

ASIAN ALPINE E-NEWS

Issue No. 41 November 2018



Climbing towards the upper wall on Kishtwar NE face

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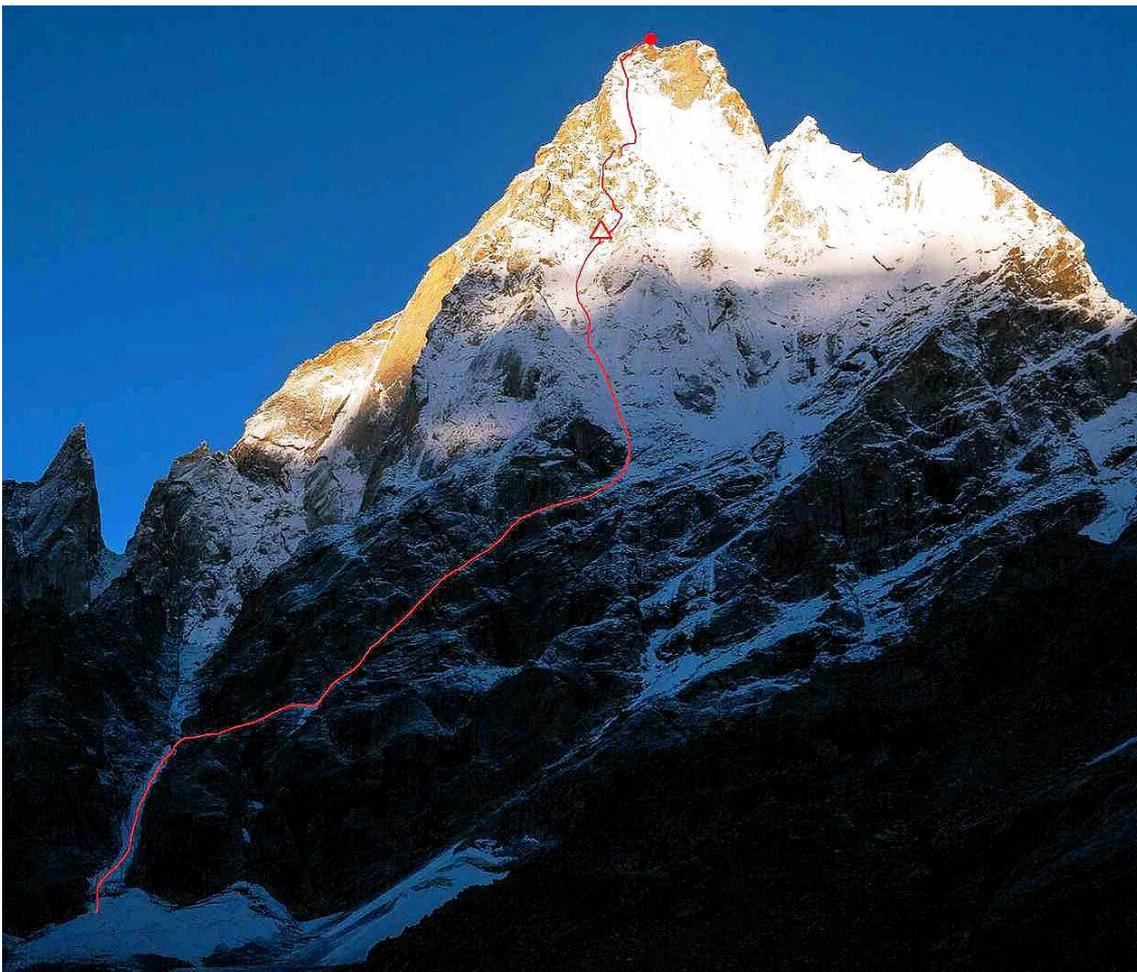
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GENJI NARUMI
Cerro Kishtwar northeast face 2018

When Hiroki showed me the photo taken by Slovenian Alpine master Marko Prezelj and asked if I'd want to join his plan to try untouched NE face of Cerro Kishtwar with Yusuke, I immediately made up mind to go with them. After some notorious and complicated procedure with Indian embassy, we obtained x-mountain visa just 4 days before departure.



(on the summit around 10:00pm in the night)



Northeast face with ascent line. Triangle indicates bivy on day 1

We set up our base on Sep 3rd. After some acclimatization and resting, watching movies at BC, we set out for ABC on Sep 19th.

On day 1 we climbed first 1000m by easy snow gully and ice then went for 500m summit push on day 2 without tent and sleeping bags because we knew the weather window would be almost closed.

Day 2 started with skinny ice pillar and then tricky mixed pitches that lead to the upper wall which consist of rocks and thin ice and made for some serious pitches. We kept on going into the dark, then finally summited around 10:00pm.

We then immediately started rappeling, stopping after a while for two hours brew session. About 10 rappelling brought us to the first camp around noon. At this point snow finally started to fall and avalanche came down from everywhere on the wall. We kept on rappelling down for another 20 pitches in the terrible situation and finally found safer place to sleep around midnight.

On day 4, we made another 3 rappel and finally stood on the glacier, only to crawl in 60 inches snow and found ABC tent completely collapsed underneath. We re-built ABC tent and rested there but realized it wasn't safe enough-, avalanche blast shakes the tent quite strongly, so we decided to move down in the night. Another swimming in the snow took us almost 4 hours-, to move only 200m. But here we found small cave under the rock. On the next day we stayed there, enjoyed some sun, waited for snow to be stabilize.

On the day 6 finally the sky cleared up and snow firmed up, we could walk back easily to the base camp.

We named our route "AAL IZZ WELL" after famous Indian movie "3 idiots". Weather was relatively bad and wet during entire stay in the area, but this movie gave us an idea of "being positive". Although the title "3 idiots" is suited for us because we spent 6 days at BC, watching movies under almost perfect clear sky then went for climbing and got caught by the storm.

Pictures follow.



Yusuke on Day 1



First bivy



Hiroki on lower ice part



Yusuke before upper wall

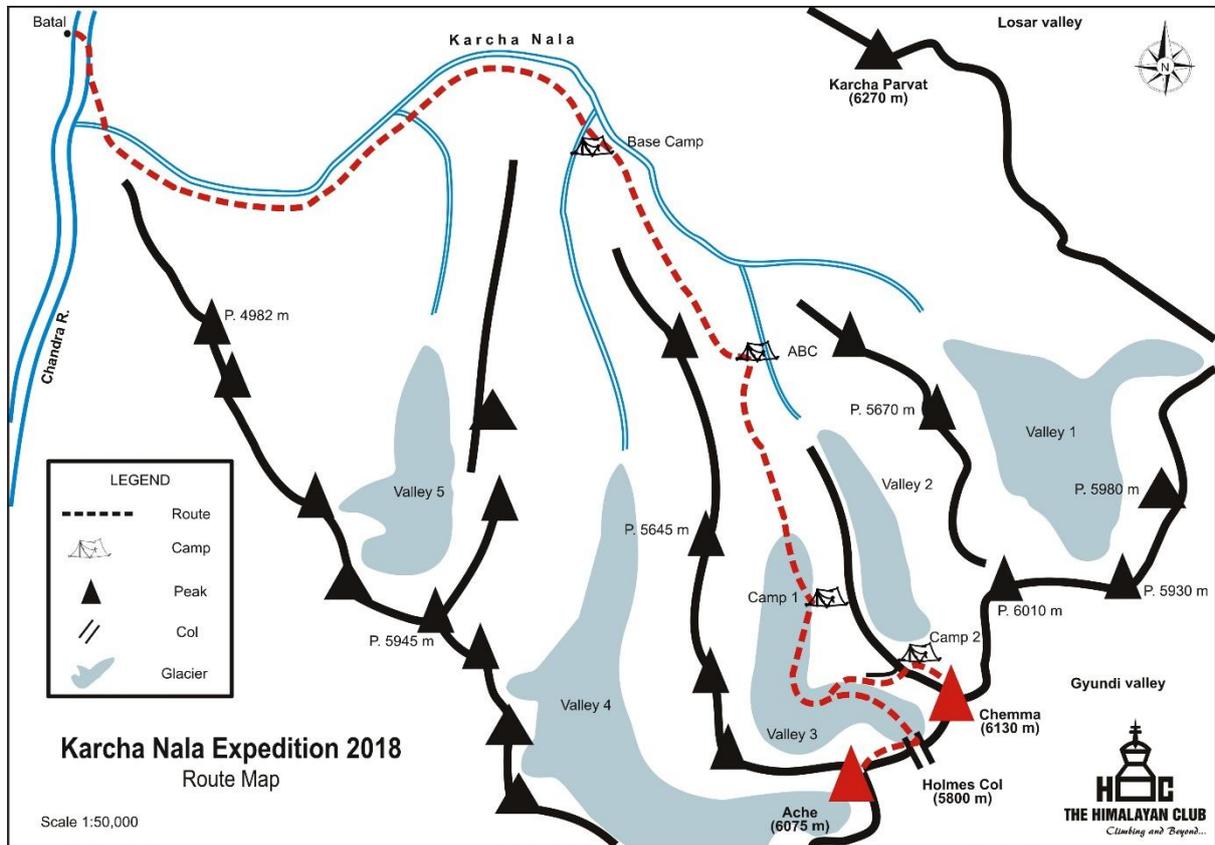


Yusuke on upper pitch 2

Sulah – Sulah

A relaxed expedition in Spiti

Divyesh Muni



Although we love to travel, trek and climb in the mountains, we tend to apply ‘urban’ yardsticks as deadlines, schedules and targets bind us - friends plan mountaineering expeditions in this way – Stok Kangri in one week, Satopanth in three weeks, Nun in 20 days and so on. A pilgrimage to Manasarovar and Kailash Yatra is done in 10 days by helicopter and Everest Base Camp in five days (with a helicopter visit to Base Camp for 20 minutes). I always thought pilgrimages are for spiritual upliftment, reflection etc. and treks and climbing trips are to enjoy the mountains, and experience the solitude and grandeur of the hills. Then why the hurry?

We planned to explore and climb in Spiti this year, and we decided that our expedition motto would be ‘Sulah – Sulah’ which in Himachali language means take it easy.

Our six-member team from The Himalayan Club consisted of Rajesh Gadgil, Vineeta Muni, Ashish Prabhu, Ratnesh Javeri, Imran Pathan and yours truly.

Our plan was to enter the Karcha nala from Batal on the Manali – Gramphu – Kaja road. It was interesting to read the accounts by P. F. Holmes (1956) and J. P. O’F

Lynam (1958) who had visited the area. Subsequently, several teams had visited the Karcha nala and climbed peaks in its various glaciers.

The Karcha nala has five major subsidiary valleys/glaciers. For our convenience we will name them 1 to 5 starting from east to west.

Valley 1 leads towards Karcha Parvat and Fluted Peak. At the head of Valley 2 is a beautiful peak with twin summits. The Tokai section of the Japanese Alpine Club named this peak Chemma after they made the first ascent of the east summit (6105 m) in 2011. Chemma means twin. They followed Valley 2 to the base of the peak and climbed the east summit from its north ridge.

At the head of Valley 3 lies the Chemma peak on the east and a beautiful dome shaped peak on the west. Holmes climbed the dome shaped peak in 1956 from the col between the peak and Chemma. The Tokai Section of the Japanese Alpine Club climbed the peak in 2009 and named it Ache meaning daughter.

Valley 4 goes towards the Bara Shigri glacier and Valley 5 leads to Gunther peak and a possible exit to Spiti valley from the Karcha nala.

We were keen to visit the Holmes col and locate a route into the Gyundi nala that lay to the south of the col. We decided to head up Valley 3.

On 10 July we flew to Chandigarh and were on the road to Manali. By the time we reached Manali, it was raining heavily, as if to set the mood for the rest of the expedition. We spent the next few days re-packing ration and equipment. A short excursion to Patalsu peak helped us acclimatize and get to know our support staff. We had with us Pemba Norboo Sherpa (aka King Kong), Sangbu Sherpa, Vipin Sharma, Rakesh Kumar (Keshu), Devinder Kumar (Shiva) and Ajeet.

On 18 July, we were on the road to Batal on the Manali – Gramphu – Kaja road. That night, we travelled further on to the Chandra Tal camping ground. A short walk next morning to the lake helped us to acclimatize. By afternoon we were camped at Batal. We met the famous Chacha – Chachi (uncle and aunt) couple who ran a dhaba of the same name. I was blown away by their enthusiasm and warm hospitality which included lodging, boarding, parental advice and assistance to all travellers who dropped by. Paper clippings and news articles stuck on the walls by their admirers told stories of the invaluable support they provided to anyone and everyone passing by. They have a terrific sense of humour and food and bed is provided with beaming smiles, regardless of the time of day or night. A not-to-be-missed experience for anyone visiting Batal.

Our horsemen were to join us on the 19th, but there was no sign of them. There was no communication facility in Batal so we sent one of our staff to Gramphu to enquire. While we waited for the horses, our porters made a light ferry of loads to base camp. There was no update on the horses but we were fortunate to meet a horseman with 12 horses who was passing through. He agreed to carry our loads to base camp from Batal. It was only a day's walk so he could drop us and be on his way for his assignment. With 12 horses loaded, we set off to cross the Karcha nala just about two kms from Batal. Fortunately, the water level was not too high in the morning which allowed us an easy crossing. The route then goes along the true left bank of the river. It was a steady climb on easy ground for the next four hours. We reached altitude of 4500 m. We had to put up a

temporary camp just across the nala from base camp since the river was in spate by afternoon. The expedition started on a sombre note. There was a shepherd across the Karcha nala with his flock grazing on the slopes of the valley. For some inexplicable reason his dog decided to swim across the river to visit our camp. But in seconds he was swept away leaving our entire team in shock and grief.

Base camp could be established next morning on 22 July. We were at the junction where Valley 4 meets the main Karcha nala.

Next morning, after a small puja at base camp, we reced a route to advance base camp. The route went along the true left bank of the Karcha nala. It was a steady but gradual height gain for the next few kms on the lateral moraine of the valley. We were soon at the junction where Valley 2 and 3 meet. We left Karcha nala and turned right to continue about one km further up Valley 3. The main difficulty was to find a water source on the glacier. The main nala was too muddy with silt. We finally found a small glacier melt and reasonably even terrain for the campsite. The camp was among boulders and scree of the glacier at an altitude of 4900 m.

We stocked up advance base camp next day before shifting on 25 July.

The weather remained unstable. It did not feel like Spiti. It rained heavily, like it would in Mumbai at this time!! We kept an eye on the slopes behind our camp. With this torrential downpour, there was high risk of landslides. Fortunately, we were in a safe location. Although a huge landslide took down a large chunk of the slopes of the valley and there was continuous rock fall in most gullies, we were safe.

We had to spend the next day in our tents, enjoying hot cups of tea while catching up on our reading. This was a good time to relax and do what we would otherwise not be able to do – nothing. Evenings were spent exchanging stories and having hearty laughs at all our escapades over the years.

We got an opportunity on the 27th to recce the route to camp 1. We found a way along the true left of the glacier. The glacier takes a sharp bend at its head before it merges with the ridgeline that divides the Karcha valley with the Gyundi valley. We stashed our loads just before the bend on a strip of medial moraine which appeared to be the safest spot for the camp.

Ratnesh and Imran had run out of time, so they started their journey back on 28 July from ABC.

On 30 July, we shifted to camp 1 at 5400 m with the rest of our loads. The lead party found an excellent spot to camp on the true right of the glacier on a fairly even slope of lateral moraine. With a good source of water, it was at a reasonable distance from the rock and scree slopes.

The head of the glacier was hidden behind the sharp turn behind the ridge of Chemma peak (6130 m). We walked up the glacier for a good look at what lay ahead of us, so we could plan our adventures ahead. We saw promising routes to the high col between Chemma peak and Ache peak (6075 m) and a possible route to approach the west ridge of Chemma peak. Both would need closer inspection later.

On 1 August, one team went for a look at the Holmes col and the other towards Chemma peak. The route to Holmes col involved negotiating a 100 m ice wall to reach the col. We fixed rope on the col and were rewarded with good views towards Gyundi as well as Ache peak. While the route to the peak looked straightforward, the route down towards Gyundi looked horrific. The snow had receded from the southern slope of the col towards Gyundi. The entire slope below the col was exposed to rockfall. The second team found an easy route to the west ridge of Chemma. They came back very happy with the location of the proposed summit camp and the route to the summit.

We decided to attempt the west Chemma peak immediately. On 2 August, we climbed to the summit camp. Initially the route followed the glacier. After the sharp left bend on the glacier, we climbed on the lateral moraine on its true right. We then traversed on the steep scree slope to top-out on the west ridge of Chemma. A short distance along the broad ridge brought us to the summit camp. It was a delightful location with fantastic views all around. Just as we reached the camp site, we were hit by strong winds that made it very difficult to pitch out tents. It required one person to crawl into the tent to hold it down while the others anchored the tent. Fortunately, the wind subsided by evening. We enjoyed the most wonderful sunset while we lazed around our camp.

On 3 August, we started off for the summit at 7:00 a.m. along the northwest ridge of Chemma peak. The initial route was over steep scree and then on snow and ice slopes. The ridge has several steep sections followed by easy angled slopes. The longest steep section was 100 m. We reached the summit by 11:00 a.m. in clear weather with gorgeous views in all directions. For more than an hour we were lost in the scenery around us, taking photographs and identifying the peaks around.

We were back to summit camp by early evening and decided to stay the night. Next morning, we took it easy and left for our camp 1 by 10:00 a.m. We were down in two hours. We decided to rest a day at camp 1 before starting for Holmes col.

On 6 August, the weather took a turn for the worse with rain battering our tents through the day and night. Sometimes it would snow and sometimes rain. We were all set to shift to Holmes col but decided to wait till the weather settled. The rain and snow continued for the next three days relentlessly, showing no sign of abating. The cloud layer was thick and the rain would come down with gusts of wind. It did not look good. After several days of being confined to our tents, we ran out of patience. We decided that going across Holmes col was not advisable considering the time on hand, nature of terrain and the weather. It now appeared that we would have to abandon our attempt on Ache peak also.

Finally, on the 9th we decided to wind up the expedition. Our support staff went to bring down the equipment we had dumped for the summit attempt. But around early afternoon we were happy to see a few patches of blue sky. It raised our hopes for a last-minute attempt. We decided to take a chance from camp 1 itself, if the weather was clear early next morning.

And luck favoured us. At 2:00 a.m. on 10 August, we woke to a starry sky and quickly prepared ourselves. A couple of hours later we were off, making quick progress to Holmes col. The 100 m ice wall slowed us down but shortly we were on the east ridge that led up from the col. Most of the ridge was easy angled with a few sections of steep ground. We negotiated a steep step just before reaching the summit by 11:00 a.m. We

spent a joyful hour at the top photographing the panorama around us. We found a cairn on the summit with a sealed note left behind by a team from 'Himalay's Bekon' in August 2015.

This was a wonderful end to our expedition. Over the next three days we made our way down to Batal. It rained heavily. We just managed to reach Manali and all hell broke loose. There were landslides in many places of Himachal and most roads were blocked. We were out just in time. It took a few days for the weather to clear and the roads to open. But our time was well spent, relaxing in a Manali hotel.

Sulah...Sulah it was!!

Summary:

A six-member team from The Himalayan Club entered Karcha nala and made first ascent of East Chemma peak (6130 m) and an ascent of Ache peak (6075 m) during July – August 2018. They had to suffer a lot due to bad weather.



Base camp in Karcha Nala



On the summit of Chemma Peak



From the summit of Chemma Peak



From the summit of Chemma Peak



From the summit of Ache Peak



Crossing the Karcha Nala



(from left) Chemma Peak, Holmes col and Ache Peak



and Pama from Ache Peak



Chemma Peak



Climbing to camp 2 on Chemma Peak



Climbing the ice wall to Holmes col



On the summit ridge of Chemma Peak



Climbing the summit ridge of Chemma Peak



Chandratal

KAZUO HOSHI
**Four Peaks in the Headwaters of Karcha Nala, Spiti
JAC Tokai Indian Himalaya Expeditions**

The Japanese Alpine Club, Tokai Section (hereinafter described as JAC Tokai) conducted 13 expeditions to the India Himalayas since 1988, mainly in the Ladakh, Lahaul area and Spiti areas, and ascended 17 summits over 6,000 meters high. Among them, the nine summits were first climbed.

This year, we organized expedition 2018 in the Indian Himalayas. We were 4th times decided to attempt climb the unnamed peak (6105 m) on the Karcha Nala since the summer 2009. We obtained permission from the Indian Mountaineering Foundation. Our expedition was organized specifically for the five senior members (in age) of the club who, despite their age and limited physical capabilities, still felt passionately about mountaineering and exploration.

Karcha Nala belongs to Kullu administrative district of the State of Himachal Pradesh, but an access route to get there is only from Batal in Spiti administrative district. Karcha Nala is a small river about 17 km long at nearly N32°20'. It joins Chandra River at a point of 1.5km south of Batal. Karcha Parbat (6,271m) and Fluted peak (6,139m) are dominant on the north side of the river. Four glaciers fan out to the south of the river in length of 4~10km. We tentatively named these glaciers as ABC and D glacier from the east. These glaciers feed water to the stream of Karcha Nala. Shepherds and a Flock of sheep are seen nearby Karcha Nala. The wide glaciers are separated by ridges. Slopes of both sides of the ridges are pastures for grazing sheep. Side moraine is covered with gravel.

There are 6,060m peak (Tashi Rang), in the headwaters of the A glacier, 6,105m peak (Chemma) in the headwaters of the B glacier, 6,066m peak (Ache) in the headwaters of the C glacier, and 6090m peak (Pyagski) in the headwaters of the D glacier respectively. These peaks range from northeast to southwest. Steep rocky ridges of the east side line descend straightly down to the Gyundi River. The D glacier is the largest and its south headwaters borders on the Lower Bara Shigri Glacier.

(Reference)

Rough map: LEOMAN MAPS (Sheet 5,6) 1:200,000

Russian map: 1:200,000/ 1:100,000

Panoramic photograph: HJ Vol.44(1986-1987) India party of Karcha Parbat

Google Earth 2018

1) Ascent of Unnamed 6,066m 2009

JAC Tokai 10th Expedition first planned to attempt Karcha Parbat 6,271m having studied a record

of the Indian ascent in 1991. They departed from Manali by jeeps on June 30 and reached Batal (3,980m) on July 2. We further went up to a place at 4,600m of South Dakka Glacier for acclimatization and returned to Batal. The expedition left Batal for base camp on July 6. They went along a dry riverbed on the north side of Karcha Nala. Then they traversed a fragile cliff and passed big snow bridges heading to the south side of Karcha Nala. After crossing a small river twice, they established base camp at 4,400m.

From the base camp we found no snow on the ridge toward the summit of Karcha Parbat and realized that it was difficult to reach the top of Karcha Parbat because of lack of water. They had to change our target from Karcha Parbat to another peak in the upper Karcha Nala. Camp1 was set up at 4,700m on July 13. They ascended to a craggy glacier (tentatively named as **C glacier**) in the south side of Camp 1 and found a beautiful snowy peak beyond snowfield. This peak has become a new target. Camp 2 was established on the **C glacier** at 5,200m on July 17.

Three Japanese members and four high altitude porters (HAPs) started from Camp 2 at 5:30 am on July 18. Tsuneo Suzuki (leader 74 years old), Naoyuki Adachi (66) and one HAP retired at 5,400m because of deep snow. Ritsuo Matsubara (75) and three HAPs carried on climbing of a steep and deeply snowed slope and finally stood atop snow-clad peak of 6,066m at 2:30pm. Regrettably no panorama could be viewed from the top because of fog. We gathered at the base camp on July 20 and returned to Manali. This beautiful peak would hopefully be called as "Ache" which means a daughter in Lahul language.

2) First Ascent of Chemma Peak 6,105m 2011

JAC TOKAI 11th expedition members were an elderly group of an average age of 65 years old. We were still not losen passion for expeditions. Period of expedition was 40 days from July 15 to August 23. Main objective was to climb a stunning dome-shaped peak in the headwaters of Karcha Nala.

19 July: Five members and liaison officer in Delhi moved to Manali (2,000m).

22 July: All staff members (instructor, HAP, and kitchen staff) gathered in Manali and necessary preparation such as purchasing foods and checking gear and equipment was made.

26 July: Although it heavily rained and there was a landslide at the Rohtang Pass (3978m), they departed to Rohtang Pass (3,978m) by three 4WDs at 3:00pm and arrived at Chhatru (3,330m) at 8:00pm.

27 July: We reached Batal (3,980m) in the afternoon and set up tents.

30 July: Horses caravan of horses headed to base camp along Karcha Nala. After having crossed the dangerous stream five times, base camp was set up on a dry riverbed at 4,400m in the afternoon. The expedition members were in good health conditions suffering from no high-altitude sickness.

3 August: Camp 1 was set up at 4700m.

6 August: Camp2 was set up at snout of **B glacier** (5,250m). We further went up and looked for location of camp3 (5,550m). A route on the north east face was chosen as the best for climbing, which undoubtedly promised the success.

7-8 August: We carefully avoided falling rocks and detoured hidden crevasses. Oxygen cylinders were

In services for safety. It began to snow at night. Snow continued to fall on August 8.

9 August: Snow conditions seemed good though it was clouded and there was no visibility. At 7:30am, we started climbing a steep and deeply snowed slope. After one hour, we reached a snowfield. There are many crevasses here and there. The oldest member, Shinohara (72) was slow but steady. Sky soon cleared up and strong sunshine annoyed us. They stood atop 6,105m at 11:45. The top was narrower than Google Earth image. To their regret panorama pictures could not be taken as narrow space did not allow to do it. They returned Camp 2 at 2:00pm.

20 August: They returned to Manali at 2:00pm.

22 August: The Indian Mountaineering Federation officially recognized the first ascent of summit which the 2011 Expedition succeeded in climbing and named it as Chemma Peak. Chemma means twin peaks in local language.

Members:

Leader: Kazuo Hoshi (60)

Members: Motoyoshi Tanabe (61)

Yutaka Shinohara (72)

Hitoshi Ishii (68)

Katsumi Kuze (63)

Liaison Officer: Gajendra Deshmukh (35)

Climbing Guide: Buumi Dev Sharma

Harsh Thakur

BC Manager: F.Namgial Negi

High Altitude Porter: Fateh Chand Thakur

Pyare Lal

Jeet Ram Thakur

Tej Ram Thakur

Cook: Lal Bahadur Thapa

Suresh Bahadur Shahi

Period of expedition: 15 July – 23 August, 2011

3) First Ascent of Pyagski Peak 6,090m 2014

Commemorating the 110th Anniversary of Japanese Alpine Club (JAC), Tokai Section of the Club organized the summer 2014 Expedition to 6,090m unnamed peak in the Indian Himalayas. We obtained a climbing permit from the Indian Mountaineering Foundation in April of 2014, and our expedition was organized by the three club members. The expedition period was planned 33 days, 15 June-16 July.

The First objective of the 12th expedition was climb of a virgin peak in the **D glacier**, headwaters of Karcha Nala. The second objective was to let the club's young members join the expedition.

18 June: Three members and Liaison Officer in Delhi moved to Manali (2,000m)

23 June: Starting from Manali to Batal at 3:00 am.

They crossed Rohtang pass (3,978m) at 8:00 am. Three jeeps run smoothly along Chandra River, but, at 9:30am, snow shat our way, and the jeeps could not go farther. We walked three days from here to Batal (3,980m), and the baggage was carried on horseback.

25 June: We reached Batal in the afternoon and set up tents. Walked 14km. Two days were lost. But all members were in good health conditions suffering from no high-altitude sickness.

27 June: Horses caravan headed to base camp along Karcha Nala. We marched on the riverbed of the west side of Karcha Nala, and then passed a fragile cliff and snow bridges to the east side of Karcha Nala. We set up a tent on a dry riverbed at 4,300m in the afternoon.

1 July: Camp 1 was set up at 4,800m.

2 July: Camp 2 was set up at the snout of **D glacier** at 5,100m and searched for the peak of our target.

4 July: We woke up at 2:00am. Snow conditions seemed good, though it was snowing and there was no visibility. At 3:00am, we forwarded to a climbing point and at 5:00am, resumed climbing a snowed slope. Sky soon cleared up, but sunshine annoyed us. We climbed up snow face to an unstable band.

After rest here, we continued climbing and reached the top of the snow-covered peak (6,090m) at 8:30am. We returned to camp 2 at 2:00pm.

This was the first ascent and we named this peak as "Pyagski".

Members:

Leader: Kazuo Hoshi (63)

Members: Miyo Suzuki (62)

Masayo Tsuchiya (38)

Liaison Officer: Gajendra Deshmukh (38)

BC Manager: F.Namgial Negi (38)

High Altitude Porter: Pyare Lal

Jeet Ram Thakur

Tej Ram Thakur

Cook: Lal Bahadur Thapa

Suresh Bahadur Shahi

Period of expedition: 15 June – 16 July, 2014

4) First Ascent of Tashi Rang Peak 6,060m 2018

JAC TOKAI 13th expedition was organized this summer 2018 Expedition to 6,060m unnamed peak

in the Indian Himalayas. We obtained a climbing permit from the Indian Mountaineering Foundation in June of 2018, and our expedition was organized by five members. The expedition period was planned 26 days, 2 August-27 August.

This expedition planned to attempt unnamed peak in the **A glacier**, but it was different from the time when first ascent of Chemma in 2011. Is global warming the cause of that? We found dangerous river, rocky collapse and glacial retreat.

5 August: Five members and Liaison Officer in Delhi moved to Manali (2,000m)

9 August: Starting from Manali to Batal at 7:30 am. We crossed Rohtang pass (3,978m) and reached Batal in the afternoon and set up tents.

11 August: Horses caravan headed to base camp along Karcha Nala. We marched on the riverbed of Karcha Nala, and then cross the swollen river. We set up a tent on a dry riverbed at 4,500m in the afternoon.

13 August: Camp 1 was set up at 4,900m.

16 August: Camp 2, AC was set up at the snout of **A glacier** at 5,500m and searched for the peak of our target.

18 August: We woke up at 3:00am. Snow conditions seemed good, though it was snowing and there was no visibility. At 5:30am, we forwarded to headwaters of **A glacier** and at 5:00am, resumed climbing a snowed slope. We climbed up snow face to an unstable band. After rest here, we continued climbing and reached the top of the snow-covered peak (6,060m) at 2:08 pm. We returned to camp 2 at 8:55pm.

This was the first ascent and we named this peak as “Tashi Rang”.

Members:

Leader: Kazuo Hoshi (67)

Members: Takashi Tsukahara (64)

Syuiti Kimata (67)

Katsumasa Suda (63)

Taeko Hasegawa (50)

Liaison Officer: Gajendra Deshmukh (42)

BC Manager: F. Namgial Negi (42)

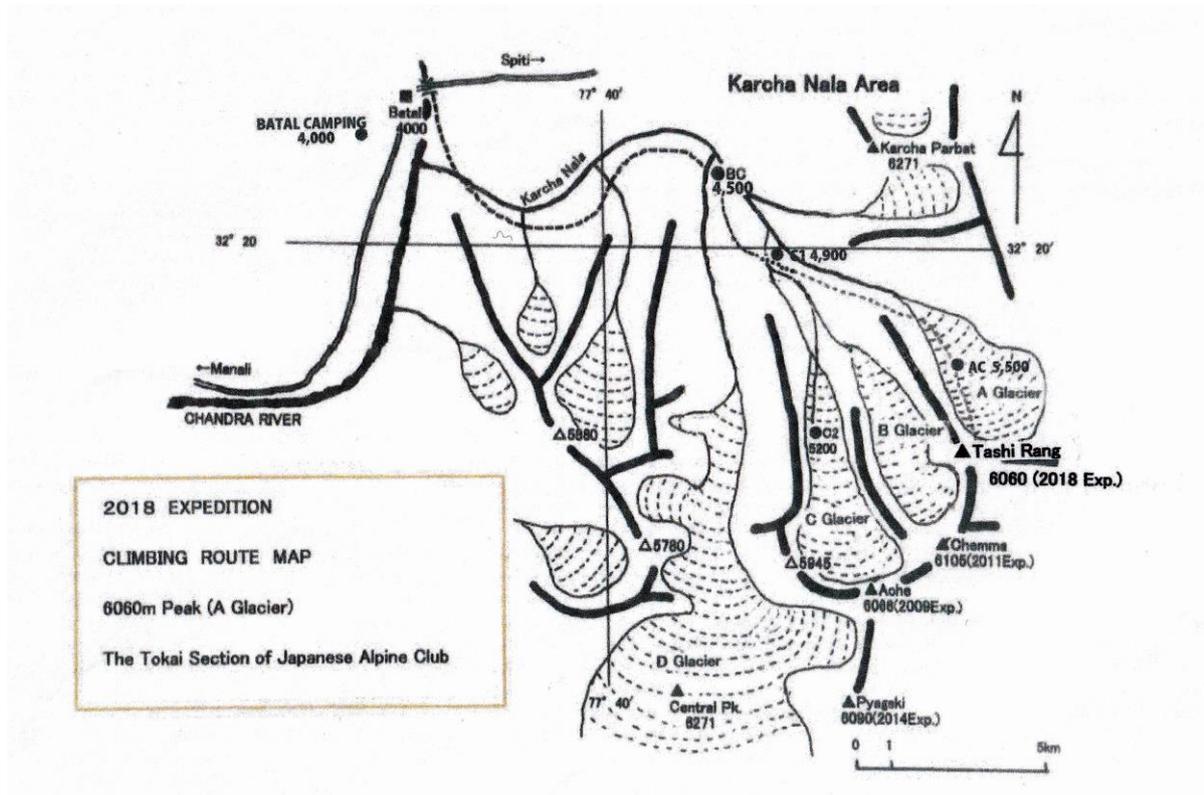
High Altitude Porter: Pyare Lal

OM Perakash

Tej Ram Thakur

Cook: Lal Bahadur Thapa

Period of expedition: 2 August – 27 August, 2018



On the summit of Tashi Rang



From AC to unnamed peak 6060m



Entering mix zone



Ascending snow wall and mix zone

2018 Mulung Tokpo Expedition

A report on the exploration and unclimbed peaks of the Mulung Glacier in
the Zaskar region of India

30th August – 29th September 2018

Derek R Buckle

(18 Hillfield Road, Redhill, Surrey, RH1 4AP; derek@bucklefamily.com)



Drew Cook crossing the crevassed region of the south Mulung Glacier *en route* to High Camp at 5,085m

Supported by the Mount Everest Foundation, the Montane Alpine Club Climbing Fund,
and the Austrian Alpine Club (UK)

Members:

Derek Buckle, Drew Cook, Mike Fletcher, Adele Long, Gus Morton & Tony Westcott

With thanks to Chewang Motup & Yangdu Gombu of Rimo Expeditions, Leh, Ladakh,
India

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Summary:

During the period between 30th August and 29th September 2018 six members of the Alpine Club flew to New Delhi prior to joining their Liaison Officer, Manu Verma, and continuing on to Leh in Ladakh at 3,500m. With such an altitude gain the team spent two days acclimatising in and around Leh before making the long drive *via* Kargil to the hamlet of Ating (3,640m) at the foot of the Mulung Tokpo, where they joined their support staff. From Ating the team commenced the two day trek *via* a camp site at Sampuk (4,000m) to the junction with the Nabil Tokpo, and close to the snout of the Mulung Glacier, where they established a Base Camp at 4,188m. From this camp exploratory forays identified a suitable site for an ABC on the true right lateral moraine at 4,525m. Although inclement weather limited advancement from this camp, the team eventually established a High Camp on the southern arm of the Mulung Glacier at 5,085m.

By this time a collective decision had been made to change the primary objective to one or more of a collection of attractive peaks on the cirque at the glacier head, a decision determined by the unconsolidated nature of the snow and the viability of establishing a suitable camp closer to the original objective, M15. Thus, on 19th September Derek, Drew, Mike and Adele were in a position to make a determined attempt on PK5631 *via* its north face. Unfortunately, extreme cold and the unconsolidated nature of the newly precipitated snow terminated this attempt some 300m short of the corniced summit. The same day Gus and Tony had greater success in gaining the 5,480m col (called Aari Dont Col) leading to a prominent tooth-shaped peak. From this col Gus went on to make the first ascent of PK5557 (Aari Dont, PD) *via* its NW ridge. The next day Derek, Drew, Mike and Adele repeated the ascent before Derek and Mike climbed the short mixed NE ridge of the adjacent outcrop to make the first ascent of Point 5,537 (Chilh Point, AD). After two 25m abseils they regained the col. Both summits afforded outstanding panoramic views of the neighbouring peaks and valleys.

By the time that the team returned to BC, and the high camps were dismantled, a serious storm hit the region, depositing some 40-50cm of new snow and demolishing three of the BC tents. Since more bad weather was predicted, prudence necessitated an urgent abandonment of BC, with the team and support staff only able to take essential equipment with them. As it was, the 13-16h, 25km descent over awkward terrain to Ating was an exhausting trial. We later learned that a vast area was affected with many trekking parties requiring rescue and the main road communications between Manali and Kullu and between Padum and Kargil being blocked.

Introduction:

I first went to Zaskar in 2013 as a result of a general 'invitation' from Harish Kapadia.¹ On that occasion our party visited the Pensi Lungpa, where we successfully accomplished two first ascents.² Two years later we returned to Zaskar to climb in the Korlomshe Tokpo, where we again completed two first ascents.³ With so many new and varied opportunities in this unique part of India I was encouraged to organise another expedition in 2018 following an exploratory visit by Kimikazu Sakamoto to the Mulung Tokpo.⁴ Like other trips made by

The Climbing Team:



Derek Buckle, 74, British; Retired Medicinal Chemist. AC member & past VP. Has extensive mountaineering experience throughout the world; notably Tibet, Greenland, Kyrgyzstan (Tien Shan), Tajikistan (Pamirs), Russia & Georgia (Caucasus), India (Garhwal, Himachal Pradesh, Zaskar), China, South America (Bolivia, Peru, Ecuador), Antarctica (Antarctic Peninsula) and numerous trips to the Alps. He has made over 60 mountain first ascents plus many first British ascents and new routes. Leads rock to 5a/5b, ice to WI5, Mountaineering to TD and is a competent ski-tourer.



Andrew (Drew) Cook, 53, British; HSE Consultant & Mountain Safety Advisor. AC member. He has extensive climbing/mountaineering experience in the UK, Alps, Indian and Nepalese Himalaya and has spent two seasons with the British Antarctic Survey in Antarctica. He has accomplished first ascents in India and Antarctica in addition to several new routes. He is a competent ski-tourer and leads to HVS on rock.



Mike Fletcher, 53, British, Retired Information Technology company executive. AC Member (former Committee member). 40 years of climbing and mountaineering experience including summer and winter in the Alps and UK. Expeditions making first ascents in Alaska, Greenland and Antarctica. Also climbed in India, Pakistan, Spitzbergen, USA and Norway.



Adele Long, 61, British, Retired Medical Researcher/Company Director, AC Member (Newsletter Editor). Mountaineering and ski mountaineering experience over 20 years, including several expeditions to Greenland, Bolivia, Peru, Argentina and Kyrgyzstan. Also climbed in Kenya, Georgia, Canada, US, Morocco, Australia and in Europe. Four first ascents on summits over 5,000m.



Gus Morton, 67, British, Retired European Civil Servant, AC Member. Extensive climbing/mountaineering experience in numerous countries around the world with summits up to 6,990m including four first ascents in the Karakoram, one in the Kunlun and one in Zaskar. Rock climbs to HVS/E1 and is a competent ice-climber and ski-tourer. Author of the "funalps.com" website.



Tony Westcott, 69, British, Retired University Lecturer/ Chartered Quantity Surveyor, AC Member (Chair of Marketing, Membership & Recruitment). Mountaineering experience over 50 years, including over 30 of the 4,000m peaks in the European Alps and two first ascents on Himalayan summits in Zaskar to 6,000m. Also climbed in the Canadian Rockies, Corsica, Iran, Morocco, New Zealand, Scotland, Tenerife and USA. Mountaineering currently to AD standard and rock climbing to 4c (lead).



The team ready for action at ABC

Support Staff & Administration:

All in-country arrangements were made through the husband and wife team of Chewang Motup and Yangdu Gombu *via* their trekking company Rimo Expeditions (229 DLF Galleria, Phase IV, Gurgaon, Haryana – 122022, India; email info@rimoexpeditions.com; tel: 91 – 124-2806027 / 28; Fax: 91 – 124-2806030; www.rimoexpeditions.com). We have worked with Rimo many times over the last eight years and they have consistently accommodated our requirements. They have the breadth of organisation to respond rapidly to changes of circumstance and problems and greatly facilitate our expeditions. Both they and their staff have always been a pleasure to work with.

In addition to Manmohit (Manu) Verma, the Liaison Officer appointed by the Indian Mountaineering Foundation, we were supported by our Sirdar and high altitude porter (HAP) Anup Tamang and two other exceptional HAPs (Tshering Bhotia & Pemba Nubu Sherpa), our excellent cook (Santabir Sherpa) and his ever-willing assistant (Tsedung Bhotia).



Anup Tamang



Pemba Nubu Sherpa



Tshering Bhotia



Santabir Sherpa



Tsedung Bhotia



Manmohit (Manu) Verma



An unusual sight, but they had worked hard!

Itinerary: (See also Appendix 2 {for daily itinerary} & 3 {for key GPS locations})

The journey to Base Camp by the Nabil Tokpo:

After flying to Leh at 3,500m most of the team acclimatised by first visiting the Matho Gompa in the foothills of Stok Kangri, which at 6,153m is a popular trekking peak. Devotional prayers were underway when we arrived and it was a rare treat to witness the chants and music of the 80 or so monks in residence. As with many such monasteries, the

paintings and artefacts were enchanting and vibrantly coloured, making it a rich experience to visit such an active Buddhist centre. Because of its importance, the gompa attracts a large number of devotees and tourists on major festivals who enjoy not only the religious experience, but the commanding views over the Indus valley. On the second day most of the team made a gentle ascent to 4,026m to a point overlooking Leh Palace and Gompa while the less energetic hired motorbikes in order to drive to the Chang La.



Matho Gompa



Lamayuru Gompa

By the 4th September we were ready for the two day drive to Ating from where we would begin the trek to base camp in the Mulung Tokpo. The drive took several of us over now familiar ground as we passed the ancient Lamayuru Gompa soon after leaving the Indus valley, then the 1,300 year old 8m high Maitreya rock carving depicting an image of the future Buddha at Mulbeck, before reaching the predominantly Muslim town of Kargil.

From Kargil the rapidly deteriorating road headed south along the Suru River to pass the 7,000m giants Nun and Kun before heading more easterly passed Rangdum to the Pensi La (4,400m). From here the road essentially descends to follow the Doda River until reaching Ating (3,640m), a hamlet at the foot of the Mulung Tokpo some 20km before Padum.



It was at Ating where we made our first camp and joined our support team who had gone on ahead to arrange horses for the trek into base camp. From our communications with Kimikazu Sakamoto we knew that good camping sites existed at Sampuk (4,000m)

Sampuk Camp 4,000m



Base Camp 4,188m

and near the Mulung glacier snout where we planned to site our base camp. With fewer horses than anticipated, however, it was quite late at night by the time that they and their drivers had completed the second carry to Sampuk and there was naturally some reluctance to complete the carry to base camp in a single day. Two days later, on 8th September, base camp was finally firmly established within easy reach of the glacier snout at 4,188m.

Exploration and climbing from the Mulung Glacier:

Once at base camp our first task was to carry out a gentle exploration of the lateral moraines leading to the Mulung Glacier proper. It was soon obvious that the convoluted lower regions of the glacier offered no feasible way forward, but we debated the advantages of taking either the true left or the true right moraine approaches. Finally we took what appeared to be the lesser of two evils and chose the true right option. This route, which we cairned after several exploratory forays, meandered up the



Tony on the true right lateral moraine

moraine(s) linking various sandy wash-outs to avoid vast areas

of large, unstable boulders. It was far from ideal, but once we gained the glacier proper the going became relatively straightforward. Eventually we identified a suitable site for ABC at 4,525m on a short offshoot of the true right lateral moraine at the foot of the South Mulung Glacier.



Drew climbing onto the true left lateral moraine

ABC was fully established on 11th September with the assistance of our high altitude porters such that we were now in a good position to explore the southern arm of the Mulung Glacier. Unfortunately, Adele was feeling unwell at this point so she and Gus descended back to BC to recuperate while we others climbed up to



ABC at 4,525m, M15 on far right

the left of the glacier to avoid a series of ice cliffs. Once above the cliffs an easy traverse wound its way through a heavily crevassed region until reaching a prominent buttress below



Drew crossing crevasses *en route* to High Camp

M15 that we thought might be suitable for a high camp. With the weather continuing fine at this point we repeated the ascent on 13th September but by now we had decided that one or more peaks higher on the southern arm cirque offered a greater chance of success than the original objective. Hence we climbed further onto the glacier until reaching a flat plateau at 5,085m which was ideal for a high camp.

Inclement weather over the following two days confined the top party to ABC but an improvement on 16th September allowed myself and Drew to investigate the valley leading to the foot of M11, while Gus and Adele returned with

the high altitude porters. Taking a slightly descending traverse it was possible to scramble to near the foot of the glacier descending northwards from the peak. Although steep, we deemed it eminently climbable as the glacier appeared to continue all the way to the summit. However, with about 1,000m of ascent it would be a long day so we put it on hold should we have sufficient time to attempt it later.



Heavy snow at ABC



Drew, Adele & Mike at High Camp, 5,085m

After so much poor weather we were now keen to push on to High Camp, so with the help of our high altitude porters, we moved up on 17th September, although deep snow had made the route significantly more arduous than on our previous visits. Keen to make the most of the short spell of improved weather Mike and I beat out a trail to the foot of our chosen peak (PK5631; height estimated from Google Earth and map contours, but some of the team considered that it might be higher) on 18th September, passing another potential objective (PK5557) *en route*. Duly accomplished, Mike, Drew and I set out the next day intent on completing the climb *via* its north ridge/face. Unfortunately, it was not to be. Extreme cold and deep post-holing on steep ground with the threat of possible avalanche eventually forced a retreat at somewhere around 5,328m. Walking back to camp we could see Gus and Tony making better progress on PK5557 (Aari Dont, *aka* Saw Tooth in Hindi) and they later reported that



Drew & adele completing the second ascent of Aari Dont, Chilh Point behind

after reaching the col (Aari Dont Col, 5,480m) *via* the north couloir Gus then went on to make the first ascent of Aari Dont (5,557m) itself *via* its NW ridge.



Adele joins Gus and Tony after the 1st ascent of Aari Dont, 5,557m

On 20th September Mike, Drew, Adele and I successfully made the second ascent of Aari Dont *via* the same route. While the other two descended to High Camp, Mike and I were attracted to the mixed NE ridge of the point just beyond Aari Dont Col. This we climbed at Alpine Grade AD to reach the compact rocky

summit at 5,537m. Two eagle-like birds flew over as if to celebrate our climb so we chose to call this Chilh Point (*aka* Eagle Point in Hindi). Two 25m abseils took us back to the col from where we too descended to High Camp.



Derek on the second pitch of Chilh Point, 5,537m

By now those that had been above BC for 10 nights were looking forward to some home comforts so on 21st September we chose to descend to BC in one long, single push. With time (and energy) beginning



Heavy snow at BC

to run short the high altitude porters cleared the upper camps the next day in what turned out to be remarkable good timing. Heavy snow set in as they returned to camp and continued overnight. So much snow fell in fact (some 40-50cm) that three of the BC tents were destroyed. With weather forecasts predicting more heavy snow we could envisage no way that the horses would come up the next day so we made the unanimous

decision to abandon camp and return to the valley while we still could. Taking only what was considered essential, both the team and our support staff then endured an arduous 13-16h, 25km descent to Ating in what can only be described as trying conditions. It was a relief to reach the first occupied house where we were immediately offered shelter for the remainder of the night.

The following day we managed to arrange transport to Padum only to find that a vast area had been affected by the unseasonal conditions and that many trekking parties were trapped and requiring rescue. Moreover, the local police informed us that the Pensi La was closed so there was no way yet that we could return to Leh. The road from Manali to Kullu was similarly affected by deep snow so we were not alone in our plight.



The bear ravaged camp

Two days later the road over the Pensi La was cleared and we were able to continue our journey, arriving in Leh in time to catch the return flight to Delhi and thence home. Our equipment was not so lucky. When Rimo staff were finally able to return they found that hungry bears had ravaged the camp in their search for food and that all of the bags and some soft materials had been destroyed. At the time of writing the full extent of the damage is unclear, but hopefully most equipment will be salvageable.

Future opportunities in the region:



Panorama showing the north rim of the South Mulung Glacier

As far as can be determined very little has been climbed from the Mulung Glacier. Hana's Men Peak (6,191m, M19), high on the northern side of the main western branch, is known to have received at least two ascents from the Hagshu Glacier side,⁵ but certainly no other of the mountains recorded by Kimikazu Sakamoto during his 2016 visit. The southern glacier appears to be entirely unknown. Bordering the headwall are numerous impressive rock ridges towering some 800m or more above the valley. For those willing to endure the unattractive approach these could be challenging objectives. PK5631 is definitely achievable given the right conditions, as is M11 from a camp based somewhere near where we placed our ABC.

Conclusion:

Zanskar has many unclimbed peaks to suit all tastes and styles. We simply sampled what was on offer in the Mulung Tokpo under what were clearly less than optimal conditions. I have now visited three of Zanskar's valleys, the Pensilungpa, the Korlomshe Tokpo and now the Mulung Tokpo. There are many others available for those wishing to investigate the numerous opportunities.

Bibliography & Notes:

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3. Derek Buckle, *Alpine Journal*, 82-89, **120**, 2016
4. Kimikazu Sakamoto, Academic Alpine Club of Kyoto, 2016, Asian Alpine e-News, No.4, 42, 2017
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Glossary:

Indian names vary widely in their spelling, presumably reflecting the phonetic translations used by cartographers and regional languages/dialects. We have used those employed on the Survey of India maps wherever possible. Given heights are also those used on the 1:50,000 Indian Survey Maps where available. Other heights were determined by GPS measurement.

Gompa is a monastery

La signifies a pass

Nala, *Lungpa*, *Tokpo* & *Phu* all imply a river, stream or valley, but other terms are also used

Maps:

The most readily available map is the Leomann 1:200,000 Indian Himalaya Map, Sheet 2, Jammu & Kashmir, which can be obtained from Stanfords, 12-14 Long Acre, Covent Garden, London, WC2E 9LP, www.stanfords.co.uk. Also available from the same vendor is the 1:150,000 Editions Olizane map covering Ladakh & Zaskar North. A 1:175,000 Ladakh & Zaskar Trekking map is published by Milestone Books as part of their Himalayan Series and is available from Amazon, www.amazon.co.uk; ISBN: 9788190327091.

An electronic version of the Russian 1:200,000 map, 200k-i43-23 is held by the Alpine Club, 55 Charlotte Road, London, EC2A 3QF, www.alpine-club.org.uk and is also available free on-line.

Satellite images are freely available from Google Earth, www.googleearth.com

Sponsors & Supporters:

The expedition was supported by the following sponsors to whom we are especially grateful:



Montane Alpine Club
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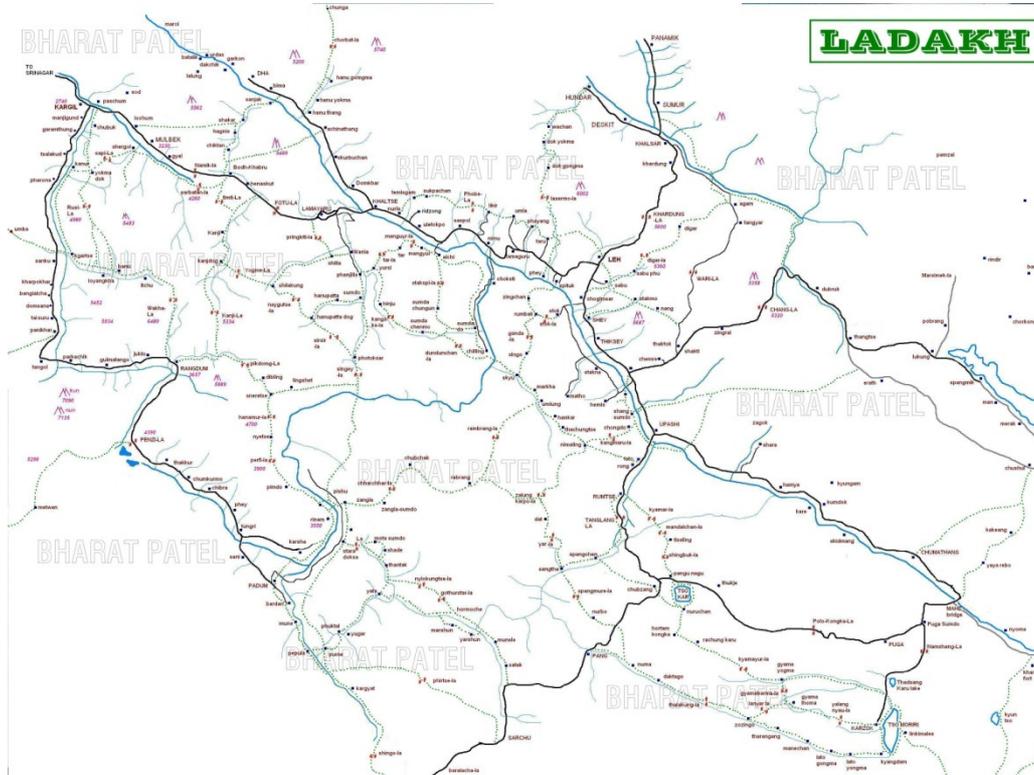
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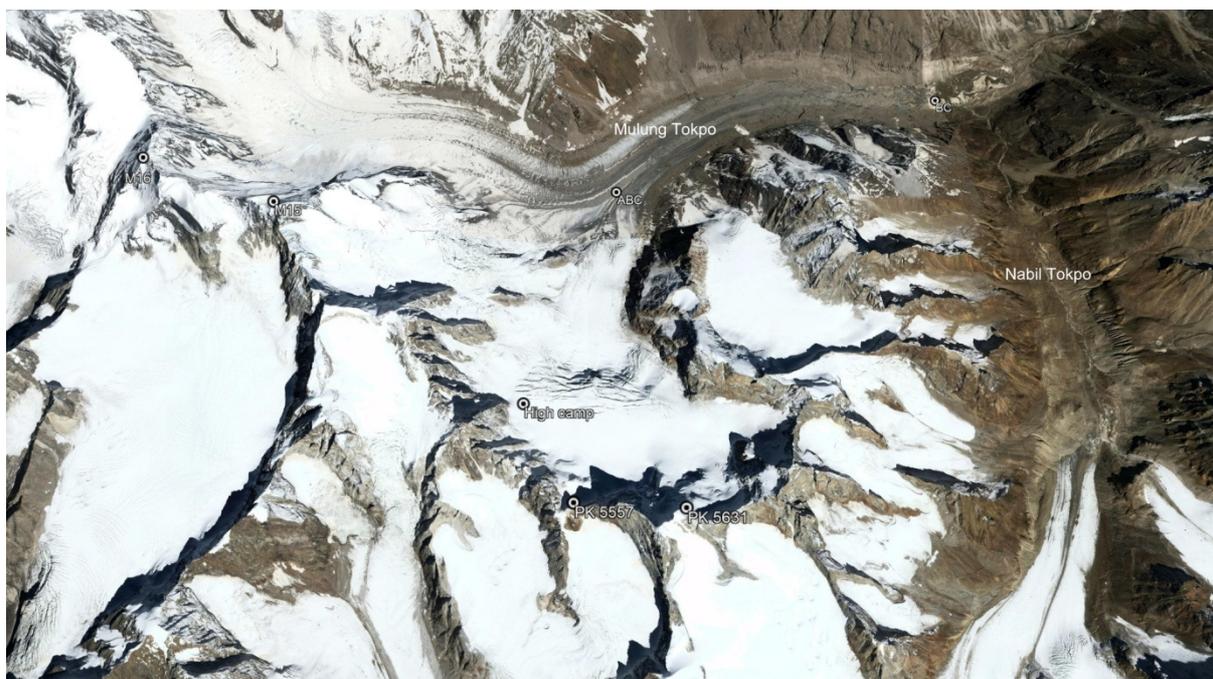
The Gorge Outdoors

Appendix 1

Appendix 1a; Ladakh map showing route from Leh via Kargil and the Pensi La to Padum. Ating and the Mulung Tokpo lie just to the NW of Padum



Appendix 1b; Google Earth satellite image of the Mulung Glacier with camps and objectives annotated



Appendix 2

Daily Itinerary:

Thursday 30 th August	Team flew overnight from the UK to Delhi.
Friday 31 st August (Ashok County Resort, Delhi)	Whole team assembled in Delhi to meet with the IMF and Liaison Officer
Saturday 1 st September (Kanglachen Complex, Leh)	Team flew from Delhi to Leh (3,500m) with LO to meet Rimo representatives and confirm onward plans. Afternoon spent in Leh
Sunday 2 nd September (Kanglachen Complex, Leh)	Majority of team visited the 500 year old Matho Gompa in the foothills of Stok Kangri as part of a gentle acclimatisation day
Monday 3 rd September (Kanglachen Complex, Leh)	Acclimatisation day in and around Leh. Most of team made a gentle walk to a 4,026m high hill top overlooking Leh
Tuesday 4 th September (Zojila Residency, Kargil)	Whole team departed for the drive to Kargil (2,700m), stopping at the Lamayuru Gompa <i>en route</i>
Wednesday 5 th September (Ating Camp)	Continued drive to Ating (3,640m) <i>via</i> Rangdum and the Pensi La to meet up with our Rimo support staff
Thursday 6 th September (Sampuk Camp)	Started the trek up the Mulung Tokpo to camp at Sampuk (4,000m). A double carry was necessary for 11 horses to transport all equipment
Friday 7 th September (Nabil Tokpo Camp and BC)	Continued the easy trek up the Mulung Tokpo to establish BC at the junction with the Nabil Tokpo and close to the glacier snout at 4,188m
Saturday 8 th September (Base Camp)	Fully established BC while team explored various routes to the main glacier by way of the left and right lateral moraines
Sunday 9 th September (Base Camp)	Further exploration to establish optimal route to the upper Mulung Glacier
Monday 10 th September (Base Camp)	Heavy rainfall overnight before leaving a clear morning. Sorted gear in readiness for transfer to higher camps
Tuesday 11 th September (ABC)	With the help of our HAPs the whole team transferred to our planned ABC on the true right lateral moraine at 4,525m
Wednesday 12 th September (ABC, BC)	Adele and Gus returned to BC while others explored the left branch of the Mulung Glacier to identify possible sites for higher camps
Thursday 13 th September (ABC, BC)	The ABC team continued to explore the Mulung Glacier, eventually deciding to change the primary objective to one or more peaks bordering the left hand glacial cirque
Friday 14 th September (ABC, BC)	Heavy snow confined team to camp while support team delivered additional food for a more prolonged stay above BC
Saturday 15 th September (ABC, BC)	Another day with poor visibility resulting in the team being confined to tents.

Sunday 16 th September (ABC)	Two members of the team explored the valley leading to the glacier beneath M11 to establish the viability of access <i>via</i> this route. Adele and Gus transfer back from BC with the high altitude porters
Monday 17 th September (High Camp)	With the help of our HAPs the whole team transferred to a high camp on the plateau of the left glacial of the Mulung Glacier at 5,085m
Tuesday 18 th September (High Camp)	Two of the team established a track in deep snow to the foot of our newly selected target peak(s) at a height of 5,218m
Wednesday 19 th September (High Camp)	Three team members attempted PK 5631 following the previous days' tracks but aborted around 5,328m on account of deep unconsolidated snow with the threat of avalanche and extreme cold. Gus and Tony forged a route to Aari Dont Col from where Gus went on to make the 1 st ascent of Aari Dont (5,557m) <i>via</i> its NW ridge
Thursday 20 th September (High Camp)	Derek , Mike, Drew & Adele repeated the ascent of Aari Dont by the same route after which Derek & Mike made the first ascent of the mixed ridge leading to Chilh Point (Eagle Point, 5,537m) before returning back to High Camp
Friday 21 st September (Base Camp)	The whole team returned to BC in a long single push
Saturday 22 nd September (Base Camp)	Team rested at BC while HAPs cleared upper camps in preparation for leaving the valley. Heavy continuous snow set in while they were descending
Sunday 23 rd September (Ating hamlet)	Substantial snow fall overnight resulted in the destruction of three BC tents and necessitating immediate, urgent abandonment of the camp. With no possibility that horses could assist the evacuation both team and support staff descended carrying only essential gear for the 13-16h, 25km arduous descent to Ating
Monday 24 th September (Chamling Kailas Hotel, Padam)	With deep snow affecting the whole area the team relocated to Padam to await re-opening of the Pensi La and the opportunity to return to Leh
Tuesday 25 th September (Chamling Kailas Hotel, Padam)	Members of the team visited the old Palace in Padam while awaiting news of snow conditions on the Pensi La
Wednesday 26 th September (Zojila Hotel, Kargil)	With the pass now open the team drove from Padam to Kargil
Thursday 27 th September (Goba House Residency, Leh)	Continued the drive to Leh for discussion with Rimo concerning the retrieval of our abandoned equipment
Friday 28 th September (Ashok County Resort, Delhi)	Whole team flew from Leh to Delhi for our final briefing with the IMF before returning home
Saturday 29 th September	Team returned to Europe

Appendix 3

GPS Coordinates & Heights of Key Locations

Location	N coordinates	E coordinates	Height	Comment
Ating Camp	33°34.677'	76°44.114'	3,640m	5/9/18, Trek start
Sampuk Camp	33°32.091'	76°39.078'	4,000m	6/9/18, Intermediate camp
Base Camp	33°30.592'	76°36.074'	4,188m	7/9/18, Nabil Tokpo
High point on true right moraine	33°30.406'	76°34.584'	4,370m	8/9/18, Mulung Glacier
High point on true left moraine	33°30.368'	76°33.921'	4,450m	9/9/18, Mulung Glacier
ABC on right lateral moraine	33°29.915'	76°33.577'	4,525m	Established 11/9/18, 4km from BC
High point on Mulung Glacier left branch	33°29.052'	76°32.875'	4,920m	12/9/18
Potential site for High Camp on Mulung Glacier left branch	33°28.516'	76°32.795'	5,090m	13/9/18
High Camp	33°28.474'	76°32.826'	5,085m	Established 17/9/18 on Mulung Glacier left branch
High point reached from High Camp	33°28.173'	76°33.633'	5,218m	18/9/18, Track made towards target peak
High point reach during attempt on PK 5631			5,680m	19/9/18
Aari Dont Col (<i>aka</i> Saw Tooth Col in Hindi)	33°27.856'	76°32.968'	5,480m by GPS	19/9/18, 1 st ascent by Gus Morton & Tony Westcott
Aari Dont (<i>aka</i> Saw Tooth)	33°27.875'	76°33.060'	5,557m by GPS	19/9/18, 1 st ascent <i>via</i> N face & NW ridge, PD, by Gus Morton
Aari Dont (<i>aka</i> Saw Tooth in Hindi)	33°27.875'	76°33.060'	5,557m by GPS	20/9/18, Second ascent <i>via</i> N face & NW ridge, PD, by Derek Buckle, Mike Fletcher, Drew Cook & Adele Long
Chilh Point (<i>aka</i> Eagle Point in Hindi)	33°27.844'	76°32.940'	5,537m by GPS	20/9/18, 1 st ascent <i>via</i> NE Ridge, AD, by Derek Buckle & Mike Fletcher

Appendix 4

Weather and Conditions:

As a desert area, Zanskar is normally dry in September with very little precipitation. 2018 was different. This year vast swathes of the area from Manali to Kullu and Padum to Rangdum were inundated with exceptional and unprecedented snow precipitation. We experienced only six days without some precipitation during our time at BC and above, which severely hampered our exploration and climbing. The resulting snow was deep and un-compacted, resulting in deep post-holing on both flat and inclined slopes alike. During our time climbing there were relatively few obvious avalanches, but they were very much in evidence when we abandoned BC to return to the valley in a storm. The serious conditions affected many groups of trekkers in the Padum area, causing some to require rescue and other to forego their planned trips. Due of closure of the Pensi La, Padum was isolated for several days, although early on helicopter evacuation was possible until this option was curtailed on account of a mechanical fault.

Appendix 5

Flora & Fauna:

Zanskar is a desert area and little vegetation exists away from close proximity to the major rivers. The Mulung Tokpo itself essentially constituted a barren landscape with generally sparse vegetation. There was little evidence that local villagers ascended high in the valley to graze cattle, but presumably they did in the lower reaches. Tracks suggested that foxes and possibly snow leopards inhabited the glacial regions but there were no actual sightings. Two eagle-like birds crossed the summit of Chilh Point as we were descending and thus gave the name to this high point, although it is likely that these were Himalayan Griffons. The Suru and Doda Vallies are a haven for marmots and we saw many *en route* to Ating. From the devastation of our evacuated base camp bears clearly inhabit the upper reaches of the Mulung Tokpo but we did not see any.



Himalayan Griffon

Appendix 6

Geology:

The major rock type in the Mulung Tokpo appears to be granitic, often of a coarse grained pegmatitic variety. In regions there are extensive deposits of garnetiferous rock with large intrusions, although the quality of these semi-precious stones is poor. Rock climbing opportunities do seem to exist for those adventurous enough to attempt the impressive ridges that characterise much of the South Mulung Glacier.