'Ski The Pamir' Expedition Final Report

MEF reference: 19-05 Expedition Leader/Organiser: Ryan Taylor Address: Korumu4.11-201, 11-9-13, Hiragishi 4-jo, Sapporo Shi Toyohira Ku, Hokkaido, 062-0934, Japan E-mail address: <u>ryan.nz.taylor@gmail.com</u> Mobile: 08025555034 (Japan)

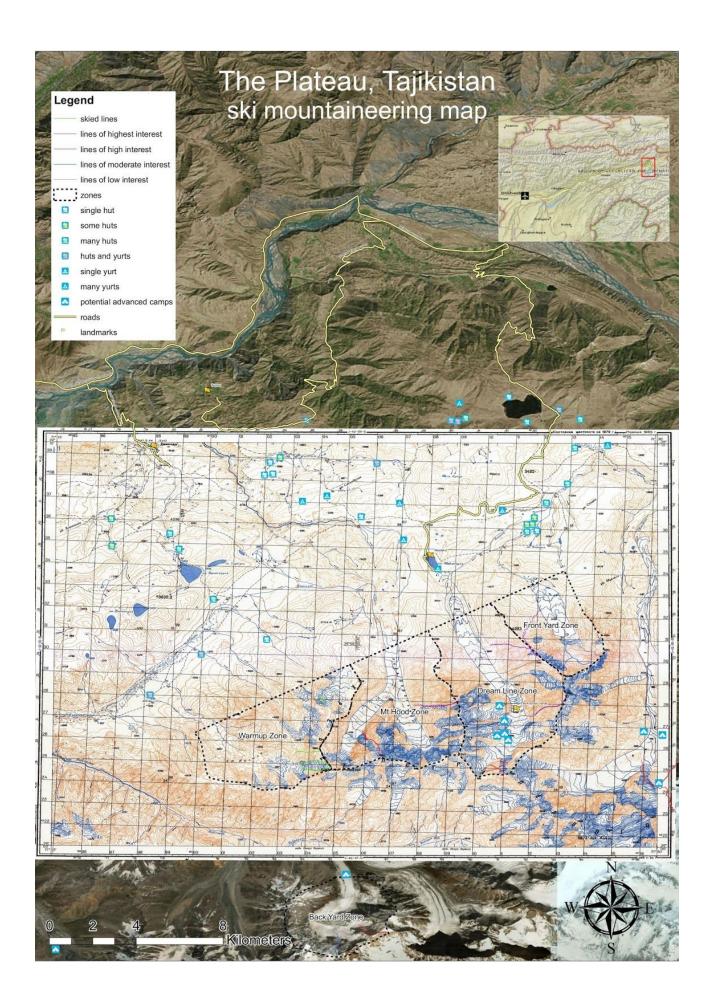
Names of all expedition members, indicating leader, climbing members, and support:

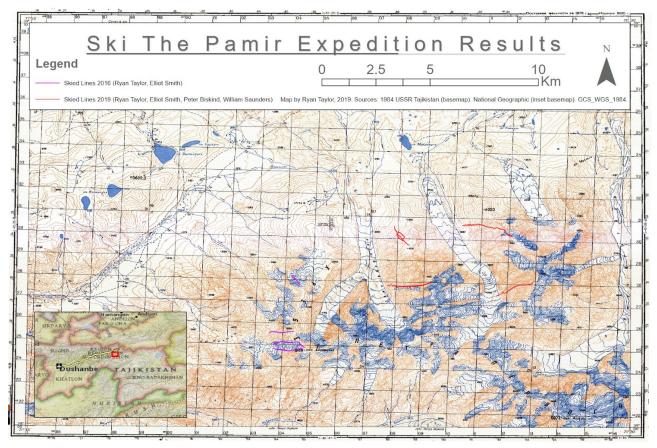
Ryan Taylor, Elliot Smith, Peter Biskind. William Saunders participated as a photographer but received none of the grant money.



Original objective(s) of expedition:

Peaks in the area are mostly unnamed. The peak heights I will refer to are from the 1984 USSR topomap series. In the MEF application, a map was submitted showing lines skied in the 2016 expedition and potential ski lines for the upcoming trip grouped by 'level of interest'. All 3 ski lines in the category of 'highest interest' were skied including another, lower altitude set of gullies that were skied early in the trip and considered 'warm-up' lines. All of these described lines are on this maps pictured below aside from a small hillside we skied next to the hut. 1st is the aforementioned map submitted in the original application followed by a map of skied lines from both the 2016 and 2019, MEF funded, expedition.





Higher quality versions of these maps will be provided as attachments or Google Drive links where files will be temporarily available for download. - If these links ever stop working, please contact me and I will get you the files.

Overall dates of expedition:

1st May - 25th May 2019 (with several days preparing, shopping/ recovering either side.) After arrival by 4WD we stayed the night in the village of Jilandi on the 1st. On the 2nd we approached basecamp with the help of 3 villagers, 2 horses and a donkey. 25th of May was spent traveling down from basecamp to Jilandi and driving back to Dushanbe in the same day. In between these times we were mostly at our basecamp which was a mud hut or 'dom' as the locals call them. We made different missions to ski various objectives described in the following section.

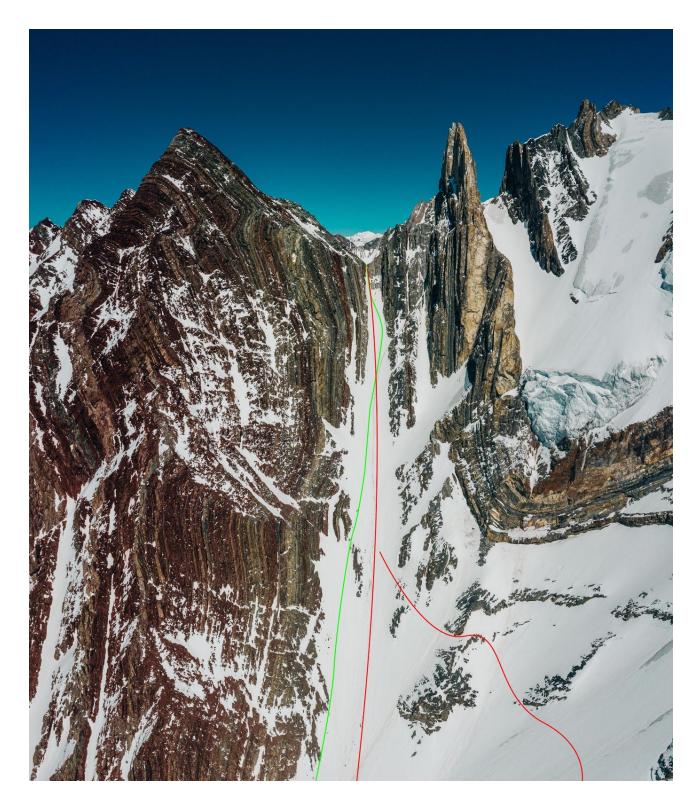
8 - Detail for each route climbed or attempted:

Names of the skied lines can be found in the .KMZ file that was linked to in the original application. The link to this file will be again provided in the email this is attached to. In the attached images, Green indicates our ascent route and red are our descent route/routes.

- The 1st objective skied was the N facing gullies on peak 4518m(39.075300° 71.407519°) on the 4th of May. Ascent from point 8936m was an easy walk/ tour. After a few days of acclimatization at our basecamp at 3300m we skied this peak in a single push. We left basecamp (39.136677° 71.376621°) around 11am resulting in a descent in the afternoon light and skiing the low angle terrain back to basecamp once the crust had reformed during sunset. We had perfect weather and only a light breeze at times. The upper section of the face was 15cm of powder in the loaded gully features and spring skiing lower down. See image below:



- The 2nd objective skied was the 'Warp Couloir', a large, obvious couloir that is skiable all the way from the ridge line immediately S of peak 5150m (39.059362° 71.415876°). On the 5th of May, we left basecamp to make a camp in rolling, snow covered moraine (approx 39.093244° 71.392791°). We started touring to the base of the couloir just before sunrise as it was W facing (6th of May). We did not use any of the glacier gear that we brought with us as we were able to approach the couloir easily on the moraine. Once in the couloir, we climbed on the skiers right to avoid some exposure to the large serac above. From the top of the couloir, 2 of us skied straight down the middle of the couloir while Peter and I traversed under the serac after skiing the upper section to then ski a wind loaded spur back down to the valley floor. That afternoon we rested at camp and waited for the crust to form before skiing back in the sunset. We had perfect weather with no clouds and wind. See image below:



The 3rd objective skied was 'The Shield' (39.079370° 71.449362°). - A shield shaped glacier on the N face of 5105. We made a camp next to the glacier moraine on the 9th May(approx 39.091950° 71.425269°). We started very early to make the descent on the following day, the 10th. We cramponed up in perfect cramponing conditions to the saddle (39.086639° 71.442752°) below the glacier. From here we could not climb next to the hanging terminus of the glacier as planned so we were forced to climb directly up the ridge to gain the glacier. This ridge was very chossy and we should have simply climbed the gully feature that was the lower section of our eventual ski descent. Near the summit of the skiing we found 2 old pitons stamped '61 and '69 (dates of historical russian expeditions). We skied the line in cloudy conditions. Elliot turned back a few hundred m from the summit due to cold feet and descended by himself. We were all back at camp around 1pm and rested

for a few hours. During this time large clouds formed. We crossed over the glacier and stashed some gear for the next objective that would be further up the glacier. See image below:



The 4th and final objective skied was 'The Dream Line' (39.058643° 71.456847°) on peak 5574m (39.062777° 71.462169°). We left basecamp on the morning of the 15th May for a camp below the icefall (39.076160° 71.427250°). The following day we spent 8 hours climbing the centre of the icefall that turned out to be very challenging. Eventually we made camp at (39.054220° 71.441150°) immediately below the objective. We then waited many days in tents to sit out a storm and 40cm of precipitation accompanied by strong winds. On the 20th we got a window to ski 'The Dream Line' and had great success from a 1am wakeup time and departing camp around 2:30am. We climbed directly up and skied back down in perfect weather and no wind. I skied the entirety of the line, only stopping once. The top 1/3 of the couloir was powder condition and the others told me someone managed to trigger a reasonably large slab at the top while skiing a convex roll that I avoided. Will hurt his knee on the way down but not too badly. We all made it back to camp safely. The following day, the 21st, we were out of food and almost out of fuel so decided to head back down through the icefall before the next forecasted storm system. I wanted to ski another line but the others were not keen and Will was injured so we made the logical decision to head down during the morning of the next day. It took 7.5 hours to get back down through the icefall and we made it back to basecamp just after sunset. This was the last line of the expedition as the extended forecast showed heavy precipitation for several days. A few days later, we decided to head down when the forecast did not improve. We got reception on the hilltop above our hut and called our driver to coordinate the locals to pick us up ASAP. On the night of the 24th, the locals arrived and in the morning we departed via the way we came up at the start of the trip. It was great to stop at the Obigarm hot springs on the way back the city where we had our 1st showers of the month. See image below:



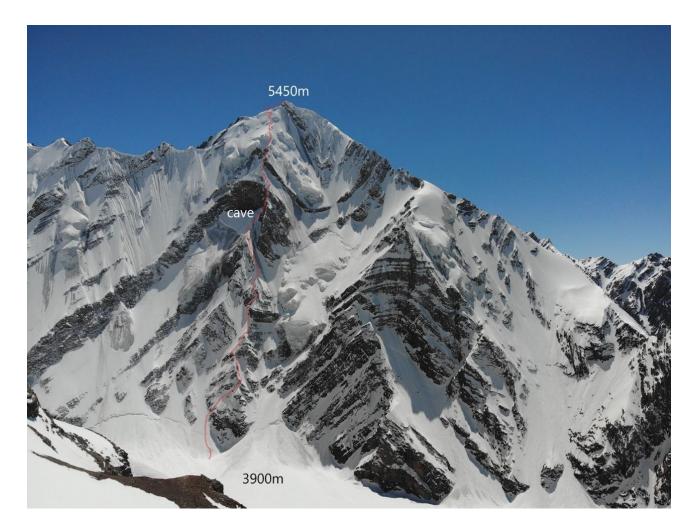
New route suggestions:

Most of the rock is highly folded and deformed sedimentary rock, mostly sandstone with varying amounts of limestone/ calcium carbonate and mudstone mixed in. Although heavily folded, the rock is of a low grade metamorphism however I noticed that axis of a fold was schist, a much higher grade of metamorphism. In the moraine of the glacier, I found some plutonic igneous rock but did not see any outcrop of this in the mountains above. The rock in the vicinity of 'The Dream line' was by far the highest quality that we encountered.

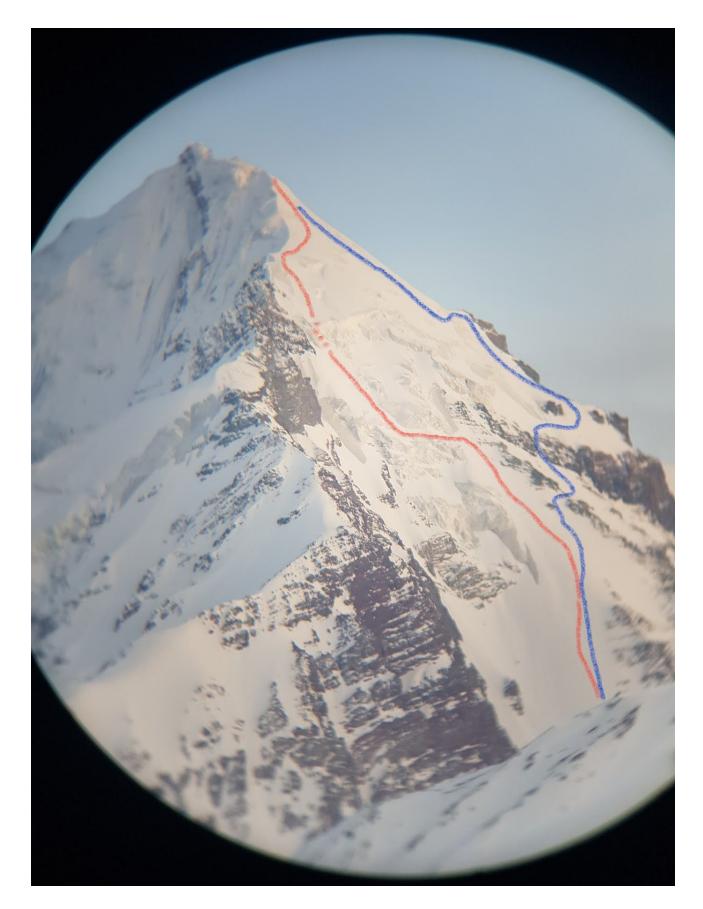
The rock spires are generally sandstone with varying amounts of calcium carbonate, I believe that the paler areas of rock are richer in calcium carbonate. Darker areas of rock are mostly chossy mudstone and eroding away (which produces the spires).

I think there is some potential for climbing on the rock spires on rock of decent quality. However, there were certainly areas of very chossy rock in areas where the rock is the darker mudstone. For this reason, I think the best climbing aside from the prominent spire above the 'Warp Couloir' is probably mixed routes where there is more snow and ice.

Here is a suggestion for a mixed route that I really liked the look of on peak 5468m (39.037275° 71.384004°) The image was taken from the top of the 'Warp Couloir':



On the NW face of peak 5468, there is also potential for a 1600m vertical steep ski descent. The idea below is what we would have skied next if the weather had held. The red line is what we would have attempted if the face was in good condition and blue would have been the back-up option. Note, it is drawn on the original application's map as a line of 'high interest':



There are many other ski descent options in the area that are noted on the original map provided in the application. All the lines of 'high interest' are still very interesting to me, however, it is important to note that 'The Dream Catcher' ski line is now cut off where the glacier enters the gully and terminates as a hanging serac (39.071859° 71.447149°), probably recently due to glacial recession. It would have been possible to climb around it and potentially ski around it but serac fall had destroyed the snow in the entrance/ exit gully.

I would also assume that over time, access may become more difficult up the icefall (39.058243° 71.440958°). Access up here required 8 hours of navigating and climbing 2 unstable ice walls. On the true left of the glacier, there is a snow covered ramp system that bypasses the icefall (blue), but it requires climbing more vertical, exposure to serious fall, seracs and avalanche hazard. There is also a variation in green that takes a narrow snowy couloir and minimises exposure to seracs (green). The top of the rock spur in the middle of the route offers a safe campsite. The red line is the route that we took on the ascent and descent. Purple is another option but is exposed to rockfall from sunrise, however, it is probably the fastest route as it avoids much of the icefall. Like our route in red, on the way up, purple route has a high chance of taking time to climb over unstable ice walls. See images below:





There are many large, heavily glaciated peaks above the icefall that we intended to ski but did not have the opportunity due to the short weather window we received (we only skied 'The Dream Line'). There is a beautiful peak with a steep, glaciated face I wanted to ski that I call 'The Lobster' in the original application and was on the 'high interest' list for this trip (visible at the head of the glacier in the 1st of 2 images just above this paragraph). Another way to access the glacier above the icefall would be from the head of the adjacent valley to the east or the large, more remote valley system to the south.

Imagery and Maps:

There are 2 sets of Google Earth Imagery for this area. One is quite overexposed and snowy while the other is slightly underexposed summer imagery which is fantastic for showing the more detailed features of the terrain.

The Soviet military maps of Tajikistan are quite good. In 2016, we were able to purchase some online. However, there is an app on the Android store called 'Soviet Military Maps' and other, Russian apps that have the same maps of this area and most of the Pamir Mountains.

I suspect that glaciers may be receding here especially in terms of volume. The terminus of the glaciers' ice is often much taller than the glacier immediately upstream, this giv the idea that the glaciers may be receding to leave their terminuses behind. We didn't have any issues with navigating moraines as they were quite small (compared to New Zealand) and still mostly covered in snow.

Images of glaciers for future comparison:

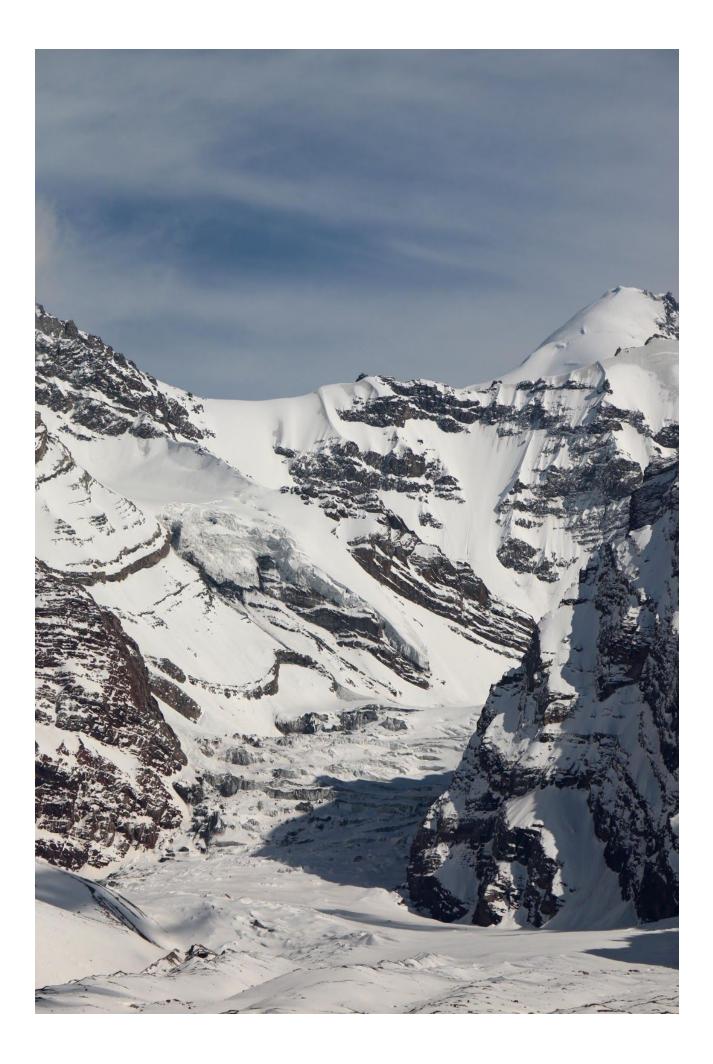
Below is a drone shot of the dangerous icefall captured on 20190515. Our route was up just lookers right of the middle:



This photo is another drone shot taken from further away, the day after on 20190516:



Below is a photograph of the icefall from the previous expedition captured on 20160520. As this image suggests, it is not actually possible anymore (or when we were there at least) to avoid the icefall on the true right side because of large walls of unstable ice:



Access:

We accessed this area from the village of Jilandi. Vehicle access is possible until here. Above here, in early May, there is a lot of snow above Jilandi (2300m). During the 2016 expedition, it was a very low snow year and the consistent snow line was around 3400m but the roads above Jilandi were still blocked with snow drifts. Even if the roads are clear of snow, the villagers will probably be very hesitant to let you use them because they are maintained by hand. During the end of the 2016 expedition (late May) we saw a 4WD driving on the plateau near out basecamp at 3300m. As none of the villagers speak enligish I tried to call ahead to organise logistics with the help of a russian-speaking friend. They villagers did not speak very good russian either so after arrival in Dushanbe, Tajikistan, we had the hotel owner at 'City Hostel' call ahead for us.

This recent expedition was the exact same time of year as the previous expedition however it was a much better snow year with the snowline being several hundred m lower. This made using horses to carry our gear to basecamp very difficult as we had to follow the crests of wind stripped, south facing ridges to avoid the horses sinking into the snow. The locals were very skilled at navigating the terrain and seemed to know it very well. 2 of the locals that guided us were hunters and were able to easily understand the map that I showed them. On my map I had marked out the mud huts visible on satellite imagery. Once it got too snowy for the horses to progress further, I pointed to a nearby hut on the map and tried to communicate that we wanted to stay there. The locals only speak Tajik and a few of them understand some Russian.

There is also a village called Sughat. This village, on the eastern side of the ravine that divides the plateau, may be better for accessing the E side and the valley that leads to the 5900m Peak Agassis. We never went to Sughat village or Peak Agassis.

Permits:

We visited the 'Central National Parks Office' in Dushanbe and asked if we needed any permits or if we were in a National Park. The assistant director told us that we were, in fact, climbing in a national park however he did not have any map of the park. On arrival in the town of Jirgatol we paid a nice man in uniform \$100USD for our 'permit'. This man also did not have a map of the 'National Park' we were in but told us we were getting the 'local's price'. We received a slip of paper that was our permit.

We paid the locals/ our friends from the previous trip for transporting our gear to and from the village of Jilandi (end of vehicle access) via horse and donkey (price was 100TJS for a person and 150TJS for a horse or donkey). We also gifted them several hundred dollars of outdoor gear, cooking gear and a gel battery for a solar setup. We paid \$1000USD for the return 4WD transport between Dushanbe and Jilandi. - We probably paid way too much for our driver.

There is a significant lack of information accessible to especially english speaking, and all foreign tourists. We talked to Ed Rogers who is currently setting up a non-profit organisation to help with expanding tourism in the country. Ed's non-profit is called the Archa Foundation. His website will probably become a good resource for adventure tourism in the future.

Waste disposal:

This area is an agricultural area and used heavily by farmers and livestock when not covered by snow. Once the snow melts, there is animal crap all over the landscape. Therefore, we were mostly just crapping in pika (marmot) holes far away from water sources. It was challenging finding clean water near the mudhut as the whole area was covered in over a metre of snow when we arrived, so we were melting snow. Once the snow started to melt it was draining animal crap from the previous autumn. We washed our dishes in a stream that was a little brown and ended up getting sick for a few days. After that, we decided to walk an extra 100m from the hut to find a more healthy looking stream that was much less brown. Towards the mountains, on the opposite side of the plateau, the water is much cleaner.

The locals throw their plastic and trash into the wind. We decided it was best to burn our trash with some left-over gasoline as we suspected they would use the gasoline for their cars and possibly scatter our plastic trash over the landscape.

Accounts:

To be attached.

I am very grateful to MEF for making this expedition possible.

Many thanks,

Myan Jaylor

Ryan Taylor.