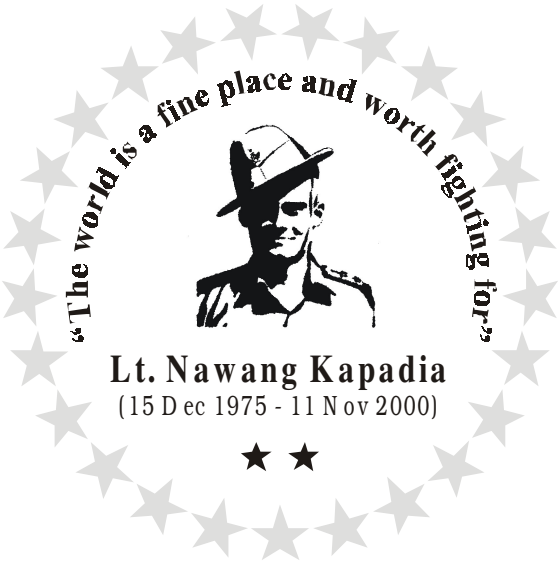
THE SIACHEN GLACIER
AND
MOUNTAINS OF EAST KARAKORAM

A HISTORICAL REVIEW

By HARISH KAPADIA

Dedicated to Memory of a brave soldier of the Indian Army

He loved the Himalaya and gave his life defending them



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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 the 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 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 over 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 (North). 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 Névé and Lt Slingsby who were the first real explorers to traverse this great glacier. At first, they crossed over the Bilafond la (or, Saltoro 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. Dr. Longstaff climbed up from the Siachen snout in the south 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 (North). 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, 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 Karakorams. 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.

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.

At the same time, in 1929, the Duke of Spoleto expedition (Italian) crossed the Karakoram by Muztagh pass and reached Turkestan La from north. They descended from Turkestan la (East) after discovering Staghar and Singhi glaciers.

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. 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 Kasmir valley and alongthe Siachen glacier, as it is now. She was advised to do so by the Secretaries. A besieged Bhutto pleaded with Mrs.Gandhi 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. 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 Saltoro Kangri I were climbed. 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 Saltoro Kangri I with many other peaks. They reached the Indira Col (west) 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.

Pakistan gave permission to a Japanese expedition to attempt Rimo peak in 1984. This peak is 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.

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.

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. It 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 (West) 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 Bombay, led by Harish Kapadia, arrived on the glacier with all the clearance 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. Someone 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 Bombay team, again led by Harish Kapadia, returned to the glacier in 1998 to complete their unfinished venture. They reached Indira Col (West), India Saddle, Turkestan La (East) and climbed the first peak on the Teram Shehr Plateau : Bhujang (6560 m). Indian mountaineers had arrived on the glacier for good.

Finally 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.

Indian Army on the Siachen Glacier

For the past 18 years now valiant soldiers of the Indian Army defends the heights of this glacier. The altitude, severe winter and harsh weather conditions have taken its toll. 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 upto 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 helicopters adding up to a staggering Rs. 5 crore (1 million US $) daily expense.

To help the army several new innovations are installed. Snow-scooters, fitted with skis, move on the upper glacier carrying men and material. Wire-cables with winches lead to some posts situated high on vertical cliffs.. Kerosene oil is pumped on the glacier in large quantity to supply fuel. But above all the courage of the jawans are tested to the full. Each has to acclimatise for along period and undergo a pre-induction training of three weeks which is severe. Mountaineering skills with skills required for the war are thoroughly instilled. Still the snow, cold, wind and the enemy fire-- all takes it toll. Almost all regiment that go up the glacier for posting lose men. There is heavy exchange of fire. For example in one year, 1998 alone, the Indian side was bombarded with 43,000 artillery shells and 230,000 rounds of small arm fire from Pakistan. The Indian army bombarded the Pakistani side in equal measure.

The mullah, who had given the *tawiz* which destroyed the glacier in the first instance, had made another prediction. When the storm did not cause total destruction of the glacier due to human folly, he said that another 'storm' may visit the glacier in a Century to complete the job. Perhaps this war is fulfilling his prediction !

ENVIRONMENT

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.

The Siachen glacier snout has receded by about 800 m in last 18 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 but till then under the present situation utmost care must be taken not to damage the environment further.

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

POWER OF THE DREAM

The 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 an stalemate. One of the ways this glacier can be saved is by declaring it as a ‘Siachen Peace Park’.

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.

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 causalities 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 'Transboundry 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 transboundry 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).

From *The Himalayan Journal,* Volume 50 (1993). **Aamir Ali**

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)

History of the Siachen Glacier (1821-2002)

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 *Ladakh.*
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 la. This was the first expedition to cross over into the Siachen glacier from Bilafond la 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 la.
1976 Japanese expedition led by H. Saito came over Bilafond la, crossed Staghar Pass and made the first ascent of Singhi Kangri from north.
1976 An Austrian expedition led by Gunther Schutz crossed over Bilafond la 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 la).
1978 Japanese expedition led by H. Kobayashi climbed Ghent NE from the Kondus glacier.
1979 Japanese expedition led by S. Hanada crossed over Bilafond la 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 la.
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 la, Turkestan la and Saltoro Pass (PK 36 glacier pass).
1983 Few trekking parties crossed over Bilafond la 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 (since1986) 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 la (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 5 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 complete cease fire declared between India and Pakistan and all firings of the glacier ceased

SIACHEN PEACE PARK

A Proposal

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 Karakorams, 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).

Then began the war of mountaineering expeditions. Pakistan authorised several expeditions since 1950 (access is much easier from the Pakistan side), but did not establish any permanent posts. Indian Army mountaineering expeditions went in 1978, 1980, 1981.

In 1984, Pakistan authorised a Japanese expedition to the Rimo peaks via the Siachen, and sent soldiers to the area; India stopped this expedition and in April 1984, sent troops to establish and maintain control; there was severe fighting and positions have been more or less frozen since then.

For 18 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 10,000 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.

Everything has to be flown in by helicopter or airdropped: personnel, food, fuel, tents, equipment, ammunition, weapons. Artillery, such as the Bofors multibarrelled rocket launchers, have to be dismantled and flown in, then reassembled. The rarefied atmosphere and winds make mockery of ballistic data. As Gen. Hoon wrote: "It must be hitting something. We are definitely within range but the problem is there is a ridge separating the two base camps."

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. 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.

Pollution

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?

The Siachen Peace Park

The costly - and some might say absurd - stand-off between two armies is not by any means 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 136 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 in the International Year of Mountains. 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.

As in 2001, the Jungfrau-Aletsch-Betschhorn region, encompassing the longest glacier in the Alps, was designated a World Heritage site. We thought, why not aim for the same status for the longest glacier in the Himalaya? Enthusiastic support from the UIAA, the international mountaineering federation, provided a major fillip to the Siachen campaign. For 2002, the UIAA organised a 'Summit Climb' in the Alps in which Indian and Pakistani mountaineers would participate together. And so it was that Mandip Singh Soin and myself from India and Nazir Sabir and Col Sher Khan from Pakistan teamed up in Geneva and together climbed the Mönch (4099m). On the summit, the flags of India and Pakistan were unfurled together, surely the first time in many years that this has happened on any mountain in the world. We mountaineers and environmentalist appealed together for peace in the mountains, a gesture all the more significant in International Year of Mountains.

No sooner had Indian and Pakistani mountaineers met in Geneva than we realised how much we had in common at a people-to-people level. We spoke the same language and shared the same tastes in music and sporting interests. (Nazir, a cricket buff like me, kept suggesting to the former President of Switzerland, Adolph Oggi: 'Sir let's play cricket between our two nations, even before we climb mountains.') There was a strong desire to visit each other's countries and we realised it was only political differences that kept us apart. At no time during the climb, tied to the same rope, did it matter to me that my companion was a Pakistani or a Muslim, or to him that I was an Indian or a Hindu. Our lives depended on each other.

Several more recent developments have focused the attention of the world community, especially mountain lovers, on the need to solve the conflict and begin the task of rejuvenating the Siachen. These include an Italian proposal to push for a peace park as part of this year's K2 50th anniversary celebrations and discussion at the World Parks Congress in Durban in September 2003. If peace returns, there is likely to be a major effort to clean up the glacier with proposals already being discussed that could attract international support and finance.

Earlier this year Delhi and Islamabad began talking to each other again, with the Siachen high on the agenda. There was even the prospect of an India-Pakistan cricket tournament after more than a decade. This was due to be played in March 2004. By the time you read this, the score will be known, and more importantly, progress may have been made towards peace in the Karakoram.

At present, armies still face each other across the ridges of the Siachen. On both sides of the line of control, it is said that to honour the soldiers whose blood has been spilled, not an inch of territory should be given up. Yet isn't there a more powerful case for saying that these brave men could best be honoured by protecting this spectacular mountain area consecrated by their sacrifice? Our young people, whether soldiers or civilians, Pakistanis or Indians, deserve to be able to enjoy such an area. When I pressed this issue while accepting the RGS Patron's Medal in 2003, I said:

'We are nations linked by Himalayan geography. Nations which do not understand and respect geography are condemned by history. Governments and people of both countries should realise that there is a humanity that binds us together, whatever our game and whichever our side of the fence.'

Thankfully the wheels of peace are moving positively and for several months (at the time of writing) there has been a complete ceasefire in Kashmir, and particularly on the heights of the Siachen. The trans-boundary park could be a positive force in cementing the peace and rehabilitating an environment in which ibexes and snow leopards can roam and the wild *Sia* bloom. Then mountaineers can return to this majestic landscape redolent with the romance of early exploration. There is too, an ambition among climbers from both nations that we will be able to walk up the glacier and, with a shake of hands at the border pass, bring that spirit of comradeship displayed on the Mönch to reality on the Siachen glacier.

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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 militants 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 11th 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. Havaldar 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 neck and died, leading his troops in the highest tradition of valour and sacrifice. Two terrorists were killed in this operation and two other terrorists were griveously injured.

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 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.