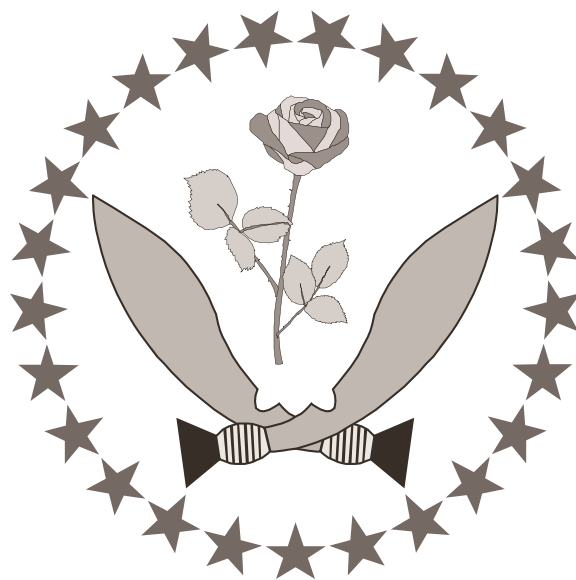


THE SIACHEN GLACIER

A HISTORICAL REVIEW

HARISH KAPADIA



To my son
Lt. Nawang Kapadia
and
Soldiers of the Indian Army on Siachen.



It is foolish and wrong to
mourn the men who died.
Rather we should thank God
that such men lived.

General George S. Patton, Jr.

For comments, views, further information and suggestions feel free to contact;

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Lieutenant Nawang H. Kapadia

15 December 1975 – 11 November 2000

Lt Nawang Kapadia, who was commissioned in the Fourth Battalion the Third Gorkha Rifles, died while gallantly fighting Pakistan based in Kupwara district of Srinagar on 11th Nov 2000.

The happiest day in twenty four year old Mumbai-born Nawang's life was when he joined the Officers' Training Academy at Chennai. His parents, well-known mountaineers Harish and Geeta, encouraged him to the fullest in spite of the cynical views of others. It was a proud moment indeed at the Passing Out Parade on 2nd of September 2000 when his family and friends saw him receiving his Lieutenant stars on commissioning to the prestigious Fourth Battalion The Third Gorkha Rifles. After a brief visit home, Nawang proceeded to the Regimental Centre at Varanasi from where he joined his Battalion on 29th Oct 2000. The Battalion was, during this period, continuously involved in operations against foreign terrorists who had infiltrated and were in the process of establishing their bases in the Kupwara area of Jammu and Kashmir. Nawang was immediately involved in these operations where his qualities of heart and mind as well as his abundant courage were a beacon to the troops under his command.

On the 10th of Nov the Battalion received information of a large number of terrorists hiding in the notorious jungles of Rajwar near Kupwara. Search and destroy operations were immediately launched with Nawang leading his own platoon. At approximately 11 am, a large hideout was discovered by the Battalion and Nawang's platoon came under fire from a group of eight to ten terrorists in the vicinity. Havaladar Chitra Bahadur got a burst in the stomach and fell mortally wounded. At this stage, Nawang instinctively rushed to rescue Chitra Bahadur, firing his weapon, under the covering fire of his comrades. A terrorist who was hiding in the nearby foliage fired at Nawang. In the crossfire, Nawang got a bullet in the face and died, leading his troops in the highest tradition of valour and sacrifice.

Nawang Harish Kapadia was born on December 15, 1975, in Mumbai three years after his elder brother, Sonam. As his surname indicates, theirs is a family of traditional Gujarati cloth merchants, of a community that has a scarce presence in the Defence Services. From his early childhood, Nawang had imbibed the best adventurous talents of his parents, both of whom have many achievements under their belt. Sonam and Nawang were named after famous Sherpa mountaineers; ironically both are Gorkha names. Nawang means "leader of men", a very apt name for an able soldier.

Nawang did his initial schooling at the New Era School and subsequently at the St. Xavier's Boys' Academy. He did his B. Com. from Jai Hind college, Bombay. In college, his interests included trekking, hiking, mountaineering (which of course, was in his genes), sports, martial arts and music. He enjoyed life to the maximum, and it was most evident in his passion for food. When it came to eating, no one could match him. Nawang could out-eat anyone and at anytime.

Lt Nawang Kapadia's sacrifice will remain a shining light to inspire future generations. The city of Mumbai should be proud of its son who lived his life here and leaves behind a sorrowing family and a large circle of friends. He was cremated with full military honours on Tuesday, 14 November, 2000 in Mumbai. Nawang lies in peace, having chosen a career as he desired and dying for the country, trying to save a life, in best traditions of the army.

INTRODUCTION

Once I was privileged to address a gathering of soldiers serving on the Siachen Glacier at the Base Camp in 2002 Their interest, need to know more about the area under their command and enthusiasm led to a suggestion to produce a small booklet on the available knowledge about the area. If you know what you are defending – and why, then perhaps there is more commitment and interest, and the troubles and sufferings seems worthwhile.

Two questions are often asked when I mention the Siachen Glacier where a war is raging between the Indian and Pakistani armies since 1984. There are no human settlements there, nor any productive use of this area, then why is this glacier so important to the both the countries? And secondly what were mountaineers doing in a place where artillery shells are regularly exchanged? The answers to both the questions lie in the geography and history of this glacier. It is said that a nation which does not know its geography is condemned by history. India had suffered such a fate in 1962 during the Chinese invasion and now it cannot happen all over again. So it is imperative that issues related to this glacier are better understood Reverse.

The Siachen Glacier and the East Karakoram areas are not just barren wasteland to be protected. They have a rich history of explorations and visits, mountains which are high and beautiful – when the areas are opened for an easy access it will be the one of the finest areas for mountaineers and trekkers in the world. Each peak has a name and each name has a meaning. Peaks, valleys and glaciers each have a history, defiance and an invitation for the future. The geology, plant life and long glaciers are some of the other important factors that needs to be studied and protected.

Such an immense area with large snow cover effects the climate and weather patterns of Central Asia and Ladakh, about which there is far little understanding available today. Hence it is imperative that its environment of the area is protected. The conflict and even Cease Fire now does not avoid the necessity of soldiers having to stay on the glacier and avoiding pollution is difficult to balance but must be addressed. We owe it to the future generation.

As some well-meaning officers put, it; 'we do not want our children and grand children sitting on the Saltoro Ridge protecting the Siachen Glacier'. Hence some solution has to be found and discussed to end the conflict. These are suggested and perhaps more discussions and awareness of it would allow the roses to bloom again. To reverse the quote; a Nation that does not learn from its history is condemned by geography.

I have dedicated the booklet to my son, who was with me on the Siachen Glacier in 1996. It was here, talking to several brave officers, that he finally made up his mind to join the army and serve the nation. Thus I have an association with and obligation to this great glacier which this booklet fulfills.

HARISH KAPADIA

January 2011



A Brief History of the Siachen Glacier

Contrary to the popular belief, the Siachen glacier has been visited by many since more than a Century. The glacier, originally known as 'Saicher Gharni' was place of interest and several Baltis from the western valleys visited the glacier. Many decades ago it is believed that a small Yarkandi village existed at the entrance of the Teram Shehr glacier. (Bullock-Workman found the walls of such a settlement in 1912 and it was seen and photographed by an Indian expedition in 2002). Here on the glacier Yarkandis met the Baltis and traded with them. Once some of the Yarkandis descended the Ghyari nala and took away a Balti woman with them to their glacier village. To take revenge, Baltis contacted an important mullah, who gave them a *tawiz* (amulet) which was to be placed on the Bilafond la. Mullah instructed them to return via the Nubra valley. However the Baltis, after placing the *tawiz* on the pass returned the way they had come. Soon afterwards a great storm visited the Siachen glacier and destroyed the settlements and only the rocky desolation remained. The priests say that the calamity would have been greater had they followed the directions fully. Because of this lapse in following the instructions wild roses were not destroyed by the storm. Today roses grow in plenty near the snout and in the lower valleys, though the entire glacier is barren. The glacier is called Siachen (Sia-rose, chen-place of) - the place of roses.

First Explorers

For first explorers, the existence, length and location of the Siachen glacier was a matter of discussions. In 1821, W. Moorcroft passed near its snout and first acknowledged its existence. In 1835 G.T. Vigne approached it from the west trying to reach the Bilafond la, but he never guessed the existence of such a large glacier across the divide. In 1848 Henry Starchy was the first to discover the existence of the 'Saichar' glacier and ascended it for two miles from the snout in the Nubra valley. In the same year, Dr. Thomas Thompson also reached the glacier followed by F. Drew in 1849-50. E.C. Ryall of the Survey of India sketched the lower part in 1861. But he ascribed to it a length of only sixteen miles.

During his famous second Karakoram journey in 1889, Sir Francis Younghusband (then Colonel) approached the area from the Urdok valley. He was exploring the area to locate a crossing into the Indian Sub-continent. Following a side valley of the Urdok glacier, he reached foot of Turkestan la. He felt that this was the main axis of the Karakoram. His explorer's instincts were correct but, in absence of maps, he was not sure where he was standing. His belief was finally confirmed by Dr. T.G. Longstaff in 1909. In fact, it was Dr. Longstaff with Dr. Arthur N  v   and Lt Slingsby who were the first explorers to traverse this great glacier. At first, they crossed over the Bilafond la (or, Salto pass, as Dr. Longstaff would have preferred to call it) and named the glacier in the east as 'Teram Shehr' (destroyed city) and peaks as Teram Kangri group. After retreating by the same route, he went down the valley, and approached the Siachen via the Nubra valley to its south. Dr. Longstaff climbed up from the Siachen snout and observed the same peaks, as he had identified them from Bilafond la. Thus, he conclusively proved the length of Siachen glacier and the actual location of the Turkestan la. This was an important discovery as it now established the true boundaries of the Karakoram. What he wrote is quoted often:

Younghusband was a true prophet. Col Burrand of the Survey had suspected the truth. The avalanche-swept pass, whose foot Younghusband had reached 20 years before (*in 1889*), was on the main axis of the Karakoram range which thus lay miles farther north than had been believed. We had stolen some 500 sq miles from the

Yarkand river systems of Chinese Turkestan, and joined it to the waters of the Indus and the Kingdom of Kashmir.

The Workman Expeditions, 1911 and 1912

The next most important explorers to the Siachen glacier were the famous Workman couple, in 1911-12. Fanny Bullock-Workman and William Hunter Workman were Americans who had special interest in the exploration of the Karakoram. They focused their attention on the exploration of the Siachen glacier.

They entered the glacier crossing over the Bilafond la and camped on the glacier with a large entourage of porters and two Alpine guides. They climbed many peaks and visited almost all the corners of the upper Siachen. Grant Peterkin was a surveyor attached to this expedition. He surveyed the glacier thoroughly and named a few peaks, particularly Teram Kangri, Apsarasas and Ghent. This expedition spent more than two months on the glacier and they visited almost all the major side valleys. Names like Sia la, Junction Peak, Hawk, Tawiz and few others were given by this expedition. They also visited and named Indira Col, after Goddess Laxmi (this name as nothing to do with name of late Mrs Indira Gandhi, who herself was also named after Laxmi).

Europeans on the glacier

In 1929 Dr. Ph.C. Visser of the Netherlands was on his fourth trip to the Karakoram. They explored the two Terong glaciers and the Shelkar Chorten glacier which were unknown till then. Dr. Rudolf Wyss and surveyor Khan Sahib Afraz Gul stayed in the Terong valley and mapped the area. Thus they completed surveying the lower part of this great glacier.

In 1930 Professor Giotto Dainelli completed the survey and exploration of the Siachen Glacier. He reached the glacier from the southern approaches, from the Nubra valley. He established himself at the Teram Shehr glacier junction in early June. He wrote : ' . . . thus reaching the Siachen tongue with all my baggage, a caravan of seventy coolies and six and a half tons of food for the men, carried by an additional caravan of ponies and supplementary coolies. On the 9th of June--exactly two months after my departure from Florence--I was heading for my first depot up the glacier. I hope my English colleagues will appreciate this rapidity of execution, which I consider a record!' Compare this with the present timings. One can reach the snout in 3 days from Delhi without taking a step on foot ! Dainelli, with his only companion Miss Kalau, stayed at the Teram Shehr junction and carried out various geological surveys. Due to the flooding of the Nubra valley in the lower reaches, he could not return by the same route and hence crossed a 6200 m pass to Rimo glaciers in the east. He named this Col Italia (Italy Col). With this, the survey and exploration of the Siachen in major respects was over.

Middle Years and Politics

The Second World War put an end to all climbing activities in this area for a few decades. This was followed by the turmoil of the Indian Independence and the glacier was left alone for a long time. With the India-China War of 1962 in the east of the Siachen glacier, the entire area was now 'restricted', even for the Indian mountaineers and no record of any visits exists. It is known that some parties from

the Indian security agencies visited Bilafond la.

In the 1971 war Indian troops defeated the Pakistani forces. The Shyok valley in Ladakh was also scene of action. India held almost 80,000 Pakistani soldiers as Prisoner of War. After the war, talks were held in Shimla to sign an agreement about the demarcation of borders. In this "Shimla Agreement", the 'Line of Control' was demarcated till the Shyok river, to what is known as 'Border Stone NJ 9842'. For the areas to the north of this point, it was agreed that the Line of Control shall follow and thence North to the glaciers'. It was not specified which glacier line will be the border. This ambiguity about exact definition of the border is the reason for today's conflict.

As per now available book refernces, the conflict in the Siachen glacier may not have taken place at all if Mrs. Indira Gandhi had pressurised Zulfikar Ali Bhutto, Prime Minister of Pakistan to sign an agreement demarcating the borders along the Kashmir valley and along the Siachen glacier, as it is now. She was advised to do so by the Secretaries. A besieged Bhutto pleaded with Mrs.Gandhi that he is the first civilian Prime Minister of Pakistan after more than a decade, that his word be trusted to do this at a later date, as did not want to come under attack from his military generals. *Aap muz par bharosa kijiye*, he said. (You must trust me). The ambiguity about the borders was left in the agreement. But soon maps appeared encompassing the Siachen under Pakistan territory.

To support their claim, from 1972 to 1983, Pakistan promoted and permitted many expeditions on the Siachen glacier. These expeditions generally crossed over either

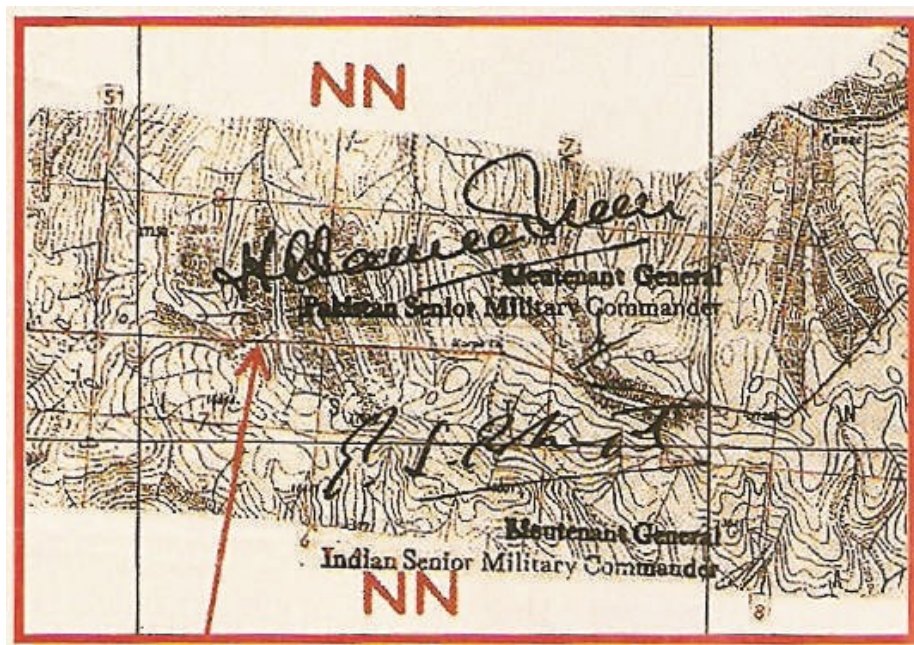


Gyong la, Bilafond la or Sia la to enter the glacier. These expeditions of several foreign nationalities (many Japanese teams) were accompanied by Pakistani liaison officers. They climbed many peaks on the glacier. Singhi Kangri, Teram Kangri, Apsarasas, Ghent and Salto Kangri I were climbed with Pakistani army officers and flag planted on the summits of each peak. Thus mountaineers became political pawns and their climbs, originating from Pakistan created a precedent of its *de facto* control over the glacier. During this period, three expeditions from the Indian Army climbed on the glacier. The first expedition was in 1978, when a team of the Indian Army, led by Col. N. Kumar arrived on the glacier and climbed Teram Kangri II. Indian Army returned to the glacier in 1981 to climb Salto Kangri I with many other peaks. They reached the Indira Col at the head of the glacier. In between these climbs an army team had climbed Apsarasas in 1980.

India Takes Control

By now maps were published in Europe which showed the extended Line of Control to join the Karakoram Pass in the east, thus surreptitiously supporting the Pakistan claim line to the east of the glacier. This would encompass the entire Siachen glacier, conceding it on maps to Pakistan, forming a long common border between Pakistan and China.

In 1984, Pakistan gave permission to a Japanese expedition to attempt Rimo peak located in the side valley, east of Siachen. It overlooks the eastern areas of the Aksai Chin. Such an expedition would have firmly linked the western routes with the eastern routes, -- the trade route leading to Karakoram Pass and China. The Indian army decided to take action and to prevent such an expedition from proceeding. There were inputs that by May Pakistan army planned to take control of the Siachen glacier.



A portion of LOC bearing signature of commanders from both sides. This is the point of LOC where demarcation ended.

Thus the first group of the Indian army landed on the glacier on 13th April 1984 to defend the territory and the war on the glacier began, which is still raging today. We fought till 2003, When a ceasefire was declared.

Soon the first expedition arrived from India to counter the policy adopted by Pakistan in the past. Next year, In 1985, an Indo-British expedition (led by Harish Kapadia with Dave Wilkinson) was given permission to climb Rimo peak, approaching it from the Nubra valley in India. This was the same peak which was to be attempted by the Japanese team with Pakistani climbers. This Indo-British team became the first civilian expedition to climb on the glacier after starting of the Siachen war, countering any precedents created by climbs initiated from Pakistan. Their successful climb and the international publicity it generated created an awareness of it as an Indian territory. An American team followed in 1986 reaching the Indira Col and their Indian counterparts climbed Sia Kangri amidst heavy firing from Pakistan side. Since then though a Japanese and British expeditions were allowed to climb in the Terong valley no team entered the main glacier.

After a gap of a decade, in 1996, an Indian team from Mumbai, led by Harish Kapadia, arrived on the glacier with all the clearances from the Government of India. At first they climbed in the Terong valley but as they were about to enter the upper glacier they were stopped from proceeding. Unreasonably and arbitrarily, an officer in the army hierarchy had decided not to allow the team to proceed ahead. They had to return. This reflected rather poorly on the Indian army. However after protests and a critical report, within a year the situation was rectified with change of Commanders. It was decided to allow the Indian mountaineers on the glacier. Thus in 1997 an Indian ladies team (led by Ms. Bachendri Pal) traversed the glacier and stood on India Saddle. The Mumbai team, again led by Harish Kapadia, returned to the glacier in 1998 to complete their unfinished venture. They reached Indira Col, India Saddle, Turkestan La and climbed the first peak on the Teram Shehr Plateau : Bhujang (6560 m). Indian mountaineers had arrived on the glacier for good.

In 2002 Japanese returned to the main glacier as a joint team with Indians. Crossing over from the 'Col Italia' in the east the team descended the Teram Shehr glacier and climbed Padmanabh (7030 m) to the east of the glacier. They also explored the high and unvisited Teram Shehr Ice-Plateau.

Finally in 2003, a cease fire was declared between India and Pakistan in Kashmir and the Siachen glacier.

Indian Army on the Siachen Glacier

For the past 26 years now valiant soldiers of the Indian Army defend the heights of this glacier. The altitude, severe winter and harsh weather conditions have taken its toll. Though exact numbers are not known, almost 800 soldiers have died on this glacier while more than 12,000 soldiers have been injured, many by the harsh conditions. The army has established camps up to 6700 m (22,000 feet) and it takes more than mountaineering skills, even to reach some of the high camps. Soldiers have to cross snow-tunnels, go up almost 700 m (2000 ft) vertical cliffs on jumars and go across huge crevasses over ladders -- most of these to be covered in night to avoid being caught in enemy fire. The stay of the army jawans at such altitudes for long periods has changed many notions about man at high altitudes and are adding new chapters to high altitude mountaineering. Many of the camps are supplied by

Physical Description of the Siachen Glacier

To understand a mountain area, it is necessary to note its glaciers, rivers, ridges, passes and peaks - especially in as complicated an area as the Siachen glacier. The following is a brief description of the glacier, which, when read with a sketch map, should give a clearer understanding of the geography of the glacier.



General Location

If you look at a satellite map, the Siachen glacier looks like a worm moving from south to north, twisting between mountain valleys. Its strategic importance is in its location. To its north, lies Central Asia, to the west, Pakistan-occupied-Kashmir and Afghanistan and to the east, China-occupied-Aksai Chin and Central Asia. To the south are the Ladakh and Kashmir valleys. Thus, politically, the Siachen occupies a vantage position between the territories occupied by Pakistan and China (west to east).

Valleys

To the north of the Siachen lies the Shaksgam valley, which belonged to the state of Jammu and Kashmir but was gifted to China by Pakistan. This valley is connected to the Siachen by high passes - Indira Col (5840 m) and the Turkestan la (5810 m). To the immediate west of the glacier is the Baltoro valley. The Baltoro glacier is almost as long as the Siachen. The Kondus and Dansam valleys are its immediate western neighbours, and are linked with the Siachen by the Sia la (5590 m), Bilafond la (5450 m) and Gyong la (5690 m).

To the east is the Depsang valley, through which the trade route to the Karakoram pass leads to Central Asia. Further east is the plateau of Aksai Chin.

Glaciers (the Northern Sector)

At 76 km, the Siachen is one of the longest glaciers in the world outside the polar regions. If one were to walk up from its snout and follow all its twists and turns up to its northernmost point, Indira Col, one would end up walking 96 km. The glacier is surrounded by some of the finest mountain scenery in the world. Many glaciers feed into the Siachen and the main glacier discharges a great volume of water into the Nubra river to the south.

Valleys and Glaciers to the West of the main Siachen Glacier (the Northern Sector)

- 1) The Sia la glacier is 12 km long and flows from the Sia la to the Siachen. It is located at the foot of the Sia Kangri II peak and is in the Tiger Saddle area.
- 2) The Peak 36 glacier that joins the Ghent glacier is 17 km long and originates at the foot of Ghent and Hawk peaks and drains snows from the summits of the Saltoro Kangri peaks, the highest in the area. The most important but easy to traverse glacier to the west is the Lolofond, which is 12 km long and originates from the Bilafond la and meets the Siachen glacier. It is located almost halfway up the Siachen, opposite the Teram Shehr glacier.
- 3) The K12 glacier as the name suggests, drains the snows of Peak K12 and meets the Siachen after 19 km.
- 4) The Hasrat glacier consists of several different valleys, which feed into it. The route, to the Gyong la is over this glacier. The glacier is complicated and about 10 km long and eventually merges with the Siachen glacier.
- 5) The Dzingrulma glacier is almost an extension of the Hasrat glacier to its south and southeast, and meets the Siachen after 5 km, at the army base camp
- 7 & 8) The La-gonghma and La-yogma glaciers are both about 10 km long and are the steepest and most complicated glaciers in this area and drain steeply into the main valley.

The last four glaciers are considered part of the '**Central Sector**' of the Siachen glacier.

Valleys and Glaciers to the East of the main Siachen Glacier (the Northern Sector)

- 1) The geography is less complicated on the eastern side of the Siachen. Again, from north to south, the first major glacier is the Teram Shehr glacier, a huge 20-km long glacier, whose drainage area extends from Col Italia (5920 m) to the junction with the Siachen.
- 2) The Terong Topko valley is eight kilometres from the Siachen snout. Though it appears small and gentle, the valley is rather wide and contains three major glaciers, with mountaineering passes to its east: a) the North Terong glacier (Ibex Col, 6200 m), b) the Shelker Chorten glacier and c) the South Terong glacier (Terong Col, 5720 m). Each of these side

glaciers is deep and long. There are other smaller glaciers in the South Terong valley, which have not been named.

Areas to the West across the Saltoro Ridge

The glaciers that drain the western side of the Saltoro ridge, from north to south, are: a) the Kondus glacier (Sia la 5590 m), b) the Sherpi Gang glacier, c) the Bilafond glacier (Bilafond la, 5450 m), d) the Chumik glacier, e) the Gyong la glacier (Gyong la, 5690 m), and f) the Chulung glacier. All of them drain through different valleys and converge at Dansam from where they flow down to Khapalu and Skardu. The great Baltoro glacier, which is almost as long as the Siachen, can be seen across the Kondus glacier. It flows down from the Conway Saddle and leads to Concordia and K2, which is not too far from the Siachen.

Areas further East of the Siachen Glacier across Col Italia.

The Rimo glaciers (North, Central and South) all drain east from the watershed with the Siachen to form the Shyok river. Further south are the gigantic Chong Kumdan glaciers (North and South), which also drain into the Shyok. There is no direct route from these glaciers to the Siachen glacier.

Areas in the Shaksgam valley, North of the Siachen Glacier

The Siachen glacier has a common watershed with the Shaksgam valley. The Urdok glacier drains to the north of the Siachen at its head at Indira Col, and then meets the Gasherbrum glacier and eventually flows into the Shaksgam river, which originates at the foot of the Shaksgam pass. To the east of the Urdok glacier are the Staghar, Singhi and Kygar valleys, all of which drain from the head walls of the Siachen, the Teram Shehr and Apsarasas peaks. The Shaksgam glacier can be approached via the Kadpa Ngonpo la that is located just west of the Karakoram pass. The Karakoram pass route follows the Yarkand river, while the Shaksgam pass and Kadpa Ngonpo la route follow the Shaksgam river.

Areas South of the Siachen Glacier (the Southern Sector)

To the south, the Siachen glacier drains to form the Nubra, which flows for a relatively short distance to Khalsar at the foot of the Ladakh range, where it is forced to turn west. The Nubra and Shyok rivers merge at Khalsar. The combined river, called the Shyok, flows west past Khapalu and merges with the Saltoro and Hushe rivers, thus draining waters from the Saltoro ridge, west of the Siachen glacier. The Shyok merges with the Indus just before it reaches Skardu. Thus, the entire water basin of the Siachen (Nubra), the areas to its east (Shyok) and the areas to its west (Thale, Hushe, Dansam and Kondus) flow into the Indus and eventually into the Arabian Sea.

Peaks of the Siachen Area

The Siachen glacier is surrounded by some of the finest and highest peaks in the Karakoram. Due to restrictions imposed by its location, and the conflict, the area has the most unclimbed peaks in the world. Gasherbrum (8068 m) and K2 (8611 m) are only a short distance to the west of the head of the Siachen. The Saltoro ridge runs south from Gasherbrum and west of the Siachen glacier. It contains, north to south,

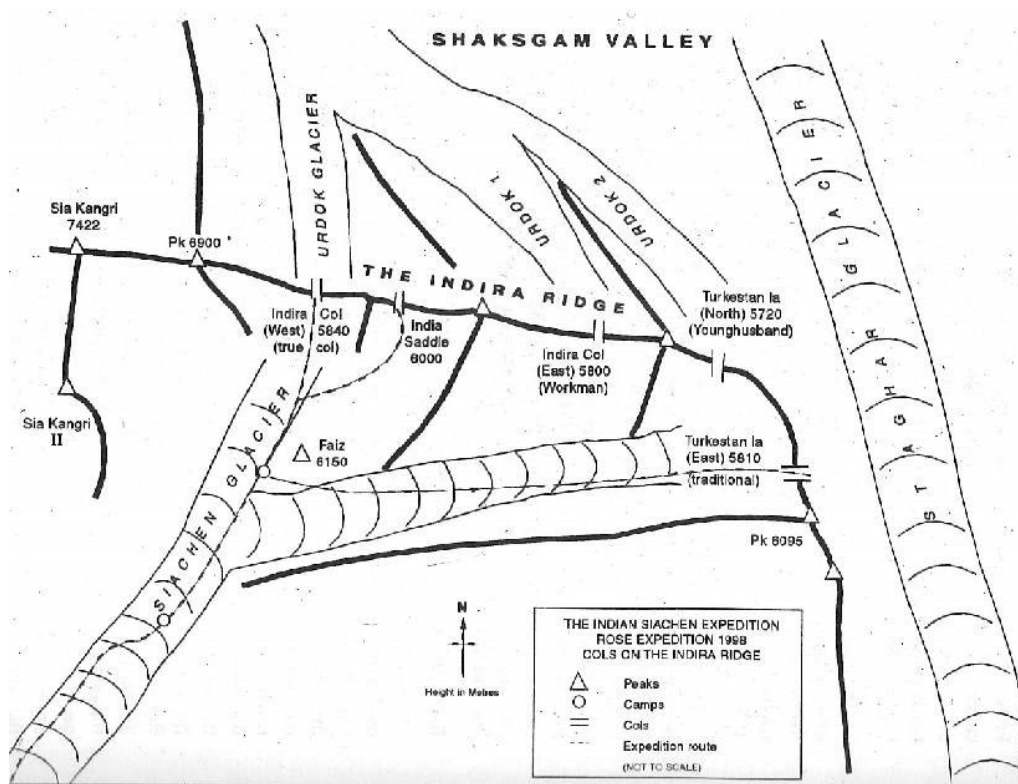
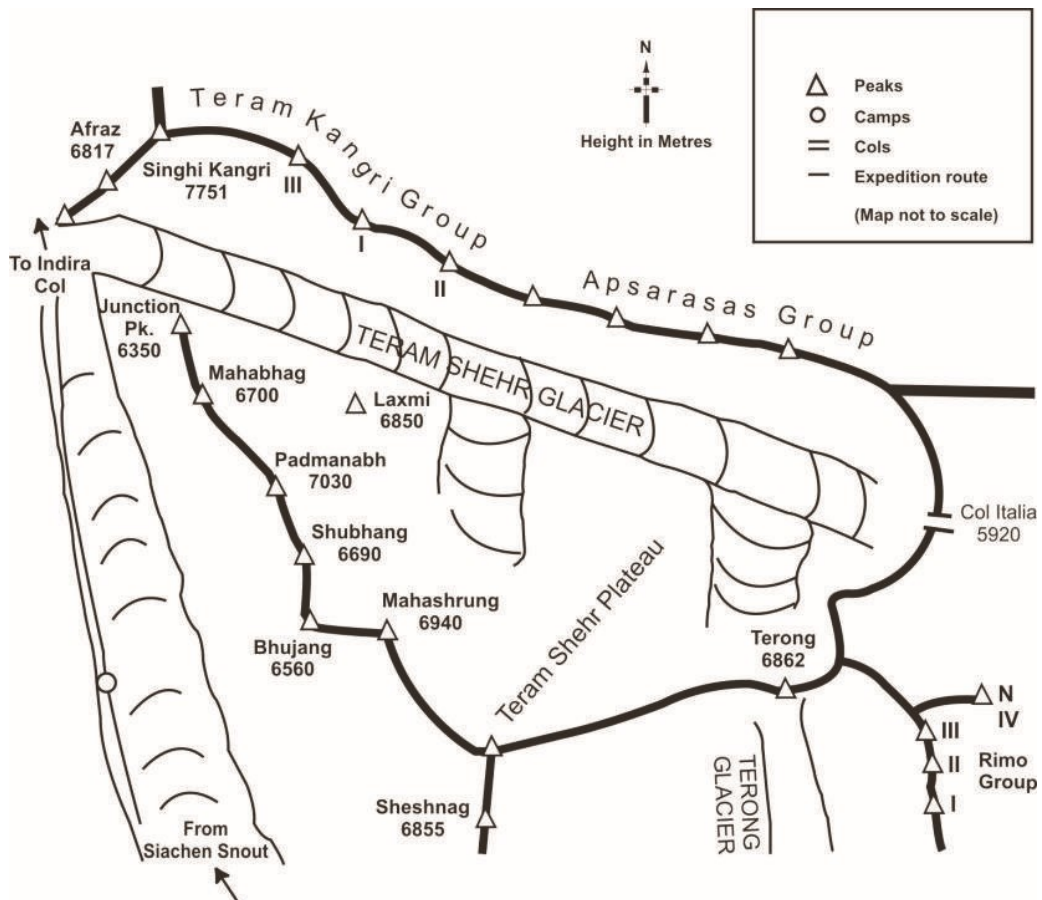
Sia Kangri I (7422 m) and Sia Kangri II (7092 m), Silver Throne (6900 m), Depak (7150 m), Hawk Peak (6754 m), Ghent (7401 m), Sherpi Kangri (7380 m), Saltoro Kangri I (7742 m) and Saltoro Kangri II (7705 m, the highest unclimbed peak in the world today). Further south stands K12 (7428 m).

The high peaks on the eastern wall of the Siachen, are Singhi Kangri (7751 m), the three peaks of Teram Kangri (7464 m) and the five peaks of Apsarasas (7245 m). To the south of these peaks and across the Teram Shehr glacier stand the Junction (6350 m), Laxmi (6850 m) and Padmanabh (7030 m) peaks along with several other peaks of 6500 m and above.

The ten square kilometre Teram Shehr Plateau is unique in that it is nowhere less than 6200 m in elevation. The plateau has numerous small arms extending in different directions.

To the east of the Siachen, the North Terong valley has the peaks of the Rimo Group - I (7385 m), II (7373 m) and III (7233 m). Peak IV (7169 m) rises on the eastern side on the Central Rimo glacier. On the watershed of south Terong glacier are Chong Kumdan I (7071 m), and Chong Kumdan II (7004 m). The mountain scene is completed by the high peak of Mamostong Kangri (7516 m) which is further southeast, outside the ambit of the Siachen glacier.

Thus, with high peaks, long glaciers and many feeder glaciers, the area has some of the finest mountain topography in the world.

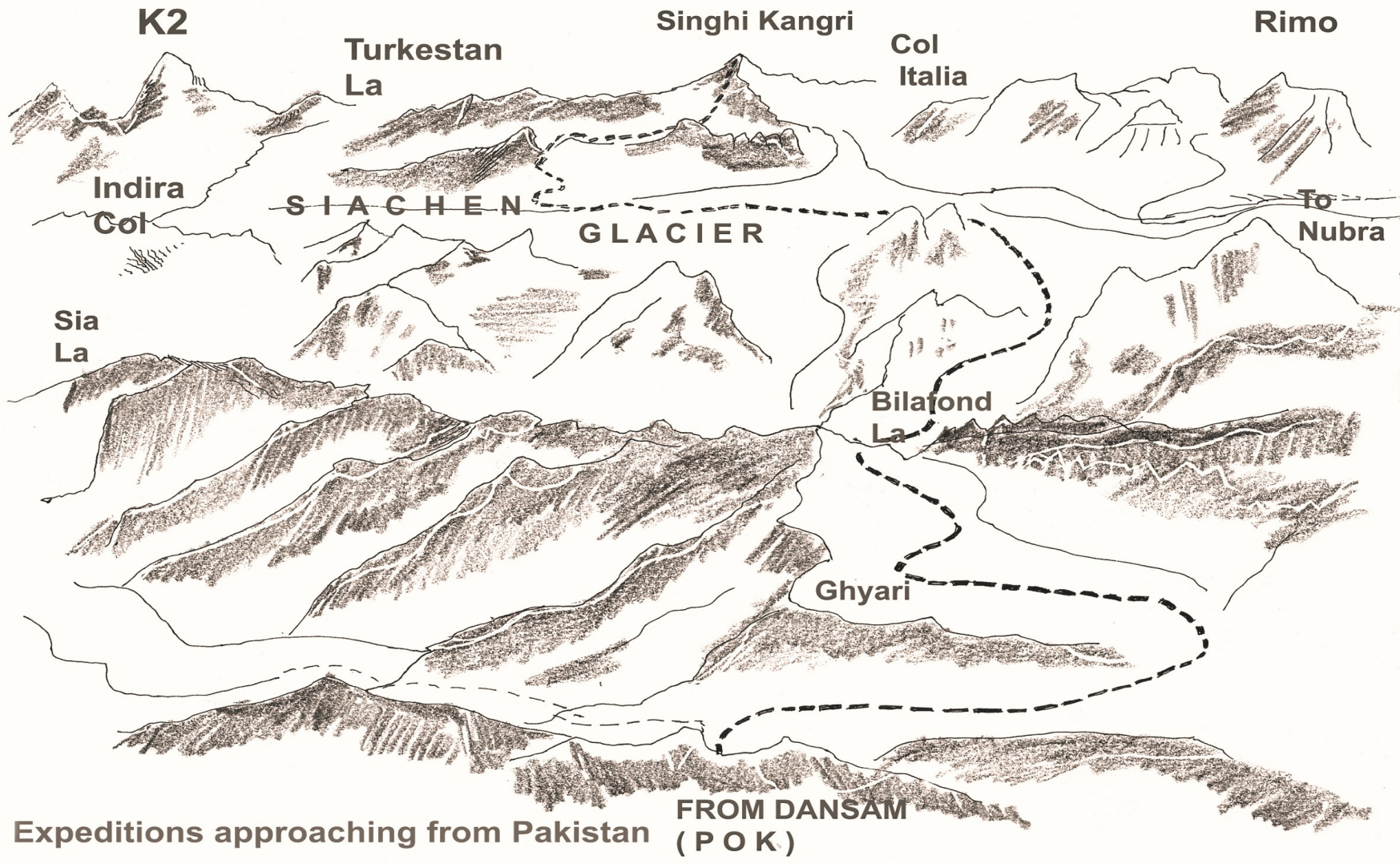


History of the Siachen Glacier (1821-2010)

| Year | Expedition |
|---------|---|
| 1821 | W. Moorcroft passed near the snout of the Siachen glacier and reported its existence. |
| 1835 | G. T. Vigne approached it from the west over Bilafond la but never guessed its existence. |
| 1848 | Henry Strachey discovered and established the existence of Siachen glacier and ascended it for two miles. |
| 1848 | Dr. T. Thompson visited the snout. |
| 1849-50 | F. Drew approached the glacier and wrote about it in his famous book <i>Ladakh</i> . |
| 1862 | E.C. Ryall of Survey of India, sketched the lower part of the glacier and ascribed it a length of only 16 miles. |
| 1889 | Sir F. Younghusband reached foot of Turkestan la (North) from north. He felt that the glacier was long and that this pass was the major Central Asian divide. |
| 1907 | Sir Sidney Burrard published a map on the Himalaya. It did not include Siachen though he mentioned the possibility of existence of a large glacier at the head of the Nubra valley. |
| 1908 | Dr. Arthur Névé and D.G. Oliver reached the snout and explored Mamostong Kangri. |
| 1909 | Dr. Tom Longstaff, Dr Arthur Névé and Lt A.M. Slingsby, later joined by Capt D.G. Oliver, first came over Bilafond la and later over the Siachen snout to establish the length of the Siachen glacier and exact location of various passes. This was the pioneering effort which established the true length and nature of the glacier. |
| 1911-12 | The Workman Expedition came over Bilafond la in the west and spent almost 2 months on the glacier. They named many peaks and passes, and climbed a few peaks. Grant Peterkin, attached to this expedition, surveyed the glacier thoroughly. |
| 1911 | V.D.B. Collins and C.S. McInnes of Survey of India surveyed Teram Kangri and other peaks. |
| 1913-14 | Sir Filippo De Filippi surveyed Rimo glacier system and published a map. |
| 1929 | Dr Ph.C. Visser, Netherlands expedition, surveyed Terong valleys and crossed the snout to Gyong la. He was accompanied by the Surveyor Khan Sahib Afraz Gul who completed the detailed survey of the entire glacier. |
| 1929 | Duke of Spoleto expedition reached Indira Col (East) from the north and discovered Staghar and Singhi glaciers. |
| 1930 | G. Dainelli, Italian expedition, stayed two months at Teram Shehr junction. He approached it starting from Bombay and through the Nubra valley. As the Nubra river was flooded later, he crossed Col Italia and returned via Saser la. |
| 1934 | G.O. Dyhrenfurth, International expedition, made the first ascent of Sia Kangri. |
| 1935 | British Expedition led by J. Waller with John Hunt attempted Saltoro Kangri. They camped on the Peak 36 glacier. |
| 1939 | Lt Peter Young visited Gyong la on shikar. |
| 1956 | Austrian expedition led by F. Moravec climbed Sia Kangri West. |
| 1957 | Imperial College British expedition led by Eric Shipton climbed Tawiz and visited several passes. |
| 1961 | Austrian expedition led by E. Waschak made the first ascent of Ghent. |

- 1962 Japanese-Pakistan expedition led by T. Shidei made the first ascent of Saltoro Kangri I.
- 1972 'Shimla Agreement' was signed between India and Pakistan. It failed to clearly demarcate the border along this glacier.
- 1974 Japanese expedition led by T. Tanaka attempted Sherpi Kangri II via S ridge. This was the first expedition allowed from Pakistan after the 'Shimla Agreement'.
- 1974 Austrian expedition led by W. Stefan climbed Sia Kangri from SW.
- 1974 Japanese expedition led by G. Iwatsubo approached K12 from the west. Two members reached the summit but died during the return and disappeared without any trace.
- 1975 British expedition led by D. Alcock attempted Sherpi Kangri.
- 1975 Japanese expedition led by Y. Yamamoto climbed K12 by the same route to search for the missing summitters. The search failed.
- 1975 Japanese expedition led by H. Katayama made first ascents of Teram Kangri I and II, coming over Bilafond Ia. This was the first expedition to cross over into the Siachen glacier from Bilafond Ia with permits from Pakistan.
- 1975 Japanese expeditions led by S. Yamamoto attempted Saltoro Kangri I.
- 1976 Japanese expedition made first ascent of Sherpi Kangri, led by H. Hirai.
- 1976 Japanese expedition led by H. Misawa made the first ascent of Apsarasas I, crossing over Bilafond Ia.
- 1976 Japanese expedition led by H. Saito came over Bilafond Ia, crossed Staghar Pass and made the first ascent of Singhi Kangri from north.
- 1976 An Austrian expedition led by Gunther Schutz crossed over Bilafond Ia and attempted Saltoro Kangri II.
- 1977 Austrian expedition climbed Ghent NE from the Kondus glacier.
- 1978 Indian Army expedition led by Col N. Kumar approached from Nubra and climbed Teram Kangri II. This was the first Indian expedition to enter the glacier from the Nubra valley after the 1930 Italian expedition by G. Dainelli (though Indian security parties have reportedly visited the glacier till Bilafond Ia).
- 1978 Japanese expedition led by H. Kobayashi climbed Ghent NE from the Kondus glacier.
- 1979 Japanese expedition led by S. Hanada crossed over Bilafond Ia and made the first ascent of Teram Kangri III.
- 1979 Japanese expedition led by R. Hayashibara climbed Sia Kangri from the Conway Saddle, descended its S face to the Siachen glacier. They trekked out via Bilafond Ia.
- 1980 Indian Army expedition led by Brig K.N. Thandani climbed Apsarasas I.
- 1980 West German team led by B. Scherzer climbed Ghent.
- 1980 An American team led by Galen Rowell traversed the Siachen glacier during the Karakoram Ski Traverse of major glaciers.
- 1981 Dutch expedition attempted Saltoro Kangri II from the west.
- 1981 Indian Army expedition led by Col. N. Kumar reached the upper glacier via the Nubra valley. They climbed Saltoro Kangri I, Sia Kangri I, reached Indira Col (West), Sia Ia, Turkestan Ia and Saltoro Pass (PK 36 glacier pass).
- 1983 Few trekking parties crossed over Bilafond Ia from the west.
- 1984 Indian Army expedition led by Col. Prem Chand climbed K12 from the Siachen glacier traversing from the west.
- 1984 The Indian Army controlled the western heights on the Saltoro ridge to take

- firm control to defend the area on 14th April. This was the beginning of the 'Glacier War' now in its 14th year.
- 1985 The first expedition after the beginning of action was allowed soon. The Indo-British expedition led by Harish Kapadia (with Dave Wilkinson), explored and climbed peaks in Terong group. They approached from the Siachen glacier, climbed Rimo III and attempted Rimo I.
- 1986 Sia Kangri was climbed by the Indo-American expedition led by Maj. K.V. Cherian and Leo Lebon. They traversed the glacier. Seven Indians reached the summit and Americans reached Indira Col (West).
- 1988 Rimo I, the first ascent was made by the Indo-Japanese team led by Hukam Singh and Yoshio Ogata. They approached from the Terong valley and Ibex Col.
- 1988 Apsarasas I was climbed by the Indian Army Team. Leader and details not known.
- 1989 Rimo II first ascent, and Rimo IV second ascent. These peaks were climbed by an Indo-British team led by Sonam Palzor and Doug Scott. They approached from the Siachen snout and the Terong glacier.
- 1992 An Indian army team led by Col. M.S. Gill climbed Teram Kangri I. No details available.
- 1996 After closer of almost ten years (since 1986) the first civilian team was given permission to climb on the upper Siachen glacier. A team from Bombay, led by Harish Kapadia climbed in the Terong valley at first. As they were about to enter the upper Siachen glacier, army cancelled their permits without assigning any reason and they were turned back. Their critical report made a serious impact.
- 1997 The Indian Women's team, with Ms. Bachendri Pal as leader, traversed the Siachen glacier and reached the India Saddle in early September.
- 1998 The Indian team, led by Harish Kapadia, returned to the glacier. They reached Indira Col (West), India Saddle and Turkestan Ia (East). The team also made the first ascent of Bhujang Peak (6560 m) on the Teram Shehr Plateau, the first ever peak to be climbed on this vast plateau.
- 2002 The Indian-Japanese Expedition (Harish Kapadia and Hiroshi Sakai) traversed the Shyok valley and reached Karakoram Pass, the first international team to stand there in five decades. They crossed 'Col Italia' (first crossing after 1930) to reach the Siachen Glacier and made the first ascent of peak Padmanabh (7030 m) on the west of the Siachen Glacier. They explored the Teram Shehr Ice-Plateau fully reaching its head.
- 2003 A cease fire was declared between India and Pakistan in Kashmir and the Siachen glacier.
- 2007- 2009 A group of trekkers was escorted by the army to the middle of the Siachen glacier, despite strong protests from Pakistan.
- 2010 On 13th April, the Glacier War completed 26 years



Lots in a Name

A Study of Names in the Siachen Glacier and Eastern Karakoram

The Eastern Karakoram, which is the northern part of Ladakh consists of two major valleys, largely uninhabited. On the east the Shyok valley runs from the Karakoram pass to the Khardung ridge in the south. In the west the Nubra valley consists of the Indira col and the Siachen glacier in north to the Khardung ridge again in the south. Except for few villages down in the Nubra valley there are no human dwellings. But still every peak, glacier, camping ground and feature has a name. Who gave them and how did they originate where no humans lived? On the east along the Shyok valley, caravans from Central Asia or Yarkand travelled across the Karakoram pass to cross Saser la to the Nubra valley on their way to Leh. They gave a Yarkandi nomenclature to the route till they reached the Nubra villages. Up towards the Siachen the area was part of the Balti legends. People at the villages in the west had heard of the area, though never visited it in the known past. They went there as porters with explorers and surveyors. Thus the names followed the Balti influence. In Nubra all the names are in Ladakhi, which is based on the Tibetan script. Thus the nomenclature here has created an interesting situation with Ladakhi, Balti and Yarkandi names, borrowed from Muslim and Buddhist scripts and the legends of the area. As a simple example, ice-peak (mountain) would be called differently. To Yarkandis it means *Muztagh*, to Baltis prefix Sar signifies that, while Ladakhis know it as *Kangri*. But 'Kangri' is a very genuine Balti name too! So there can be no clear demarcation.

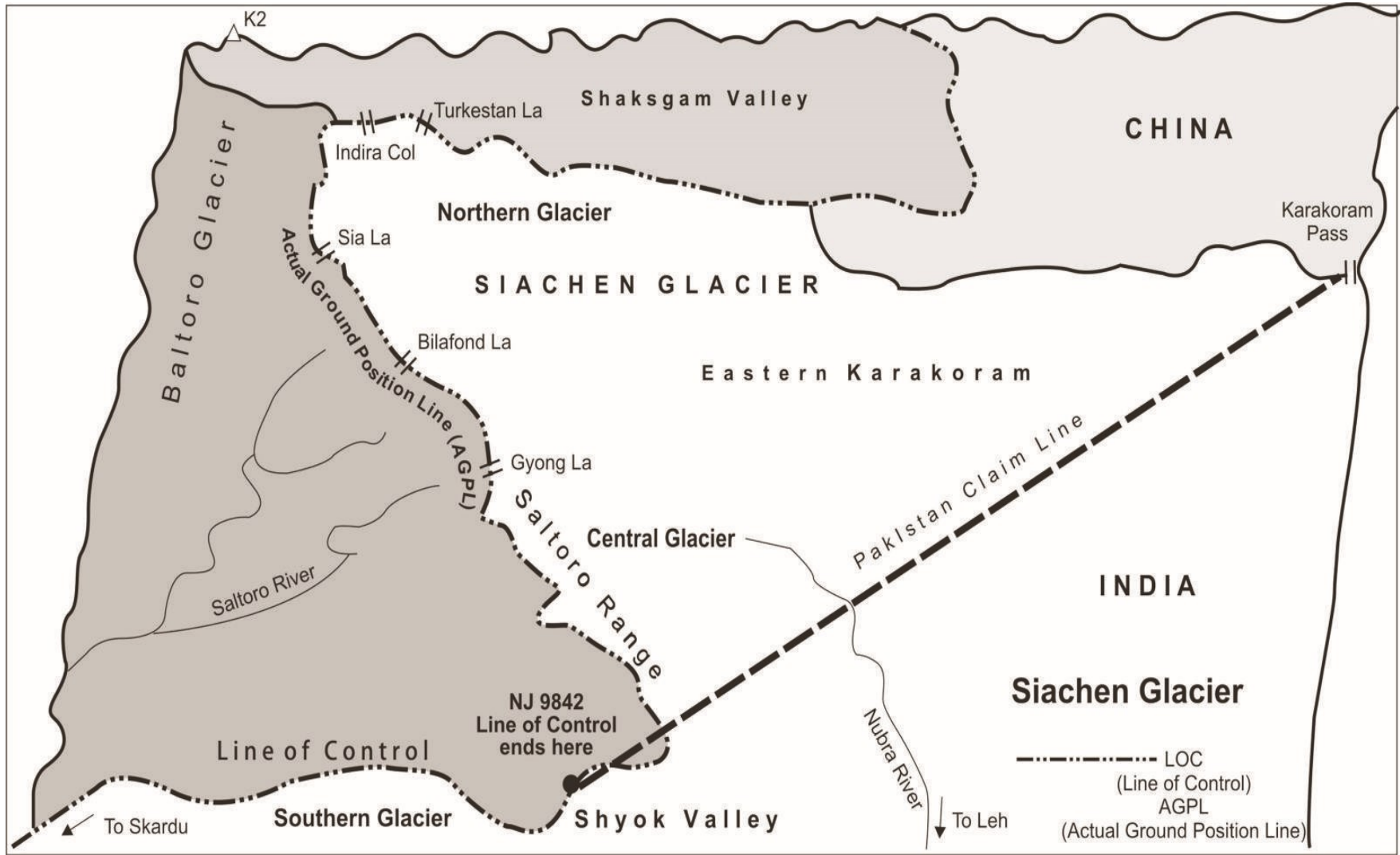
Where Rose is Sia

Going up the Nubra river one enters, what F. Bullock Workman called 'the ice-wild of Eastern Karakoram'. This is the Siachen glacier with high peaks, glaciers and the valleys of both the sides. This is the ice-wilderness whose exact location, boundaries and connections were established after many explorations and surveys. Locals never travel-led here for there were no passes to trade across. But they had heard of these areas and had heard the legends about it handed down to them through generations.

How does the nomenclature in such an area get established? First it was through the legends as narrated by the locals to the first explorers. And the rest were given by the explorers themselves, or after consulting the local pundits.

As we returned from the Terong valley in 1985, at a sharp turn Dave Wilkinson barred my way. 'What is ahead? The most prominent feature of this glacier?' After a thought and fumbings I replied, 'A rose', 'Wrong, its a Sia'. Unbelievable as it may sound this glacier has many rose plants on the moraine rocks, edges and walls surrounding it. And as in Balti 'rose' is 'sia' the glacier gets its name. Dr. A. Neve appears to have heard of it spoken of by the Nubra people as the Siachen and Dr. Longstaff gave it this name on his sketch-map. F. Bullock Workman gives a detailed explanation.

Upon much inquiry, I learned that the meaning of Siachen is, literally, rose-bush, Sia is the Balti name for jungle rose and *Chen* means a collection of thorns. Such wild rose-bushes are legion in the nalas and flourish in pink splendour to the tongues of the glaciers in Baltistan and Nubra. From Dr. Thomas, the Tibetan scholar, I learn that the Tibetan Se- Ba-Can means 'having rose-bushes'. So, probably, the Balti meaning is derived



from the Tibetan. As is well known, Baltistan was subject to Tibet in the eighth century.

We were in the Terong valley, the first eastern tributary of the Siachen glacier as one goes up from its snout. Though it contained three large glacier systems, it was unknown to the people of Nubra. They called it simply *Terong* ('that valley', Te: that, rong: valley). Scholars interpret it as (g)ter: hidden, rong: gorge ('hidden gorge'). *Shelkar Chorten* glacier in the valley goes southeastwards between the two Terong glaciers. Possibly this glacier takes its name from, Shelma: crystal and Chorten: Buddhist symbol, stupa, 'glacier of crystal chorten'. These glaciers were explored by Dr. Ph.C. Visser's expedition in 1929-30. Surveyor Khan Sahib Afraz Gul with them possibly decided on these names.

A lake on the North Terong glacier, is the 'lake of bones'. This was so called after a legend that people had died here and the bones were discovered in this lake with poisonous water. *Rimo* (striped) group rises in the northern part of the Terong valley and also overlooks the eastern glacier systems called 'Rimo glaciers'. Dr. Ph.C. Visser had explored these glaciers during his visits from the east. Thus he linked up both his surveys and exploration. All other names in this valley are of recent origin and are explained at the end.

For the peaks ahead on the Siachen glacier and the Karakoram in general Survey of India had a policy.

The numerous peaks which have no native names have been numbered in a scientific way after the astronomical system. The mapping of India has recently been placed upon a new basis as more peaks of the Himalaya and Tibet are becoming known and it has been thought advisable now to name all peaks according to the map in which they fall.

—Colonel Sir Sidney Bolland

Thus all the peaks had numbers. Some remain till today like K2 and, on Siachen, K12 and K36 glaciers.

The Workmans' expeditions, 1911-12, with surveyor Grant Peterkin, named many peaks without the Survey numbers as 'King George Peak', and 'Mt. Hardinge' (after the Victory of India). They called the entire group the 'King George V group', and claimed that this was done with the permission of the Queen and the Viceroy. But the Survey of India to their credit, even in the times of British colonial India, did not accept these. Though, the rejection of these names was done with some diplomatic charm.

We suggested the name Sia group, partly because of the name Siachen and partly because of the connexion of the rose with British royalty, thus giving some recognition to the wishes of the explorer.

—H.J., Vol. X, p. 101

These peaks were called after their natural names like Sia Kangri, Sherpi Kangri and Saltoro Kangri, and the group as the Siachen Muztagh. The other names that the Workmans gave to the smaller peaks were based on local legends, and the shapes of mountains or their locations. Thus we have Hawk peak, Junction peak (at Teram Shehr—Siachen junction) and Tawiz peak.

Tawiz: Workmans found that the porters were unwilling to accompany them to the Siachen glacier due to the hardships involved.

After our arrival, I noticed the odd *tawiz*, or magic amulets, hanging by bits of cord from the coolies' necks. They were said to contain petitions to the gods to bring storms or other calamities, that might limit our stay in the snows, and force us to return and leave the Salto valley.

Tawiz here were worn for ill-omen, unlike for the good or cure in the present days.

Towards the centre of the Siachen glacier at the junction with the Teram Shehr glacier there is a plateau. The naming of this saw bitter exchange of written words between Workmans and Dr. Longstaff, the other explorer responsible for the nomenclature of this area.

The now deserted Ghyari nala was in ancient times densely inhabited to the tongue of the Bilaphond glacier. The Baltis of that time were supposed to have crossed the Bilaphond la and met the Yarkandis of Tarim Shehr with whom they played polo. Polo always plays a great role in Balti saga. The learned men did not say how the people of Turkestan came to be in this distant ice-region, only reported that a large city was said to stand on this present site to Tarim Shehr. The Baltis feared the Yarkandis, who are said to have often crossed to the Ghyari nala to 'loot' cattle and property and abduct women from the villages. An important mullah, Hazrat Ameer gave the engaged Baltis the *tawiz* magic amulet, and told them to put it at once on the summit of Bilaphond pass, and ordered them after doing so not to return home the same way, but to go around via Yarkand.

The Baltis, having placed the *tawiz* on the pass, disobeyed the priest's orders and returned to their villages the same way from the pass. Soon afterwards a great storm visited Tarim Shehr, and the snow from the mountains slipped and fell upon the city, destroying it. The Balti priests say the calamity would have been even greater had the avenger of the woman gone around by Yarkand home, and that today not even grass and burtsa would be found to mitigate the rocky desolation of Tarim Shehr.

Workmans called it *Tarim Shehr* (oasis city, Tarim: oasis, Shehr: city) as it was before the storm. Dr. Longstaff called it *Teram Shehr* ('destroyed city', Teram: destroyed). This led to war of words. Today it is known as Teram Shehr and the peaks nearby as Teram Kangris. Dr. Longstaff seems to have won the battle.

The name *Teram Kangri* was given in Dehradun by Dr. Longstaff with the approval of Sir Sidney Burrard, Surveyor General, from the only locality place name, *Teram*, in the region. The alteration of spelling to *Tarim* by the Workmans for the glacier tributary of the Siachen is incorrect.

—H.J., Vol. X, p. 102

The Italians who visited the glacier in 1930 under Giotto Dainelli also narrate a tale of raiders from Yarkand to this city and of its destruction. They named the col leading in the east to the Rimo glaciers as 'Col Italia' or *Passo Italia* after the

mountaineers and scientists from Italy who had worked in the Eastern Karakoram.

At the head of the Siachen glacier, there are two passes. One to the east is *Turkestan la* (as it leads to Turkestan). Francis Younghusband had reached this pass from the north while trying to locate the Siachen glacier. He thought that he was on *Saltoro pass* (present Bilaphond la). Dr. Longstaff called this pass 'Younghusband's Saddle' but the present name was established by Workmans. They also named the northern col as *Indira Col*.

Indira Col: This is the northernmost pass on the Siachen. There was a confusion in the recent days that this pass is named after India's late Prime Minister Mrs Indira Gandhi. In fact both the pass and Mrs Gandhi were named after goddess Laxmi. (Indira: one of the names of Laxmi, goddess of wealth).

North and northeast of Siachen glacier are four glaciers, each draining to the Shaksgam river in the north. These glaciers were visited by Francis Younghusband in 1889 and Dr. U. Balestereri of the Duke of Spoleto Italian expedition in 1929. They named these glaciers. The groups and peaks above are also known after the names of these glaciers.

Urdok is the first glacier going down from the Indira Col. Younghusband named it after a duck he saw on the glacier. (Urdok in Turki means duck). (*Wonders of the Himalaya*, p. 149). But scholars give a different interpretation too (Ur: high, dok: solid, or tok: top, thus 'high solid glacier'). Possibly Younghusband named it after *Urdokas* ('high solid place or place of ducks') from where he had come. The next glacier by which Younghusband reached Turkestan la was called *Staghar glacier* ('many coloured') after colours of its moraine by the Spoleto team later.

Singhi ('difficult') glacier (or more correctly *Singye*) is next with *Singhi Kangri* ('difficult ice-peak') overlooking the Siachen glacier. *Kyagar* ('whitish') is the last glacier to the east. Both these were named by the Duke of Spoleto's team. They also named *Kharpo Gang* ('white glacier'). The range rising between the Teram Shehr and the northern Kyagar glacier was named *Apsarasas* ('place of fairies', Apsara: fairy, sas: place) by Grant Peterkin of the Workman expedition having surveyed the group from the Siachen glacier.

On the western rim of the Siachen glacier after the obvious *Sia Kangri* and *Sia la* ('ice-peak and pass of rose'), from a plateau rises peak *Ghent*. This double summited peak was so named by the Workmans, '... which at the suggestion of Mr. W.P. Cresson, F.R.G.S. I have named after the Treaty of Ghent, which terminated hostilities between Great Britain and the United States in 1814'. Somehow this name has remained.

After *The Hawk, Peak 36 glacier* drains from two of the highest peaks of the area, *Saltoro Kangris* (Saltoro: giver of light). This name is given after the Saltoro region in the west Karakoram which they overlook. There is *Sherpi Kangri* ('ice-peak of Sherpi') with the *Sherpi Gang glacier* ('snow glacier of Sherpi'). Little to the south of it is the Lolophond glacier. Is it named after Dr. Longstaff who had firmly established the extent of the length of the Siachen glacier by visiting it from different directions. Dr. Longstaff wrote in the *Geographical Journal*, (February 1912, p. 145) that the coolies named it 'Loloff'. But perhaps he meant the pass, not the glacier.

Dr. Longstaff was inclined to naming the features and species after himself. 'However, I had already collected a very pale coloured weasel, a new species, which was handed down to posterity as *Mustela longstaffi*'

—Longstaff, p. 169

About the glacier he writes

Apparently they (coolies) did me the honour of christening this glacier after me. The Workmans were the next visitors and put the name Lolophond glacier on their map. Loloff was the nearest the Baltis could get to my name.

So Longstaff credits the Workmans to have honoured him with this name officially. How these explorers, so critical of each other's exploits, still scratch each other's backs! However, this name, Lolophond rhymes with Bilaphond which is the name of the glacier and the pass to its west. Bilaphond is 'bright coloured butterfly' in Balti and suits the terrain well.

Bilafond Glacier and La

When in 1911 the Workmans inquired through their Parsee agent, Byramjee, what porters call this glacier one and all said, 'Bilapho' and spelled it without 'nd'. They said that the word was a Balti one, meaning a small bright coloured butterfly. Upon further inquiries they discovered that the reason for this name was not because many butterflies were seen on it, but that, in former days, this name was given on account of the shape which the glacier assumes as Naram. This definition presupposes an intelligent and poetic fancy not present in the Balti people today. Perhaps in the past someone standing on an eminence above Naram (*Naram*: soft, soft rocks) on a clear day, bearing in mind the pretty ideas can easily make the main glacier and its affluents picture to his mind's eye a monster ice-butterfly' (from the Workmans, p. 131).

However, Dr. Longstaff prefers more ordinary explanation. 'The glacier, which had been called the Saltoro glacier by the Khans of Khapalu is locally known as Bilaphond (nasal, *d* mute), which we understood to mean "butterfly". Swarms of migrating butterflies killed by storm, are often seen on glaciers and this suggest a possible origin for the name'. Dr. Longstaff originally called the pass as the 'Saltoro Pass'. Now it is called Bilafond la.

Further down is the *Gyong* (tough, difficult) la (la: pass) (Or *rGyong*) which links across with the *Chumik* ('spring') glacier in the west. As we near the Siachen glacier snout, and the civilization again, we have two glaciers with names descriptive of the difficulties on the passes above them. *Langongma*. 'above the pass', la: pass, gongma: above) and *Layogma* ('pass of wind or snow-storm', la: pass, yogma: windy, storm). These glaciers were surveyed by the Visser expedition in 1929-30 (see *G.J.*, October 1934).

As the Nubra river emerges from the Siachen glacier snout, it is called (still on the maps) *Yarma Tsangpo*. Literally *Yarma* means 'superior' but scholars think it was originally called *lema* meaning 'wonderful'. A small but wonderful gompa of the same name in the Nubra valley (opposite Warshi) is supposed to be as old as the Potala of Tibet. South in the Nubra valley is *Charasa* village and the gompa.

Charasa used to be the capital of the ancient principality of Nubra. The people are of mixed blood and not pure Ladakhis, though, like them, predominantly Buddhist. It was captured after

hard fighting by Muhammad Haider in 1532 'and the vapour from the brains of the infidels of that country ascended to the heavens'.

—Longstaff, p. 181

The place is situated a little above the junction of the Nubra and Shyok rivers and is approachable from four sides. Thus its name is apt. Char: four, sa: place, 'the place (visited) from four directions.'

The only name which is an 'outsider' in the lower Nubra-Shyok valley is *Partapur* village. Zorawar Singh of Jammu had captured the valley in 1829. He gave this name in the honour of his Dogra king Maharaj Pratap Singh. Now Partapur is an important point in the valley with an airport. It is in the Shyok valley after its junction with the Nubra river. This valley received the full blast of the Shyok floods and there are songs in the Nubra valley about the destructive powers of *Shyok* ('river of death', sheo: death).

The present day hostilities on the Siachen glacier between the Indian and Pakistani armies have been responsible for new nomenclature and legends. The Indian Hindu soldiers have erected a temple of the *Siachen glacier mata* ('Goddess of the Siachen glacier') who is worshipped with Hindu rites. A legendary fight on the shoulder of K12 has been given the place the name *Bana Post* (after the fighter Sub. Bana Singh) and we have *Kumar Post*. Many glaciers are simply known as numbers like G1, G2 and others. All these are of course best avoided at present, but who knows sometime in future they may be permanent features, like others. That's how legends grow.

The barrenness, difficulties and the remoteness of the glacier is total. Still the nomenclature of this area has been established by various means by the travellers. As long as people travel or know of the area, there will be names. In fact sometimes these names and legends attract one to the area and to face the difficulties. As the Balti philosophical saying goes about life:

Whatever the hardships,
Whatever the names, let me
O'Allah, return thither again.

The Land of Gapshan and Burtsa

To the east of the Siachen glacier, the historic trade route across the Karakoram Pass has been travelled on for generations. Much before any maps were drawn, people have travelled here. Knowledge about the route passed from generation to generation by explaining the place, drawing a 'word map' of the route. This in turn led to the nomenclature of the route, by the description of the travellers and their experiences. This is nowhere more true than on the Central Asia Trade Route between Yarkand and Leh. Yarkandis travelled over this uninhabited area for trade and pilgrimage to Mecca. Their descriptions gave the names (mostly Yarkandi which is of Turki dialect) to the halts and features on the route.

Imagine an old Yarkandi giving directions to a caravan proceeding south to Leh. He would describe how from the barren plains they must climb the 'pass of black gravel', (*Karakoram pass*). Ahead they reach *Polu* ('temporary shelter') at its foot. Not a place to linger around. Cross a river which is 'very quiet' (*Chip Chap*) to reach the place where 'Daulat Beg had died' (*Daulat Beg Oldi*, Oldi: died, or Daulat: rich, Beg: great, where a very rich person died). On the east is the *Galwan nala*, named after

Rasool Galwan of Ladakh who travelled to Central Asia with many explorers. The valley bears his name. Going ahead you come across a 'long open space after a slope' (*Depsang plateau*). Before a descent is the 'kitchen run by a Qazi' (*Qazi Langar*). As the route descends down to a nala you will find plenty of burtsa shrubs. It burns faster than the wood and has medicinal properties also. This is the *Burtsa camp*. Now comes the difficult section of the route. 'Gateway of darkness or hell' (*Murgo*, Mur: hell, go: gate). But after passing that you turn west and after a long march camp near the only 'big stone' (*Chhongtash*, Chhong: big, Tash: stone) seen en route. You cross *Shyok* ('the river of death', Sheo: death), and ahead you camp at a 'temporary camp' at the foot of Saser la (*Saser Brangza*, Brangza: temporary camp).

There is a winter route separating from Daulat Beg Oldi. Turning west one reached the meeting place of Chip Chap and the Rimo river at *Gapshan or Yapshan* ('type of wood or shrub'). Further west rises a huge mountain 'colourful and like a drawing' (*Rimo*: beautiful lines or striped). Going down along the river you reach a lake where the river is blocked by *Chong Kumdan* ('big dam'). A little ahead is a 'smaller dam' (*Kichik Kumdan*). This drains water from a 'long flat glacier which has herbal medicines' or 'the glacier of healing' (Mamostong legend, *Thangman glacier*). When these dams were breached the flood in the river caused death and destruction. The 'River of death' (*Shyok* river) originates from here.

Ahead where one sees *Aq Tash* ('white rock') turn west to join the summer route at *Saser Brangza*. The only prominent white rocks (*Aq Tash*) are to be noticed in the land of *Karakoram* ('land of black gravel').

Now comes the 'pass of the golden earth' (*Saser la*, Sa: earth, ser: golden). The 'mountain of golden earth' (*Saser Kangri*, Kangri: Ice-peak) rises to the south of it. Ahead on the track there is grass and the 'grazing ground of wild donkeys' (*Skyangpoche*, Skyang: donkey, poche: ground). To the south rises the 'mountain of thousand devils' (*Mamostong Kangri*) based on a Yarkandi legend.

Ahead is *Tulum Puti la* ('the long narrow steep pass'). It is here that Ali Hussain has built a good rocky route to help travellers to go over the steep and narrow route. You come down to the *Nubra valley* (Nubra: western valley) or *Dumra valley* (Dumra: 'valley of flowers and trees'). You reach the 'new earth' (*Sasoma*, Sa: earth, Soma: new or virgin). This is the first village in the valley, and appropriately Yarkandis see it as the end of the major difficulties. You will also find *Sakang* ('raised ground/house' Sa: ground, Kang, raised, high) and a 'place of cave' (*Phukpoche*, Phuk: cave, Poche: place). From the 'village at the foot' (*Khalsar*) there are 'two temporary shelters' (*north and south Polus*) and one crosses the *Khardung la* (pass of lower castle; la: pass, Khar: castle, dung: lower or Kharzong: castle). Finally one reaches the 'plain' where caravans meet Leh (Leh: plateau). They are in *Ladakh*, 'land of passes'.

There is a little variation of this route going south along the Shyok. Its first halt is at *Sultan Chushku* ('Sultan resting place with water', Chushku: water). Ladakhis call it *Chyushku* ('water at corner or small lake') Ahead is *Mandalthang* ('Plain of Mandal', mandal: round wheel, thang: plateau). Finally the route passes *Darbuk* ('flourishing village inside a valley', Dar: flourishing, buk: inside), and *Tankse* ('higher ground') to cross the 'northern pass' (*Chang la*, Chang: north, la: pass), to reach Leh. Well quite a detailed, if complicated description by one Yarkandi to another! But it

explains in their language how all the names of the places originated on this East Karakoram historic trade route. In a broader sense names of the large areas in the surrounding valleys also describe the same. *Chang Chenmo* (Chang Thang) is the 'big northern plains' (Chang: north, Chenmo: big), or *Lingzi Thang* ('Central plains', Lingzi: central; Thang: plains). Lingzi has a more philosophical meaning also, 'centre of the universe or four different worlds'. Hence you find Lingzi Thang plains between Ladakh in the south, Central Asian plains in the north and Tibetan plateau in the east. *Aksai Chin*, (Aksai: eastern, Chin: China) has of course a simple interpretation.

More broadly entire countries were named. China was *Gyanak* (Gya: area, nak: black, difficult, 'where people wear black clothes'). India was *Gyagar* (gar or kar: white, 'where people wear white clothes'). Here 'white' and 'black' signifies the difficulties of living. Life appeared more grim on the Tibetan plateau or the Chinese Central Asia, while they had always heard of warm and pleasant life in the Indian plains.

We leave the Yarkandis here and their 'name game'. They must go back soon over the high passes. If caught at Leh for the winter they can return only the next year, for it is '... impossible to cross the pass till the "apricots are ripe"' (Longstaff, p. 165).

Note

Most of these names mentioned in the article were identified by different scholars, Yarkandi traders at Leh and lamas. Most of the names were found to be distinctly Yarkandi. It is of course difficult to correctly interpret the meaning of the names which are more phonetic and have various meanings. However, the above interpretation is correctly suited to the trail, which many have now travelled. These are Muslim and Central Asian names. A common Ladakhi did not recognise many of these names or could not tell the meaning. But as one consulted them about the names in the Nubra valley and to the south of it, Ladakhi scholars or even an educated muleteer could identify the meaning. Once down in Ladakh even lama scholars far away at Darjeeling also gave the same interpretation of the names as a Ladakhi, signifying that they were based on the Tibetan script and the Buddhist culture.

The names for the peaks suggested recently are given below with their meanings.

Peak Names of Recent Origins

1985: Proposed by The Siachen Indo-British Expedition in the Terong valley (see *Himalayan Journal*, (H.J.) Vol. 42, p. 68 for their locations).

- | | |
|----------|---|
| Sundbrar | — A beautiful place. |
| Sondhi | — A sudden beautiful appearance. There is a place by the name of Sundbrar in Baltistan. Kashmiri Brahmins and Hindus along with several thousand people used to gather at this place on a certain day in June. They would worship the Hindu Goddess Laxmi and wait for the rising of water, praying for it to appear. At an appointed time a stream would fill the basin and the multitude would shout 'Sondhi'. Above all, this phenomenon portrays the prevalence of the Hindu rituals deep inside the Muslim Baltistan (See <i>Gazetteer of Kashmir and Ladak</i> , 1890,' p. 801). |
| Lharimo | — Holy painted mountain. Lha: holy |

- Doab — Meeting place of two waters. Do: holy
- Safina — Boat. In Balti philosophy this is a special boat which carries one to heaven.
- Saigat — Leopard's leap. This peak, particularly tilts (leaps) towards the giant Rimo peaks.
- Chorten — The Buddhist symbol.
- Ngabong Terong — Ngabong: bactrian camel—the famous double-humped camel of Yarkand. A few are still seen in the Nubra valley.
- Siab Chushku — Siab: meeting place of three waters (North and South Terong and Shelkar Chorten glaciers). Chushku: resting place.
- Doab Chushku — Camp at meeting place of two waters. (Two branches of North Terong glacier).

1989: Proposed by the Chong Kumdan expedition in the Aq Tash and Chong Kumdan valleys (see *H.J.*, Vol. 46, p. 76 for their locations).

- Lokhzung — Eagle's nest.
- Chathung Thung — Black-necked cranes.
- Chogam — A box to keep holy scriptures.
- Stos — Goat which gives Pashmina wool.
- Skyang — Wild horse.

1991: Proposed by the Chong Kumdan Indo-British expedition in the Chong Kumdan valley (see *H.J.*, Vol. 48 for their locations).

- Laknis — Vulture of two (glaciers). Lak: Vulture, nis: two (peak rising between the Central and North Kumdan glaciers)
- Landay — Ghostly or Scare of ghost (a scary peak).

2002: by the Indian-Japanese Expedition

Padmanabh – Name of Vishu, Lord of Protection. Several peaks on the Teram Sher Plateau were named after names of Vishnu, like Bhujang, Mahabhag etc

Environmental Problems

The Himalayas, born 70 million years ago, stretch for 2500 km across eight countries, cover 3.4 million km², and are home to 30 million indigenous peoples. They are the water tower for millions of people, providing the source of the Indus, Ganges, Jamuna, Brahmaputra, Hwang Ho, Yangtze Kiang and many others.

The Siachen glacier, on the eastern edge of the Karakoram, is 77 km. long, 2-8 km. wide, the longest in the world outside the Polar regions. It is redolent of the Romance of Exploration: Moorcroft, Younghusband, the Workman-Bullocks, Dainelli, Neve, Longstaff, Visser, Khan Sahib Afraz Gul. An uninhabited area, it was given no attention in the negotiations between India and Pakistan in 1949 (Cease fire Line); 1965 (Tashkent Agreement); 1972 (Shimla Agreement and the Line of Control).

For 26 long years, the armies of India and Pakistan (several thousand troops) have faced each other in a surreal, undeclared war; the longest running conflict of our times in which regular armed forces are taking part. The Indian Base Camp is at 12,000 ft with posts at up to 22,000 ft. Of the 800 dead and 12,000 injured, only 3% have been due to enemy action; the remainder have been victims of the elements: cold of minus 50 degrees Centigrade; blizzards with winds up to 300 km. an hour; avalanches and crevasses; the mountaineers dreaded oedema. Soldiers have to be rotated as they cannot spend more than 30 days at high altitudes.

All supplies are brought by helicopter or air dropped: tents, food, fuel, heaters, cookers, equipment, arms, ammunition, weapons, rocket launchers,. Heavy artillery is taken apart and the pieces flown in to be assembled up there. Items get lost in the air drops; the cold metal can take the skin off your hands. The Indian Army has the highest battleground, highest helipads in the world, the highest dropping zones, and the highest public telephone booth!

For Pakistan, things are easier. Their base camp, more easily accessible, is at 9000 ft. and their advanced posts are at lower altitudes. For Pakistan it became a political imperative to establish a post on the Saltoro Ridge; it was equally imperative for India to prevent this. This has led to heroic battles.

The cost of this operation is about Rs. 5 crores a day to India. This is about 50 times higher than the costs to Pakistan, which has easier access by road, with much lower base camps (9000 ft.) and with posts at lower altitudes (up to 15,000 ft.). Though less expensive than India's operation, it is yet a heavy expenditure. For both countries, this is an intolerable drain. They are not rich countries, with a fifth of the world's population but a half of the world's poor.

The entire area of Ladakh and the East Karakoram seems to be undergoing a changing weather pattern. East Karakoram is no longer a rain shadow area and it receives several inches of rainfall. In 1995 there were heavy downpours and the Manali-Leh road could not be opened in 1996 due to landslides. And in 2010 heavy downpour caused wide spread destruction and death in Ladakh.

Pollution

The Siachen glacier snout has receded by about 800 m in last 26 years. The glacier looked more barren and without snow cover in 2002. The Terong glaciers, particularly the North Terong glacier seemed to be receding fast and most of the ice-penitents and lakes had disappeared during the last decade. Icefalls of the Safina

valley (which was crossed in 1985) and the Shelkar Chorten valley seemed to be more broken and difficult.

The Sias, (roses) from which the glacier takes its name, were seen in plenty near the snout and in the Nubra valley. Inside the Terong valleys they grew even higher up on the rocky slopes. Some herds of ibexes were noticed in the Terong valleys, but none on the main glacier.

The army lives on the glacier with many constraints and resource crunch. Supplies are taken up by helicopters and there is always shortage of air transport, sometimes even to bring down an injured. Under such trying circumstances it was hardly surprising that the glacier was not in best of the environmental condition. With so many humans living on the glacier the accumulation of garbage was in abundance. Much of garbage was put into crevasses or dumped on rocks and snow. In winters all this is covered under at least 5 m (40 feet) of snow and the entire area appears a beautiful white sheet. But in summer all the cans, drums and human waste surface and litter is seen everywhere. Worst offenders are tetrapacks in which fruit juices are delivered on the glacier. These aluminium foils, which cannot be burnt or destroyed, line the routes which are traversed and are a major eye-sore. A pipeline is laid on the Glacier to pump thousands of litres of kerosene for troops to survive. But when a connection breaks or pipe bursts hundreds of litres of kerosene is spilled on to the snows of the Siachen leading to a major hazard.

Army cannot burn the garbage on the glacier, it cannot be destroyed there or be brought down. At the same time the area has to be defended and the army has to stay there. What should be the solution to this environmental problem ?

Rose plants, which are strong and grow near the snout have also suffered. Many were cut and their stems used as decorative pieces or even as tent-pegs ! Attention of the army was drawn to this and they have assured that the rose plants will be declared as a rare species and no harm will be done to them in future. This will be a wonderful beginning and the army can build on this for full environmental protection of the glacier. The ultimate solution will of course be to end the war and bring down soldiers but till then under the present situation utmost care must be taken not to damage the environment further.

It is not easy to imagine the pollution caused by thousands of men living up there, with every item of necessity being flown in. Cans, drums, tetra packs of fruit juices, aluminium packaging: this can neither be burnt, nor destroyed nor taken back. Imagine the human waste. This amounts to over 1000 kgs. a day; it is packed in metal drums and dropped into crevasses - up to 4000 drums a year. This, together with hundreds of tons of garbage, will then be our legacy to future generations when the glacier finally reaches the end of its journey.

Heavy guns and equipment are flown in, but as a senior army officer remarked: Nothing will ever be flown back.

The ibex are all gone. The wild roses - the area was famous for its wild roses; 'Sia' means rose in the Balti language - have been cut for tent pegs or other uses, or for decoration.

What Right Do We Have?

Do we have the right to destroy one of the Himalaya's most majestic areas before leaving it to future generations?

Do we have the right to despoil the country without the leave of the local peoples?

Do we have the right to degrade the mountains which are the source of water for millions?

Do we have the right to turn the Abode of the Gods into a nightmare landscape?

Some serious thinking needs to be done about the environment concerns on the Siachen glacier.

Power of the Dream - The Siachen Peace Park

The Siachen Glacier war has taken a heavy toll of men and material on both sides. It is almost an impasse and no side seem to be gaining in anyway. Perhaps now the time has come to consider ways and means to end such a stalemate. One of the ways this glacier can be saved is by declaring it as a 'Siachen Peace Park'.

The costly - and some might say absurd - stand-off between Indian and Pakistani armies on the Siachen glacier not by any means is accepted by everyone as inevitable. There have been many discussions, including several between the two countries, aimed at resolving this situation. Even in 1984 and 1985, immediately after the posting of troops, there were flag meetings between sector commanders. Since then there have been several meetings between senior officials - Foreign Secretaries, Defence Secretaries, senior military personnel - to find a way out of this eyeball to eyeball situation. In 1989 there was an understanding to resolve the dispute 'based on redeployment of forces.....and to ensure durable peace in the Siachen area.'

In November 1992, it was reported that high level officials had come to an agreement that 'envisaged the mutual withdrawal of troops and the creation of "zones of complete disengagement"..... and the delineation of this area of 'peace and tranquillity' "Alas, mutual suspicion was too strong, and none of these agreements, if that's what they were, were carried out.

Does this mean that this situation is eternal? While there is certainly a deep desire on both sides to end this situation, no one is ready to trust the other side. The ideal answer could be a Trans-frontier Park, serving as a buffer between the two countries, with firm guarantees that neither side can sneak in and occupy any part of the area.

Trans-frontier Parks

The concept of a trans-frontier park is not new; such parks have been established in all parts of the world over the last 70 years; in recent years there has been an 'explosion' of such parks, many of them linked to peace efforts. There are today some 169 such parks on the borders of 98 countries; a total of 406 protected areas and 112 international boundaries with at least one trans-frontier park. Several of them are specifically designated as Peace Parks, intended to provide a peaceful solution to a conflict or potential conflict, or to the rehabilitation of an area after a conflict..

As examples, there is La Amistad Peace Park between Costa Rica and Nicaragua; a Peace Park on both sides of the Evros River between Greece and Turkey; there are trans-frontier parks between Czechoslovakia and Poland; between Indonesia and Malaysia. In December 1999, Hungary, Yugoslavia and Croatia agreed to establish a cross-border nature reserve, while in February 2000, Albania, Greece and Macedonia announced the establishment of the Prespa Park. Incidentally, the Demilitarised Zone between North and South Korea has become a nature reserve by being left alone. Several other possibilities are being explored: Laos/Cambodia/ Thailand; Bosnia/Montenegro; Papua New Guinea/Indonesia. Jordan/Israel. The treaty that resolved the territorial dispute between Peru and Ecuador included provisions for a Peace Park. The Wye Accord between Palestine and Israel includes provisions for the setting up of protected areas.

Of particular interest are the Peace Parks being established in southern Africa, a region that has been troubled by much fighting in recent decades. A Peace Parks Foundation was established, largely through the efforts of an individual: Anton Rupert, an 84 year old tobacco millionaire, 'a realist who believes in miracles'. Two Peace Parks have already been set up. The first is the Kgalagadi Trans-frontier Park, about the size of Switzerland, formed by merging two adjacent parks in South Africa and Botswana; it was opened in May 2000. The second is the trans-frontier park agreed to in November 2000, by South Africa, Mozambique and Zimbabwe. This is about the size of Portugal and includes the famous Kruger National Park. There are plans for about six other trans-frontier parks including the Limpopo Valley Peace Park between South Africa, Zimbabwe and Botswana.

In India, there is the Manas Wildlife Sanctuary on both sides of the India-Bhutan border, while suggestions have been made for Peace Parks on the frontiers with Nepal and Bhutan. India already has several National Parks in the Himalayan regions: the Great Himalayan, the Hemis, the Keibul Lamjao, the Kangchenjunga, the Kishtwar, the Namdapha, the Nanda Devi, the Kokrek, the Rajaji, the Valley of Flowers, the Pin Valley. There are also some 25 Sanctuaries in the region.

In Pakistan, there is the Khunjerab National Park and the large Central Karakoram National Park, which would be adjacent to any Siachen Peace Park that might be established.. It may be noted that Col. (Retd.) Manzoor Hussain, then President of the Alpine Club of Pakistan, was active in promoting protected areas in the Northern Areas. The South Asian Association for Regional Cooperation (SAARC) has considered the possibility of trans-frontier conservation zones.

Once the principle of a Park is accepted, measures guaranteeing security to both India and Pakistan and ensuring the proper the management of the Siachen Peace Park would be worked out between the two countries. International institutions, with wide experience in trans-frontier parks, would be available and ready to provide technical help.

One purpose of trans-frontier parks is, of course, to allow animals free movement in their natural habitats without artificial barriers; yet another instance where animals can teach a lesson to humans.

The creation of the Siachen Peace Park would not only preserve a spectacular mountain region; it would defuse an armed stand-off, ease political tensions, facilitate further agreement between India and Pakistan, and represent a tremendous saving in resources. The ibex and the snow leopard would return, the roses would bloom again.

In 2001, the area of the Aletsch, the longest glacier in the Alps, was designated as a World Heritage Site. It would be fitting if the Siachen, the longest mountain glacier in the world, were to take a step in that direction. It is situated close to the world's most impressive cluster of 8000 m peaks, in a majestic mountain landscape redolent with the romance of early exploration. It is said, on both sides of the LOC, that to honour the blood of brave soldiers that has been spilled, not an inch of territory should be given up. One could say with even more force that the sacrifice of brave men could best be honoured by protecting a spectacular area consecrated with their blood.

At present, with a million armed men facing each other across the Kashmir border, talk of ending the fighting and of peace parks seems remote. But the dawn always comes after the darkest period; perhaps there will be a dawn for the Siachen also.

The 1996 Atlanta Olympics has adopted the theme, 'Power of the Dream'. Let us share the dream about which Aamir Ali has written. It is hoped, someday soon there will be peace on the Siachen glacier. Roses (Sias) will grow wild, ibexes will roam freely and mountaineers can explore and climb.

Power of Dream – (Aamir Ali)

“What is ineffably sad is that the Siachen glacier should now be the stage for a stand-off between the armies of India and Pakistan. Soldiers face each other, both sides have artillery, though the rarefied atmosphere makes nonsense of ballistic data; millions of rupees are spent daily to maintain these forces where casualties due to the altitude and cold are nine times higher than those due to combat. ('Elements torture man and machine in battle for glacier', by Christopher Thomas, *The Times*, 13 February 1993). And when we complain about the garbage dumps at mountaineering expedition base camps, can we imagine what dumps must be like in these high altitude army camps ?

To the layman, all these seems like utmost folly - but then, when did warfare **not** seem like utmost folly?

Men must harbour dreams sometimes, even foolish foolish dreams, 'I have a dream,' said Martin Luther King in the greatest of his speeches 30 years ago. So let us also dream that the mountaineers of the world persuaded India and Pakistan to withdraw their armies and to establish an 'International Park of the Rose'(Sia). This was placed under guardianship of the United Nations and the International Union of Alpine Associations. And the ibex and roses are reintroduced and they flourished.

Transnational parks of 'Transboundary Protected Areas, to use the language of the specialists, are not just an airy-fairy dream. The first was probably the Waterton Glacier International Peace Park established by the US and Canada in 1932. In the same year, Czechoslovakia - which now has third of its frontier covered by protected areas - established nature reserve on the Dunajec river to match the Polish one on the other side. Indonesia and Malaysia have transboundary reserves in Kalimantan; there is an international area for peace along the San Juan river between Nicaragua and Costa Rica; a peace park on both sides of the Evros river boundary between Greece and Turkey.

Recently the Belovezhskaya in Belarus was added to the Bialowieza in Poland, to form an extensive World Heritage Site. The demilitarised zone between North and South Korea has become a wildlife refuge; a park adjoining Pakistan and China has been under consideration. Efforts have been underway for some years by France, Italy and Switzerland to establish an International Mont Blanc Park. All in all, there are some 70 border parks in 65 countries; some of them have served as 'peace parks' and have decreased political tensions and national conflicts. (Report of the IVth World Congress on National Parks and Protected Area. International Union for Conservation of Nature, 1992. IUCN has offices in New Delhi and Rawalpindi also).”

Aamir Ali

(From the *Himalayan Journal*, Vol 50)

The Government authorities, army and all other concerned are now aware of the proposal of the Siachen Mountain". He was echoing the sentiments of the Siachen Peace Park movement. However the present stalemate is as to where and how to demarcate the Line of Control on the Siachen Glacier. This political solution is the prime requirement for peace to return to the glacier. This is a matter for Governments of India and Pakistan to consider. IUCN can act only if both the sides desires peace and intervention.

As a mountaineer and lovers of this glacier we can hope that it will be realised that some steps are required to conclude this never-ending war and save the glacier from destruction. It is hoped that powers-that-be will listen to the anguish of the glacier and soldiers serving on it. We can only ask questions which both governments must resolve.

How many deaths will it take till he knows
that too many people have died?

The answer my friend,
is blowing in the wind.
The answer is blowing in the wind.

(Bob Dylan)

LET ROSES BLOOM

It is surely odd that while everyone is concerned about the protection of the mountain environment, and while the world has celebrated the International Year of the Mountains (2002), we continue to wreak destruction and pollution on a spectacular region of the Himalaya.

The Siachen, the longest mountain glacier in the world and neighbour to an imposing array of the world's highest summits, is the victim of a military stand-off between the armed forces of India and Pakistan. And the irony is that neither country wants this 26 year old conflict to continue and would be happy to see it ended.

Since 1984, there has been sporadic fighting in the area and men have been killed. But 30 times more men have been casualties of the altitude - with posts at over 20,000 ft. - and of the cold, with temperatures reaching minus 50 C. The cost of maintaining thousands of soldiers in that environment is astronomical. For India it has been estimated at a million US dollars a day; for Pakistan it is less but nevertheless heavy.

There have been discussions between the two countries at various level, including the highest. On more than one occasion, agreement on withdrawal to establish a zone of peace was almost but not quite attained. Both sides are anxious to end this surreal conflict but cannot afford anything that might smack of loss of honour or dignity. Mutual suspicions have so far proved stronger than the mutual desire for peace.

The answer must be sought through an agreement in which neither side is seen as a 'loser', and which guarantees that neither side will 'cheat' by taking unfair advantage of the other

side's withdrawal.

Can such an agreement be found?

Yes; through the establishment of a Peace Park which will be dedicated to cleaning up and preserving the environment, and allowing the snow leopard and ibex to return. There will be no human problems because the area is uninhabited. Modern technology can provide the means for effective surveillance to ensure that there is no 'cheating'.

Is it possible to have a Peace Park between two countries?

Yes; there are scores of examples. More than a hundred countries have agreed to the establishment of trans-frontier parks on their borders; and several of them have been specifically 'peace parks' in areas of conflict. There are several trans-frontier parks in the world today, such as La Amistad Peace Park between Costa Rica and Nicaragua; the Peace Park between Greece and Turkey on the Evros River; the Nature Reserve on the frontiers of Hungary-Yugoslavia-Croatia; the Prespa Park between Albania-Greece-Macedonia.

A Peace Parks Foundation was established in southern Africa a few years ago, mainly through the efforts of one individual, Anton Rupert, a tobacco millionaire. The Kglalagadi Trans-frontier Park, about the size of Switzerland, which merges adjacent parks in South Africa and Botswana, was set up in May 2000. A Trans-frontier Park between South Africa, Mozambique and Zimbabwe was established in November 2000. Six further Trans-frontier Peace Parks are in the process of being established.

The South Asian Association for Regional Cooperation (SAARC) has shown an interest in trans-frontier conservation zones; it could play a vital role in encouraging the establishment of the Siachen Peace Park.

Both India and Pakistan have experience of National Parks in the Himalaya. Expert advice on Trans-frontier Parks is readily available; the World Conservation Union has provided technical advice to governments on many such Parks, often in very sensitive situations. A Siachen Peace Park would solve a seemingly intractable border conflict; it would allow both armies to withdraw in conditions of honour; it would save hundreds of lives and crores of rupees; it would facilitate further agreements between the two countries; it would save a marvellous area of our Himalayan heritage.

And it would be an inspiring contribution to saving the mountain.



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SIACHEN, the longest glacier in the world outside the polar regions, is a virtual high altitude paradise. Roses are found on the glacier giving its name- Sia, the rose. However for the past 26 years it has seen bloody warfare on its heights. Indian and Pakistan armies have been battling it out for its control, paying a heavy price in terms of human lives, financial resources and environmental devastation. The glacier, being part of the state of Jammu & Kashmir has defied all attempts at finding a peaceful solution to the conflict.

The book narrates the history of exploration of the Siachen, the political developments, stories of battles, state of the environment and plight of soldiers living at heights above 20,000 ft where temperatures drops to -40 degrees in winter. During his several visits to the Siachen glacier over 17 years for climbing peaks and exploring different valleys, the author had the opportunity to interact with simple soldiers, officers and local people, and witness the conflict first hand. He speaks of those encounters too.

The Battle of Roses, between two neighbours locked in a long lasting violent conflict with constant one-upmanship has led to unprecedented destruction of the finest mountain area. The book offers a suggestion to establish the 'Siachen Peace Park' to end this war and allow Nature to regenerate

Author of the book **Harish Kapadia** has made a unique contribution to our knowledge of the Himalaya: as editor of the *Himalayan Journal*, one of the most authoritative and comprehensive records of exploratory activity in the Himalaya; through his numerous books and as a leader and organiser of expeditions over the years.

He began climbing and trekking around Mumbai as a young man, in the ranges of the Western Ghats. His first visit to the Himalaya was almost 45 years ago. He is still trekking and climbing actively, to explore unknown areas and, in a number of cases, to open up climbing possibilities. He made explorations in the Himalaya, particularly the Siachen glacier and the East Karakoram, and is now exploring the unknown reaches of Arunachal Pradesh. He has continued his passion despite two serious injuries and a major tragedy when he lost his young son, a soldier and a mountaineer, to terrorism in Kashmir.

Harish Kapadia was elected Honorary Member of the Alpine Clubs of London, America, Japan, Poland, and was awarded the IMF Gold Medal in 1993 and King Albert Gold Medal in Switzerland in 2005. It is most fitting, that in the year 2003, when the 50th anniversary of the first ascent of Everest was celebrated, Harish Kapadia was honoured with the Royal "Patron's Medal", by the Royal Geographical Society 'for contributions to geographical discovery and mountaineering in the Himalaya'. He was the first Indian to receive this award after 125 years. In the same year. The President of India presented him 'The Tensing Norgay National Adventure Award', for Life Time Achievement, the highest adventure award of India. Both these he dedicated to his son Lt. Nawang Kapadia. Harish Kapadia lives in Mumbai with his family. For more information on some of the treks and explorations please see; www.harishkapadia.com and www.nawang.com.