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CANADA

**REPORT OF PAKISTANI ARMY ACTIVITY  
ON THE BALTORO GLACIER  
SEPTEMBER 1988**

Published Under Authority of the  
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NDHQ, OTTAWA

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2000-034/246 (DDI)

22 February 1989

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REPORT OF PAKISTANI ARMY ACTIVITY  
ON THE BALTORO GLACIER - SEPTEMBER 1988

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2 November 1988

REPORT OF PAKISTANI ARMY ACTIVITY  
ON THE BALTORO GLACIER - SEPTEMBER 1988

GENERAL

1. (C) The Baltoro Glacier is located in Pakistan's Northern Areas, at 3545N 7630E, just south of the border with China and approximately 30 km west of the Siachen Glacier. The area has been of military importance since June 1984 when Indian troops occupied the Siachen Glacier and established posts on the mountain passes to the west and southwest. Pakistani forces responded to this Indian incursion into an area claimed by Pakistan and sporadic fighting has taken place since that time. Both sides still maintain a substantial military presence in the area, including year-round posts on the high mountain passes. The Baltoro Glacier is the main approach for the Pakistani posts to the west of the Siachen Glacier, around Indira Col and Baltoro Kangri.

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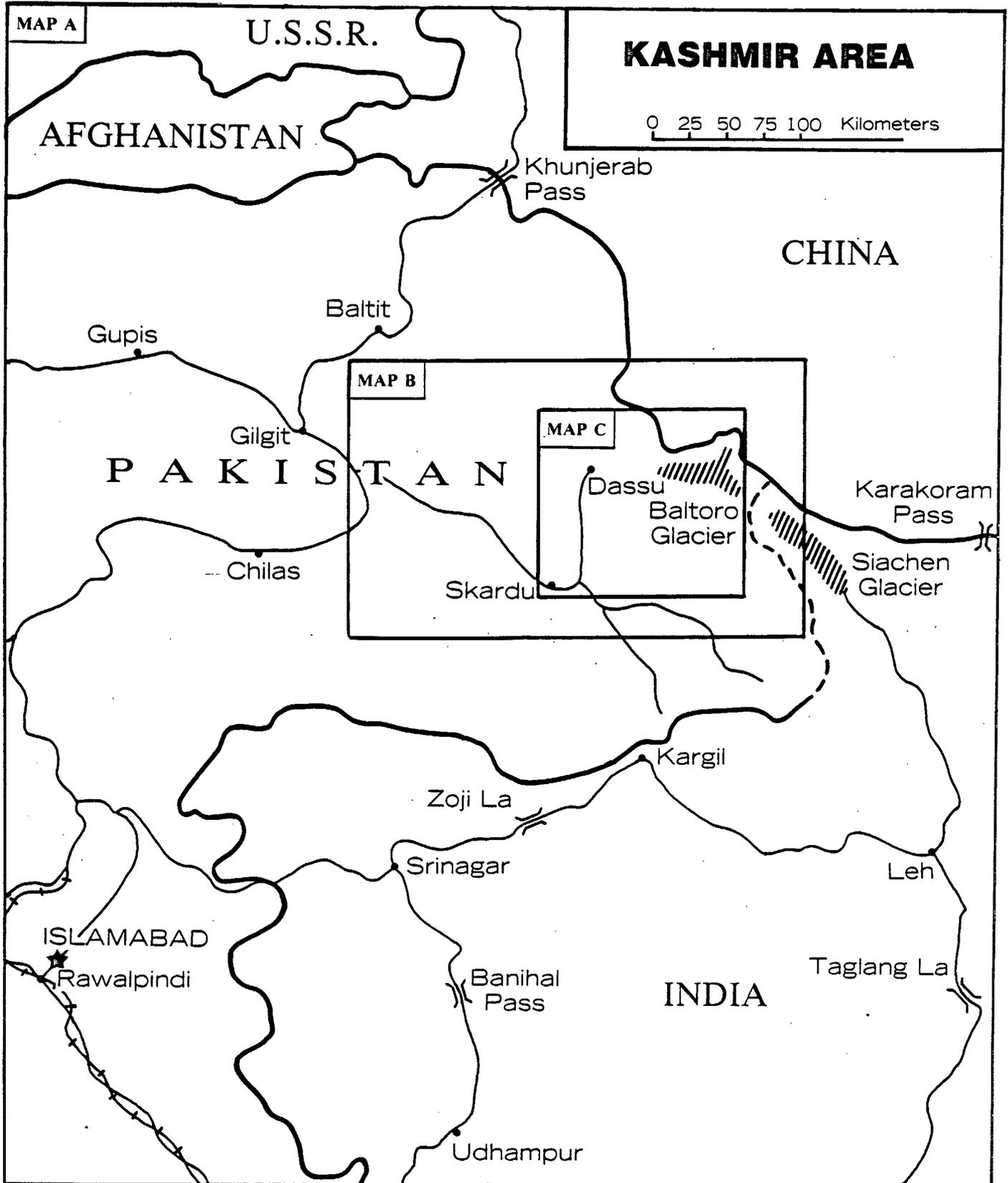
2. (C) The aim of this report is to describe Pakistani Army activities and deployments on the Baltoro Glacier and other parts of the Northern Areas, observed during the period 29 August - 24 September 1988.

3. (C) The observations were made during a trek in northern Pakistan by the Directorate of Defence Intelligence analyst for South Asia. The trip itinerary is detailed at Annex A. Freedom of movement and observation was limited by the requirement to remain as part of the trekking group and by restrictions which the Pakistani Army placed on movement on parts of the Baltoro Glacier, particularly on the upper glacier towards Baltoro Kangri.

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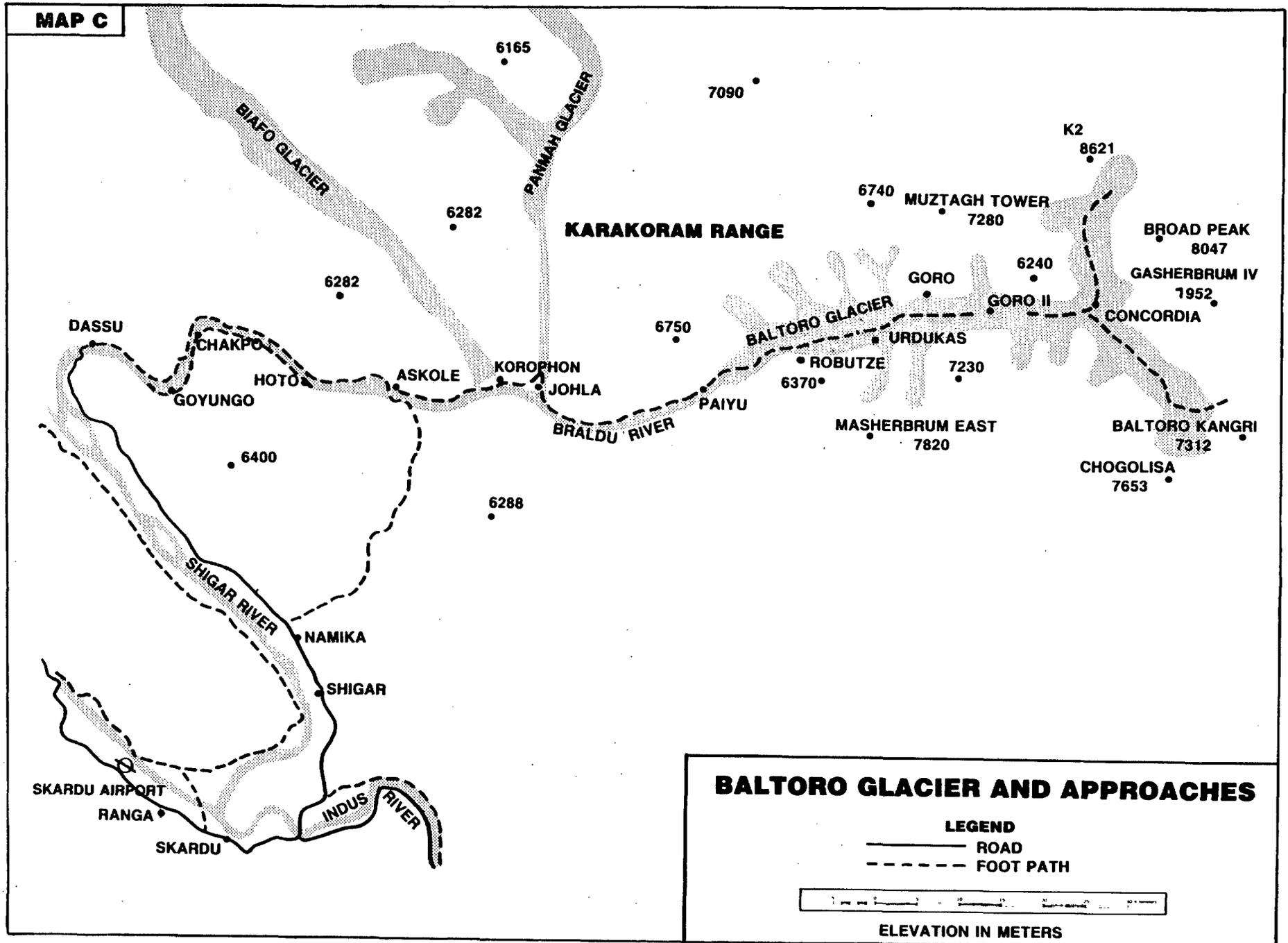
Skardu

4. (C) The town of Skardu is the main administrative centre for the Baltistan region of the Northern Areas. It is also the headquarters and main supply base for Pakistani Army operations in the Siachen Glacier area.
5. (C) The Skardu airport is the only airfield in Baltistan capable of handling fixed-wing aircraft. It is located approximately 16 km west of Skardu, on the north side of the Indus Highway. It has a single runway of unknown length running northwest-southeast. A second, longer runway is currently under construction about 300 m north of and parallel to the present runway. The new runway is in an area of constantly shifting sand dunes, and will probably require constant work to keep it clear of encroaching sand once construction is completed.
6. (C) The airport is defended by a least ten anti-aircraft guns of 14.5 mm (ZPU-4) and 37 mm (Type 55) calibre. They are deployed in pairs (one of each type) immediately beside the runway. There do not appear to be any anti-aircraft weapons deployed to cover the approaches down the Shigar Valley to the north or the Indus Valley to the east. The guns are generally manned by a reduced crew, but are not at a high state of readiness. They are tarped at night and during poor weather. They are deployed in mud-brick emplacements which take the form of a truncated cone about 2.5 m high with a low parapet. Each gun position has a dugout shelter nearby. There does not appear to be any early-warning (or air traffic control) radar in Skardu, and civilian air traffic aids are probably limited.
7. (C) There is a small army aviation field to the southwest of the airport and separated from it by the main road. It has one hangar, capable of accommodating three SA 315B Lama helicopters. No more than three helicopters were observed in the hangar or on the apron at any one time. No Puma helicopters were observed on the ground at Skardu.
8. (C) The Airport Security Force (ASF) detachment at Skardu appeared well-drilled and alert when it was deployed to secure the aircraft on landing (a standard procedure at airports in Pakistan). Its turnout compared very favourably

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with other ASF detachments, including that at Islamabad International Airport, which were observed during the trip.

9. (C) A new barracks complex has been constructed about four km south of the airfield, at approximately 3519N 7532E. Signposts indicate that it houses a unit with the numerical designation 601. A large logistics depot, which handles primarily rations, is located in the village of Ranga, halfway between the airport and Skardu. In Skardu there are several facilities occupied by elements of a unit with the numerical designation 648. Its headquarters compound is located in the eastern part of the town. There also appear to be elements of engineer and other support units stationed in Skardu. The Special Communications Organization (SCO), which is run by the military and is apparently responsible for military and civilian telecommunications in the Northern Areas, has a major administrative centre in Skardu. There is a large satellite dish and probable HF antenna installation on the eastern outskirts of the town.

10. (C) There is considerable military traffic in Skardu, but only limited traffic outside the town. The paved road from the west ends in Skardu. Jeep tracks continue north through the Shigar Valley and east towards Khapulu and the roadhead for the Siachen Glacier. These roads are of very limited capacity and are only suitable for four-wheel-drive vehicles. Some sections are impassable to vehicles larger than jeeps. Only limited military traffic was observed east of Skardu. It included civilian farm tractors with military drivers transporting construction materials. There was almost no military traffic in the Shigar Valley. In observations over three days, only one light truck was seen.

11. (C) The jeep road leading to the Baltoro Glacier ends at Dassu, at the mouth of the Braldu Gorge. The telephone line also ends at this village. The only access forward from this point is by helicopter or footpath. The track is very rugged and in its present condition is impassable for pack animals. It is planned to extend the jeep road up the Braldu Valley to Askole over the next few years. About 15 kms of road have been built to date, but several sections have been damaged by rockslides and are passable only on foot. There is a helicopter landing zone in Dassu, and a supply dump with stockpiled 45 gal fuel drums, small arms ammunition and sections of prefabricated fibreglass mountain shelters. The Braldu Valley is uninhabited beyond Askole.

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Baltoro Glacier

12. (C) The Pakistani Army reportedly maintains a presence of about battalion strength on or near the Baltoro Glacier throughout the year. Most of this force is deployed in platoon posts to the east of the glacier in the area of Baltoro Kangri and Indira Col. The positions on the Baltoro Glacier are reportedly manned entirely by troops of the Northern Light Infantry (NLI), who are recruited from the mountainous regions of northern Pakistan. Soldiers of the NLI serve only in the Northern Areas. Officers are seconded to the NLI from regular infantry regiments. The positions around the Siachen Glacier to the east, where most of the fighting has taken place, are manned by both NLI and regular infantry units.



Northern Light Infantry On Parade

13. (C) Personnel are deployed to the glacier area for two month periods. However, delays in the arrival of replacements due to bad weather are common, and it is not unusual for personnel to remain at a forward post for three months or more. It is normal for each soldier to get one such tour a year, with the remainder of the year spent at

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headquarters or depots in Skardu or Gilgit, or at less remote posts. Soldiers get two months home leave a year, and officers get somewhat less.

14. (C) Most weapons and cold weather equipment are retained at the forward posts and handed over by the personnel being relieved to their replacements. Cold weather gear (including mountain packs, down parkas and boots) is generally western-made and of good quality. However, much of the equipment and clothing is poorly cared for and dirty. NLI personnel were observed wearing a variety of military and civilian clothes; there was no uniformity of dress. A common article of clothing was a green track suit, which appears to be an issue item.



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Pakistani Army Cold Weather Equipment and  
Fibreglass Mountain Shelters

15. (C) A helicopter landing zone and logistic support base has been established at Goro, which is reportedly manned by a platoon. Most helicopter flights from Skardu and Dassu terminate here. Although some personnel walk from Dassu to the forward positions, many replacements are deployed by helicopter to Goro, which is at an altitude of approximately

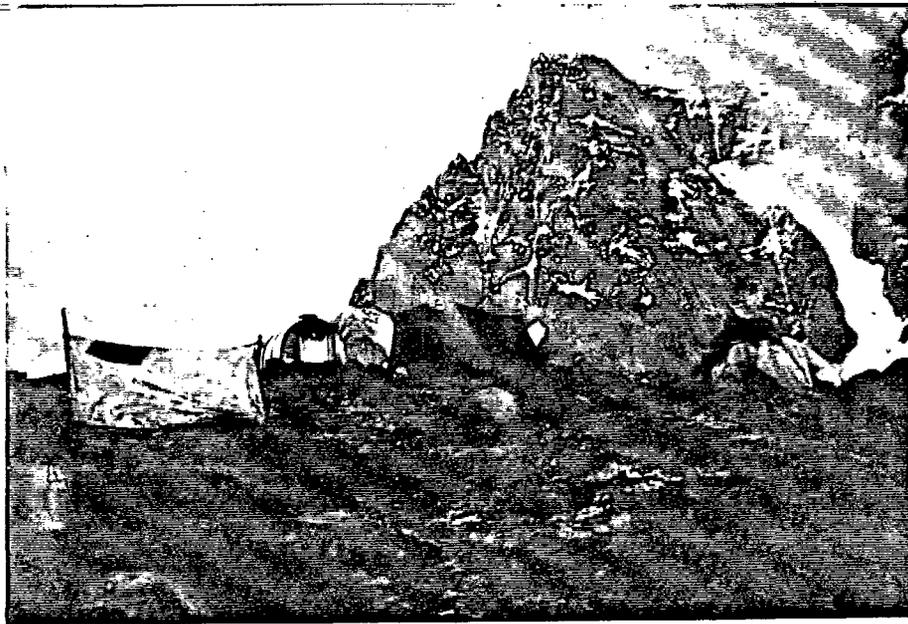
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4300 m. Since the soldiers of the NLI are from the mountains, they usually have no difficulty acclimatizing to this altitude. They then walk forward from Goro, which enables them to acclimatize to the higher altitude of the forward posts over a period of several days. It usually takes four to five days to reach these positions. The trip can reportedly be done in one day, if necessary, but in this case there are often problems in acclimatizing to the altitude. The move forward is broken down into stages of about four to five hours walking time, and small staging camps have been established. The trail over the glacier is very rough, traversing rugged moraine and skirting crevasses. At certain times of the year, any movement on the glacier is dangerous, especially when the crevasses are covered with snow. Travel by foot on the glacier, especially with a heavy load, is difficult, and average progress is limited to about two kph.



Staging Post at Goro II

16. (C) Staging posts were observed at Goro II and Concordia. They consisted of one or two two-man fibreglass mountain shelters, and several tents, both mountain tents and canvas tents without rain flies. These posts are manned by two or three men and can provide accommodation for about a section (plus). The canvas tents were in poor repair and the mountain tents were not properly set up. Unless

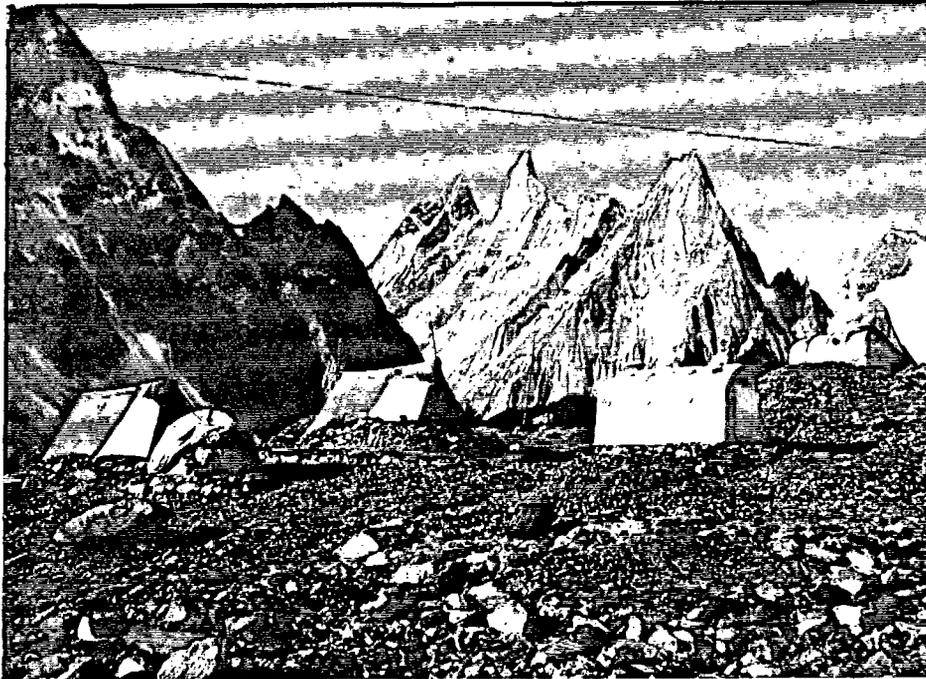
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improvements were made to the tents, only the fibreglass mountain shelters would provide adequate protection from severe winter weather. The posts are connected by a single field telephone line running forward from Goro. The line is supported by two-metre tall bamboo tripods, many of which have collapsed. The line appears to have been repeatedly repaired. The staging posts apparently do not have radio communications.



Staging Post at Concordia

Personnel

17. (C) Three groups of replacement personnel were observed deploying to the Baltoro Glacier area: a group of five men under a corporal and a 32-man platoon commanded by a lieutenant walking in from the roadhead at Dassu, and a group of eight men under a captain who were deployed by helicopter to Goro. None of the soldiers wore unit shoulder flashes or cap badges. Only three of the five-man group were armed (G3 rifle) and not all of the men had packs. They were dressed in a variety of military and civilian articles of clothing. The platoon was properly turned out in winter field uniform. No items of cold weather clothing were worn. All had standard packs (ie. not mountain packs)

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and none were armed. The eight-man group were dressed in a variety of clothing, including winter field uniform, articles of cold weather clothing and track suits. Three of the soldiers were armed with G3 rifles. Most of the men carried mountain packs, which reportedly contained extra food. The remainder of the weapons and cold weather clothing would be turned over by the soldiers they were relieving at the forward posts. The captain in charge of this group was an officer of the 18th Battalion, Frontier Force Regiment, which is a mechanized infantry unit. He was qualified as both an infantry and armoured officer, which is reportedly standard practice for officers of mechanized infantry units. He had previously served as an instructor at the mountain warfare school in Gigit.

18. (C) All three groups were accompanied by civilian porters, who carried up to 35 kg of food. The porters hired by the Army are required to carry heavier loads than porters for mountaineering expeditions (who carry a maximum of 25 kg, and less at higher altitudes). However, Army porters receive higher pay. This has forced up the price of hiring porters in the area, and there is often a shortage of porters willing to work for the government-set rate. The Army is therefore sometimes forced to task soldiers to work as porters. In such cases, the soldiers receive porter's wages in addition to their military pay.

19. (C) During the first week of September, members of the 1988 Pakistan Army Karakoram Expedition were observed returning from the successful ascent of Baltoro Kangri (7312 m). Several members of the expedition were armed with AKS 47 assault rifles.

Helicopter Operations

20. (C) Army helicopters operated regularly along the Braldu Valley and over the Baltoro Glacier. The usual pattern was one SA 330 Puma or two SA 31B Lama sorties daily. On one occasion six Lama and two Puma sorties were flown. Flights are cancelled entirely during periods of poor or even marginal weather; there was one observed period of five days without flights. All forward posts reportedly have helicopter landing zones. However, no landing zones were observed at either staging post. The surface of the glacier in this area is very uneven due to pressure ridges and crevasses, and it is covered with rocks, which are often

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very large. It would therefore be very difficult to land a helicopter near these posts. Conditions may be different at the forward posts. However, most helicopter flights apparently ended at Goro. During a six day period when the



Puma Helicopter over the Baltoro Glacier

upper glacier could be observed, no helicopters were seen farther up the glacier than Goro. The following day, helicopters were seen to fly farther up the glacier, but it is not known if they landed.

Indus Highway

21. (C) The Indus Highway was constructed by Pakistani Army engineers during the 1970s to connect Skardu with the Karakoram Highway, which runs from the Chinese border to Rawalpindi. The approximately 170 km long road is the only route to Skardu except for jeep tracks that are only open part of the year. The highway traverses very rugged terrain. Except for the area around Skardu, where the Indus River runs in multiple channels through wide stretches of gravel, the Indus Valley is a very precipitous gorge. The river is 25 to 40 m wide and extremely fast-flowing. The cliffs bordering the river often fall sheer to the water. The mountains in this area are extremely unstable and

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MAP B

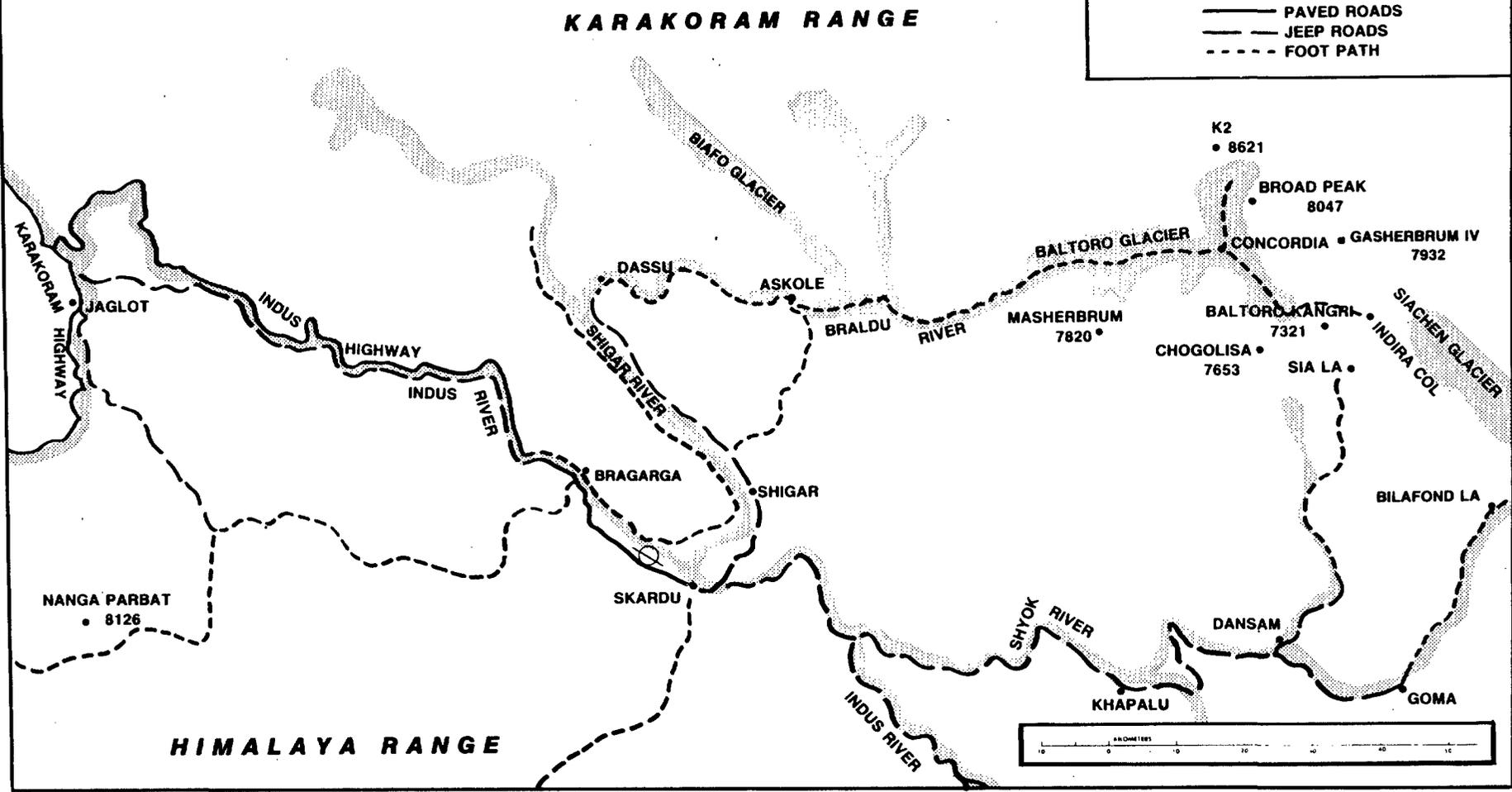
# BALTISTAN

## LEGEND

-  PAVED ROADS
-  JEEP ROADS
-  FOOT PATH

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rockslides are a common occurrence at all times of the year, but particularly during the spring. This stretch of the Indus Valley is largely uninhabited.



Indus Gorge

(The Indus Highway is running along the face of the cliff on the left of the photo)

22. (C) The Indus Highway is a single-lane asphalt road approximately 2.5 m wide. In places it has gravel shoulders about 1 m wide. The pavement is approximately 2 cm thick, and is generally very rough and in poor repair. Several sections of the road had been damaged by rockslides, and although they were made passable for traffic, they had not yet been resurfaced. These sections were usually a few hundred metres in length, but one was about 1.5 km long. The edge of the road is sometimes marked with whitewashed stones, but there are no guardrails. Many sections of the road have been cut into sheer cliff faces. Small streams

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often crossed the road on concrete beds (ie. the roadway went through the water which was flowing across it). These concrete beds were often damaged. Sections of the road near Skardu were partially covered by drifting sand. Because of the poor condition of the road, an average speed of only 20 to 25 kph can be maintained.

23. (C) There are over 20 bridges along the Indus Highway of the following four types:

- a. Suspension Bridges. A large suspension bridge across the Indus River is located 35 km west of Skardu. A second bridge of a similar pattern crosses the Hunza River where the Indus Highway joins the Karakoram Highway. Both are approximately 100 m long, single lane and have a posted 20 ton capacity. The roadbeds of both bridges are wood. The support towers of the bridge across the Indus are stone, while the second bridge has steel girder support towers. Both bridges were controlled by police checkpoints.
- b. Concrete Arch Bridges. These bridges are between 30 and 40 m long and about 3.5 m wide. One of the bridges was damaged and had been over-bridged with a Bailey-type bridge.
- c. Concrete Slab Bridges. There are two types of concrete slab bridge. The larger type is two lane (approximately 4.5 m wide) and spans gaps between about 20 and 30 m wide. The smaller is single lane (approximately 2.5 m wide), spanning gaps of 10 to 20 m.
- d. Bailey Bridges. These bridges were single lane and about 10 to 20 m long. One bridge had a posted 30 ton capacity. None of the other bridges (except the suspension bridges) had a marked capacity.

24. (C) The Northern Areas Works Organization (NAWO) is responsible for building and maintaining roads in the mountainous regions of Pakistan. NAWO has strong links with the Army engineering corps and can probably draw on Army resources. There is a large NAWO equipment depot south of

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the Skardu airfield and an Army equipment depot at Jaglot camp, near the junction of the Indus and Karakoram Highways. However, no road repair equipment was observed at any point along the highway between these depots. There is a small Army vehicle maintenance detachment and several small SCO detachments along the road. Helicopter landing zones are marked out every 10 to 15 kms, usually at the sites of former road construction camps. Only limited military traffic was observed on the road. During a period of one day only two medium trucks were seen.

COMMENT

25. (C) There have been some unconfirmed reports in the Indian press that in 1987 the Indian Army was planning to launch an offensive, codenamed Operation Trident, into northern Pakistan if the Brass Tacks exercise led to an outbreak of hostilities between the two countries. The aim would be to recapture all of Kashmir now held by Pakistan (the present day Northern Areas). The attack was reportedly to include elements of the three divisions of XV Corps, attacking on two main axis (down the Shyok and Indus Vallies) with the objective of capturing Skardu and Gilgit, and severing the Karakoram Highway.

26. (C) If such an operation had been launched, the rugged nature of the ground would have greatly favoured the Pakistani defenders. Small blocking forces would have been able to delay the advance for a considerable time at little cost. The insertion by helicopter of Indian forces to leapfrog these defensive forces would have been difficult, given the often very poor flying conditions in the mountains, the fact that the helicopters would be operating at their extreme altitude ceilings and the lack of suitable landing zones. The very poor roads in the area would pose major problems for logistic support to such a large-scale offensive.

27. (C) The airfield and logistics installations in Skardu and the Pakistani lines of communication in Baltistan are very vulnerable to Indian air attack, which would logically play a major role in an Indian offensive against the Northern Areas. The Indus Highway could be interdicted in a number of places, and unless Skardu could continue to be resupplied by air, it would be effectively cut off from supplies and reinforcements.

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28. (C) Given that the Indian Army may have considered contingency plans along the lines described above, it is still very unlikely that large-scale military operations will be conducted in the Northern Areas in the foreseeable future. Even in the event of war between India and Pakistan, the main theatre of operations will be the plains of the Punjab or the Thar desert. The tactical and logistics problems associated with fighting in the mountains will ensure that any future operations there remain limited in scope.

29. (C) The Pakistani Army can sustain operations in the Northern Areas at their current level with little difficulty. It is not a significant burden on the substantial manpower of the Army, although it does require a major logistic effort. The resupply and reinforcement of the troops deployed to the glaciers is very dependent upon helicopters. Given the problems associated with the operation of helicopters under the conditions that prevail, there are probably frequent occasions when helicopter-resupply cannot be relied upon.

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ANNEX A  
TO 2000-034/246 (DDI 6)  
DATED 2 NOVEMBER 1988

TRIP ITINERARY

<u>DATE</u>	<u>PLACE</u>	<u>REMARKS</u>
29 Aug	Skardu	by air
30-31 Aug	Dassu/Goyungo	by road and foot
1 Sep	Chakpo	by foot
2 Sep	Hoto	
3 Sep	Askole	
4 Sep	Johla	
5-6 Sep	Paiyu	
7 Sep	Robutze (Liligo)	
8 Sep	Urdukas	
9 Sep	Goro II	
10-12 Sep	Concordia	walk to K2 basecamp
13 Sep	Urdukas	
14-15 Sep	Paiyu	
16 Sep	Johla	
17 Sep	Korophon	
18 Sep	Askole	
19 Sep	Hoto	
20 Sep	Chakpo	
21 Sep	Dassu/Shigar	by foot and road
22-23 Sep	Skardu	by road
24 Sep	Chilias	by road
25 Sep	Rawalpindi	by road

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