplies.—

} *Vide* Route 12, stage 2.

ROUTE No. 11.

NEW CHAMAN TO KANDAHAR.

Viâ Saiadan and the Barghana pass.

72 miles.

7 stages.

Authority.—Afghan war records, 1879.

Epitome.

General description.—One of the 3 main through routes from the railhead at Chaman to Kandahar, formerly known as the “northern” or “alternative” route.

Road.—Camel road to Mandi Hissar (stage 6), thence disused cart road made by the British in 1880; with slight repair passable for carts.

The following *obstacles* are encountered :—

(a) Rivers and streams—

(i) The Kadanai river in the first stage.

(ii) The Kushobai and Mel rivers in the third stage.

(iii) The Arghastan river in the fifth stage.

(iv) The Tarnak river in the sixth stage.

All the above are crossed by easy fords, but during floods the Arghastan is temporarily impassable.

(b) Passes—

The Putu-kai *kotal* in 4th stage ; no difficulty.

The Barghana pass in fifth stage ; an easy road through low hills and broken ridges.

Route open throughout the year.

Camping ground.—No details regarding stage 2 ; for a division at stages 5, and 6 ; for 2 infantry brigades with proportion of divisional troops at remaining stages except stage 4, where there is space for 2 battalions only.

Water.—At stage 1 amount uncertain ; for a division at stages 2, 5, and 6 ; for at least 2 infantry brigades with proportion of divisional troops at remaining stages.

Fuel.—At stages 1, 2 and 4 in the form of small bushes (wild sage and southern wood(; stage 3 plentiful from the wooded hills near by ; stages 5 and 6 scarce.

Fodder.—Excellent *hariala* grass except in winter, at stages 3, 4 and 5 ; *bhusa* to a limited extent procurable at stages 1, 5 and 6 ; excellent camel grazing except in winter at all stages except at stage 1, where it is scarce.

ROUTE No. 11—*contd.*

Supplies.—Unground grain to a limited extent at stages 1, 5 and 6.

For description of Kandahar and supplies available there, *vide* Route 12.

No. of stage and total dis- tance.	DETAILS.	
1 <hr style="width: 50px; margin: 0 auto;"/> 12 m.	(AKBAR) AKHTAR.	.. 12 m. Camel road, passable for wheeled artillery.

Leaving new Chaman (4,450'), the road runs N.W. over the open plain, forming the northern arm of a fork which it makes with the old cart road (Route 12). The track is not clearly defined and the ground is stony practically the whole way and there is a gradual fall to the first (and main) channel of the Kadanai which is reached at 9 miles. The Kadanai, almost always dry, is crossed here and presents no difficulty except after heavy rain on Toba, when it may be impassable for 24 hours. At 9½ and 10½ miles two smaller channels of the Kadanai which offer no difficulty. At 12 miles the 2 villages of Akbar and Akhtar formerly known as Rasul Khan and Mulla Amir.

Camping ground.—For at least 2 infantry brigades with proportion of divisional troops.

Water.—Exists, but there is no information regarding amount.

Fuel.—In the form of small bushes (wild sage and southern wood) procurable.

Fodder.—A few hundred maunds *bhusa* procurable; camel grazing scarce; *nil* in winter.

Supplies.—A few hundred maunds unground grain available.

2 <hr style="width: 50px; margin: 0 auto;"/> 20 m.	SAIADAN	.. 8 m.	Camel road passable for wheeled artillery.
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Road continues N.W. over an open plain partially cultivated, track not clearly defined. At 6 miles Mulla Dost Muhammad on left bank of a tributary channel (generally dry) of the

ROUTE No. 11—*contd.*

Khushobai river; thence track turns nearly due N. and continues so to the end of the stage.

At 8 miles Saiadan.

Camping ground.—No details.

Water.—For a division probably from 2 *karez*s; one near camp itself which provides ample water, the other 4 miles to the S. called Shah Karez.

Fuel.—In the form of small bushes (wild sage and southern wood) procurable.

Fodder.—Good camel grazing except in winter.

Supplies.—Practically *nil*.

3	TANDUKAI ..	12 m.	Camel road passable
—————	KAREZ.		for wheeled artillery.
32 m.			

Immediately after leaving Saiadan the Khushobai stream is crossed by an easy ford; the road then turns nearly due W. over the Khushobai plain and continues in this direction to about 6 miles when it gradually veers N.W. At 9 miles the Bedak wells and halting place of the same name. Here there is—

Camping ground.—Excellent, and sufficient for 2 infantry brigades at least; some very fine willow trees in the vicinity.

Water.—For a division and more from the Bedak wells, 10 to 12 in number, wells perennial, water 7' below the surface and exceedingly pure.

Fuel.—Plentiful among the hills close at hand.

Fodder.—Abundant *haria* grass except in winter; good camel grazing except in winter.

Leaving the wells the road leads N.W. and immediately crosses the Mel river not far from its source; river here fordable anywhere; at 12 miles the halting place known as Tandukai, where there is no village but an excellent *karez*.

Camping ground.—For at least 2 infantry brigades with proportion of divisional troops.

Water.—For the above force at least from the *karez* mentioned.

Fuel.—Plentiful.

Fodder.—Abundant *haria* grass in the spring and summer; excellent camel grazing except in winter.

Supplies.—*Nil*.

ROUTE No. 11—*contd.*

4 **BALOL KAREZ** .. 14 m. Camel road, passable
 ——— (**BARGHANA.**) for wheeled artillery.
 46 m.

General direction N.W. At about 8 miles the Malikiar range is crossed by the Putu-kai *kotal*; ascent and descent fairly easy; road good but stony. The road then leads across the Putu-kai plain and at about 12 miles reaches the first of the broken ridges which divide the Malahed range from the valley of the Arghastan and which is crossed here by the Barghana pass. At 14 miles Balol Karez about the centre of the pass.

Camping ground.—For 1 or 2 battalions near Balol Karez itself and for one infantry brigade at least near Saiyid Muhammad 1 mile to the N.

Water.—Excellent and abundant; it was calculated in 1879 that the discharge from the *karez* was 1 cubic foot per second (probably half that amount in the hot weather); tank for watering animals near by.

Fuel.—In the form of small bushes (wild sage and southern wood) procurable.

Fodder.—*Hariala* grass in great quantities except in winter; camel grazing good, scarce in the winter.

Supplies.—*Nil.*

At Balol Karez Route 11-A, an alternative route between New Chaman and this stage, joins this route.

5 **NAO DEH (DEH-** 7 m. 4 f. Camel road, passable
 ——— **I-NAO)** for wheeled artillery.
 53 m. 4 f. (3,626').

Road continues through the Barghana pass for about 2 miles when it emerges on to the Makua plain. At 2½ miles the Makua *karez* is passed; water not very good. Road now becomes very easy across undulating plains.

At about 4 miles a low watershed is crossed and the valley of the Arghastan is entered, the road very gradually descending to the river itself, which is reached at 6 miles and forded. Arghastan river at this point has a shallow bed about 180× wide with a fair flow in the winter and spring of brackish water about 1' deep in 2 channels separated by a low strip of tamarisk jungle; generally quite dry in the summer and autumn; river bed is of deep, heavy sand with long elevated drifts of sand and

ROUTE No. 11—*concl'd.*

stones between which flood water tears with great force ; banks only a few feet high of conglomerate and shingle easily ramped ; wheeled artillery might have to be man-handled over parts of the river bed shortly after floods ; during floods the river temporarily is impassable. At $7\frac{1}{2}$ miles Deh-i-Nao, a collection of domed huts, near which a large irrigation canal runs.

Camping ground.—For a division between the village and the river.

Water.—For a division from the Arghastan except in the summer and autumn, when there would only be sufficient water for 1 or 2 infantry brigades from 5 wells, 15' to 20' deep.

Fuel.—Scarce.

Fodder.—*Hariala* grass abundant except in winter ; lucerne also procurable except in winter ; *bhusa* to some considerable extent ; excellent camel grazing except in winter.

Supplies —A few hundred maunds unground grain procurable.

6	MANDI HISSAR.	8 m.	Camel road, easily convertible to a cart road.
—————			
61 m. 4 f.			

Road continues N.W. over a nearly level plain ; an easy march. At 8 miles Mandi Hissar (100 houses), inhabitants Nurzais and Barakzais.

Here Route 10 leading from the Zhob to Kandahar joins this route. Mandi Hissar is also the 8th stage of that route.

<i>Camping ground</i> .— <i>Water</i> .— <i>Fuel</i> .— <i>Fodder</i> .— <i>Supplies</i> .—	}	Vide Route 10, stage 9.
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7	KANDAHAR.	10 m. 4 f.	Camel road passable for wheeled artillery.
—————	(3,462').		
72 m.			

For description, *vide* Route 12, stage 6, with which this stage is identical.

ROUTE NO. 11-A.

NEW CHAMAN TO BALOL KAREZ (BARGHANA).

Viâ the Kussa pass.

63 miles.

5 stages.

Authority.—Afghan war records, 1880 ; native information, 1900.*Epitome.*

General description.—An alternative route to the first 4 stages of Route 11. It is longer, but might be useful for cavalry protecting the flank of a march by the other route. In September 1880 the cavalry brigade of the Kabul-Kandahar Field Force returning to India partly followed this route from Kaandahar. The country had then undergone three years' drought and the guides asserted that there was no water either at Bedak or Sarwar Karez. The brigade therefore made one march of 24 miles from Barghana to Mulla Mustapha. Not a drop of water was found during the whole march and the followers suffered much from thirst.

Road.—Camel road throughout could be made passable for wheeled artillery with a little labour, which is mostly required at the Kussa pass.

The following *obstacles* are encountered :—

- (i) The Kangasu stream in second stage ; no difficulty.
- (ii) The Kadanai river in third stage ; no difficulty.
- (iii) The Kussa pass in fourth stage ; long and narrow defile requires clearing before being passable by wheeled artillery.
- (iv) The Fatukhel *kotal* in fifth stage ; an easy pass.
Route open throughout the year.

Camping ground.—For a division at stage 4, and for at least 1 infantry brigade at the remaining intermediate stages.

Water.—For an infantry brigade at least at all stages and for a division at the fourth stage.

Fuel.—Tolerably abundant at the first stage, little information regarding other intermediate stages, but believed to be scarce.

ROUTE No. 11-A—*contd.*

Fodder.—Abundant grass except in winter at the second stage only; *bhusa* at third and fourth stages; fair to good camel grazing throughout except in winter.

Supplies.—Unground grain to an appreciable extent available at the third and fourth stages.

No. of stage and total dis- tance.	DETAILS.
1	SHER-I-ObA .. 9 m. 4 f. Camel road.
9 m. 4 f.	

Leaving New Chaman the road leads nearly due E.; road is good though stony and slightly undulating. At $6\frac{1}{2}$ mile the halting place Sina, at the entrance of the Boghra pass, which leads to that part of the Toba plateau known as Tobin. A good stream issues here from the Boghra ravine and affords a copious supply of water.

The present route turns due N. at Sina, thus avoiding the Boghra pass and runs northward along the base of the hills.

From Sina to the end of the stage the road is stony and crosses numerous water-courses and small ravines, trying to laden camels. At $9\frac{1}{2}$ miles cross a large water-course known as the Sher-i-Oba. On the further or right bank is an artificial water channel in which runs a strong stream, alongside which is a suitable site for a camp.

Camping ground.—For 1 infantry brigade at least.

Water.—For the above force at least from the water-course referred to.

Fuel.—Firewood tolerably abundant.

Fodder.—Good camel grazing except in winter.

Supplies.—*Nil.*

2	AKHTAR .. 11 m. 4 f. Camel road. KHAN,
---	---

21 m.

General direction N. At $3\frac{1}{2}$ miles reach the summit of a rise from which is visible the whole of Margha Chaman, a small grassy plain, $1\frac{1}{2}$ miles by 1 mile, covered with excellent grass and perfectly level, making a splendid site for an

ROUTE No. 11-A—*contd.*

encampment. At about 8 miles the Kanjasu stream is crossed ; no difficulty. At $11\frac{1}{2}$ miles a few Nurzai hamlets known as Akhtar Khan, $1\frac{1}{2}$ miles S.W. of the Margha Chaman.

Camping ground.—For 1 infantry brigade at least.

Water.—For the above force and more from *karezes*.

Fuel.—Scarce.

Fodder.—Abundant grass can be obtained except in winter from Margha Chaman.

Supplies.—*Nil.*

3 MULLA MUS- 13 m. Camel road.
TAPHA.

34 m.

The road now bends sharply to the left and runs nearly due W.

At 2 miles the dry channel of the Kadanai is crossed; no difficulty. At 3 miles the camping ground where Sir Hugh Gough's cavalry brigade * of the Kabul-Kandahar Field Force camped on the 25th September 1880. At 6 miles the Nurzai village of Shah Pasand. From here a camel track runs due N. through the Durani country to the villages in the upper reaches of the Arghastan river.

The road now gradually veers N.W. The country is a wide open plain in which are various hamlets and camps of Nurzais; but the former being mere groups of mud huts without trees are invisible in the bare plain at a short distance. There is some cultivation watered by *karezes*, and a few dry beds of water-courses are crossed ; the road is good all the way. About $1\frac{1}{2}$ miles before reaching Mulla Mustapha, the road passes 1 mile N. of Saiadan, stage 2 of Route 11. At 13 miles Mulla Mustapha, a group of Nurzai hamlets on the right bank of the Khushobai stream which is crossed just before camp.

Camping ground.—For 1 or 2 infantry brigades on a site just N. of the village.

Water.—For the above force and more from *karezes* and the stream.

* Brigade composed as follows :—

9th Lancers.

3rd Bengal Cavalry.

3rd Punjab Cavalry.

Central India Horse.

}
}

3 squadrons from each Regiment.
Total 12 squadrons.

ROUTE No. 11-A—*contd.*

Fuel.—Scarce.

Fodder.—A few hundred maunds *bhusa* procurable ; fair camel grazing except in winter.

Supplies.—A few hundred maunds unground barley normally procurable.

4 **SARWAR** 15 m. Camel road.
 ———— **KAREZ.**

49 m.

Road now leads N. for 3 miles over the Khushobai plain, when it leads slightly to the N.W. and runs through low hills. At about 8 miles the Hadda hills are reached, through which the Kussa pass, a long and narrow defile, winds in a northerly direction ; the defile is about 200× wide, road indifferent, and pass would require clearing before being practicable for wheeled artillery. The pass is left at 14 miles and the road then runs due N. over undulating country to the camp which is on the Mulla plain just N. of the Barakzai village of Sarwar Khan.

Camping ground.—For a division on the plain. †

Water.—Excellent and sufficient for the above force from several *karez*s.

Fuel.—Scarce.

Fodder.—*Bhusa* to an appreciable extent ; camel grazing good except in winter.

Supplies.—Unground grain to an appreciable extent normally procurable.

5 **BALOL KAREZ** .. 14 m." Camel road.
 ———— **(BARGHANA).**

63 m.

Leaving Sarwar Karez the road bends sharply to the W. and maintains this direction throughout the stage. For the first 7 miles the road, which is excellent, traverses the Malhed plain. Between the 7th and 8th miles the Fatukhel *kotal* is crossed, an easy pass over a range of hills dividing the Malhed and Fatukhel plains ; road over the latter plain is stony, but fairly good. At 14 miles Balol Karez.

Camping ground.—

Water.—

Fuel.—

Fodder.—

Supplies.—

} *Vide* Route 11, stage 4.

ROUTE No. 11-A—*concl'd.*

Barghana or Balol *karez* can also be reached from Mulla Mustapha by a direct road branching to the left (N.W.), after passing the first rise from the Kushobai valley, at 1 mile from Mulla Mustapha camp N. of the hamlets. Thence by narrow difficult path through a long ridge, after which the route lies nearly due W. over a plain dotted with low hills and at about 8 miles passes near and S. of a steep rocky cliff, the end of the Hadda range. Here in winter may be found a nomad camp, and the locality is apparently known as Bedak, although the Bedak of Route 11 is 3 miles, or so, S.W. in a small valley. Tandukai on the same route is probably 3 or 4 miles due W. There are also wells a mile or two W. of the road.

After passing the end of Hadda the road leads N.W. over an open, bare plain for about 10 miles and Route 11 comes in at or near the Barghana *kotal*. Thence to Barghana 6 miles; total from Mulla Mustapha 24 miles. On the whole the road is good and it is probable the march might be broken at the wells above mentioned or at Tandukai.

ROUTE NO. 12.

NEW CHAMAN TO KANDAHAR.

Viâ Mel Karez.

71 $\frac{1}{4}$ miles.

6 stages.

Authority.—Afghan war records, 1879-80; O'Sullivan, 1886; General Officer Commanding, Quetta, 1892; native information, 1905-06; native information, 1912.

Epitome.

General description.—This is the most important of the three routes from the railhead at Chaman to Kandahar.

Road.—Disused cart road throughout, made by the British in 1880; with slight repair passable for carts.

ROUTE No. 12—*contd.*

The following *obstacles* are encountered:—

- (i) The Kadanai river in the first stage; usually no difficulty, but it has been known to be unfordable for 2 or 3 days after heavy rain.
- (ii) The Kushoba river in the second stage; no difficulty.
- (iii) The Mel river in the third stage; no difficulty.
- (iv) The Arghastan river in the fifth stage; temporarily impassable after heavy floods.
- (v) The Tarnak river in the last stage; difficult after heavy rain.

Route open throughout the year.

Camping ground.—For a division at all stages.

Water.—For a division at all stages, but at stages 1 and 2 supply is liable to be intercepted.

Fuel.—Scarce throughout.

Fodder.—*Bhusa* at stages 1, 2, 4, and 5; camel grazing fair to good except in winter, when there is practically none.

Supplies.—Afghan Government granary at Spin Baldak 5½ miles from Chaman; unground grain to a limited extent at stages 1, 2, 4 and 5; 300 to 500 sheep at stages 3 and 5.

For supplies, etc., at Kandahar, *vide* stage 6.

No. of stage and total dis- tance.	DETAILS.
1	WAT THANA .. 10 m. Disused cart road, (GATAI). with slight repair 10 m. (3,974'). passable for carts again.
	General direction N.W. At 5½ miles, on the right of the road, the well-known fort at the foot of the western spur of the Spin Baldak hill (4,230'). Fort known as Kala-i-Jadidi; also known as Kala-i-Baldak, so named after the hill; rectangular in shape with a double line of walls, both with 2 tiers of loopholes; inner walls 4' thick at the top and 6' at the bottom; walls separated by an open space 20× broad, surrounded by a ditch 25' deep, except on the eastern face where a rampart has been made; about 2,000 men could be accommodated in the fort; normal garrison 500 <i>khasadars</i> . Wells have been dug inside the inner quadrangle, but a good supply of water has not been found, and water is now brought by a channel from the hills some

ROUTE No. 12—*contd.*

miles distant, but this supply also is precarious. Granary inside the fort in which is stored Government revenue grain from adjoining districts.

Western spur of the Spin Baldak hill is crowned by 2 towers, distant about 350× from the centre of the fort and intended to be connected with its eastern face by three high loop-holed walls, which, however, are still uncompleted.

Adjoining the fort is a *bazzar* with two rows of shops, a collection of houses, the residences of officials and Achakzais, a caravansarai 120× square, mud building with mosque in centre and a deep well just outside, and a Government garden 400× square surrounded by high walls with a tower at each corner. Here there is—

Camping ground.—For a division on the open plain N.W. of the fort.

Water.—Probably only sufficient for 1 or 2 infantry brigades from the well outside the *sarai* and the water channel referred to above.

Fuel.—Scarce.

Fodder.—*Bhusa* to an appreciable extent could be collected from the surrounding Achakzai villages.

Supplies.—Unground wheat and barley to a very large extent, stored in the granary inside the fort.

At 7 miles 3 furlongs cross the first branch of the Kadanai river and at 9 miles 3 furlongs the second or main branch; the river bed here is about 500× broad; the stream ordinarily narrow and from 1' to 2' deep, and sometimes dry in the summer, but it has been known to be unfordable for 2 or 3 days after heavy rain. At 10 miles the small *khasadar* post now known as *Wat thana* .

Camping ground.—For a division.

Water.—Sufficient for the requirements of the above force could be obtained by artificial channels from the Kadanai whose perennial stream, however, is diverted near the Murgha Chaman, some 10 miles to the N.E., for irrigation purposes. Arrangements would have to be made to avoid this.

There is also a tank near camp which is usually full of good and clear water.

Fuel.—Scarce.

Fodder.—*Bhusa* to an appreciable extent could be collected from the adjoining villages; camel grazing fair, except in winter.

ROUTE No. 12—*contd.*

Mel river is at this point, $\frac{1}{4}$ mile N. of Mel Manda village. The crossing here is far easier than at the place where the Dori river Route (Route 13) crosses this same stream 5 miles to the S. The road now gradually ascends to Mel Karez reached at 12 miles. The *khasalar* post is $\frac{1}{2}$ mile to the left of the road; outer walls in good order, but the post has fallen somewhat into disrepair (1905); fortified *sarai* adjoining the road completed in 1905; inhabitants in this vicinity are Kakozais.

Camping ground.—For a division on an open plain; soil gravelly.

Water.—For the above force and more from a good *karez* and the Mel river $1\frac{1}{2}$ miles distant, where all animals would be watered.

Fuel.—Scarce.

Fodder.—Good camel grazing except in winter.

Supplies.—No unground grain, but sheep and goats procurable in large numbers; also transport camels.

4	ABDUL RAHMAN 14 m.	Disused cart road; with
45 m. 6 f.	(TAKHTAPUL).	slight repair passable for carts.

Road continues N.W. At 2 miles 5 furlongs, cross the crest of the Ghlo *kotal*, a pass over a small range of hills in otherwise open country; at $3\frac{1}{2}$ miles the road forks, both branches leading to Abdul Rahman, but that turning abruptly to the right is the cart road which now runs through stony, undulating, open country. At 10 miles 3 furlongs the ruins of Saifulla village. The whole neighbourhood here is known as Takhtapul. The last 2 miles of this stage is over heavy surface sand. At 14 miles Abdul Rahman, where there is a fortified *sarai* completed in 1906, an old post with a customs and passport official, also a *masjidi*.

Camping ground.—For a division on an open plain.

Water.—For the above force from *karez*es.

Fuel.—Scarce.

Fodder.—A few hundred maunds *bhusa* procurable; camel grazing scarce; *nil* in winter.

Supplies.—A few hundred maunds unground grain,

ROUTE No. 12—*contd.*

5 **MANDI HISSAR.** 15 m. Disused cart road ;
with slight repair
60 m, 6 f. passabl for carts.

Road continues N.W. At 2 miles cross a low *easy kotal* ; at 4 miles the large domed villa e of Deh-i-Haji, most prosperous in 1880 and from which supplies could always be obtained, but reported in 1905 as being deserted and falling into ruin, owing to the inhabitants having migrated through being troubled by travellers on the main road. The water here is plentiful owing to irrigation streams but of indifferent quality.

Deh-i-Haji is the 4th stage on the Dori river Route which joins the present route at this point coming in from the S. The two routes are contiguous for the next mile and a half, but no difficulty is anticipated in keeping the two routes separate as the country is an open, hard, stony plain ; at 5½ miles the road bifurcates, the present route diverging to the right, while Route 13 leads straight on to Khushab and thence to Kandahar.

At 7 miles reach the left bank of the Arghastan ; river here has a shallow bed about 200× wide with a fair flow in the winter and spring of brackish water about 1' deep ; generally quite dry in the summer and autumn, but after heavy rain river is temporarily impassable owing to floods. At 8 miles the Barakzai village of Dahi on the right of the road and at 11 miles the small village of Kalacha-i-Muhammad Jan. At 15 miles Mandi Hissar (100 houses), inhabitants Nurzais and Barakzais ; fortified *sarai* was built here in 1906.

Camping ground.—For a division, though limits are liable to be restricted owing to cultivation ; camping ground in 1879-80 was protected by a walled, defensible enclosure and ditch, which was in good order in 1893, but this camp was only sufficient for 2 brigades.

Water.—For the above force from *karez*es near camp and from the Tarnak river 2 miles N. of camp, where animals could be watered.

Fuel.—No information.

Fodder.—A few hundred maunds *bhusa* normally available ; camel grazing only fair for most of the year, *nil* in winter.

Supplies.—A few hundred maunds unground grain ordinarily procurable, also from 300 to 500 sheep. About 100 transport camels and 300 *yabus* could generally be relied on for her.

ROUTE No. 12—*contd.*

6 **KANDAHAR** .. 10 m. 6 f. Disused cart road,
 (3,462'). with slight repair
 71 m. 2 f. passable for carts
 again.

Road now leads N.W. direct for Kandahar. For the first 4 miles country is hilly, thence to the end of the stage the road leads over a much irrigated plain with soft soil which would cause wheeled artillery considerable trouble.

At 1 mile 3 furlongs cross the Tarnak river; river bed here 100× broad; stream shallow and easily fordable except after heavy rains, river bed tortuous, but passable by carts. At 2 miles 7 furlongs reach the broad, flat crest of the Shorandam *kotal*, thence steady descent and reach the plain at 4 miles.

At 6 miles 1 furlong cross dry bed of Shorad river, passable by carts; at 8 miles 7 furlongs pass a *ziarat* on the right, where the Kalat-i-Ghilzai road comes in from the E. At 8 miles 7 furlongs the suburb of Deh Khwaja on the left of the road and extending for nearly $\frac{1}{2}$ mile.

The road leads straight to the Bar Durani Gate, but there is a broad track all round the walls outside; the *Idgah* or north gate is reached at 11 $\frac{1}{2}$ miles, and the centre of the former British cantonment N.W. of the town at 12 miles.

A new garden called *Manzil Bagh* was built in 1893 to the right of the road, just before the village of Deh Khosak is reached, and about one mile from the city, this forms a cool residence; thence direct to the *Idgah* a good road, lined with trees, has been made. Just outside the Bar Durani Gate a large and commodious caravansarai for storage of wool and other trade products going to India, has been built. The enclosure is quadrilateral, with a row of 50 double domes on the N. and S. faces and would accommodate one or two battalions.

KANDAHAR (3,462'). *Population* 31,500. *Garrison* (1912) 4 batteries, 1 $\frac{1}{4}$ regiments cavalry, 3 battalions infantry. City situated on level plain between the Tarnak and Arghandab rivers, but is separated from the latter river by a range of hills in which, however, there is a break just N.W. of the city affording easy communication between the city and the Arghandab valley. The city is commanded on the N. and W. by high hills, at ranges varying from about 2 $\frac{1}{2}$ to 4 miles. It is nearly regular in plan, W. face is about 1 $\frac{1}{4}$ miles in length, E. face about 1 mile, N. and S. faces $\frac{3}{4}$ of a mile each.

ROUTE No. 12—*contd.*

The defences consist of an earthen rampart having an average command of 22' and an average thickness of 20' at the bottom and 10' to 12' at the top. Its outer face is continued to form a parapet about 7' high and 2' or 3' thick, with a double tier of loopholes. The rampart is flanked by circular towers placed at distances 200' to 300' apart. The ditch varies both in breadth and depth, but it is roughly 25' broad and 10' deep. There are 6 gateways one on each of the N. and S. faces and 2 on each of the E. and W. faces, defended by 6 double bastions with 4 large circular towers at the angles.

The *citadel* is situated on the N. side and occupies the greater part of an open space 1,400' square. The treasury, gun park and Governor's residence are inside it. The city is surrounded on all sides by orchards, graveyards and villages; the field of fire from the ramparts is, therefore, much interrupted and there is good cover for an assaulting force.

The citadel and city generally are in much the same state as when left by the British. The walls seem in fair repair, and the roads made along the S. and W. faces have been well kept up and are lined with trees on either side. The cantonments seem in fairly good repair and are occupied by the Afghan garrison; the hospital, being unoccupied, seems to have fallen in places and will require considerable repair, but the majority of the barracks can apparently be re-occupied after a little cleaning.

The garden houses of Sirdars Amir Khan, Mir Afzal Khan, and Rahim Dil Khan formerly occupied by the General Officer Commanding, the Resident, and the Engineers, respectively, seem in pretty much the same state, and could be re-occupied again at once.

Camping ground.—For a very large force, 2 or 3 divisions at least on the plains around. In 1879-80 the British cantonments were to the N. of the city.

Water.—For a force of any size from the Arghandab and Tarnak rivers and water channels leading from the same.

Fuel.—Scarce; the only trees in the vicinity are fruit trees. In the British occupation 1879-80 all the wood was imported from the N.W. and paid for at very high rates.

Fodder.—*Khasil*, for horses of a cavalry brigade daily in March and April; *bhusa* 200,000 to 500,000 maunds; good camel grazing.

ROUTE No. 12—*concl'd.*

Supplies.—Amount of grain available in Kandahar can be reckoned at something between 200,000 and 500,000 maunds of which $\frac{1}{2}$ is barley; fruits of all kinds in abundance.

ROUTE NO. 12-A.

GATAI TO TANDUKAI KAREZ.

20 miles.

2 stages.

Authority.—Native information, 1892.

Epitome.

General description.—A connecting route between the 2 through Routes 11 and 12.

Road.—Camel road practicable for wheeled artillery.

A small *kotal* which presents no difficulty met with in the second stage is the only *obstacle* encountered.

Route open throughout the year.

Camping ground.—For at least one infantry brigade with proportion of divisional troops at the intermediate stage.

Water.—Sufficient for that force at that stage.

Fuel.—Scarce.

Fodder.—*Harijala* grass plentiful at the intermediate stage; good camel grazing throughout, except in winter.

Supplies.—*Nil* at the intermediate stage.

No. of stage and total dis- tance.	DETAILS.
1 <hr/> 10 m.	KUSHOBAI .. 10 m. Camel road practicable for wheeled artillery.

General direction N.W. Leaving Gatai this route follows the old cart road (Route 12) for 4 miles to Humai Karez, where

ROUTE No. 12-A—*concl'd.*

the present route continues N. W., while the old cart road bends to the W. Between the 9th and 10th miles cross two arms of the Kushobai stream, beyond the second of which is camp.

Camping ground.—For at least 1 infantry brigade with proportion of divisional troops.

Water.—For the above force from *karez*s.

Fuel.—Scarce.

Fodder.—*Haria* grass plentiful; good camel grazing except in winter.

Supplies.—*Nil.*

2	TANDUKAI KAREZ . . 10 m.	Camel road, practic- able for wheeled artil- lery.
<hr style="width: 20%; margin-left: 0;"/>		
20 m.		

General direction N. W. For the first 3 miles the road runs across a gentle, sloping plain at the foot of the hills with a rise of about 150'. Thence to 5½ miles the road follows the course of the Surkhab Manda to a small *kotal*; ascent in this portion about 300', of which 100' is in the last quarter of a mile near the *kotal*. There is no real difficulty in this part of the road. It is a little rough for guns in places, and the ascent of the *kotal* would be somewhat troublesome for artillery. The valley is fairly open everywhere between low hills. The worst portion of the road can be avoided by a *détour*, said to be about 1½ miles longer, and a good road. It leaves the bed of the Surkhab Manda at 4½ miles from Kushobai, and rejoins the road just beyond the *kotal*. The descent from the *kotal* is easy, but somewhat rocky, falling about 150' in ¼ mile, whence the road debouches on an open undulating plain called Bedak, 2 or 3 miles across which are the Bedak wells

Here Route 11 is joined and followed to Tandukai Karez reached at 10 miles.

<i>Camping ground.</i> — <i>Water.</i> — <i>Fuel.</i> — <i>Fodder.</i> — <i>Supplies.</i> —	}	<i>Vide</i> Route 11, stage 3.
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ROUTE NO. 13.

NEW CHAMAN TO KANDAHAR.

Viâ the Dori river.

66 miles.

6 stages.

Authority.—2nd Afghan war records, 1879-80 ; native information, 1905 ; native information, 1910.

Epitome.

General description.—One of the 3 routes from the railhead at New Chaman to Kandahar. The major portion of this route lies in the Dori valley, following the right bank of that river, and is particularly easy. It forms the best alignment for a railway from New Chaman to Kandahar. The section of this route from Shah Pasand stage 2 to Kandahar was followed by the 2nd Division of the Kandahar Field Force in 1879. Country generally open and passable by all arms.

Road.—Camel road passable by wheeled artillery throughout ; sandy in places ; with little labour could be made passable for carts.

The following *obstacles* are encountered:—

- (i) The Kadanai, Kushobai and Mel Manda streams in the 1st and 2nd and 3rd stages respectively ; no difficulties.
- (ii) The Kurkura *kotal* in the 3rd stage ; ascent and descent easy.
- (iii) The Arghastan river in the 5th stage ; liable to be temporarily impassable after floods which occur in winter and spring.
- (iv) The Tarnak river in the 6th stage ; no difficulty.

Route open throughout the year.

Camping ground.—For a division at stages 1, 3 and 4 ; for 1 infantry brigade at stage 2 ; no details regarding stage 5.

Water.—For a division at all stages with the following exceptions:—

1st stage for a division only between November and May ; for the other half of the year for 1 infantry brigade only.

In 2nd and 3rd stages for one infantry brigade only during August and September.

Fuel.—Abundant at stages 2 and 4 : probably procurable in limited quantities at all stages.

ROUTE No. 13—*contd.*

Fodder.—*Bhusa* to an appreciable extent at stages 2, 3, 4 and 5; camel grazing throughout, except in winter.

Supplies.—A few hundred maunds unground wheat and barley procurable at stages 2, 3, 4 and 5.

For supplies, etc., at Kandahar *vide* Route 12.

No. of stage and total dis- tance.	DETAILS.
1 12 m.	KALA MALIK GHAZI 12 m.—Camel road passable for wheeled artillery.

Leaving the railhead at New Chaman the road runs due W. across open country. At 8 miles pass the hill Tor Baldak (4,312'), half mile S. of the road. At 9½ miles cross the Kadanai stream, which comes in here from the N. W. by an easy ford. Road then follows the right bank of this stream to the end of the stage reached at 12 miles.

Camping ground.—For a division.

Water.—From 11 wells and a channel leading from a *karez*; supply calculated to be sufficient for one infantry brigade; for a division for half the year from the Kadanai 1½ miles distant.

Fuel.—
Fodder.—
Supplies.— } No information.

2 18 m.	SHAH PASAND .. 6 m. Camel road passable for wheeled artillery.
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Road follows the right bank of the Kadanai, general direction W., country open. At 4 miles pass the Nurzai village of Fathulla on the left bank of the river; village consists of a collection of dome-roofed houses surrounded by mud walls, with a mud fort; when river is dry inhabitants are dependent for their water on a channel coming from the hills 50 miles to the N., consequently supply is liable to be intercepted.

The road now gradually veers N. W. At 4½ miles cross the channel of the Kadanai (usually dry,) no difficulty. At 5 miles the Kushobai stream, which coming from the N. joins the

ROUTE No. 13—*contd.*

Kadanai, here crossed by an easy ford; normal depth of stream about 2'; stream always fordable even during spates; below the junction of these 2 streams the river is known as the Dori river till it joins the Arghastan some 18 miles due S. of Kandahar. At 6 miles the Gurak Nurzai village of Shah Pasand on the right bank of the Dori river.

Camping ground.—For at least 1 infantry brigade with proportion of divisional troops.

Water.—For a division and more except during August and September, from the Dori river, half a mile S. of camp. In August and September from wells in river bed for an infantry brigade at least, transport animals would be watered at Hauz Robot tank 1 mile due N.

Fuel.—Abundant; there are a quantity of tamarisk trees in the river bed and elsewhere, also southern wood is plentiful.

Fodder.—*Bhusa* procurable to a limited extent; camel grazing abundant except in winter.

Supplies.—A limited amount of unground grain procurable.

The following is the description of the Dori river between Shah Pasand and Abdul Rahman:—bank to bank average width 150', channel normally 10' to 12' wide, 1' deep; in January, February and March 30' to 40' wide, 3' deep; greater dimensions after floods which are rare and never last more than 24 hours. Dry during August and September; sandy bottom with occasional boulders; height of banks vary from 15' to 30' and are steep; there are no bridges nor boats and the current is not rapid. The best known fords are:—

- (1) Kandahar ford near Shah Pasand.
- (2) The Matal Mehrab.
- (3) The Anbar.
- (4) The Bolak, in the vicinity of which there is jungle.
- (5) The Muhammad Shah.
- (6) The Abdulla Rai.

When the river is in flood the e fords are impassable for 24 hours. Below Shah Pasand the Dori river passes through a populous district; unground grain and *bhusa* are procurable at all villages along its banks.

The above information was obtained in 1903.

ROUTE No. 13—*contd.*

3 **CAMP SAIFUDIN:** 15 m. Camel road passable
 for wheeled artillery.

33 m.

Road here temporarily leaves the banks of the Dori river and ascends gradually towards the hills; general direction N. W.

At 1 mile pass a well, about 30' deep, in which there is abundance of water. At 3 miles reach a watershed. Thence a gentle descent to the Mel valley, which runs up a considerable distance N. E. and is about 5 miles wide. Here it presents an appearance very similar to the hard and level portions of the country crossed on the last march. To the left the Dori and sand desert close the valley. At about 10 miles cross the *Manda*, or water-course of Mel, about $4\frac{1}{2}$ miles from the camping ground of Mel Manda on the main road, and 5 miles S. W. of Mel Karez. Thence ascend gradually to the Kurkura *kotal*, another watershed from which the road commences to descend into the tract called Takhtapul. Here there is half a mile of rough broken ground, with hills close to the road on both sides. This bit is difficult for artillery. Issuing from the defile, the road gains the right bank of the Dori, which has all the way been running parallel on the left, and turns along it, nearly due N. The country is an undulating plain, intersected by numerous water-courses. These, and an occasional strip of sand, delay the march of artillery. At 2 miles from the Kurkura *kotal* reach camping ground in a broad and level plain on the right bank of the river.

The camp derives its name from a Nurzai village on the opposite bank of the river. Mel Karez stage 3 of Route 12, the old cart road to Kandahar, is about 5 miles due E, of this camp.

Camping ground.—For a division on the plain.

Water.—For the above force and more from the Dori river, except in August and September, when there would be sufficient for 1 or 2 infantry brigades from wells dug in the river bed.

Fuel.—No information.

Fodder.—*Bhusa* to a limited extent could be collected; camel grazing good in spring, *nil* in winter, fair at other times.

Supplies.—A few hundred maunds unground wheat and barley normally procurable.

ROUTE No. 13—*contd.*

4	DEH-I-HAJI..	14 m. Camel road practicable for wheeled artillery.
<hr style="width: 10%; margin-left: 0;"/>		
47 m.		

Road continues N. W. along the right bank of the Dori river and now enters the district known as Takhtapul. The present route and the old cart road (Route 12) gradually converge throughout this stage, and at 10 miles opposite Abdul Rahman post (stage 4 of that route) they are only half a mile apart. At about 11 miles the Dori river makes a sharp bend to the W., and the present route ceases to follow its bank. The road then runs practically side by side with Route 12 to the end of the stage reached at 14 miles.*

Deh-i-Haji, a large domed village, most prosperous in 1880 and from which supplies could always be obtained, but reported in 1905 as being deserted and falling into ruins, owing to the inhabitants having migrated on account of being troubled by travellers on the main road.

Camping ground.—For a division on the plain.

Water.—Probably sufficient for the above force from irrigation channels; the water, however, is not very good, being somewhat saline.

Fuel.—Plentiful; wild sage bushes and southern wood abound.

Fodder.—*Bhusa* to an appreciable extent procurable; camel grazing good except in winter.

Supplies.—Unground wheat and barley to an appreciable extent procurable.

5	KHUSHAB (3,484').	10 m. Camel road passable for wheeled artillery.
<hr style="width: 10%; margin-left: 0;"/>		
57 m.		

The road runs for $1\frac{1}{2}$ miles N. W. contiguous with Route 12 when the old cart road branches half right to the village of

* Instead of going to Kala Abdul Rahman, which might interfere with the march of troops proceeding along the main road, it would probably be quite practicable to keep along the bank of the Dori, and halt on the river at about 9 miles, where it bends to the W. The only difficulty would be in the case of newly irrigated land intervening. The camping ground would be about 2 miles S. W. of Deh-i-Haji.

ROUTE No. 13—*contd.*

Dahi and so on to Mandi Hissar and Kandahar. This route, though the longest, is much the best, but if, as is most probable, this road is used only to relieve the main road, any interference with the latter will be undesirable, and it will be necessary to take the *kafilā* road by Khushab.

This leads straight on. At about 3 miles reach the Arghastan which has a broad, stony bed about 300 yards across. In winter the water ordinarily runs in several channels not more than a foot deep. The banks are low, and the river offers no obstacle to the passage of troops with artillery. The season of floods is in winter and early spring. In summer the river may be perfectly dry. Thence straight on, over level open plain, in which large stretches of cultivable land alternate with barren stony tracts, slightly undulating. There are many villages to the W., but none near the road. At 10 miles the populous Nurzai village of Khushab.

Camping ground.—No information.

Water.—For a division from several irrigation channels.

Fuel.—Scarce.

Fodder.—*Bhusa* and lucerne (in season) to an appreciable extent; good camel grazing except in winter.

Supplies.—Unground barley to an appreciable extent.

6	KANDAHAR	.. 9 m.	Camel road passable
-----	(3,462').		for wheeled artillery
66 m.			

Road continues N. W. towards a low *kotal* in the hills. At about 2 miles it crosses a channel of the Tarnak, which is usually dry or nearly so. It then ascends about a mile to the crest of the *kotal*. The road is stony, and for 100 yards is steep. Descend from the *kotal* to the plain of Kandahar, which is here thickly studded with villages, surrounded by high-walled enclosures, orchards, etc. Numerous deep water-cuts cross the road. These are passed by narrow rustic bridges, just practicable for camels, but they are often serious obstacles to artillery. There are various roads. The best seems to be that leading to the Bar Durani gate (10 miles) on the E. side of the town. There is also a road to the former British cantonment N. W. of the town, which is reached at about 11 miles.

ROUTE No. 13—*concl'd.*

This march is practicable for artillery, but decidedly difficult.

<i>Camping ground.</i> —	} <i>Vide Route 12 Stage 6.</i>
<i>Water.</i> —	
<i>Fuel.</i> —	
<i>Fodder.</i> —	
<i>Supplies.</i> —	

ROUTE NO. 14.

NUSHKI TO KANDAHAR.

Viâ Jat Poti and Tarabaz.

142 miles.

11 stages.

Authority.—General Officer Commanding, Quetta District, 1900; Hennell from native information, 1881; Roome from native information, 1896.

Epitome.

General description.—A direct, through route from the railhead at Nushki to Kandahar. After leaving Dak Nawar, stage 4, the great Registan desert is entered and traversed till the Dori river is reached at the end of stage 10.

Road.—Camel road throughout. The following *obstacles* are encountered:—

- (i) The Registan desert between stages 4 and 10; impassable between May and September for all but small parties, preferably mounted on camels.
- (ii) The Dori river in stage 10; impassable during spring floods for 2 or 3 days at a time.
- (iii) The Tarnak river in the last stage; temporarily impassable after heavy rains. As water can only be relied on in the *nawars* in the Registan from September to May, this route can only be said to be open during that period.

Camping grounds.—For a division at least at all stages.

ROUTE No. 14—*contd.*

Water—For 1 infantry brigade at least at the first 3 stages; thence to the Dori river, stage 10, only sufficient for 1 infantry brigade between September and May, and possibly for a battalion in the remaining months by digging wells; for a division at stage 11.

Fuel.—Firewood of tamarisk trees and a certain amount of scrub available throughout the route

Fodder.—Grass to a limited extent immediately after rain from stages 4 to 9; *bhusa* to an appreciable extent at stages 3 and 10; fair camel grazing throughout.

Supplies.—Unground wheat and barley to an appreciable extent at stages 3 and 10. For supplies, etc., at Kandahar see Route 12, stage 6.

No. of stage and total dis- tance.	DETAILS.
1 <hr/> 17 m.	MEHRAB NAWAR . . 17 m. Camel road. (SIAH SANG.) (3,150').

Leaving the railhead at Nushki the road, which is a well marked track, leads almost due N., partly over *pat* and partly over a stony *daman*; going somewhat difficult on account of the numerous small *nalas* which cross the road at right angles. Country open throughout the stage. At 17 miles the camping ground sometimes known as Siah Sang opposite the tank made by Mehrab Khan, a Baluch. There is no other water *en route*. This stage is identical with stage 1, Route 131, Routes in Northern Baluchistan, 1910.

Camping ground.—On an open sandy plain for a division, if necessary.

Water.—For one infantry brigade from the tank referred to.

Fuel.—Fairly abundant; there are tamarisk trees and a certain amount of scrub in the vicinity.

Fodder.—A small quantity of *bhusa* obtainable, but nothing appreciable; good camel grazing.

Supplies.—Nothing appreciable.

ROUTE No. 14—*contd.*

2 SAHIBZADA .. 11 m. Camel road,
 (3,186').

28 m.

Road continues N., and maintains this direction throughout the stage. Road is good and fairly level the whole way; country generally open. At 11 miles Sahibzada (60 houses), inhabitants Baluchis; houses are mere wattle huts smeared over with a thin layer of mud. About $\frac{1}{4}$ mile to the S. W. is the Baluch village of Shah Muhammad, similar generally to Sahibzada.

Camping ground.—For a division, if necessary, on the open plain.

Water.—For one infantry brigade at least from several tanks.

Fuel.—Fairly abundant; there are tamarisk trees and a certain amount of scrub in the vicinity.

Fodder.—A small quantity of *bhusa* obtainable, but nothing appreciable; good camel grazing.

Supplies.—Nothing appreciable.

3 JAT POTI .. 14 m. Camel road.
 (3,150').

42 m.

Road continues N. and maintains this direction throughout. Good and easy going all the way over *pat*. At 14 miles the few ruins and halting place known as Jat Poti.

Camping ground.—For a division, if necessary, on the sandy plain W. of the irrigation channel.

Water.—For one infantry brigade at least from the irrigation channels $\frac{1}{4}$ mile S. of camp; water also from November to April in the irrigation channels E. of camp.

There are also several wells about 150' deep which could be cleared without much difficulty.

Fuel.—Fairly plentiful.

Fodder.—*Bhusa* to an appreciable extent obtainable from the friendly Barechi villages in the vicinity; good camel grazing.

Supplies.—An appreciable amount of unground wheat and barley could be collected from the villages referred to above.

At Jat Poti the following routes converge:—

Route 14-B., from Iltaz Karez.

Route 14-C., from Anjirgai.

Route 14-D., from Tang.

ROUTE No. 14—*contd.*

Route 14-F., from Saiad Bus.

From Jat Poti Route 14-E, leads to Shah Pasand.

4 DAK NAWAR .. 15. m. Camel road.

57 m.

Road runs due N., across a sandy desert. Achakzai country. At 15 miles the halting place and wells known as Dak Nawar.

Camping ground.—For a division or more on the sandy plain.

Water.—From the *nawars*; probably sufficient for one infantry brigade from September to May, and for about 1 battalion for the remaining months when wells might have to be dug.

Fuel.—Firewood procurable.

Fodder.—Grass procurable; fair camel grazing.

Supplies.—*Nil.*

5 ABU CHAH .. 8 m. Camel road.

65 m.

Road runs N.E. for 4 miles, then N. W., to Abu Chah which is due N., of Dak Nawar. At the commencement of this stage the road enters the eastern fringe of the great Registan desert and crosses it till the Dori river is reached in stage 10. The Registan which signifies the "country of sand" is the name given to the great desert which stretches eastward from Sistan and the Persian frontier. It is a vast expanse of ridges and hillocks of loose red sand and is of considerably greater elevation than the adjacent alluvial plains. It abuts on Shorawak in a long line of sand-bluffs, touches the end of the Khwaja Amran to the N. of that district, and, sweeping round north-westwards across the end of the Kadanai valley, follows the line of the Dori and then of the Tarnak until the latter falls into the Helmand. The desert is a most important strategical feature, forming as it does what is believed to be an impassable barrier, on the S.W. of Kandahar.

At 8 miles the halting place known as Abu Chah.

Camping ground.—For a force of any size.

Water.—For an infantry brigade from wells.

Fuel.—Firewood procurable.

Fodder.—Grass procurable. Fair camel grazing.

Supplies.—*Nil.*

ROUTE No. 14—*contd.***6 KHWAJA GIAN NAWAR: 14 m. Camel road.**

79 m.

Road leads N. W. through the sandy desert. The following *nawars* are passed during the stage. The Shakar *nawar* at 2 miles, the Zaz *nawar* at $3\frac{1}{2}$ miles, the Yaltaz *nawar* at 6 miles, the Matunki *nawar* at 9 miles and the Gharlan *nawar* at 11 miles, in all of which water would be found from September to May.

Camping ground.—For a force of any size.

Water.—From the *nawars*; probably sufficient for one infantry brigade from September to May and for about 1 battalion for the remaining months when wells might have to be dug.

Fuel.—Firewood procurable.

Fodder.—Grass procurable. Fair camel grazing.

Supplies.—*Nil.*

7 TONGAI .. 12 m. Camel road.

91 m.

The Nurzai country is now entered. The road leads N. across the sandy desert. The Jado, Shahid and Khalil *nawars* are passed at 6, 8 and 10 miles, respectively, in all of which water would be found from September to May. At 12 miles the halting place known as Tongai reached, near which is the Gat Tarak *nawar*.

Camping ground.—For a force of any size.

Water.—For an infantry brigade from a number of wells, also from the Gat Tarak *nawar*.

Fuel.—Firewood procurable.

Fodder.—Grass procurable; fair camel grazing.

Supplies.—*Nil.*

8 SAR NAWAR .. 8 m. Camel road.

99 m.

Road gradually veers from N. to N.W., across the sandy desert. At 8 miles Sar Narwar.

Camping ground.—For a force of any size.

Water.—For one infantry brigade from September to May, and for 1 battalion for the remaining months when wells might have to be dug.

ROUTE No. 14—*contd.*

Fuel.—Firewood procurable.

Fodder.—Grass procurable; fair camel grazing.

Supplies.—*Nil.*

9 **TARABAZ** .. 14 m. Camel road.

113 m.

Road continues N. W. through a sandy desert. At 14 miles Tarabaz.

Camping ground.—For a force of any size.

Water.—For 1 infantry brigade from a number of wells.

Fuel.—Firewood procurable.

Fodder.—Grass procurable; fair camel grazing.

Supplies.—*Nil.*

10 **DORI RIVER** .. 15 m. Camel road.

128 m.

Road runs N. W., over a sandy desert. At about 14 miles the Dori river is crossed about half mile W. of its junction with the Arghastan. At this point the river bed is 200' wide, the channel has an average width of 50' and water is of an average depth of 2½'. During the spring floods the river here is impassable for 2 and 3 days at a time. At 15 miles the camping ground flanked on the W. by the Arghastan river and on the S. by the Dori river.

Camping ground.—For a division.

Water.—For the above force and more from the 2 rivers referred to,

Fuel.—No details.

Fodder.—An appreciable amount of *bhusa* could certainly be collected from the surrounding villages; fair camel grazing.

Supplies.—An appreciable amount of unground wheat and barley procurable from the surrounding villages.

11 **KANDAHAR** .. 14 m. Camel road.

(3,462').

142 m.

General direction almost due N. Road traverses a cultivated plain studded with villages. At about 7 miles the Tarnak river is crossed just N. of the fortified Nurzai village of Rahwani. River bed here 1,000× broad; average width of

ROUTE No. 14—*concl'd.*

channel 90', average depth 2' to 3', river easily fordable except after heavy rains. At 10 miles the Durani villages of Balada and Karezak on the right and left of the road respectively. At 14 miles Kandahar.

Camping ground.—

Water.—

Fuel.—

Fodder.—

Supplies.—

} *Vide* Route 12, stage 6.

ROUTE NO. 14-A.

SAHIBZADA TO SPINAKHULA.

Viâ the Band pass.

33 miles.

3 stages.

Authority.—Native information, 1900.

Epitome.

General description.—A connecting route running from stage 2 of Route 14, the through route from Nushki to Kandahar, to stage 1 of branch Route 14-E.

Road.—Camel road throughout. The Band pass in the third stage is the only *obstacle* encountered; gradient not steep, but the road is rough and would be better for clearing.

Route open throughout the year.

Camping grounds.—For 1 infantry brigade at both intermediate stages.

Water.—For one infantry brigade, at least, at both intermediate stages.

Fuel.—Scarce throughout.

Fodder.—Good camel grazing throughout.

Supplies.—A few hundred maunds of unground grain at both intermediate stages.

No. of stage and total dis- tance.	DETAILS.
1	PUTLA KHAN .. 12 m. Camel road. (IN SHIRANI).
12 m.	(3,400').

ROUTE No. 14-A—*contd.*

General direction N. E. Leaving Sahibzada there is a well-marked track running N. W. along the edge of the *daman*. At 4 miles the Barechi village of Samazai; at 6 miles pass the Mir Ali *ziarat* and at $8\frac{1}{2}$ miles the Shirani Barechi village of Shiranrai on the bank of the stream. At 12 miles Putla Khan (70 houses; inhabitants Shirani Barechis) about 1 mile to the W. of the left bank of Lora river. In the village are three trees which form a landmark in the treeless level plain.

Camping ground.—For one infantry brigade at least, probably sufficient room for two.

Water.—For the above force and more from irrigation channels.

Fuel.—Scarce.

Fodder.—Good camel grazing.

Supplies.—A few hundred maunds of unground grain normally available.

At Putla Khan, Route 14-C., from Anjirgai to Jat Poti crosses this route.

2 PAIN KHAN .. 11 m. Camel road.
 ——— (IN POTI)
 23 m. (3,300').

General direction nearly due N. The road is a good track over cultivated, alluvial soil. At 4 miles, the hamlet of Pir Muhammad Karez to the right of the road at the foot of low hills. Thence across the dry and stony bed of the Lora river which here is of considerable breadth, but the banks are not high. At 7 miles the road passes through a gap in a high range of hills, called Tang or Siah, which terminate in a semi-isolated peak on the plain, the gap being to the S. of this peak. At 11 miles Pain Khan at the foot of some sand hills; inhabitants, Badalzai Barechis.

Camping ground.—For 1 infantry brigade W. of the village.

Water.—For the above force and more from irrigation channels.

Fuel.—Scarce.

Fodder.—A few hundred maunds *bhusa* procurable; good camel grazing.

Supplies.—A few hundred maunds of unground grain (no barley) procurable.

ROUTE No. 14-A—*concl'd.*

3 SPINAKHULA .. 10 m. Camel road.
 (3,590').

33 m.

General direction N. The track now leads through low undulations of loose sand thickly sprinkled with bushes; these ridges increase in elevation towards the S., and small isolated peaks and ridges of rocks stand up through the sand, some of which are close to the road. At about 2 miles a sand ridge is reached which commands an extensive view over the cultivated Shorawak plain. At 4 miles a track leads S. W. to the village of Amunzai; at 5 miles, the tower in the village of Ahmad Khan is visible over the sand hills 1 mile W. of the road and near by is the ruined fort of Murad Khan. Immediately afterwards the road gradually rises to the Band or Chawal pass, which consists of a gap about 200× wide, where the Khurma hills overlap, but do not touch. The gradient is not steep, but the road is rough. Beyond the pass the road emerges on to an open plain, then across low sand ridges between the 8th, and 9th miles, and finally the track follows the deep bed of a *nala* for the last mile to Spinakhula, reached at 10 miles.

Camping ground.—

Water.—

Fuel.—

Fodder.—

Supplies.—

} *Vide* Route 14-E, stage 1.

ROUTE No. 14-B.

ILTAZ KAREZ TO JAT POTI.

Viâ the Get pass.

25 miles.

2 stages.

Authority.—Native information, 1884.

Epitome.

General description.—This route connects at Iltaz Karez with Routes in Northern Baluchistan, Route 87, leading from Gulistan to Nushki.

ROUTE No. 14-B—*contd.*

Road.—Camel road throughout.

The following *obstacles* are met with :—

- (i) In the 1st stage the Wali or Get pass (5,900'); ascent easy, descent for the first 100 yards down a steep gully just wide enough for a laden camel to pass.
- (ii) In the second stage the Lora river; difficult crossing after heavy rain.

Route open throughout the year.

Camping-ground.—For 1 infantry brigade at the intermediate stage.

Water.—Sufficient for the above force at that stage.

Fuel.—Wood generally abundant throughout

Fodder.— } An appreciable amount of *bhusa* and unground
Supplies.— } grain could be collected in the vicinity of

Miru Khan; good camel grazing throughout.

No. of stage and total dis- tance.	DETAILS.
1 <hr style="width: 50px; margin: 0 auto;"/> 15 m.	MIRU KHAN .. 15 m. Difficult camel road. (3,100').

General direction N. W. Leaving Iltaz Karez the hills are at once entered. They are low and almost insignificant. Road easy and ascent gradual to the crest of the Wali or Get pass, which is reached at 3 miles. Elevation 5,900'.

Descent is by a narrow and steep gully for the first 100 yards when the bottom of a ravine is reached. It is only just wide enough to allow a laden camel to pass, and the hills rise sharply on either hand. The bed of the *nala* is of rough slate rock, and the gradient of descent very considerable. At half a mile from the crest of the pass the ravine is 20× wide; the bottom is of fairly smooth slaty shingle, and gradient of descent about 1 in 15.

Hence the water-course gradually widens, and the slope becomes easier while the path is good. At 10½ miles the ravine meets with the outer ridge of the Sarlat range, and makes a sudden turn to the left. Here, on the left hand, is a spring with a few mulberry and willow trees. There is room for a small body of troops to encamp, but the ground is cramped and inconvenient.

ROUTE No. 14-B—*concl'd.*

After running for a short distance parallel to the ridge, the water-course turns sharply to the right, and escapes through it by a short but narrow gorge. At 12 miles the road gains the open country. At 15 miles the Shirani Barechi village of Miru Khan (70 houses).

Camping ground.—Near the village for 1 infantry brigade at least.

Water.—Sufficient for the above force from several irrigation channels; water slightly brackish.

Fuel.—Wood abundant.

Fodder.—*Bhusa* to an appreciable extent could be collected in the vicinity; good camel grazing.

Supplies.—An appreciable amount of unground grain could be obtained in the vicinity.

At Miru Khan Route 14-A., the Shirani road through Shorawak to Nushki crosses this route.

2 **JAT POTI** .. 10 m. Camel road.

25 m.

General direction N. W. At about 2 miles the Lora river is crossed. Its channel is about 200× wide and 25' deep, with perpendicular banks. It is usually dry, but a good deal of water occasionally comes down in winter after heavy rain. The current of the stream is then very swift, but the bottom is of firm sand. When dry, laden camels have no difficulty in crossing at the regular places, but to find them without delay, guides are necessary. The tall tamarisks of Jat Poti are plainly visible from the Lora bank, but the intervening plain is intersected by artificial water channels, and a good deal of land is often under irrigation. Just before reaching Jat Poti the hollow of the Dori or Lora *nala* has to be crossed, and this is sometimes a matter of difficulty.

Altogether this march is not an easy one for pack animals of any description, and in wet weather it may be absolutely impracticable.

Camping ground.—

Water.—

Fuel.—

Fodder.—

Supplies.—

} *Vide* Route 14, stage 3.

ROUTE No. 14-C.
ANJIRGAI TO JAT POTI.

Viâ the Salwatu pass.

25 miles.

2 stages.

Authority.—Native information, 1901.

Epitome.

General description.—This route forms a portion of one of the routes from Quetta to Jat Poti. It connects at Anjirgai with Routes in Northern Baluchistan, Route 110.

Road.—Camel road.

The following *obstacles* are met with:—

- (i) The Salwatu pass in the first stage; difficult for laden camels, though constantly crossed by them.
- (ii) The Lora river in the second stage; crossing difficult after heavy rain.

Route open throughout the year.

Camping ground.—For 1 infantry brigade, possibly 2 at Putla Khan, the intermediate stage.

Water.—Sufficient for that force at Putla Khan.

Fuel.—Scarce.

Fodder.—Good camel grazing throughout.

Supplies.—A few hundred maunds unground grain normally available at Putla Khan.

No. of stage and total dis- tance.	DETAILS.
1	PUTLA KHAN .. 17 m. Camel road, but difficult for laden camels over the
17 m.	

Salwatu pass.

General direction N. W. Leaving Anjirgai the road ascends the *Katunki nala* for about 1 mile. It then diverges to the left and ascends low spurs to the *Tarzana kotal*, which is quite easy. The range now being crossed is known locally by several names. It consists of low, black, rocky peaks, joined by a lower ridge. To the left is a conspicuous peak called Ting.

Beyond the *kotal* is the Chuna (Lesser) Dasht, a long narrow plain about $2\frac{1}{2}$ miles wide, stretching N. E. and S. W. In the

ROUTE No. 14-C—*contd.*

latter direction it is crossed by Route 14-B. On the further side of the plain is another small range, similar to that just passed; it is called Parah. An easy *kotal* (6 miles) gives access to the Bala (Greater) Dasht, resembling the Chuna Dasht, but twice the width. The peak of Sarlat (Chari Ting) is nearly due W. from the *kotal*. The whole Sarlat range from this side has a very insignificant appearance.

Descending to the plain, the road bears away to the right (a track to the Mohat pass leads nearly straight on). About half-way across the Dasht ($8\frac{1}{2}$ miles) is a small artificial tank called *Shahdin talao*. It contains water after rain and is a well-known place. The road now enters the hills at $10\frac{1}{2}$ miles. Just inside of the first low elevations the road to the Ushtarlar pass diverges to the right, and from near the same point the road to the Psha pass branches off in the same direction. Neither of these passes is practicable for laden camels. A road from Muhammad Khel by the Sarsham or Singband *kotal* also comes in about here. The Mohat pass is about 2 miles S.W., a short distance N. of Chari Ting.

Not far beyond the fork of the roads the *ziarat* of Pir Gali Chopal is passed on the right. It is 200 yards off the road; the path to the Ushtarlar passes close to it.

At 10 miles reach the crest of the Salwatu pass (an insignificant *kotal*). The descent is into a deep, narrow, and rocky ravine. For the first mile and-a-half it is decidedly a difficult road. In many places there is hardly room for an animal to pass, and occasionally slate rock occurs, which results in drops or steps of several feet. At half-a-mile below the crest, and at several places lower down there is water. Here 1 battalion might bivouac.

The Salwatu pass is constantly crossed by heavily laden camels, but the upper part is difficult even for mules.

All at once the narrow defile gives place to a broad ravine 40 or 50× wide at bottom and widening as it descends. Gradient at first 1 in 18, decreases to 1 in 25. Road over firm slaty shingle is good. At 14 miles the hills on either hand—spurs of Sarlat—come to an end. Here is a comparatively open space, and water is sometimes found. Probably it can always be obtained by digging.

In front is the small outer range called Spari. The water course bending to the left, is now quitted, and the road lead

ROUTE No. 14-C—*concl'd.*

straight on into the hills. As it crosses them diagonally to the run of the spurs there are several ascents and descents, one being rather steep, but the road is good. At about 15 miles the hills are finally quitted and the track continues for 2 miles over a gentle, smooth descent to the village of Putla Khan or Zhiai in the Shirani district of Shorawak.

Putla Khan (70 houses) about 1 mile to the W. of the left bank of the Lora river. In the village are 3 trees which form a landmark in the treeless, level plain.

Camping ground.—For 1 infantry brigade at least, probably sufficient room for two.

Water.—For the above force and more from irrigation channels.

Fuel.—Scarce.

Fodder.—Good camel grazing.

Supplies.—A few hundred maunds unground grain normally available.

At Putla Khan, Route 14-A., the Shirani route through Shorawak, to Nushki crosses this route.

2 **JAT POTI** .. 8 m. Camel road.

27 m.

General direction N. W. At $1\frac{1}{2}$ miles the Lora river is reached; channel here 250× to 300× wide with scarped sides 25' high; crossing only difficult after heavy rain; ascent and descent easy for camels.

From thence a fair road across the plain pretty straight to Jat Poti, the tall tamarisks of which are plainly visible. Two small canals have to be crossed. The first is called Augir and the other Sharuwah. They are difficult for pack animals. Before reaching Jat Poti the river bed of the Dori or Lora *nala* has also to be crossed, in which there are several artificial water channels, which are sometimes flooded. When this is the case, the crossing is difficult.

Camping ground.—

Water.—

Fuel.—

Fodder.—

Supplies—

} *Vide* Route 14, stage 3.

ROUTE No. 14-D.

TANG TO JAT POTI.

33 miles.

3 stages.

Authority.—Native information, 1897 and 1902.*Epitome.*

General description.—A connecting route between Routes in Northern Baluchistan, Route 86, from Gulistan post and Route 88 from Sarghari and the through Route 14; it is supposed to furnish the shortest route between Pishin and Shorawak.

Road.—Difficult road for fully laden camels for the first 2 stages, third stage much intersected by irrigation channels. The long succession of stony defiles and the continual crossing and recrossing of the Lora makes the road very wearisome.

The only *obstacle* encountered is the Lora river which is crossed several times; river is impassable when in flood which may happen any time in winter or spring. To be caught by a freshet in the Lora gorge would always be a serious matter. Route open throughout the year except when the Lora is in flood as just described.

Camping ground.—For one infantry brigade at least, at both intermediate camps.

Water.—For the above force and more throughout, from the Lora.

Fuel.—Abundant throughout.

Fodder.—*Bhusa* at stage 2, good camel grazing throughout.

Supplies.—A few hundred maunds of grain at stage 2.

No. of stage and total dis- tance.	DETAILS.
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1	MIRZA KACH .. 14 m. Difficult camel road.
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14 m.

Leaving Tang the track leads down the Tang defile. The general direction is S. W., but the defile winds considerably. The road is stony, but fairly good marching, and the gradient easy. As the Tang is descended, the hills become higher and steeper, and the bed of the watercourse narrower. At about 2 miles from camp the hills, especially those on the right,

ROUTE No. 14-D—*contd.*

are lofty and precipitous ; here the defile is hardly more than 10× or 15× wide, and it continues to be narrow, winding, and enclosed by high and steep hills until it opens into Lora at 4 miles. There is a good running stream all the way which is crossed frequently.

The Lora is now descended in a general south-westerly direction through a tortuous defile averaging about 100× in width. On either hand are high and steep, but not inaccessible, hills ; those on the right being spurs of Shista and Tang (Khwaja Amran range) and those on the left under-features of Sarlat. The track is usually well defined and rough marching, but the stream of the Lora is crossed continually ; it is swift, shallow, and somewhat muddy ; the fords in winter are from about 1 to 1½' deep, and average about 15× in width. Bottom generally firm and free from large stones, but the track must be adhered to. Patches of sand or mud to be strictly avoided. In summer the water is much decreased in volume.

At 2 miles from entering the Lora (6 miles from camp) the Shista *nala* comes in from the right. It looks insignificant, but gives access to a large glen running up under the main range parallel to Tang. At about 7 miles cross a plateau on the left bank, and at 7½ miles regain the Lora by the mouth of a water-course known as the Guldara.

A halt might be made on the plateau, if desirable. Thence to Lashkar Kach (*see* next stage), about 9 miles.

For the remainder of the march the road continues to follow the winding defile of the Lora, as above described. At 14 miles Mirza Kach situated on a low plateau on the left bank.

Camping ground.—For 1 infantry brigade, but camp is commanded on all sides within 1,000 yards.

Water.—For the above force and more, from the Lora river, water slightly brackish, but quite drinkable.

Fuel.—Wood abundant.

Fodder.—Good camel grazing.

Supplies.—Nothing appreciable ; the country is only inhabited by a few Badezais and other Achakzais, who bear a bad reputation.

ROUTE No. 14-D—*contd.*

2 **SILI KACH** .. 10 m. Difficult camel road.

24 m.

General direction S. W. The road continues to descend the wincing defile of the Lora, which is very much the same as before. At about 2 miles pass a plateau called Lashkar Kach, which closely resembles Mirza Kach. After 3 miles the hills gradually begin to decrease in height, but the defile continues narrow until about 7 miles, when it opens into a glen of increasing width. Here the road takes to the left bank, and passes over undulating plateaux, keeping parallel to the river bed. At 9 miles the track bends due W. and Route 14-A is crossed. The halting place, reached at 10 miles, is a well-known spot, and is marked by two trees and a graveyard at the edge of the plateau.

The width of the valley here is about $2\frac{1}{2}$ miles. Opposite to Sili Kach, under the hills on the right bank of the river, there is also good ground for camping on. Sili Kach is considered to mark the boundary between Achakzais and Barechis, but the real boundary of Shorawak is much higher up at the Tang junction. This march is practicable for all arms. From Sili Kach to Mir Alam Kala is 3 miles. The road is good.

Camping ground.—For 1 or possibly 2 infantry brigades on both banks of the river.

Water.—For the above force from several canals leading from the river.

Fuel.—Wood abundant.

Fodder.—A few hundred maunds *ohusa* could certainly be collected in the vicinity; good camel grazing.

Supplies.—A few hundred maunds grain normally available; there are several water mills at Sili Kach on the right bank of the stream.

3 **JAT POTI** .. 9 m. Camel road much
intersected by irri-
gation channels.

33 m.

General direction due W. Leaving Sili Kach the road leads across the river bed to the end of the range of hills on the opposite side of the valley. At about 1 mile pass through a gap between the end of the hills and outlying rocks on the left.

ROUTE No. 14-D—*concl'd.*

At least one large irrigation cut has to be crossed at or near the gap. There is then a tolerably straight track over the plain to Jat Poti, keeping to the N. of the main cut and of the Dori or Lora *nala*, but one large water channel has to be crossed and the plain is also broken in places by *nalas* and intersected by irrigation cuts. A guide is therefore necessary, although the Jat Poti trees are plainly visible bearing S. W. immediately after clearing the gap.

In the case of a considerable body of troops it would perhaps be better to keep away to the right after passing the gap, and to skirt the rocks and sand to Pain Khan's village, which is passed at about 4 miles. Thence E. passing Ahmad Khan's village at 6 miles. From there is a good road, passing N. of Murad Khan Kala to Amunzai ($9\frac{1}{2}$ miles), and then S.W. to Jat Poti, which is reached at $12\frac{1}{2}$ miles. This road is practicable for all arms.

<i>Camping ground.</i> —	} <i>Vide</i> Route 14, stage 3.
<i>Water.</i> —	
<i>Fuel.</i> —	
<i>Fodder.</i> —	
<i>Supplies.</i> —	

ROUTE No. 14-E.

JAT POTI TO SHAH PASAND.

Viâ Gwazha.

78 miles.

6 stages.

Authority.—2nd Afghan war records and native information, 1900.

Epitome.

General description.—A connecting route between the two through Routes 13 and 14, and also part of a favourite route for the greater part of the year of *kafilas* journeying from Kandahar to Nushki. They follow the main road from Kandahar to Chaman (Route 12) as far as Spin Baldak and then take a short cut across the plain sometimes to Kunchai and sometimes

ROUTE No. 14-E—*contd.*

to Gwazha following this route then to Jat Poti where the main Route 14 to Nushki is joined.

Road.—Camel road practicable for wheeled artillery throughout. Practically no *obstacles* are encountered along the route, which is open throughout the year.

Camping grounds.—Stage 1 for 1 battalion only, remaining stages for 1 infantry brigade at least.

Water.—For 1 infantry brigade at all stages except at stage 4, where natives report that the Lalgoli tank is often dry, but it is believed there is always an abundance of water at that stage between November and March.

Fuel.—Abundant at stages 2, 4 and 5 and procurable to a limited extent at other stages.

Fodder.—Good camel grazing throughout.

Supplies.—Nothing appreciable at the intermediate stages.

No. of stage and total dis- tance.	DETAILS.
1 <hr/> 15 m.	SPINAKHULA .. 15 m. Camel road practicable for wheeled artillery.

General direction N. E. Leaving Jat Poti (3,130') the track first leads across the great Shorawak plain. At 1 mile pass Amunzai, $\frac{3}{4}$ mile W. of the road; at 2 miles the *ziarat* of Haji Makal and at 3 miles pass the high sand ridges known as Shpul Poti. At about 7 miles the western fringe of the Khurma hills is reached, the track passing through the Alu Karez gap between the Khurma range on the E. and the Shabas Khan Taraki rocks on the W. A well-marked path, skirting the base of the Khurma hills, is now followed for 4 miles till at 11 miles the Chawal plain is reached, across which the road leads N. W. At $3\frac{1}{2}$ miles the plain is left and the deep bed of a *nala* followed to the end of the stage. The country generally is passable for all arms throughout the march. At 15 miles halting place known as Spinakhula in the Badezai Achakzai country.

Camping ground.—For 1 battalion only; camp commanded on all sides.

ROUTE No. 14-E—*contd.*

Water.—For 2 infantry brigades at least; a plentiful supply of good water runs down from the hills through a mass of large granite boulders.

Fuel.—Scarce.

Fodder.—Fair camel grazing.

Supplies.—*Nil.*

2	ARGUTAI	..	15 m.	Camel road practicable for wheeled artillery.
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30 m.				

General direction N. E. Leaving Spinakhula the track follows the *nala* of that name for about $1\frac{1}{2}$ miles, after which it traverses some undulating ground flanked on the W. by the rocky heights of the eastern Sargu hills and on the E. by the Khwaja Amran range here known as Tang or Siah. Between the 3rd and 5th miles the track traverses a small plain called Chawal or Tsawal; at 5 miles it passes through a gap about 700× wide, flat and open, between the eastern and western Sargu hills, thence to about 10 miles it skirts the base of the western hills pretty closely. Thereafter to the end of the stage the track leads S. W. over stony undulating ground, falling on the W. to the sand-hills of the Registan. Close on the E. are low gravelly hills, and behind these a considerable extent of broken ground, intersected by hollows and large water-courses, extends for several miles to the base of Shasta. Numerous shallow *nalas* are crossed and the *daman* is sprinkled with thorny shrubs and bushes.

Just before reaching camp the Argutai stream is crossed; no difficulty. At 15 miles the halting place of Argutai still in the Badezai Achakzai country.

Camping ground.—For 1 infantry brigade on a stony plain.

Water.—For the above force and more from the Argutai stream.

Fuel.—Abundant.

Fodder.—Good camel grazing.

Supplies.—*Nil.*

3	GWAZHA	8 m. 6f.	Camel road passable for wheeled artillery.
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38m. 6f.			

ROUTE No. 14-E—*contd.*

General Direction N.E. For the first 4 miles to the Waah *dara* the road is metalled and in excellent repair. Thence over *daman* to the end of the stage. At $8\frac{3}{4}$ miles the halting place of Gwazha.

Camping ground.—For 1 infantry brigade.

Water.—For the above force from the Tanda *dara* stream and a *karez*.

Fuel.—Scarce.

Fodder.—Good camel grazing.

Supplies.—*Nil.*

4	LALGOLI TANK : 14m. 4f.	Camel road practic-
53m. 2f.	OR ALI GULI DAND. (4,036').	able for wheeled artillery.

General direction N.W. Road now leads down the stony skirts of the hills which slope to the Kunchai plain. Numerous water-courses are crossed, but offer no obstacle to artillery. After 5 or 6 miles the road gets off the stones, and is thenceforward over light alluvial soil or sand. At $8\frac{1}{2}$ miles a track leads to a tank about 5 miles to the W., which is at the edge of the great sand desert, within the outermost sand-hills. The main road goes straight on to Kunchai wells. At $14\frac{1}{2}$ miles Lalgoli tank which is $1\frac{1}{2}$ miles long by over a mile wide and is said to contain water at all seasons; but this is doubtful; however, there is almost certain to be plenty between November and March. No permanent inhabitants, but in winter and spring numerous camps of Achakzais are in the neighbourhood and scattered over the whole plain.

Camping ground.—For 1 or 2 infantry brigades at least.

**Water.*—For the above force at least between November and March.

Fuel.—An appreciable quantity of firewood obtainable.

Fodder.—*Harijala* grass procurable; good camel grazing.

Supplies.—*Nil.*

5	KUNCHAI .. 8m. 6f.	Camel road practic-
63 m.		able for wheeled artillery.

* Natives report that the Lalgoli tank is often dry. In January 1879 the Infantry of General Stewart's division marched straight from Gwazha to Kunchai $23\frac{1}{2}$ miles, probably owing to lack of water at Lalgoli.

ROUTE No. 14-E—*contd.*

General direction nearly due N. Here the route lies over low sand-hills, and would be difficult for wheeled artillery. Stretches of sand continue for 3 miles when the road again leads over a hard, stony plain, covered with southern wood. A rocky ridge, called Bambul, is 2 or 3 miles to the left. Beyond this, N.W. is the Kunchai ridge. The sand desert extends up to and beyond these hills in great waves of loose red sand. At about $8\frac{3}{4}$ miles reach Kunchai camping place. There are two wells, one on either side of the road. They are about 150' deep; water slightly brackish, and not sufficient for a large body of men with their baggage animals. About due N. of camp, water is procurable from the bed of a ravine in the hills. To find the spot keep the highest peak on the right hand. Animals can be watered here from holes dug in the bed of the water-course. No permanent habitations, but nomad camps of Achakzais and Nurzais are scattered about (except in summer). There is also a good deal of cultivation in the plain.

This march is easy for artillery, except where sand has to be crossed.

Camping ground.—For one infantry brigade at least.

Water.—For the above force from the 2 wells and the ravine referred to above.

Fuel.—Southern wood abundant.

Fodder.—Excellent camel grazing.

Supplies.—*Nil.*

6	SHAH PASAND ..	15 m.	Camel road, practicable for wheeled artillery.
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78 m.			

Leaving Kunchai the road leads N. for 6 miles over a hard level plain; good going for all arms. Low sand-hills blown up from the desert to the W., are then reached. The road crosses them for about a mile, and is heavy for wheeled artillery. After this a sharp turn to the left (N.W.) over a gravel plain, keeping the sand-hills on the left. At about 12 miles cross the bed of the Kadanai. It is dry, except after heavy rain, and having low banks is easily passed. At 14 miles reach the channel of the Kushobai at the point where it unites with the Kadanai. The road descends into the river bed down a high bank and keeps along it for about a mile, when the right bank is ascended to a plateau on which is

ROUTE No. 14-E—*concl'd.*

the camping ground. The ascent from the water-course is steep. Close by is the village of Shah Pasand, *malik* of the Gurak Nurzais.

The road is good all the way and quite practicable for artillery. The country is very bare and barren, and no water is passed on this march. Numerous tents of nomads are, however, scattered about in the cold season, and there are many flocks of sheep. Immediately to the N.W. of camp is the grand-looking scarped hill of Ashik which can be seen from Gwazha camp and forms an excellent landmark over the whole plain. The red sand-hills of the desert come down to the further bank of the river, which is here called the Dori.

Gatai, on the main road, is about 14 miles E. of Shah Pasand and the intervening country is tolerably open. Columns advancing simultaneously on both roads can therefore communicate without difficulty.

Camping ground.—

Water.—

Fuel—

Fodder.—

Supplies.—

} *Vide* Route 13, Stage 2.

ROUTE NO. 14-F.

SAIAD BUS TO JAT POTI.

25 miles.

2 stages.

Authority.—Native information, 1900.

Epitome.

General description.—A connecting route between Routes in Northern Baluchistan, Route 132, from Nushki and the through Route 14 from Nushki to Kandahar, which is joined at stage 3; together with the former route it makes an alternative route to stages 1 to 3 of Route 14.

Road.—Camel road practicable for wheeled artillery throughout, though in places track leads through heavy sand.

The Dori river which is forded at the commencement of the second stage is the only obstacle encountered; crossing easy. Route open throughout the year.

ROUTE No. 14-F—*contd.*

Camping ground.—For 2 infantry brigades at the intermediate stage.

Water.—For the above force at least at the intermediate stage from the Dori river.

Fuel.—Procurable from tamarisk bushes.

Folder.—Grass procurable at Ziarat; also about 500 maunds of *bhusa* from Mandozai 3 miles E. of Ziarat; good camel grazing.

Supplies.—About 500 maunds unground grain from Mandozai.

No. of stage and total dis- tance.	DETAILS.	
1 <hr/> 15 m.	ZIARAT ..	15 m. Camel road practic- able for wheeled artillery.

General direction N.E. Leaving the Barechi village of Saiad Bus the track leads across several sand ridges. At $1\frac{1}{2}$ miles the old ruined fort of Pirosh Kala, E. of the road. At 3 miles Shahidan Ghundi where a *lashkar* of Barechis were defeated by a small column under Major Humfrey, 30th Bombay Infantry, in 1880. At 4 miles a small tank called *Musa talao* on the W. of the road, and some high sand bluffs called Reg-i-Khar near the road to the E. Between miles 5 and 10 the country is thickly sprinkled with *smalgai* bushes (a species of tamarisk) and patches of sand are occasionally crossed. At mile 6, a good-sized tank close to the sand-hills on the right of the road. From mile 10 to the end of the stage the track runs over a level plain with a succession of sand-hills to the W., but to the E. is bare, flat country without cultivation or inhabitants. At 15 miles Ziarat which takes its name from a small white-washed tomb, near which is a hamlet of *fakirs*, on the banks of the Dori.

Camping ground.—For 2 infantry brigades at least, $\frac{1}{2}$ mile S.E. of the tomb.

Water.—For the above force from the Dori river, and possibly for a division from the same source in the winter, but the water is rather salt.

Fuel.—Can be collected about 4 to 5 miles from camp, from tamarisk bushes,

ROUTE No. 14-F—*concl'd.*

Fodder.—Limited amount of grass from the Registan; 500 maunds *bhusa* from large village of Mandozai 3 miles E. of camp; good camel grazing.

Supplies.—500 maunds unground grain from Mandozai normally available.

2	JAT POTI	..	10 m.	Camel road practic-
				able for wheeled
				artillery.
<hr style="width: 10%; margin-left: 0;"/>				
25 m.				

General direction N.E. Immediately on leaving camp the Dori river is forded; crossing easy. The road then follows the right bank of the Dori river for 3 miles, where it leaves the valley and runs across a perfectly level plain of alluvial soil entirely surrounded by sand hills to about 5 miles, where sand ridge 50' to 60' above the plain is crossed; the sand is very fine, soft and deep and would be trying for the horses of wheeled artillery. At 6 miles the hamlet of Saiyid Yahia W. of the road, perched on a sand bluff. Thence the track runs nearly due N. to Jat Poti, reached at 10 miles.

<i>Camping ground.</i> — <i>Water.</i> — <i>Fuel.</i> — <i>Fodder.</i> — <i>Supplies.</i> —	}	Vide Route 14, stage 3.
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ROUTE NO. 15.

KABUL TO KANDAHAR.

Viâ Maidan, Ghazni and Kalat-i-Ghilzai.

310 $\frac{1}{4}$ miles.

27 stages.

Authority.—2nd Afghan war records and native information, 1912.

Epitome.

General description.—Main road between Kabul and Kandahar. From Kabul to Saiyidabad (stage 4), an alternative route, known as the Logar valley route (parts of Routes 3, 3-F. and 4) is more generally used by the inhabitants, as it traverses

ROUTE No. 15—*contd.*

the richest district in Afghanistan, but the present route *via* Argandeh and Kala Durani, which is identical with the last 4 stages of Route 4, is the shorter by $17\frac{1}{2}$ miles and better for troops, especially as it is now metalled. From Saiyidabad to Kandahar ($259\frac{1}{2}$ miles) there is no doubt that this is the best and shortest route, though alternatives exist here and there.

Average elevation of road from Kabul to Ghazni is 7,000'; from Ghazni to Kandahar (3,342') there is a gradual descent. Route was followed from Kandahar to Saiyidabad in March 1880 by a British division of all arms under Sir Donald Stewart consisting of 7,250 troops, 7,300 followers and 11,210 animals, and from Saiyidabad to Kandahar in August 1880 by the Kabul-Kandahar Force under Sir Frederick Roberts, consisting of 10,000 troops, 7,800 followers and 10,000 animals. The section Kabul to Saiyidabad was traversed by a force of all arms under General Ross in April 1880, consisting of 4,000 troops with attendant followers and animals, and by the heavy batteries of Sir D. Stewart's force referred to above.

Road.—Metalled motor road 24' wide with 12' to 16' metalling, no soling; reliable information in August 1912 indicated that the entire road would be metalled throughout by the autumn of 1912; bridges and culverts were then in process of construction between Ghazni and Kandahar, on completion of which the entire road would be ready for motor traffic.

As the road has been improved for motor traffic all serious *obstacles* have been removed.

The Sher Dahan pass (8,500') is crossed in the seventh stage and presents no difficulty.

Route open throughout the year, though the section Kabul to Ghazni is frequently under snow in the winter.

Camping grounds.—For a division at all stages.

Water.—For a division at all stages.

Fuel.—Wood scarce, but scrub abundant.

Fodder.—Grass at stages 5, 6 and 8; *khasil* at stages 12 and 21; *bhusa* in varying but appreciable quantities at all stages except at stages 3, 10, 17, 18 and 20, where the supply is doubtful; camel grazing good throughout, except in winter.

Supplies.—Unground wheat and barley in varying but appreciable quantities at all stages, except at stages 3, 10, 17, 18 and 20; cattle and sheep at stage 12.

ROUTE No. 15—*contd.*

For supplies, etc., at Ghazni and Kandahar *vide* Routes 6 and 12 respectively.

No. of stage and total distance.	DETAILS.
1 <hr/> 15 m.	ARGHANDEH : 15 m. Metalled motor road (7,200'). 24'.

Taking the suburb of Deh Afghan as the starting point the road leads S.W. towards the Deh Mozang gorge. At 1 mile Deh Mozang* (500 houses), inhabitants Tajiks and Kizilbashis, at the eastern entrance of the gorge which is about 1 mile in length and in which the road crosses the Kabul river by a wooden bridge 30× long and 6× wide; river only 4' deep as most of the water is taken off for irrigation higher up. Then it crosses a broad canal by a good plank bridge with a railing, and emerging from the gorge turns S.W. across the Chardeh plain, which is covered with fields, and gardens, thick with tall poplars and seamed with irrigation channels. There are numerous fortified villages, and infantry can only move with difficulty off the road. At about 3 miles pass the Deh Bori, a collection of 3 Tajik villages (about 200 houses). At 4 $\frac{3}{4}$ miles pass the Amir's large new garden house and grove, known as the *Mahtab Bagh*. Then skirt the northern slopes of the Korogh range and reach the small village of Kala Kazi, situated $\frac{3}{4}$ mile S. of the road on the W. edge of the Chardeh plain. Kala Kazi or Kala-i-Kazi was the farthest point reached by the Royal Horse Artillery and Cavalry in General Massey's engagement on the 11th December 1879. Here there is:—

Camping ground.—Difficult to find owing to cultivation.

Water.—Ample for a division from streams flowing into the Kabul river and from numerous irrigation channels.

Fuel.—Very scarce.

* In the 2nd Afghan war, on the retreat of the cavalry and horse artillery from the Chardeh valley on the 11th December 1879, this village was held by 200 men of the 72nd Highlanders sent out from Sherpur, and the Afghan advance was checked.

ROUTE No. 15—*contd.*

Fodder.—About 1,000 maunds *bhusa* could normally be collected in the immediate vicinity ; good camel grazing except in winter.

Supplies —About 1,000 maunds unground wheat and barley procurable in the immediate vicinity.

Road now leads due W., the Kabul river being left to the S. At $10\frac{1}{4}$ miles the Adramzai village of Murghir or Murgh Giran (100 houses). Here the Changar stream is crossed by a small, wooden bridge 6' long by 8' broad, practicable for wheeled artillery. At $11\frac{3}{4}$ miles Kala Ghulam Haidar (100 houses) and at 13 miles Kala Jafir Khan (50 houses), both Tajik villages. At $14\frac{1}{4}$ miles pass through a short, broad defile between a spur of the Paghman range and the Korogh mountain. At $14\frac{1}{2}$ miles opposite Arghandeh-i-Bala two roads branch off from this main road.

(i) One running nearly due W. to Jaokul where this road bifurcates leading—

(a) to Herat *viâ* Daulat Yar.

(b) to Mazar-i-Sharif *viâ* Bamian.

(ii) The other running N.E. over the Surkh *kotal* to Charikar *viâ* Istalif.

Arghandeh-i-Bala is about $2\frac{1}{2}$ miles N.W. of Arghandeh and lies in a small valley running up into and ending in the Paghman range of hills. Just before reaching camp the junction of the Changar and Arghandeh streams is crossed ; no difficulty. Throughout this march the passage of all arms would be mainly confined to the road and the paths connecting villages, owing to the highly irrigated and cultivated condition of the country. For the last 5 miles also the road is flanked on the S. by the Korogh range. At 15 miles Arghandeh, or Arghandeh-i-Pain (1,500 houses) which was a place of great importance during the British occupation in 1879-80, as it commands the road by which supplies are brought to Kabul from the S. and S.W.

Camping ground.—For a division between Arghandeh and Arghandeh-i-Bala, the country being level and open.

Water.—For the above force from the Arghandeh and Changar streams, from the Sadik ravine near camp and also from several irrigation channels.

Fuel.—Wood scarce.

Fodder.— } Grain for probably two infantry brigades and
Supplies.— } *bhusa* for their transport animals for 2 or 3

ROUTE No. 15—*contd.*

days from the large villages of Arghandeh-i-Bala and Arghandeh-i-Pain.

Good camel grazing except in winter.

2 KALA DUR. 14m. 6f. Metalled motor road
RANI. 24'.

29m. 6f.

From Arghandeh the Ghazni road runs S. W. The valley here is not very wide, and is bounded by hills both on the E. and W., but they are not near enough to enable an enemy to annoy a force marching through the valley, unless they were supplied with artillery. The Takht pass is reached at $3\frac{1}{2}$ miles, but the ascent to it is gentle, and it would not afford as good a position to an enemy as *kotal*s usually do; in fact the country leading to it is extremely suitable for cavalry, as is that descending from it. From this *kotal* the cluster of villages called Pain Maidan is visible and distant about 4 miles. Two roads descend from the ridge, one leading to Ghazni, the other direct to Pain Maidan. Soon after the descent is commenced, there is a path on the E. leading over a low ridge which goes to Lalandar.

From Pain Maidan two valleys branch off westward, being separated by a not very high range of hills; one is called Bala Maidan through which the Kabul flows. It contains numerous villages and a path runs through it joining the Bamian road just beyond Rustam Khel. The other is called the Nirkh valley. It contains a good many villages, and is highly cultivated, but it leads nowhere in particular and ends in the hills.

At $7\frac{1}{2}$ miles Pain Maidan (7,170'), 300 houses. Here there is—

Camping ground.—N. of village for 2 or 3 infantry brigades at least.

Water.—For a division and more from the Kabul river, about 1 mile to the W., whose water is brought close to camp by irrigation channels.

Fuel.—Wood scarce.

Fodder.—*Bhusa* to an appreciable extent from adjacent villages; good camel grazing except in winter.

Supplies.—Unground wheat and barley to an appreciable extent from adjacent villages.

The road now runs due S. down the valley of the Kabul river, keeping roughly about $\frac{1}{2}$ mile from its left bank. At 12 miles the river turns sharply to the E. and has to be crossed.

ROUTE No. 15—*contd.*

The old masonry bridge which existed in the 2nd Afghan war was subsequently swept away by floods, but has since been reconstructed. The river, however, is easily fordable, not being more than 18" deep. The river winds about a little and then strikes northwards to Deh Kepak, whence it flows nearly due E. through the Lalandar valley and makes its way to Kabul. As soon as the river is crossed, there is a gorge running up the hills on the E. of the valley, and so to the Logar valley; and it was this route which was taken by Brigadier-General Baker's brigade in November 1879. Before Kala Durani is reached, a low range of hills, with a narrow gorge through it, has to be passed, which might afford a fair position to an enemy attempting to block the road.

The country throughout this march is much restricted, the road lying in valleys, bounded at comparatively short distances by high hills.

At $14\frac{3}{4}$ miles Kala Durani, a small Tajik village with a fort.

Camping ground.—For a division at least.

Water.—For the above force from a large stream E. of the road.

Fuel.—Wood scarce, scrub abundant.

Fodder.— } A considerable quantity of unground wheat

Supplies.— } and barley and an equivalent amount of

bhusa could be collected from the populous neighbourhood known as Surkhpul Maidan, passed on the road 2 miles before the end of the stage. Good camel grazing except in winter.

3	TOP	10m. 4f.	Metalled motor road
—————	(7,400').		24'.
40 m.			

General direction S.W. Road gradually ascends for the first half of the stage till a distinct watershed across the valley is reached at 5 miles, when the road descends gently but decidedly to Top. At $4\frac{1}{2}$ miles the Ghilzai village of Bin-i-Badam (100 houses) on the W. of the road close under the hills with 3 or 4 forts on the hillside; $\frac{1}{2}$ mile S. of Bin-i-Badam is the small village of Anda.

Shortly after a path strikes off S.W. over some open downs to the Langar valley, or Rewat valley as it is sometimes called by the inhabitants, and is joined there by a path which comes

ROUTE No. 15—*contd.*

from the Nirkh valley through the Bez Samand valley. About this point also there is the watershed already referred to across the valley. When the ridge of the watershed is reached and for some distance afterwards, signalling can be carried on with the Sher Dahan, a *kotal* about 10 miles short of Ghazni. From Top itself the Sher Dahan is lost, but it can easily be got from hills not far off. The road in this march lies in a valley 2 miles wide, flanked by high hills on the E. and W. At $10\frac{1}{2}$ miles the camping ground of Top, called after the small district of that name.

Camping ground.—For a division.

Water.—Probably sufficient for the above force from a tributary of the Logar river flowing parallel to the road, $\frac{1}{4}$ mile to the W. of it.

Fuel.—Wood scarce, scrub abundant.

Fodder.— } Probably nothing appreciable; good camel
Supplies.— } grazing except in winter.

4 **SAIYIDABAD.** 10m. 2f. Metalled motor road.
————— (6,950'). 24'.
50m. 4f.

Road continues S.W. and follows the left bank of the tributary stream referred to. The valley descends gradually at first and afterwards more rapidly. At about 5 miles the Wardak country is entered. At $5\frac{1}{4}$ miles Shaikhabad (6,650') at the junction of this tributary stream with its parent river the Logar, over which a masonry bridge was built at this point in 1906; in addition there is also a strong, wooden bridge near by. The average depth of the water here however is only about 18". Shaikhabad proper stands on the right bank of the Logar, the houses on the left bank compose the village of Kheri Taisang which however is included in Shaikhabad. There is a strong fort here. Here there is—

Camping ground.—For a division.*

* On the 28th April 1880 General Ross's division consisting of 2 mountain batteries, 6 squadrons cavalry, and 2,680 rifles encamped at Shaikhabad.

On the 22nd May 1880 troops as under accompanying Sir F. Roberts halted at Shaikhabad:—

2 mountain batteries.
7 squadrons cavalry.
1 company sappers and miners.
4 battalions infantry.

ROUTE No. 15—*contd.*

Water.—For the above force and more, from the Logar river.

Fuel.—Wood in small quantities; also a certain amount of scrub.

Fodder.—Grass and clover abundant except in winter.

Supplies.—Rice and *jowar* are plentiful; wheat scarce.

The road continues S.W. and at about 8 miles enters the Shiniz valley following the left bank of that river to the end of the stage. The country throughout this march is much restricted, the road lying in valleys, bounded at comparatively short distances by high hills. At $10\frac{1}{4}$ miles Saiyidabad, a cluster of hamlets belonging to the Khwaja Rasul Saiyids. Signalling communication with the Sher Dahan *kotal* can be maintained from a hill just W. of the village.

Camping ground.—For a division on the left bank of the Shiniz river.

Water.—For the above force from the Shiniz river.

Fuel.—Wood scarce.

Fodder.— } Unground grain and *bhusa* to a considerable

Supplies.— } extent can be collected from the various villages in the Shiniz and Unkai valleys. Good camel grazing except in winter. From Kabul to Saiyidabad Routes 4 and 15 are identical. In the present route, however, this section has been described from Kabul onwards, whereas in Route 4 it is described from Saiyidabad to Kabul.

From a point a short distance before reaching Shaikhabad a route is known to lead over the Kadam Khan *kotal* past Piru Khel and Shaleli to Babus. It is said that it could be made fit for wheeled artillery.

5 HAFT ASIA .. 15 m. Metalled motor road,
24'.

65m. 4f.

Road continues S.W. and runs parallel to the Shiniz river, a few hundred yards from its right bank, throughout the stage. At 5 miles Haidar Khel comprising a fort on the E. of the road and a cluster of hamlets at the foot of the hills about 1 mile W. of the road. As far as Haidar Khel the road skirts a range of hills which flank it on the E. To the W. the hills have gradually receded and at this point the valley is about 2 miles wide and highly cultivated.

ROUTE No. 15—*contd.*

At Haidar Khel there is:—

Camping ground.—For 2 infantry brigades W. of the road.

Water.—For a division from the Shiniz river.

Fuel.—Wood scarce, scrub abundant.

Fodder.— } *Bhusa* and unground wheat and barley to an

Supplies.— } appreciable extent could be collected from the Haidar Khel villages.

Leaving Haidar Khel the road once more passes through low hills and at 10 miles it practically leads through a defile, the hills flanking the road very closely on both sides. Immediately afterwards it emerges on to the open valley which is extremely fertile and well cultivated with numerous villages dotted about. At 15 miles the Wardak village of Haft Asia, which comprises 10 to 12 fortified hamlets.

Camping ground.—For a division.

Water.—For the above force from the Shiniz river and a *karez*.

Fuel.—Wood scarce, scrub abundant.

Fodder.—Grass and lucerne procurable except in winter; *bhusa* to an appreciable amount should be normally available; fair camel grazing.

Supplies.—Unground wheat and barley to an appreciable amount could be collected in the vicinity. Good camel grazing except in winter.

6 **SHASHGAO** .. 10m. 2f. Metalled motor road,
24'.

75m. 6f.

Road continues S. W. and still follows the right bank of the Shiniz river. The hills once more close in on the road on the E., restricting the movements of cavalry and wheeled artillery in that direction, but to the W. the country remains open and is suitable to the passage of all arms. At 10 $\frac{1}{4}$ miles the walled Wardak village of Shashgao,* surrounded by a considerable amount of cultivation and numerous forts.

Camping ground.—For a division.

Water.—For the above force from springs and 11 *karezes*; the Shiniz here is a very small stream.

Fuel.—Wood scarce, scrub abundant.

* On the 14th August 1880, the whole of the Kabul-Kandahar force (10,000 fighting men with followers) encamped at Shashgao.

ROUTE No. 15—*contd.*

Fodder.—Grass and lucerne to a limited extent except in winter; a considerable quantity of *bhusa* could be collected in the immediate vicinity; fair camel grazing except in winter.

Supplies.—A considerable amount of unground wheat, barley and other grain procurable from villages in the immediate vicinity.

7	GHAZNI	..	13m. 2f.	Metalled motor road,
————	(7,279').			24'.
89 m.				

Road continues S.W. and leads through open country. The hills to the E. are from 2 to 3 miles distant, as far as the northern entrance of the Sher Dahan pass, reached at $3\frac{1}{2}$ miles. The road through the pass is good, and broad enough for four horses abreast, and easy for all arms. Ascents and descents gradual and quite practicable for the heaviest wheeled guns. Crest of pass (8,500') reached at about $5\frac{1}{2}$ miles; containing hills bare and treeless, easy of access especially on the E. For about a mile beyond the crest of the *kotal* there is a gradual descent, and the hills close in. The southern end of the pass is reached at about $6\frac{1}{2}$ miles. Here the hills receding again in a curve, on either side, form a basin, from a mile to a mile and a half broad, in which is a line of *karez*s furnishing water for about 100 acres of cultivation. At 9 miles they converge again, and here the road ascends a second low *kotal* in nearly a straight line, from the top of which the Ghazni plain is overlooked. Between the 9th and 10th miles there are a succession of dry water-courses, some of which require ramping to allow of the passage of wheeled artillery. At $10\frac{3}{4}$ miles a *nala* and a stream are met with, which also require ramping at this point; but they can be turned by a detour to the W. At $12\frac{3}{4}$ miles pass suburb of Roza, the outskirts of which are a mass of vineyards; and $\frac{1}{2}$ mile further reach camp on plain to the S. of the two old *minars* which stand to the E. of Ghazni between the city and the suburb of Roza.

Camping ground.—

Water.—

Fuel.—

Fodder.—

Supplies.—

and for description of Ghazni

} *Vide* Route 6, stage 10.

ROUTE No. 15—*contd.*

8	NANI	..	14m. 2f. Metalled motor road, 24'.
103m. 2f.			

From the camping ground two roads lead to the southern extremity of the town of Ghazni; the western is the motor road and leads through the gardens outside the town; the other makes a detour to the E. and would be useful for transport animals. Leaving the town the road leads S.W. and maintains this direction, throughout the stage. At $3\frac{1}{2}$ miles a garden called Chehil Bachagan is reached after crossing the sandy bed of a river about $200\times$ broad. Thence to Ispandi, reached at 7 miles, the road is flanked on the W. by a low range of hills $1\frac{1}{2}$ miles distant, and on the E. by hills considerably further off, the country between is well cultivated and studded with villages. Ispandi is merely a halting place and there would probably be room for 1 or 2 infantry brigades to encamp here if required.

The road now leads over an open, flat plain. At 9 miles Noghai on the E. of the road and a group of Ghilzai villages known as Bagla, 1 mile W. of the road, beyond which, separated by a low range of hills, is the district of Waghaz covered with many Musa Khel Ghilzai villages, beyond which again is the Hazara district of Kakrak. At about 11 miles the Andari villages of Kala-i-Fakir and Kala-i-Sher are passed about 1 mile E. of the road and at 12 miles the Kizilbash village of Karabagh also on the E. of the road. At $14\frac{1}{4}$ miles the large Andari village of Nani in the western limits of the Shilgrha district.

Camping ground.—For a division on the open, sandy plain.

Water.—For the above force from several springs and *karezes*.

Fuel.—Wood scarce; scrub abundant.

Fodder.—Grass plentiful; an appreciable quantity of *bhusa* should normally be available; camel grazing excellent.

Supplies.—Unground grain to some considerable extent should always be procurable from the surrounding villages.

A large number of transport camels can be obtained in the vicinity.

At Nani, Route 7, the main through route from the Gomal valley to Ghazni, joins this route.

ROUTE No. 15—*contd.*

9 MASHAKI .. 14m. 4f. Metalled motor road,
 (6,900') 24'.

117m. 6f.

General direction S.W. For the first $6\frac{1}{2}$ miles the road crosses an extensive plain; there are only a few water-courses to impede the march. Between $6\frac{1}{2}$ and $8\frac{1}{2}$ miles the hills are close on the W. side of the road. At about the 8th mile descend from a low pass to a stream with a boggy bed, where it is necessary to find other crossings lower down stream. The road then leads through low hills. Mashaki is a group of villages, surrounded by cultivation between two *karez*es. The villages in the neighbourhood are:—

- | | | |
|----------------------|---|-------------------------------|
| (1) Khah Mashaki | } | inhabited by Andari Ghilzais. |
| (2) Haji Musa | | |
| (3) Kala-i-Meri | | |
| (4) Akhund Khel | | |
| (5) Kala-i-Murchi | | |
| (6) Saiyid Musa .. | | Inhabited by Saiyids. |
| (7) Kala-i-Durani .. | | Inhabited by Duranis. |

They were all deserted in April 1880. Supplies were brought in by Hazaras.

Camping ground.—For a division on an open sandy plain about $1\frac{1}{2}$ miles in length between 2 *karez*es.

Water.—For the above force from these *karez*es.

Fuel.—Wood scarce, scrub abundant.

Fodder.— } *Bhusa* and unground grain to a very consider-
Supplies.— } able extent would normally be procurable

from the Mashaki villages.

10 JAMRUD .. 9 m. Metalled motor road,
 24'.

126m. 6f.

Road continues S.W. It lies across a valley which is much cultivated and there are many forts and villages scattered on every side. The Jaguri Hazaras occupy a large tract of country to the W. of the range of mountains which run parallel to the route as far as Mukur. N. of this tribe the Muhammad Khwaja and Chahardasta tribes of Hazaras commence. They also possess a tract of country, bordering on the plain to the

ROUTE No. 15—*contd.*

E. of the range, already alluded to, which is called Karabagh, of which Jamrud, Kala-i-Marwardar (1 mile from camp), and Chahardeh Bebud (2 miles from camp) belonging to the Chahardasta section, are the principal villages in its southern portion. These villages are fortified, being built close beside those of the Afghans, who are here mainly of the Andari section of Ghilzais. Most of these villages, both Afghan and Hazara, were in ruins in April 1880, owing to the feud between them. Each tribe had devastated the property of the other. There is also a good road from Karabagh.

At 9 miles the halting place known as Jamrud, near which are several Hazara hamlets, strongly fortified owing to the proximity of the Andari Ghilzai villages.

Camping ground.—For a division on the cultivated plain.

Water.—For the above force from *karez*es N. and S. of camp.

Fuel.—Wood scarce, scrub abundant.

Fodder.— } Nothing appreciable in the immediate vicinity.
Supplies.— }

11	Oba Karez	..	12 m.	Metalled motor road,
138 m. 6 f.	(6,986').		24'.	

General direction S.W. Country fertile and highly cultivated which would restrict the movements of wheeled artillery especially as the country is intersected by several difficult *nalas* and ravines. At 12 miles Oba; village marked by a large tree, near which a stream of clear water runs out from a *karez*. The villages near Oba Karez are—

Piari Khel and Bazak, $1\frac{1}{4}$ miles to the S.E.

Laram, 3 miles to the S.

Sekacha, 3 miles to the S.W.

Inhabitants Andari Ghilzais.

Camping ground.—For a division on an open waste plain.

Water.—For the above force from the *karez* mentioned, with an additional water-supply from a *karez* $1\frac{1}{2}$ miles S. of Oba Karez.

Fuel.—Wood scarce, scrub abundant.

ROUTE No. 15—*contd.*

Fodder.—A considerable amount of *bhusa* could be collected from the surrounding villages; camel grazing excellent except in winter.

Supplies.—A large amount of unground wheat and barley procurable, also sheep in large numbers. In April 1880 supplies were found with difficulty owing to the country being deserted.

12 **KALA SARKARI** 14 m. Metalled motor road,
 ————(MUKUR DISTRICT). 24'.
 152m. 6f. (6,550')

General direction S.W. Country W. of the road is open and passable by all arms; E. of the road there are a great many villages, protected by mud forts and surrounded by much cultivation. The Tarnak river whose source is to be found near Oba Karez flows parallel to the road for the first half of the march about 3 miles to the E.; then gradually it bends to the southward and is about 7 miles distant at Kala Sarkari; its course is marked by a line of willow trees. At 6 miles pass a mound visible for a considerable distance, and at 13½ miles reach a number of springs which form a tributary stream of the Tarnak.

Camping ground.—For a division on a small plain E. of the road.

Water.—For the above force from an excellent spring ¼ mile W. of the main road; animals would be watered at the many water channels.

Fuel.—Wood scarce, scrub abundant.

Fodder.—In March and April *khasil* daily for the horses of one cavalry regiment at least; *bhusa* to a considerable extent, probably at least 2,000 maunds could be collected from the villages in the vicinity; good camel grazing except in winter.

Supplies.—Some 2,000 to 3,000 maunds unground grain should normally be procurable from the surrounding villages. Cattle, sheep and goats are said to be kept in large numbers, but the Mukur villages in 1880 were all deserted and only such supplies and live stock were obtained as were found by foraging parties. Near the camp is a burial ground reputed to be a haunt of thieves.

At Kala Sarkari, Route 8, the main through *kafila* route from Zhob, joins this route coming in from the S.

ROUTE No. 15—*contd.*

near camp are Kala-i-Adam Khan, Babakarzai, Suza and Mulla Kaisar. Inhabitants, Tokhi Ghilzais.

Camping ground.—For a division to the W. of the road, with an alternative site N. of the *nala*.

Water.—For the above force from *karezes*.

Fuel.—Wood scarce, scrub abundant.

Fodder.—A few hundred maunds *bhusa* normally available; good camel grazing except in winter.

Supplies.—A few hundred maunds unground grain ordinarily procurable.

15	SHAHJUI ..	8 m. Metalled motor road,
—————	(6,247')	24'.
183m. 2f.		

Road continues S.W. The Tarnak river now gradually approaches the road and for the latter half of the stage the river flows parallel to the road about 1 mile distant.

Country generally open and passable by all arms.

The villages near Shahjui are (1) Saigai, about $1\frac{1}{2}$ miles S. of camp; (2) three villages of Musazai, on the left bank of the Tarnak, about 3 miles from Shahjui; (3) Kala-i-Dinak, 2 miles E. of Shahjui; (4) two villages, Sangar and Kala Khel, about 3 miles W. of camp. The villages of Ulan Robat to the N.W. might also be requisitioned, but the nearest is quite 7 miles distant. In the Ulan Robat group are some 20 villages; country very rich.

Camping ground.—For a division; sites on both sides of the road.

Water.—For a division from *karezes*; animals if necessary could be watered at the Tarnak river about $\frac{3}{4}$ mile E. of camp.

Fuel.—Wood scarce, scrub abundant.

Fodder.—Probably from 1,000 to 2,000 maunds *bhusa* could be collected from the villages mentioned; fair camel grazing.

Supplies.—About 1,000 to 2,000 maunds unground wheat and barley could be collected from the villages mentioned. On the 25th October 1879 a sharp engagement took place near Shahjui when a column under Brigadier-General R. J. Hughes defeated a large body of Ghilzais with considerable loss.

ROUTE No. 15—*contd.*

16	TAZI	..	12 m. Metalled motor road,
<hr style="width: 100px; margin: 0 auto;"/>	(5,849')		24'.
192m. 2f.			

General direction S.W. The country for the first 5 miles is open and passable by all arms. At 5 miles the Tokhi villages of Mir Kot on the W. of the road and Gagari $\frac{3}{4}$ mile E. of the road. Here the Tarnak river, coming in from the N.E., almost meets the road, which follows its right bank henceforward to within a few miles of Kandahar. At $5\frac{1}{2}$ miles a range of hills is met, which flanks the road on the E. and continues to the end of the stage. The country on the W. of the road for the latter half of the stage is much intersected by *nalas* and ravines and would be very difficult for wheeled artillery. At 12 miles the halting place known as Tazi near the Tokhi Ghilzai village of the same name.

The villages on the left bank of the Tarnak, close at hand, whence supplies are procurable, are Tazi, Lala Shahid, Takht Gal, Gojai, Gundai, and Malegh, all inhabited by Tokhis. The Tokhi Patozai section also possess villages on the left bank, but they are distant some 7 or 8 miles. Principal among them are Abdulla, Khwaja Khel, Mulla Didan, Ukkas and Spin Tiga. To the N. of camp on right bank are two villages (3 miles off), Ashogai and Abdul Habib, rich in supplies.

Camping ground.—For a division W. of the road.

Water.—For the above force and more from the Tarnak river $\frac{1}{4}$ mile E. of camp.

Fuel.—Wood scarce, scrub abundant.

Fodder.—*Bhusa* to a considerable extent could be collected from the Tokhi Ghilzai villages mentioned; good camel grazing.

Supplies.—A large amount of unground grain could be collected in the vicinity. The Tokhi Ghilzais did not readily produce supplies here in 1879-80, but subsequently foraging parties procured ample supplies on payment.

17	NAORAK	..	7 m. Metalled motor road,
<hr style="width: 100px; margin: 0 auto;"/>			24'.
202m. 2f.			

General direction S.W. The road follows the right bank of the Tarnak closely throughout. Country E. of the road is hilly, on the W. it is much intersected by *nalas* and ravines,

ROUTE No. 15—*contd.*

At 4½ miles Amadin (50 houses) and at 5 miles Olali (70 houses) both Tokhi Ghilzai villages on the right bank of the river.

At 7 miles the halting place known as Naorak.

There are small patches of cultivation here, but no village. In an S.E. direction, distant about 3 miles, is a hamlet called Musa Khel; but the country generally is uninhabited and unproductive. At about 6 miles S. of Naorak there is a village named Bubakarzai, on the left bank of the Tarnak, with cultivation, and also a narrow valley called Dorai, which contains two or three small villages, 2 and 3½ miles from Bubakarzai. Another group of villages, from 6 to 10 miles distant, is called Kurram, situated in a undulating plain to the N. E., from which supplies can also be procured, on which account it might be found more convenient to halt on the right bank opposite Bubakarzai, making a march of 13 miles from Tazi.

Camping ground.—For a division, but the site is a bad one, being too confined between the river to the E. and the broken ground to the W.; the force would have to be divided into several encampments on both sides of the river.

Water.—For the above force and more from the Tarnak.

Fuel.—Southern wood abundant.

Fodder.—Good camel grazing.

Supplies.—Nil.

18	SAR-I-ASP ..	12 m.	Metalled	motor
		road, 24'.		

214m. 2f.

General direction S.W. For the first half of the stage the road lies between 2 parallel ranges of hills, the intervening valley being only a few hundred yards wide. During the second half of the stage the hills W. of the road disappear and in their place is a bare, open plain. At 12 miles the encamping ground of Sar-i-Asp W. of the road.

Camping ground.—For a division.

Water.—For the above force and more, from the Tarnak river.

Fuel.—Wood scarce, scrub abundant.

Fodder.—Good camel grazing.

Supplies.—Nothing appreciable.

ROUTE No. 15—*contd.*

19 **KALAT-I-GHILZAI** 9 m. Metalled motor road,
 (5,543') 24'.
 223 m. 2f.

General direction S.W. Country E. of the road generally is broken and hilly, to the W. is a bare, open plain. At 9 miles Kalat-i-Ghilzai.

KALAT-I-GHILZAI. *Population* 15,000. *Garrison* (1912) 1 squadron cavalry, 3 battalions infantry and 3 batteries.

In 1880 the fort was described as being a work of irregular profile, situated on a hill 100' above the surrounding plain. It is roughly in the form of an oblong, the N. and S. sides of which are about 300× in length, and the E. and W. about 150×. The main gateway is on the S. side; the approaches to it are steep and fairly well flanked by a wall facing N.E. The rampart is surrounded by a loop-holed wall about 6 feet in height, and about 2 feet thick; loop-holes are faulty and ill constructed, admitting of shelter being obtained under the wall; both wall and rampart are much out of repair. It would be necessary to breach the walls before attempting an assault. The weak point is on the N. side, where there is an unused gateway; here the wall is very thin, and the approaches to it not so steep as on the other side. There is a commanding hill 600× N.W., whilst to the W. lies high ground, on which batteries could be erected to enfilade completely the N. and S. faces. The fort was not considered in 1882 as fit to stand against troops armed with rifled guns and modern rifles. In the interior there are some buildings which would serve as shelter for troops and as hospitals and supply store-houses. In the centre, on an artificial earthen mound, is a citadel, or keep, 80' above the main fort; it would be impossible to scale this; but, in the event of the fort falling, it could not hold out from want of water, which is obtained from a spring at the foot of the mound in which the keep is built. It has, however, a good command over the surrounding country. The spring is apparently perennial.

It was reported in 1903 that alterations in the fort were in progress.

The country round Kalat-i-Ghilzai is capable of supporting a small garrison in the fort permanently. The Hotak

ROUTE No. 15—*contd.*

district from 10 to 20 miles to the E. and Mizan district (Durani) in the Arghandab valley to the W. can furnish a large amount of supplies. The people in the immediate neighbourhood of Kalat-i-Ghilzai are Hotak and Tokhi Ghilzais.

Route 9, a main through route from the Zhob joins this route here.

Route 15-D, the alternative route between this stage and Kandahar, *viâ* the Arghandab valley, leads away to the W. from Kalat-i-Ghilzai.

Camping ground.—For a division at least.

Water.—For that force from the Tarnak river.

Fuel.—Wood procurable to a certain extent within a radius of 5 miles, also a certain amount of scrub.

Fodder.— } *Bhusa*, unground wheat and barley and probably gram, sufficient for the requirements of a division for about a fortnight could be collected in the vicinity. There is also good camel grazing.

20 **PUL-I-SANG** .. 8 m. Metalled motor road,
 ————— (5,007') 24'.

231m. 2f.

General direction

S.W. Country open throughout. At 5 miles the Hotak Ghilzai village of Sefu Kala $\frac{1}{2}$ mile E. of the road. At 8 miles the halting place of Pul-i-Sang on the boundary between the Ghilzai and Durani country.

Camping ground.—For a division.

Water.—For the above force and more, from the Tarnak river.

Fuel.—Wood scarce, scrub abundant.

Fodder.—Fair camel grazing.

Supplies.—Nothing appreciable.

21 **JALDAK** .. 9 m. Metalled motor road
 ————— (4,890'). 24'.

240m. 2f.

General direction S.W. Country generally open and the march easy, a few spurs of hills (which offer no difficulty) being crossed at intervals. At 9 miles the Durani village of Jaldak where there is a Government granary, in which 8,500 maunds of grain are supposed to be stored.

ROUTE No. 15.—*contd.*

Camping ground.—For a division; site poor and several detached camps would have to be made.

Water.—For the above force and more from the Tarnak.

Fuel.—Wood scarce, scrub abundant,

Fodder.—*Khasil* for the horses of a cavalry brigade daily, during March and April; lucerne grass obtainable; *bhusa* to a considerable extent, good camel grazing except in winter.

Supplies.—A large quantity of grain is usually stored in the granary; abundant supplies of all kinds were procurable here in 1879-80.

22 **TIRANDAZ** .. 14 m. Metalled motor road.

254m. 2f.

General direction S.W. In 1880 this section of the road to Tirandaz was described as follows.

“ A mile from camp the river makes a bend, cutting into the hillsides, and a track must be prepared for heavy guns. For the first 3 miles the road is fairly good. Thence there are two roads to Tirandaz; one, the regular and direct road runs round a hill close to the river bank, and has a considerable ascent with a somewhat difficult turn; though good enough for camels it would not be considered safe for guns. The other crosses a hill to the W. of the Jalaogir pass; it is a longer round but presents no difficulties. The march is a trying one, and in some places irrigation channels caused delay to camels.”

It is now (1912) known that one of these 2 roads is a motor road.

Camping ground.—For a division on an open plain E. of the road.

Water.—For the above force and more, from the Tarnak river.

Fuel.—*Jhau* jungle, suitable for fuel, procurable in the river bed.

Fodder.—*Bhusa* to an appreciable extent procurable; good camel grazing except in winter.

Supplies.—Unground wheat and barley to a considerable extent procurable.

ROUTE No. 15—*contd.*

23 **SHAHR-I-SAFA** .. 12 m. Metalled motor road,
 _____ (4,220'). 24'.
 266 m. 2f.

General direction S.W. At $1\frac{1}{2}$ miles cross a *nala* with high banks, and at 2 miles pass a minaret. At about 8 miles the villages of Shahbaz Khan and Bakhtiar, whose irrigation channels overflowed in April 1880, and the road was swamped. A long detour had to be made to the E. The remainder of the march is good. There is no village at Shahr-i-Safa, but on the right of an artificial mound some 400× in front of the river, is situated the encamping ground on a fine open plain.

There is not much cultivated land in the vicinity of Shahr-i-Safa.

Camping ground.—For a division at least on the plain referred to.

Water.—For the above force and more from the Tarnak river.

Fuel.—Tamarisk bushes on the river side afford a little fuel.

Fodder.—Good camel grazing except in winter.

Supplies.—Nothing appreciable in the vicinity.

24 **KHEL-I-AKHUND** 12 m. Metalled motor road.
 _____ 24'.
 278m. 2f.

General direction S.W. For the first five miles the road passes across an open, undulating plain, then for the rest of the stage there is a constant succession of ascents and descents; at the 7th mile a defile is reached, called the Poti pass between two low hills. The road passes over the face of a hill which falls precipitously towards the bed of the Tarnak.* The descent is steep and narrow.

Camping ground.—For a division.

Water.—From the Tarnak for the above force.

Fuel.—Tamarisk bushes on the river side afford a little fuel; scrub abundant.

Fodder.—*Bhusa* to a considerable extent procurable; good camel grazing at all seasons of the year.

* Presumably this has been improved for motor traffic.

ROUTE No. 15—*contd.*

Supplies.—A considerable quantity of *ata*, unground wheat and barley procurable.

25	ROBAT	..	12 m.	Metalled motor road,
	(3,622').			24'.
290m. 2f.				

General direction S.W. Country consists of undulating plains on which a few low hills are occasionally dotted; easy for the passage of all arms. At 12 miles the Durani village of Robat.

Camping ground.—There are 2 sites for camps; the site on the W. of the road being considerably larger than that on the E.; sufficient room for a division.

Water.—For a division and more from the Tarnak river.

Fuel.—Wood scarce, scrub abundant.

Fodder.—*Khasil* for the horses of a cavalry brigade daily during March and April; *bhusa* procurable to a considerable extent; good camel grazing except in winter.

Supplies.—Unground wheat and barley to a considerable extent can be collected.

Communication by heliograph, can be maintained direct with Kandahar citadel *viâ* Mohmand.

26	MOHMAND	..	8 m.	Metalled motor road,
				24'.
298m. 2f.				

General direction S.W. Road leads over a *daman* which however is much intersected by water-cuts. At 8 miles group of villages known a Mohmand.

Camping ground.—For a division on an excellent site N.W. of the village.

Water.—For the above force from the Tarnak.

Fuel.—Procurable from tamarisk bushes.

Fodder.—*Bhusa* to an appreciable extent procurable; camel grazing fair, *nil* in winter.

Supplies.—Nothing appreciable.

27	KANDAHAR	..	12 m.	Metalled motor road,
				24'.
310 m. 2f.				

ROUTE No. 15—*concl'd.*

General direction nearly due W. Road traverses an extensive plain, excellent going for all arms. At about 10 miles the suburbs of Kandahar are reached. At 12 miles Kandahar.

Camping ground.—

Water.—

Fuel.—

Fodder.—

Supplies.—

and for description of Kandahar

} *Vide* Route 12, stage 6.

ROUTE No. 15-A.

GHAZNI TO KANDAHAR.

Viâ Sang-i-Masha and Maidan.

224 miles.

19 stages.

Authority.—Native information.

Epitome.

General description.—An alternative route between Ghazni and Kandahar, though very little is known about the route than that it exists. The section Ghazni to Sang-i-Masha (stage 5) was used by Abdur Rahman in his descent upon Ghazni. From Sang-i-Masha to Maidan (stage 10) the route is supposed to follow the Arghandab valley; at Soznai, stage 17, it joins Route 15-D, the Arghandab valley route to Kandahar, which it follows for the last two stages.

Road.—Believed to be a camel road throughout.

The only known *obstacle* met with is the Arghandab river which is forded at Soznai; the river is sometimes unfordable here, for a fortnight at a time, after heavy rain in the winter and spring. In September and October 1880 the river ran in two streams at Soznai, each about 3' deep and 40× wide; the river bed here is about $\frac{1}{2}$ mile across.

Camping ground.—

Water.—

Fuel.—

Fodder.—

Supplies.—

} No information, except for the last stages for details of which *vide* Route 15-D.

ROUTE No. 15-A—*contd.*

No. of stage and total distance.	DETAILS.	
1	KAKARAK ..	12 m. Camel road.
12 m.	<p>General direction S.W. Leaving Ghazni the road leads down an open valley, whose stream crosses the Kabul-Kandahar road 12 miles S. of Ghazni, and then joins the Ghazni river. At about 12 miles Kakarak in the Waghar district, standing on the banks of a stream of the same name. There are several Musa Khel Ghilzai villages in the vicinity.</p>	
	<p><i>Camping ground.</i>— <i>Water.</i>— <i>Fuel.</i>— <i>Fodder.</i>— <i>Supplies.</i>—</p>	} No details.
2	GULISTAN ..	12 m. Camel road.
24 m.	<p>Road continues S. W. At about 5 miles it passes several Jaghuri Hazara villages. At 12 miles there is a halting place near the village of Gulistan, whence a camel track leads due S. to the Kabul-Kandahar road (Route 15) about 8 miles distant, which it joins a little N. of Jamrud, stage 10 of that route.</p>	
	<p><i>Camping ground.</i>— <i>Water.</i>— <i>Fuel.</i>— <i>Fodder.</i>— <i>Supplies.</i>—</p>	} No details.
3	CAMP ..	14 m. Camel road.
38 m.	<p>Road continues S. W. At about 10 miles the road crosses a low <i>kotal</i>; no difficulty. Another valley is now entered whose waters also flow across the Kandahar road. At about 11 miles the Hazara village of Baroda. At about 14 miles camp.</p>	

ROUTE No. 15-A—*contd.**Camping ground.*—*Water.*—*Fuel.*—*Fodder.*—*Supplies.*—

} No information.

4 **CAMP** .. 12 m. Camel road.

50 m.

Road now leads nearly due W., nothing is known about this stage.

Camping ground.—*Water.*—*Fuel.*—*Fodder.*—*Supplies.*—

} No information.

5 **SANG-I-MASHA** .. 12 m. Camel road.

62 m.

General direction W. The road runs over a level plain, gradually descending into the Sang-i-Masha valley in the latter half of the stage.

Camping ground.—*Water.*—*Fuel.*—*Fodder.*—*Supplies.*—

} No information.

6, 7, 8, 9 **MAIDAN** .. About 68 m. Camel road.
and 10.

130 m.

The information about these five stages, as about all other routes through the Hazarajat is vague; it is believed that a camel road exists down the Arghandab valley, whose general direction is S.W. The distance between Sang-i-Masha and Maidan, following the course of the Arghandab stream by the map, is 68 miles and this has been divided into 5 stages. Maidan stands at the junction of the Chila Khor and Arghandab rivers and is about 30 miles N.W. of Kalat-i-Ghilzai, along a camel track which connects the two places.

ROUTE No. 15-A—*concl'd.*

Camping ground.— } No information, but there would cer-
Water.— } tainly be sufficient water for one
Fuel.— } infantry brigade with proportion
Fodder.— } of divisional troops throughout
Supplies.— } these 5 stages from the Arghandab
 river.

11, 12, 13, 14, **SOZNAI** .. 80 m. Camel road.
 15, 16 and 17.

210 m.

There is practically no information about this section except that a camel track exists; its probable course by the map is about 80 miles and these have been divided into 7 stages. At Soznai, Route 15-D, running from Kalat-i-Ghilzai to Kandahar *via* the Arghandab valley is joined.

Camping ground.— } For intermediate stages no in-
Water.— } formation.
Fuel.— } For Soznai, *vide* Route 15-D, stage 8.
Fodder.— }
Supplies.— }

18 **SHAKCHALA**.. 9 m. Camel road.
 (OR SHEKH
 219 m. **CHALA**)

This stage is identical with stage 9, Route 15-D.

19 **KANDAHAR** .. 5 m. Camel road.

224 m.

This stage is identical with stage 10, Route 15-D.

ROUTE No. 15-B.

KALA SARKARI (MUKUR DISTRICT) TO SANG-I-
 MASHA (EASTERN HAZARAJAT).

35 miles.

3 stages.

Authority.—Native information.

Epitome.

General description.—A connecting route between the Kabul-Kandahar road, (Route 15) and Route 15-A, the alternative

ROUTE No. 15-B—*contd.*

route between Ghazni and Kandahar. The information about this route, as about all other routes in the Hazarajat is vague.

Road.—Camel road, passable for wheeled artillery throughout. No *obstacles* are known to exist. Route open throughout the year.

<i>Camping ground.</i> —	} No information.
<i>Water.</i> —	
<i>Fuel.</i> —	
<i>Fodder.</i> —	
<i>Supplies.</i> —	

No. of stage and total dis- tance.	DETAILS.
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1	KALA-I-MULLA:	12 m. Camel road pass- able for wheeled artillery.
12 m.		

Leaving Kala Sarkari the road leads S.W. across a wide open plain, which is said to resemble that of Rawal Pindi. At about 6 miles the road bends gradually N.W. and heads direct for Kala-i-Mulla, reached at 12 miles, where there is a strong fort.

<i>Camping ground.</i> —	} No information.
<i>Water.</i> —	
<i>Fuel.</i> —	
<i>Fodder.</i> —	
<i>Supplies.</i> —	

2	KALA HAJI . .	10 m. Camel road passable by wheeled artillery. General direction due N. Leaving Kala-i-Mulla the road almost immediately leads over the Rasana pass and thereafter ascends on to higher ground. At 10 miles Kala Haji.
22 m.		

<i>Camping ground.</i> —	} No information.
<i>Water.</i> —	
<i>Fuel.</i> —	
<i>Fodder.</i> —	
<i>Supplies.</i> —	

ROUTE No. 15-B—*concl'd.*

3	SANG-I-MASHA	..	13 m.	Camel road, pass- able for wheeled artil- lery.
35 m.				

Road continues due N.; a low *kotal* is reached at 4 miles, whence there is an easy gradual descent to the Sangi-i-Masha valley. At 13 miles Sang-i-Masha.

<p>Camping ground.— Water.— Fuel.— Fodder.— Supplies.—</p>	}	No information.
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ROUTE NO. 15-C.

ROBAT TO KALA SARKARI (MUKUR DISTRICT).

153 miles.

14 stages.

Authority.—2nd Afghan war records, 1880.

Epitome.

General description.—This route is an alternative to stages 12 to 25 of Route 15, the main Kabul-Kandahar road; the routes run roughly parallel to one another, being never more than 10 miles apart.

Road—Camel road throughout and with a little labour could easily be made passable for wheeled artillery. The following *obstacles*, which are very slight, are met with:—

- (i) The Khushk Rud river forded in the 4th stage; river always fordable, no difficulty.
- (ii) The Tarnak river forded in the penultimate stage; as above.

Route open throughout the year.

Camping grounds.—For a division at stages 3, 11 and 13, and for at least 1 infantry brigade with proportion of divisional troops at all other intermediate stages.

Water.—Sufficient for a division at stages 3 and 4, and from stage 11 onwards when the Tarnak valley is entered; for at least 1 infantry brigade with proportion of divisional troops at the remaining intermediate stages.

ROUTE No. 15-C—*contd.*

Fuel.—Scarce from stages 1 to 8 ; from stage 9 onwards fire wood is scarce, but scrub is plentiful.

Fodder.—*Khasil* at stages 2 and 3 for the horses of a cavalry brigade, from stage 12 onwards for the horses of a cavalry regiment, perhaps more, between the 15th March and the 15th May ; lucerne at stage 12 ; *bhusa* in varying quantities at practically every stage, the amount procurable being considerable in the Tarnak valley ; fair to good camel grazing throughout except at stages 1 and 2 where there is none.

Supplies.—Unground wheat and barley in varying quantities at practically every intermediate stage, the amount procurable being considerable in the Tarnak valley. Large flocks of sheep available in spring and summer at stages 9 and 12, and probably at other stages in that vicinity.

No. of stage and total distance.	DETAILS.
1 <hr/> 4 m, 6 f.	MARSINZAI 4 m, 6 f. Camel road practicable for wheeled artillery.

At Robat the road branches off from the main Kabul-Kandahar road (Route 15) and leads due E. through irrigated fields ; many irrigation channels are crossed in this march, some of them knee deep and consequently difficult for camels. At $4\frac{3}{4}$ miles Marsinzai (50 houses).

Camping ground.—For at least 2 infantry brigades with proportion of divisional troops on a fine, open plain W. of the village.

Water.—For the above force and more from several water channels.

Fuel.—Limited supply of a small shrub from the *daman* within 1 mile of camp, wood very scarce.

Fodder.—A few hundred maunds *bhusa* from the neighbourhood ; no camel grazing.

Supplies.—A few hundred maunds unground grain normally procurable ; wild hyacinths known as *pahari piaz* are used as vegetables in great quantities,

ROUTE No. 15-C—*contd.*

2	MIR ALAM ..	15 m.	Camel road practicable for wheeled artillery with a little labour.
<hr style="width: 10%; margin-left: 0;"/>			
19 m, 6 f.			

General direction due E. Road for first 2 miles fairly good, over low, undulating hills; then very broken and rocky ground, with track winding through *nalas* with gradual ascent as far as Tagak *kotal*, 14 miles. W. of the *kotal* is a sugar-loaf hill called Koh-i-Duzd. Heliographic communication might be established with Kandahar from a hill easy of ascent E. of the *kotal*, whence the hills N.W. of Kandahar are distinctly visible. This stage can be made practicable for wheeled artillery by a company of sappers in six to eight hours,

At 15 miles Mir Alam's village about $1\frac{1}{2}$ miles from the *karez*s of the same name.

Camping ground.—For 1 infantry brigade with proportion of divisional troops on a site surrounded by low, barren hills and divided by a dry bed of a *nala*.

Water.—For the above force, at least, from the Mir Alam *karez*s, $1\frac{1}{2}$ miles distant; water slightly brackish.

Fuel.—Limited supply of small scrub as before.

Fodder.—*Khasil* for the horses of a cavalry brigade daily during March and April; a few hundred maunds *bhusa* from the Konchazai villages within a few miles; no good camel grazing.

Supplies.—A few hundred maunds unground wheat and barley normally procurable.

3	SARICHE ..	14 m.	Camel road passable for wheeled artillery.
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33m. 6 f.			

Leaving Mir Alam the road leads nearly due E. down bed of dry *nala*. At about 2 miles cross low, barren plain, covered with southern wood, and intersected by *nalas*, with steep banks, trying for camels. At about 8 miles reach village of Pir Muhammad; some 15 houses with a few fruit trees and willows; also a fine *karez* which waters the village lands down stream. Thence over undulating country, intersected by deep ravines with steep but easy banks; ascent gradual, and almost imperceptible. At 14 miles reach Sariche on right bank of Khushk

ROUTE No. 15-C—*contd.*

Rud. Thermometer at Sariche in beginning of April 1880 was some 15° lower than at Kandahar.

Camping ground.—For a division on a fine open plateau on right bank of the Khushk Rud.

Water.—For the above force and very good from the Khushk Rud and several *karez*s.

Fuel.—Scarce.

Fodder.—*Khasil* in March and April, from the Konchazai and Sundarzai groups of villages, daily for the horses of a cavalry brigade; about 500 maunds *bhusa* normally procurable from these villages; good camel grazing, the first since Kandahar.

Supplies.—About 500 maunds unground wheat and barley normally available in the villages referred to.

4	KALA MIR	9 m, 2 f.	Camel road pass-
————	AFZAL.		able for wheeled
43 m.			artillery.

General direction N.E. Leaving Sariche road leads up the right bank of the Khushk Rud and is flanked on the W. by a low range of rocky hills. At 5 miles the road leaves the stream temporarily, crosses a low range of barren hills and descends once more to the river at 6 miles. At this point the river is forded; stream here in January 1880 was 20 × to 30 × broad, 2' to 3' deep, banks almost flush with the stream; river always fordable. The road now follows the left bank of the river; during the latter part of the march numerous hamlets, surrounded by their own cultivation are passed. At 9¼ miles the Popalzai village of Kala Mir Afsal.

Camping ground.—For 1 infantry brigade with proportion of divisional troops.

Water.—For a division from the Khushk Rud, which is 1½ miles to the W., a branch *nala* passes close to camp, but the water is usually cut off from it, and it takes some 6 hours to get water to the camp by this *nala*; there is also a *karez* near camp suitable for watering animals.

Fuel.—Scarce.

Fodder.—A few hundred maunds *bhusa* from the surrounding hamlets; good camel grazing.

Supplies.—A few hundred maunds unground grain normally procurable.

ROUTE No. 15-C—*contd.*

5 **SALAM KALA** .. 8 m, 6 f. Camel road.

51 m, 6 f.

General direction N. E. On leaving camp the road descends on to the banks of the Khushk Rud; descent steep but feasible for laden camels; it then continues up the bed of the stream, easy going. At about 6 miles villages of Khan Gul Khel and Abdul Rahim are passed. These are the last of the Popalzai villages. This is the boundary line between them and the Hotak tribe of Ghilzais. At $8\frac{3}{4}$ miles Salam Kala. There is a direct road from here to Kandahar by Shahbaz Khel, over the range, into the Tarnak valley. It passes between two peaks, prominent landmarks in this range, one called Koh-i-Chugni, being sugar-loaf-shaped, bearing 258° from camp, and the other 268° .

Camping ground.—For at least 1 infantry brigade with proportion of divisional troops.

Water.—For the above force only from the Khushk Rud, which is now only a small stream.

Fuel.—Scarce.

Fodder.—A few hundred maunds *bhusa* can be collected within 2 or 3 miles; good camel grazing.

Supplies.—A few hundred maunds unground grain normally available.

6 **SHIRAH** .. 12 m, 6 f. Camel road.

64 m, 4 f.

Road still continues N.E. and ascends by an easy gradient into a large open plain and is easy throughout. Pass villages of Khair-ud-din on right bank, and Shadi on left bank of the Khushk Rud at about 4 miles. At $6\frac{1}{2}$ miles fort of Rahman Khan (rectangular, with four bastions) is passed, and at $7\frac{1}{2}$ miles the large village of Sultan containing upwards of 80 houses. A little further on is the village of Gul Muhammad; here descend into the bed of the Khushk Rud, pass the village of Aslam on left bank, and reach Shirah at $12\frac{3}{4}$ miles.

Camping ground.—For 1 infantry brigade with proportion of divisional troops on a good site between Shirah and Muhammad Umar,

ROUTE No. 15-C—*contd.*

Water.—For the above force from the river whose waters are brought to camp by 2 canals.

Fuel.—Scarce.

Fodder.—No camel grazing.

Supplies.—Nothing appreciable; the inhabitants (Hotak Ghilzais) make considerable difficulty in producing supplies.

7 PUMBA .. 14 m, 4 f. Camel road.
(6,100')

79 m.

General direction N.E. Road generally good. A steady ascent from camp. At about 3 miles a high tableland is reached. At 4 miles cross a *nala*, whose banks would require ramping for wheeled artillery (some 4 hours' work for a company of sappers). Cross tableland, which forms watershed between the Tarnak and the Arghastan. A somewhat undulating plateau with a slight ascent. At about 10 miles reach elevation of 6,300', whence there is a gradual descent; at 11 miles the Hotak Ghilzai villages of Mulahad, a few houses, with some fruit trees and cultivation. Pumba is 10 miles from the fort of Kalat-i-Ghilzai, which is visible bearing W.N.W. and with which heliographic communication can be easily established.

Camping ground.—For 1 infantry brigade with proportion of divisional troops, on an indifferent site.

Water.—For the above force from an open channel, and from several springs under the crest of a low range of hills to the E.

Fuel.—Scarce.

Fodder.—A little camel grazing in the valley to the W.

Supplies.—Nothing appreciable.

8 DIWALIK .. 8 m, 4 f. Camel road.
(6,200')

87 m, 4 f.

General direction N.E. Leaving Pumba the road slightly ascends on to a high tableland. At 1 mile a *kotal* is reached from which a grand panoramic view of the Hazara mountains is obtained. At 3 miles cross Route 9, the through route from the Zhob valley to Kalat-i-Ghilzai, at Janat Khwarah, stage 8 of that route. At 5 miles pass ruined village of Zafar-ka-Kala with a spring of good water. At 8½ miles the Hotak Ghilzai village of Diwalik, with a strong fort.

ROUTE No. 15-C—*contd.*

Camping ground.—For 1 infantry brigade with proportion of divisional troops on undulating ground.

Water.—For the above force and more from several good springs near camp.

Fuel.—Very scarce.

Fodder.—Good camel grazing near camp.

Supplies.—*Nil.*

Easy heliographic communication with the main Kabul-Kandahar road, Route 15, 8 miles distant with which this route now runs parallel.

9	SURKOH	9 m. Camel road.
————	KANDAO	
96 m, 4 f.	(6,340')	

Direction continues N.E. Leaving Diwalik, a gradual ascent is at once made, the road following the bank of a dry *nala*; at about 6 miles a high plateau is reached, which extends as far as a range of hills which runs parallel to the road about 2 miles to the E. Numerous springs of water issue from the western slopes of this range with corresponding patches of cultivation and pasturage, on which large flocks of sheep are brought by *powindahs* to graze during the spring and summer; with the exception of these patches the country is barren and desolate. The country generally in this stage is similar to the last march, the road traversing high tablelands, practicable for all arms. At 9 miles the Tokhi Ghilzai village of Surkoh Kandao (100 houses) also known as Jahandad.

Camping ground.—For about 1 infantry brigade with proportion of divisional troops.

Water.—For the above force at least, from several springs.

Fuel.—Firewood scarce, but there is a considerable quantity of wild thyme, a passable substitute, within 1 or 2 miles of camp.

Fodder.—Excellent camel grazing.

Supplies.—Large flocks of sheep graze in the vicinity ordinarily in the spring and summer.

10	KHAKAH	..	14 m, 4 f. Camel road.
————			
111 m.			

ROUTE No. 15-C—*contd.*

General direction N.E. Road generally good over high tablelands. At about 3 miles pass a steep-banked *nala* requiring little labour to ramp; at about 7 miles the Tokhi villages of Saiyid, Loidin, and Firozi surrounded by some cultivation. These villages were found empty in April 1880, as the inhabitants had fled with their women and cattle to the hills. Thence the road runs parallel to, and about 3 miles distant from, the Surkh Koh range, over which there is a pass into Nawa, called Spir Sang, reported easy. At about 12½ miles reach a few villages and a *kotal*; from this *kotal* a view of the fort of Shahabuddin is obtained, about 2½ miles distant to the E.

Camping ground.—For about 1 infantry brigade with proportion of divisional troops on a confined and irregular site.

Water.—For the above force from a canal.

Fuel.—Scrub plentiful.

Fodder.—In 1880 foraging parties found some *bhusa* and grain which had been buried by the inhabitants who had fled; good camel grazing.

Supplies.—Nothing appreciable

From Khakah a camel road runs N.E. through the Taraki country over the Girdanai pass to Kala Khan, stage 6 of Route 8, the through *kafila* route from the Zhob to the Kabul-Kandahar road. Kala Khan is situated near the S.W. corner of the Ab-i-Istada lake.

11 **KALA-I-DINAK** .. 9 m. Camel road.

120 m.

General direction N.E. Leaving Khakah the road passes for the first 2 miles between two low ranges of hills, after which it passes into the valley of the Tarnak. Between the 3rd and 4th miles pass the Tokhi Ghilzai village of Madali and Bargai. There is a high hill about 1 mile E. of Bargai called Sperawana, from the top of which the Ab-i-Istada lake is visible, some 25 miles to the eastward. During the latter half of the stage the Marana hills, a range of low, rocky hills, run parallel to the road about 1 mile distant to the E. At 9 miles Kala-i-Dinak, about 2 miles E. of Shahjui, stage 15 on the main Kabul-Kandahar road (Route 15).

Camping ground.—For a division on a fine level plain between the road and the left bank of the Tarnak river.

ROUTE No. 15-C—*contd.*

Water.—For the above force from the Tarnak river, from which several irrigation canals bring water close to camp.

Fuel.—Wood scarce; scrub abundant.

Fodder.—Between 1,000 and 2,000 maunds *bhusa* could be collected ordinarily from the Shahjui villages within 2 or 3 miles of camp; fair camel grazing.

Supplies.—About 1,000 to 2,000 maunds unground wheat and barley could be collected from the villages referred to.

12 **KALA-I-JAFAR** .. 7 m. Camel road.

127 m.

General direction N.E. The road leads over an open plain with large belts of cultivation at intervals. At 2 miles pass ruins of an old fort and village, evidently of some importance formerly. During the last few miles numerous water channels are passed. At 7 miles Kala-i-Jafar in the Hibar district, one of the last of the Tokhi villages.

Camping ground.—For at least 1 infantry brigade with proportion of divisional troops on undulating ground N.W. of the village.

Water.—For a division from the Tarnak river, about 1 mile W. of camp, but there are numerous water channels nearer.

Fuel.—Wood scarce; scrub abundant.

Fodder.—*Khasil* daily in April and May for the horses of at least 1 cavalry regiment; lucerne to a considerable extent in spring; a few hundred maunds of *bhusa* ordinarily procurable; good camel grazing.

Supplies.—A few hundred maunds of unground wheat and barley normally available; large flocks of sheep in the vicinity during spring and summer.

13 **MARTAZA** .. 12 m. Camel road.

139 m.

General direction N. E. Road leads over undulating ground parallel to a range of hills, to the E. the country is open and easy. Cross several *nalas*; little ramping required. At about 1 mile the road turns temporarily to the W. and crosses the Tarnak. In April 1880, there was only a moderate

ROUTE No. 15-C—concl'd.

stream in the river, and the actual passage was very easy. The bed of the stream is firm throughout. The banks, however, are precipitous, and the road to the ordinary ford extremely steep, so that easier gradients must be selected or the regular road ramped. Country on the right of the Tarnak fertile and well cultivated. All the villages are regular forts, rectangular in shape, with loop-holed walls, 20' to 25' high and flanked by bastions at the corners. At 12 miles Martaza, which is reported to be a hot-bed of fanaticism. Martaza is about half-way between the two main Routes 8 and 15, being about 5 miles distant from each.

Camping ground.—Probably for a division on the open plain.

Water.—For the above force from the Tarnak river and several *karezes*.

Fuel.—Wood scarce.

Fodder.—*Bhusa* to some considerable extent normally procurable; good camel grazing.

Supplies.—A few hundred maunds unground wheat and barley ordinarily available.

14 **KALA SARKARI** 14 m. Camel road;
 ——— (MUKUR DISTRICT)
 153 m. (6,550')

For the first 6 miles the road runs parallel to the right bank of the Tarnak, distant about 1 mile to the E, through richly cultivated and most fertile country, direction N.E. At 6 miles the road leaves the river and bends N.W; it now leads through the Mukur district, situated on a fine tableland, which for extent and richness of soil would compare favourably with any known district at this high altitude. The road now passes an almost continuous succession of villages till Kala Sarkari on the main Kabul-Kandahar road is reached at 14 miles.

Camping ground.—

Water.—

Fuel.—

Fodder.—

Supplies.—

} *Vide* stage 12, Route 15.

At Kala Sarkari, Route 8, the through *kafila* route from the Zhob valley joins in from the S

ROUTE No. 15-D—*contd.*

ROUTE NO. 15-D.

KALAT-I-GHILZAI TO KANDAHAR.

Viâ the Arghandab valley.

102 miles.

10 stages.

Authority.—Biscoe, 1879-80.*Epitome.*

General description.—An alternative route to stages 19 to 27, Route 15. It enters the Arghandab valley at stage 3, and follows it to within a few miles of Kandahar.

Road.—Camel road throughout; fit for wheeled artillery as far as stage 4; difficult for camels in stage 5.

The following *obstacles* are encountered :—

- (i) The Arghandab river which is forded in the 5th stage; river here ordinarily 3' deep with a strong current; during spates it is temporarily impassable at this point for 24 hours.
- (ii) The Arghandab river which is again forded in the 9th stage; river here is ordinarily 2' to 3' deep with a strong current, but it is known to be impassable for a fortnight at a time at this point during floods in spring.
- (iii) Several tributaries of the Arghandab, notably the Chinartu, Uian, and Almish rivers are forded along the route, but they present no difficulty.

Except for the crossing of the Arghandab as mentioned above, this route is open throughout the year.

Camping ground.—For 1 infantry brigade with proportion of divisional troops at all intermediate stages except at stage 4, where there is only sufficient camping space for 2 or 3 battalions.

Water.—For a division at stages 3, 4, 8, and 9, and for at least 1 infantry brigade with proportion of divisional troops at the remaining intermediate stages.

Fuel.—Scarce throughout.

Fodder.—*Khasil* for the horses of a cavalry brigade at stages 3 and 9, and for a cavalry regiment at stage 8, daily between the 1st March and the 15th May; lucerne grass in large quantities at stage 9; *bhusa* at all intermediate stages in varying quantities; good camel grazing throughout.

ROUTE No. 15-D—*contd.*

Supplies.—Unground wheat and barley in varying quantities at all intermediate stages. The Dahla district, traversed between stages 4 and 8, is reported capable of supporting a force of 4,000 men for 2 or 3 months. Anywhere in the last two stages, in which the country is irrigated by the main Patab canal, supplies for a division for one week could easily be collected within 2 or 3 days.

No. of stage and total dis- tance.	DETAILS.
1 <hr/> 7 m.	KALA JUMA DIN .. 7 m. Camel road passable for wheeled artillery.

Leaving Kalat-i-Ghilzai the road leads due W., and ascends on to a range of downs; at 3 miles it gradually veers N.W., at 5 and 6 miles two deep *nalas* are crossed, which would require ramping to be passable for wheeled artillery.

At 7 miles Kala Juma Din.

Camping ground.—For 1 infantry brigade with proportion of divisional troops N. of the road.

Water.—For the above force from a stream.

Fuel.—Scarce.

Fodder.—A few hundred maunds *bhusa* procurable from 5 adjacent villages; good camel grazing.

Supplies.—A few hundred maunds of unground wheat and barley from the villages mentioned.

2 <hr/> 15m. 4f.	TAKIR .. 8m. 4f. Camel road passable for wheeled artillery.
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General direction N.W. The road runs over 2 broad plains as far as the Gao Murda hill (7,974') passed at 5 miles, about half a mile S. of the road, when it descends gradually into the Takir valley.

Camping ground.—For 1 infantry brigade with proportion of divisional troops on a high undulating plain.

Water.—For the above force from the Takir stream which, however, is said to dry up in very dry seasons.

ROUTE No. 15-D—*contd.*

Fuel.—A fair supply of firewood procurable.

Fodder.—*Bhusa* to a large extent from the numerous villages in the vicinity; excellent camel grazing; in the winter *powindahs* bring a large number of camels to graze in this vicinity.

Supplies.—Unground wheat, barley, and *jowar* to a large extent from the villages mentioned; large flocks of sheep ordinarily obtainable; also about 400 to 500 bullocks.

3	SEHLUM	..	12m. 4f.	Camel road passable
—————	(4,561').			for wheeled artillery.
28 m.				

General direction W. Road passes over a steep, stony *kotal*, which can be partially avoided by a detour to the right of about $1\frac{1}{2}$ miles; it then descends by a series of gentle undulations to Mukrak reached at 7 miles, passes over a low hill, and again descends to Sehlum on left bank of Arghandab; this march is difficult for artillery owing to its sharp ascents and descents, but is not impracticable; another road to Sehlum runs parallel to and S. of this through the Takhum valley, but it is even more difficult for artillery, and is 15 miles long. At Sehlum there is a ford across the Arghandab; the stream here has an average width of 30 × and is ordinarily 2' 6" deep.

Camping ground.—For about 1 infantry brigade with proportion of divisional troops on a site close to the river S. of the village; this camp is very wet after rain; alternative camp about the same size, but always dry, on the opposite side of the river.

Water.—For a division from the Arghandab.

Fuel.—Scarce.

Fodder.—*Bhusa* to some considerable extent from the surrounding villages; *khasil* for the horses of cavalry brigade daily during March and April; good camel grazing.

Supplies.—In 1880 it was calculated that from the adjacent valleys of Takhum, Siahjui and Shaikhan, supplies of all sorts could be collected at Sehlum within a few hours, sufficient for 3,000 men for one week; bullock carriage plentiful here.

4	ARGHASU	..	10m. 4f.	Camel road passable
—————	(4,440').			for wheeled artillery.
38m. 4f.				

ROUTE No. 15-D—*contd.*

Leaving Sehlum the road leads due S., and temporarily leaves the Arghandab river. At 1 and 3 miles the Takir and Takhum rivers respectively are forded; no difficulty. The road then passes over a low, easy *kotal* on to a plain from 2 to 3 miles broad and gradually changes its direction to due W. At 7 miles the Arghasu stream is crossed, and the road now follows its left bank to Arghasu, a group of 5 small villages, situated in a narrow gorge between high, overhanging rocks, about 1 mile from the Arghandab.

Camping ground.—Probably only for 2 or 3 battalions on a narrow and confined site.

Water.—For a division; the troops would obtain their water from the Arghasu and animals would be watered at the Arghandab 1 mile distant.

Fuel.—No details.

Fodder.—Good camel grazing.

Supplies.—Negligible.

From Arghasu a road runs S. *via* Bori to Kandahar; it is considerably shorter than the Arghandab route, but is impracticable for laden camels.

Another route from Sehlum to Arghasu by the right bank crosses the river at Sehlum, and, passing over some low hills, enters and crosses the Shaikhan valley; thence over a high, steep *kotal* into the Daroshak valley, whence it again rises up an extremely steep ascent, and passing along the side of a hill, meets the Arghasu-Tari road half mile beyond the ford; it is a mere mountain track (impracticable for camels) along which cavalry might, if necessary, pass in single file. The distance is about 11 miles.

5 CHINARTU .. 15 m. Camel road.

———— (4,366').

53m. 4f.

Leaving Arghasu the road gradually descends to the river bed of the Arghandab by a narrow, rocky path which needs some improvement to be passable for laden camels; it then crosses to the right bank; this ford is ordinarily 3' at the deepest part, with a strong current; a ramp had to be made to enable camels to ascend the opposite bank; thence road leaves the river, ascends a steep, rocky hill and again descends by a narrow, stony path to the river; here a narrow rocky path betwene

ROUTE No. 15-D—*contd.*

the river and overhanging rocks, 3 furlongs long, leads to Tari, reached at 6 miles, where there is a camping ground; this path is practicable for cavalry in single file, mules and ponies, but not for camels, which have to cross the river again $\frac{1}{4}$ mile further down; both crossings fairly easy.

Once the Argandab is crossed the road enters the Karwai sub-division of the celebrated Dahla district of the Kandahar division. It was calculated in 1880 that the Dahla district was capable of supporting a force of 4,000 men for 2 or 3 months, if broken up into detachments.

The road has roughly run due W. to this point, but it now bends sharply northwards and leads up the Karwai stream, at 9 miles it turns S.W. from the stream, crosses the Sar-i-Ab plain and descends to the Chinartu valley. At 15 miles a series of Ghilzai villages known jointly as Chinartu about 5 miles N. of the Arghandab.

Camping ground.—For about 1 infantry brigade with proportion of divisional troops.

Water.—For the above force from the Chinartu stream.

Fuel.—Scarce.

Fodder.—*Bhusa* to some extent from the Chinartu villages; good camel grazing.

Supplies.—A few hundred maunds unground wheat and barley ordinarily available. From Chinartu onwards to Kandahar; bullocks for carriages become scarce, and donkeys are obtained instead.

6 **BAGHTU** .. 12m. 4f. Camel road.
 ——— (4,423').

66 m.

General direction S.W. The road leads over a series of low, barren hills and is stony and difficult. At about 12 miles the Baghtu river is forded; no difficulty. At 12 $\frac{1}{2}$ miles Baghtu (100 houses), inhabitants Popalzais and Alikozais.

Camping ground.—For about 1 infantry brigade with proportion of divisional troops.

Water.—For the above force from the Baghtu river.

Fuel.—Scarce.

Fodder.— } A few hundred maunds unground grain
Supplies.— } and an equivalent amount of *bhusa*
 normally procurable; good camel grazing.

ROUTE No. 15-D—*contd.*

7 **ALMISH** .. 12 m. Camel road.

78 m.

General direction S. W. The road now winds through some comparatively high hills. At 7 miles the Uian river, a tributary of the Arghandab, is forded; no difficulty. On the right bank is a camping ground for 2 or 3 battalions, near the villages of Muhammad Riza and Din Muhammad from which a few supplies are procurable. At about 11 miles, the Almish river, another tributary of the Arghandab, is crossed. At 12 miles the camping ground known as Almish, near the Alizai village of Kara Mulla.

Camping ground.—For about 1 infantry brigade with proportion of divisional troops.

Water.—For the above force from the Almish stream.

Fuel.—Scarce

Fodder.— } *Bhusa* and unground grain to a moderate ex-
Supplies.— } tent obtainable; good camel grazing.

8 **SOZNAI** .. 10 m. Camel road,

88 m.

General direction S.W. An excellent road throughout; country generally open with a few low hills. At 9 $\frac{3}{4}$ miles cross the Soznai *nala*, banks steep. At 10 miles the group of villages known as Soznai, on the right bank of the Arghandab.

Camping ground.—For 1 infantry brigade with proportion of divisional troops.

Water.—For a division from the Arghandab.

Fuel.—Scarce.

Fodder.—*Khasil* for the horses of at least a cavalry regiment daily, between 15th March and the 15th May; about 200 to 300 maunds *bhusa* could normally be collected from the villages; good camel grazing.

Supplies.—Between 200 and 300 maunds unground wheat and barley ordinarily procurable.

Soznai is just outside the Dahla district, which is quitted here.

ROUTE No. 15-D—*contd.*

9 SHAKCHALA .. 9 m. Camel road.

97 m.

General direction nearly due S. Leaving Soznai the road crosses the Arghandab river at Khwaja Mulk, 1 mile from camp; the river here during September and October 1880 flowed in two streams, each about 40× to 50× wide, and 3' deep; the river bed is about $\frac{1}{2}$ mile wide; the Arghandab at Soznai is reported to be ordinarily fordable, with an average depth of from 2' to 3' of water, but it is known that the river here is sometimes impassable for a fortnight at a time during floods, which are of frequent occurrence in the spring. The road now follows the left bank of the Arghandab, and it is here that the canal system of the Kandahar district proper commences, the main canal known as the Patab canal lying between the road and the river. The country consequently throughout this stage is highly irrigated, and troops would be confined mainly to the road. Continuous gardens of fig, grape, peach, plum, apricot, and pomegranate are passed along the road, and there are numerous villages along the banks of the river and canal, the most important being Miranjan and Sardeh passed at 3 and 5 miles, respectively. At Sardeh there is a ford across the Arghandab, leading to Shuhin on the right bank and the Kandahar-Khakrez road. At 9 miles Shakchala (200 houses) which is in the Kariajat or home district of Kandahar.

Camping ground.—No details; owing to the extensive cultivation, it is probable that there would be only space for 1 infantry brigade with proportion of divisional troops, several units of which would have to encamp in the fields.

Water.—For a division and more from the Arghandab.

Fuel.—Scarce.

Fodder.—) In this fertile and highly-irrigated country, all

Supplies.—) supplies for a division for at least a week, possibly for a month could certainly be collected within 2 or 3 days; in addition *khasil* for the horses of a cavalry brigade, daily between 1st March and the 15th May and lucerne grass in very large quantities in the spring.

10 KANDAHAR .. 5 m. Camel road.

(3,462').

102 m.

ROUTE No. 15-D—*concl'd.*

The road continues parallel to the river and canal banks direction S.W., for about 2 miles where the village of Baba Wali is reached; here there is a ford leading to Tabin on the right bank. At Baba Wali the road turns at right angles S.E., leaves the river and passing over the Baba Wali *kotal* enters on the Kandahar plain. The following is a description of the Arghandab river in the Mizan district, written in 1880:—

“The Arghandab river in the Mizan district has in ordinary times an average breadth of about 30', a rapid stream of 4 miles an hour, and a depth of from 3' to 6'. It widens considerably, as it descends towards Kandahar. During the melting of the snows and after heavy rains it rises rapidly and becomes impassable, and towards the latter end of the hot weather it can be forded at almost any spot. Fish abound in it, the commonest sort being a species of barbel, not unlike the Kashmir trout. Like the rest of Southern Afghanistan, there is a curious absence of trees in both these districts. The only ones to be seen are a few mulberries and willows in the valleys, a few wild almonds on the sides of the hills, and an occasional solitary tree on the ridges of the highest, most inaccessible crags, said to be a species of pistachio. The country on either side of this river is wild and mountainous, so much so that, except at the juncture of the numerous small streams which run into it, banks are unapproachable, until it enters the Dahla district, when the valley gradually opens out, and from Uian downwards the country, more especially on the right bank, is open, cultivated and dotted with villages.”

Camping ground.—

Water.—

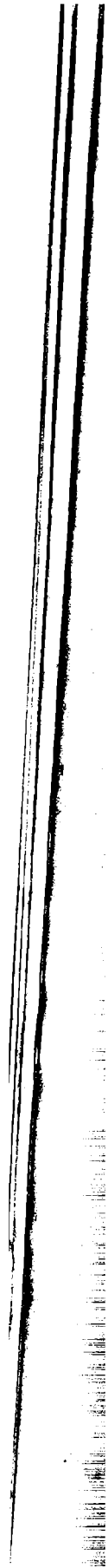
Fuel.—

Fodder.—

Supplies.—

and for description of Kandahar.

} *Vide* Route 12, stage 6.



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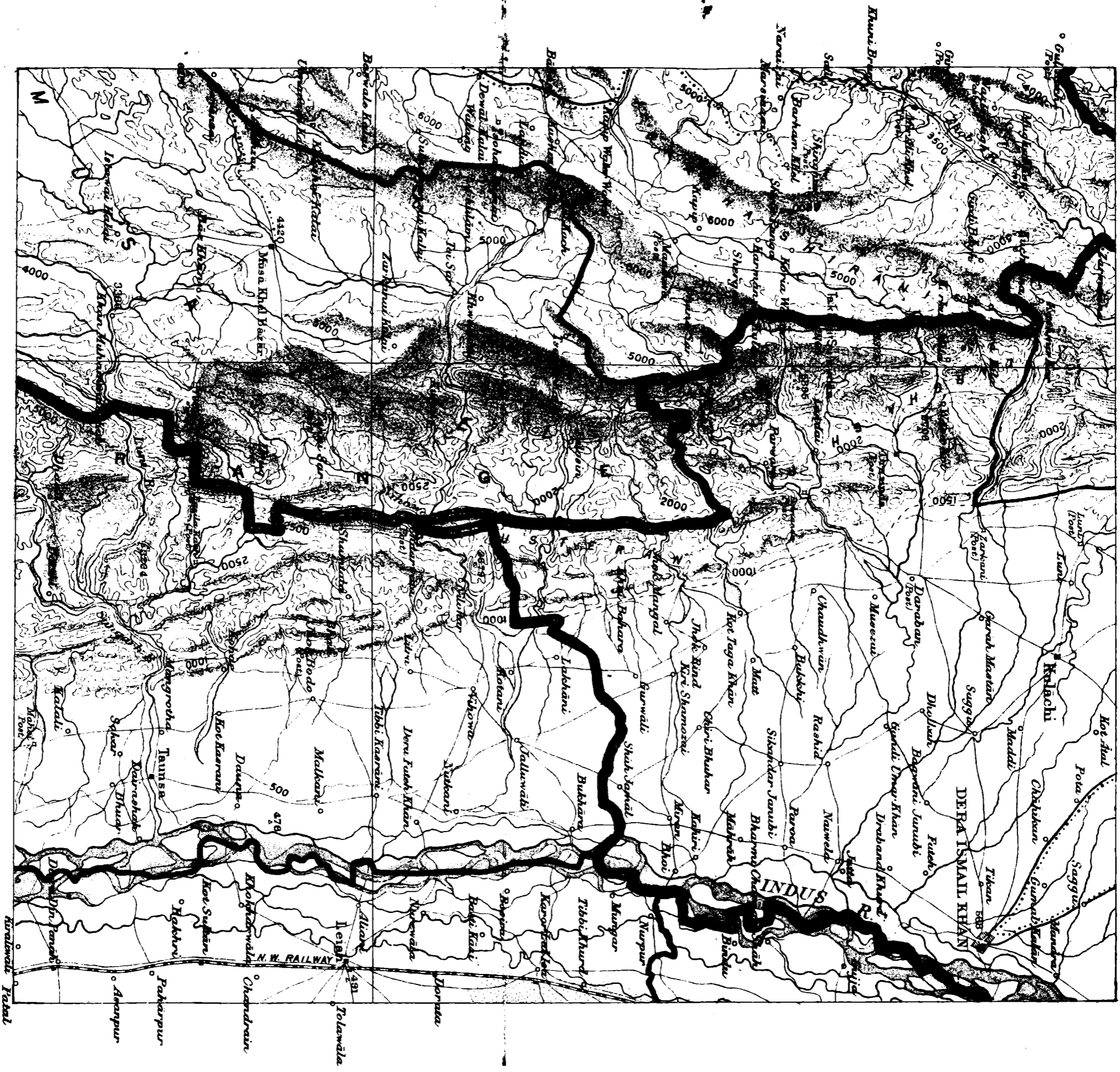
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