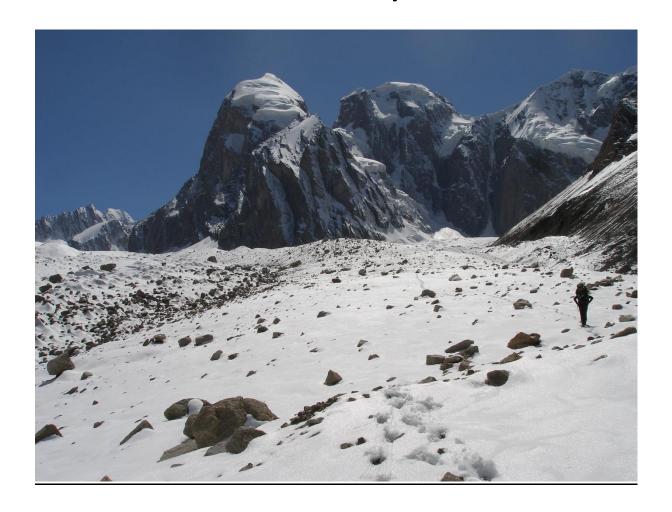
Little Poobah 2014 MEF – 14/13



3rd to 30th August 2014

'The compilers of this report and the members of the expedition agree that all or part of it may be copied for the purposes of private research.'

The Little Poobah, Western Kokshal-Too, Kyrgyzstan

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Acknowledgements

The 2014 Little Poobah expedition would like to thank;

- The Mount Everest Foundation for helping to fund the expedition.
- The Alpine Club and First Ascent for helping fund the expedition.
- The Alpine Club Symposium 2012.
- The I.T.M.C. for logistics support and Sergei (driver).
- Alpkit for loan of 2 tents during the expedition.
- The KCLMAC Sarychat/Fersmana 2011 expedition and Grand Poobah
 2005 expedition for excellent MEF reports.
- Needlesports for the discount of equipment.
- C. Dye for proof reading the report.
- Dr. B. Sloan for advice (on demand!) Mrs J. Liddell as co-ordinator.

1.0 Background

The Alpine Club symposiums provide an excellent way of absorbing knowledge and experience of other mountaineers in the space of a few hours, rather than months of researching. The Mountains of the ex-USSR symposium proved to be so inspiring that night time winter mountaineering in the Lake District straight after the lecture was called for! The Western Kokshal-Too area of Kyrgyzstan had particularly caught our imagination and the expedition began to take shape under the full moon over the wintery Lakeland fells back in December 2012.

The Alpine Club symposium enabled easy identification of a target valley thanks to the images and talk by Pat Littlejohn. The more inaccessible areas of the Western Kokshal Too appeared to host more unclimbed peaks and provide more logistical problems for establishing a base camp! Furthermore the recommendation of the I.T.M.C. as a logistics company proved to be excellent, as they were brilliant throughout the planning stages and the expedition itself. The high resolution Google Earth images were useful throughout the planning stages and went some way to making up for the large scale maps (1:125,000) available for the area. So a plan evolved for a relatively inexperienced team of 6 to visit the Fersmana valley in order to attempt unclimbed alpine peaks and rock routes up to 450m in a self-sustained expedition.

1.2 Expedition Members

Adrian Dye, 30



Adrian Dye is a former Geography teacher who lives in Barnsley and is currently studying an MSc in Polar and Alpine Change at the University of Sheffield. He has been climbing since he was 16 and in this time he has climbed all over the UK with several new winter routes to his name in the Peak District, Lake District and Scotland. He has also made several mountaineering trips to the Alps and Norway,

along with exploratory mountaineering expeditions to Bolivia and Alaska.

Scott Gillespie, 49



Scott is a train driver who lives in the flat lands of North East Lincolnshire. Despite this, he is an experienced UK winter mountaineer with routes up to V,5 and 1 new route to his name. His foreign mountaineering experience consists of 1 summer trip to the Alps and climbing Kilimanjaro. This was his first major mountaineering expedition to the greater ranges.

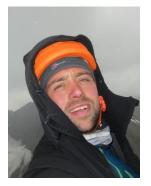
Ian Peachey, 23



lan is a geo-environmental engineer, roped access technician and outdoor instructor. He is an experienced caver, with 11 expeditions to Europe, North America, North Africa and Asia. He is an experienced explorer, with 2 scientific expeditions to the Alps and Iceland, traverse of the Lyngen Alps and solo trekking through the Ala Archa range. Whilst he has winter climbed in Scotland and a summer trip

to the Alps, this was his first major mountaineering expedition to the greater ranges.

Robert Middleton, 29



Rob is a roped access level 3 team leader. He is a highly experienced caver, with new discoveries in Derbyshire, Peru, Borneo, China and Crete. He has extensive UK mountaineering experience in summer and winter, with new routes on rock and ice. This has extended to 4 summer trips to the Alps and 1 to the Lofoten islands of Norway, as well as a new alpine route in Peru on a 5,000m peak.

Hannah Moulton, 28



Hannah is an IRATA level 2 Bridge Examiner. She is a highly experienced caver and has undertaken key organisational roles in exploratory caving expeditions to remote mountainous regions around the world, with new discoveries in Austria, Slovenia, Germany, Peru, Borneo, Crete and China. She is also a talented mountaineer, with trips to Lofoten, the Alps and Peru, as well as plenty of

Scottish Winter climbing. This was her first big mountaineering expedition.

Huw Goodall, 22



Huw is a freelance climbing instructor and chef, who is currently studying a Geology MSc at the University of Manchester. He is an experienced and talented climber, with summer and winter climbing experience in the UK as well as 2 summer trips to the Alps and a North American climbing trip. This was his first major mountaineering expedition to the greater ranges.

2.0 Expedition Objectives

To explore the Fersmana valley area on the east side of the Western Kokshal Too, Kyrgyzstan. Focusing on the climbing of;

New alpine rock routes on the faces either side of the Fersmana valley.

Point 4,870m

This appears to have an attractive snow/ice gully on the W face directly below the unclimbed summit (4,780m) according to the KCLAMC 2011 Fersmana/Sarychat glacier expedition report and photos. This may be possible if snow conditions permit.

Point 4849m and 4879m

Whilst these are in the Limestone area, which reports suggest is very poor, the difficulties look to be mainly on snow and should be around AD standard, perhaps easier. It seems that these peaks are unclimbed, as neither the ITMC nor Paul Knott (led first expedition to Fersmana) know of any ascents or exploration of this glacier system.

Subsidiary peak to the north of Fers III (5,210m)

This appears to have an attractive snow/ice gully on the NE face running up to the unclimbed summit (just below 5,000m) according to the KCLAMC 2011 Fersmana/Sarychat glacier expedition report and photos. This may be possible if snow conditions permit.

Pogrannichik (5,220m)

This was attempted by Paul Knott's expedition in 2005, but they retreated due to technical rock difficulties and suggested that an easier route of ascent may be possible from the Sarychat glacier side. This will be investigated during the expedition or the rock difficulties will be investigated, as from photos it looks to be a ~30m jamming crack which may be possible if it isn't iced up!

Little Poobah (5,481m)

This is the summit to the east of the Grand Poobah (Pik Biyeliy) (5,697m), which is divided by a deep (~400m?) col between the 2. Paul Knott's expedition concluded that there were no obvious easy lines of ascent, but there seems to be 3 main options which would require further reconnaissance when there;

1. South west couloir followed by west ridge.

This couloir on the south side of the peak furthest west benefits from a prominent buttress to the east that would provide some shade from the sun. The lower couloir looks to be ~40 degrees so would obviously be very snow conditions dependent! The west ridge would then be followed to the summit. A high camp at the col would probably be necessary.

2. The South buttress/ridge.

This looks to be a route that would provide some technical rock difficulties, although there are significant weaknesses and ledge systems along the reasonably angled ridge. These would be accessed via the snow /icefield below and then the right slanting weakness up to the ridge crest above. This line is probably unlikely given the south east aspect and unknown technical rock difficulties high up the buttress.

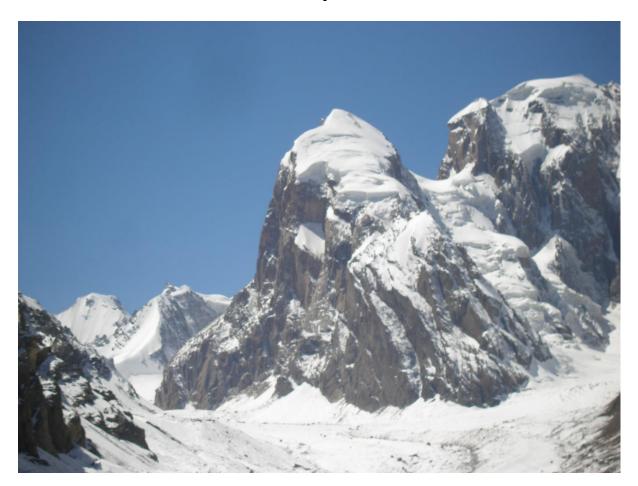
3. The NW flank.

This appears to be the least likely route of ascent given the various seracs threatening the route and reported poor snow conditions on northerly aspects. However, it may be possible to exploit some line of weakness on the NW flank.

Supporting objectives;

- To explore the high glacier basin with peaks 4,849m and 4,879m
- To make a photographic record of glacial limits in the area and assess the rate of glacial recession.
- To make a photographic record for lecturing and website use and identify other mountain peaks in the area for future expeditions.

Main objective;



Little Poobah, 5,481m

41°01′00 N, 77°29′20 E

This was accessed via 6WD UAZ from Bishkek to the north side of the Western Kokshal Too ($41^{\circ}08'41 \text{ N } 77^{\circ}27'27 \text{ E}$). Then over periglacial terrain and river crossings to the base camp at $41^{\circ}08'19N 77^{\circ}33'21E$.

3.0 Research

The initial research was conducted through the Alpine Club symposium and Pat Littlejohn, who recommended the I.T.M.C. as an excellent logistics company. The MEF reports from the 2005 Grand Poobah expedition and the 2011 KCLMAC Fersmana/Sarychat expedition were excellent resources for planning the expedition, as well as the high resolution images of Google Earth.

3.1 Maps

Russian maps are downloadable at 1:100,000 and 1:200,000 free from http://loadmap.net/en?q=38.4762%2073.3840&z=12&s=100000&c=41&g=1">http://m.loadmap.net/en/m18821. The American Alpine Club 1:150,000 map is generally more accurate and readily available from Needlesports. Both the Russian and American maps are of little use for mountaineering, but are useful for general travel and approach through the area. The Google Earth imagery is generally excellent resolution and from 2013.

3.2 Guidebooks - There are no guidebooks available for this area.

3.4 Permission and permits

A border permit was required for anywhere within 20km of the Chinese border. These were arranged by the I.T.M.C. at a cost of ~£100 and had to be shown at each border control post, so it is worth having at least 4 photocopies. Fortunately UK citizens currently do not require a visa to travel in Kyrgyzstan.

3.5 Transport

Flights were purchased from standard websites and went smoothly via Istanbul. Turkish airlines provided excellent food and 30kg baggage allowance for the hold with 8kg allowance for cabin baggage. Transport through Kyrgyzstan was in a Ural 375 with an excellent driver (Sergei) from the ITMC, with whom all the logistics were arranged. Sergei also had an excellent knowledge of the Ural and was able to fix any of the various problems that occurred through the journeys.

4.0 Expenditure and grants

Details	Cost
Flights from Manchester to Bishkek (via Istanbul with Turkish Air)	£550 each
Transport within Kyrgyzstan (Kamaz 6wd and driver)	£2,175
Food	£266.71
Satellite phone	£210
Medical and other logistics	£175
Border permit	£100

The Mount Everest Foundation kindly supplied us with a grant of £1,350.

The Alpine Club and First Ascent kindly supplied us with a grant of £700.

5.0 Food and cooking equipment

We took very limited supplies from the UK. Some Elevenses cereal bars, which provided good sustenance and also decent tea bags! There is a good supermarket just to the south of the train station, where most of our food was purchased at cheap prices. We investigated Osh bazaar, where we bought some supplies; spices, honey, almonds (2.5kg), peanuts (2kg), raisins (1kg), lentils (1kg), dried apricots (2kg). The remainder of supplies were bought at the supermarket: dried pasta (6kg), rice (6kg), smoked sausage, frankfurters, tins of tuna, pasta sauces, bulgar wheat, vegetables, chick peas, milk powder, noodle packs and kidney beans. The supermarket also had some excellent porridge sachets, which just needed hot water adding to them, as did the rather sweet 'MacTea' packets. A couple of the team fell victim to badly cooked eggs at one of the roadside cafés on the drive to Naryn, so were unable to fully enjoy the excellent food at the homestay.

A range of cooking equipment was taken to deal with any possible situations that arose. An Optimus multi-fuel stove provided the main cooking facilities and petrol was purchased in Naryn by the driver for us. This was supplemented by an MSR Pocket Rockets and a Jet-boil stoves, both of which proved to be very useful. The 25 gas canisters were purchased by the I.T.M.C. in advance, as they had to be ordered in from Israel. One canister had a faulty seal and the gas discharged when unscrewed from the stove, no other gas canisters did this. We used a total of 17 gas canisters and ~5 litres of petrol during the expedition.

6.0 Water

The team took no risks with tap water in Bishkek and drank bottled water for the entire time that we were in the city, as well as during the journey south and had enough water to stash at our drop-off point. The Western Kokshal Too proved to be challenging for finding clean water sources, given the glacial and permafrost conditions groundwater sources were fairly rare. Basecamp was sited next to the only clean and fresh stream in the Fersmana valley.

The primary method of water purification was a Platypus gravity pump with ceramic filter. This had a 4 litre capacity and took about 5 minutes to filter 4 litres. It was used throughout the trip without failure, and only slowed slightly during this time. It is highly recommended, though it must be noted that our primary water source was a clean mountain stream which was unlikely to have been a hard test for the pump.

Our second method was to use Chlorine tablets. This was mainly used as a backup method as they do not kill all water-borne illnesses.

7.0 Communications and technology

The Fersmana valley and the peaks around it are very remote. No mobile coverage was available. We therefore decided that a Satellite Phone would be an essential addition to allow rescue to commence. We hired one from globaltelesat.co.uk. This company was very good and saved us at the 11th hour as our original plan, to borrow a friends handset, failed to come through. The Satellite phone cost £210 with £500 deposit on top, and £160.80 for the sim card and plan for the borrowed phone, which unfortunately failed to materialise. In

the field, we used the phone for weather forecasts and for occasional home contact. This cost an additional £36.

We also took 2 solar chargers between the group which charged the usual collection of Ipods, MP3s and Kindles. One charger (Goal Zero Nomad 7) was also capable of charging the satellite phone, and of putting charge from pre charged rechargeable AA batteries directly into other electronic devices when the sun is not shining. This proved a very versatile piece of kit and is recommended to further remote expeditions.

Of note was the popularity of the Kindle amongst the team. The paperwhite models were particularly useful as they rarely need charging. Also worthy of a special mention was a MiniRig rechargeable speaker which succeeded in bringing cultural solace during the bad weather. Despite its small size, the volume and quality, as well as battery life (50 hours), were very impressive and could not be recommended enough.

8.0 Rescue Cover and Insurance

There is a Mountain Rescue Service in Kyrgyzstan. This is run by a co-operation of mountain guides and asks all expeditions to send their details and insurance details in advance so that credentials can be checked. Regarding insurance, following extensive research it became apparent that the only UK company which covered exploratory expeditions outside Europe was the BMC. While we are grateful that the BMC do offer this service, it did feel expensive at £392 each. One member used Austrian Alpine club insurance however having paid an additional premium on top of his membership to extend his insurance cover to exploratory mountaineering he was informed that "this should be ok ….. you will receive no further confirmation of cover" this was not particularly reassuring but at £40 (in addition to membership) it was cheap.

9.0 Group health and well-being

Following advice from doctors, it was decided that our rate of ascent at the start of the trip was quite quick to be sure of effective acclimatization naturally. It was therefore decided that the team would use Acetazolamide prophylacticly to ensure safe and effective acclimatization. No problems were encountered with this approach, although it is hard to know if any acclimatization problems would have been encountered anyway with natural processes. One amusing side effect of this approach is all team members reported crazy dreams! On the hill a small amount of emergency altitude medicine was carried by all team members as a precaution. See appendices for more information on medication and first aid.

Two members of the team suffered acute food poisoning on approach to the valley, probably from eating at a road side cafe. One member's food poisoning cleared up within a few days, however the other member was not so fortunate, and a dose of Ciprofloxacin was required a few days later to put a cork in it! This severely weakened the member in question, and he was not up to full speed for another week.

Antidiarrhoreal would appear to be an essential requirement in Kyrgyzstan and a third member also suffered on return to Biskek.

Other than food poisoning, the expedition was very lucky and had no major problems. One thing noted was the difficulty in acquiring Iodine tincture as a disinfectant due to new EU laws. Although other disinfectants are available, iodine is a tried and tested favourite amongst particularly caving expeditions.

Given the altitude of base camp ($^{\sim}$ 3,400m) exposure to the high altitude sun was clearly an issue and this was notably evident in Huw's change in complexion during his period of illness at the start of the trip. Whilst the air temperatures were relatively cold at base camp (8° C to 15° C during daylight), the solar radiation was strong and very useful for drying. Most of the team covered up and used sunblock, whilst others of a favourable complexion soaked the solar radiation up with relish. High factor (50) sunblock was used in the mountains.

10.0 Equipment and clothing

The team used a variety of boots, from old plastic boots to leather mountaineering boots and modern boots with integral gaiters. The main concerns were leather boots becoming damp in the wet snow, integral gaiters getting damaged in the moraine and old plastic boots 'breaking in the wearer' sufficiently for them to be worn over long periods. A variety of crampons were used and thankfully posed no real problems.

As the 3 pairs were planning to climb in Alpine style, each pair took out;

- 2 x 60m 8.7mm double/single ropes
- 10 extenders of varying lengths
- 1 set of mixed nuts and rockcentrics
- 1 set of cams
- 5 ice screws
- 5 slings
- 10m of abseil tat
- 1 snow stake
- 1 deadman

During the expedition to the Western Kokshal Too a range of weather conditions were experienced (see Weather section). The team mainly used a multi-layer approach and found that Primaloft jackets were best suited to the sometimes cold and damp conditions (rather than down jackets). Full waterproofs were often required in the periods of snowfall and given the wetness of the snow were much preferable to soft shell. Most of the teams sleeping bags were rated to around -5°C to -10°C, which proved to be adequate for base camp but a bit chilly for the higher camps on glaciers. Two members of the team took a double sleeping bag system with a lightweight inner bag that could be used on its own for misery bivys and a second thicker bag to ensure a comfortable night's sleep at basecamp.

11.0 Detailed account

Sunday 3rd August

Adrian and Scott depart Manchester airport, with a short connection in Istanbul before...

Monday 4th August

Adrian and Scott arrive in Bishkek at 5:00AM and are driven by an ITMC driver to the less than luxurious flat near to the ITMC headquarters. After an 'epic' power nap the exploration of Bishkek commenced, with altercations obtaining cash, fixing the leaks, turning on the electricity and difficulties navigating around the multi-named streets. Finding a desirable restaurant was proving to be a challenge, but we eventually overcame the first crux of the trip and settled into the excellent Taksim restaurant.

Tuesday 5th August

We made the most of some hard won navigational knowledge and pressed on to investigate the intriguing Osh Bazaar for buying some food supplies in the 35°C heat before returning to the Taksim restaurant for another excellent meal.

Wednesday 6th August

Huw and Peachey were delivered to the flat at 10AM by the ITMC. Once adjusted to the heat, shopping resumed at Osh Bazaar. Ice cream facilitated further acclimatisation before yet another excellent meal in the Taksim restaurant.

Thursday 7th August

Luckily Hannah and Rob arrived with all their baggage in time for us all to load up the UAZ 6 wheel drive, then fill it some more with a last minute supermarket shop before Sergei drove us out of the heat of Bishkek. Unfortunately this progress didn't last long before the truck came to a halt and Huw was roped into assisting Sergei in beating a pipe back into shape over the bonnet! Huw's fortunes continued to dwindle and a gamble on an undercooked egg from a roadside café proved to be a mistake as both his and Rob's digestive system made the first protests of the trip. Eventually we all made it to the home stay at Naryn and the food was excellent.

Friday 8th August

The journey south became progressively wilder; in remoteness, in roughness of the road and also in personal bodily functions for some. As we travelled south, horses took over from vehicles and yurts took over from buildings. Team psyche reached new levels as we passed the At Bashi range and progressed through two border check points and got ever closer to the Chinese border. At the last building the road disappeared and we appreciated the capability of the UAZ and Sergei's driving skills for the first time and certainly not the last! As we gained height from the check point at ~3,000m, the Soviet built dirt road disintegrated more frequently and signs of infrastructure dissipated. So too did the drive shaft on the front wheels and once again progress came to a halt and once again Sergei's mechanical skills were up to the challenge. We rolled on until stopped by the river flowing from the Kotur glacier. Despite earlier negotiations that were translated by the ITMC staff, Sergei announced that this was the end of the journey. An anxious phone call to the ITMC followed and we were soon driving through the Kotur river, thankfully unaware of previous ITMC vehicles that Sergei had got stuck in high water. Naturally, the expedition leader had to walk in front of the UAZ and guide Sergei up through boulder fields over 4,000m to our ideal drop off point. An uneasy night in the single skin tents followed, particularly for the afflicted members of the team.

Saturday 9th August – First carry

Everybody had a relatively comfortable night, despite the altitude and digestive system faults. Sergei's valiant driving had resulted in him having to spend several hours repairing the suspension, whilst we shouldered our first loads and headed down hill towards the Fersmana. The going was fairly easy over the plateau and down the hill. The Aylati river appeared to be already fairly high with glacial meltwater at 11:30am and required several forays into the icy water before a suitable route through the river was achieved. Thankfully, the sunshine warmed the cold feet before continuing into the Fersmana valley and establishing base camp around 3:00pm, close to the stream on the west side of the valley at ~3,400m.

Sunday 10th August – Second carry

Ascending <u>unladen</u> back up to the drop off point at ~4,000m proved to be excellent acclimatisation. Carrying the large blue barrel to protect the food from the marmots at base camp proved to be character building! As did the river crossing at 1:30pm! Hannah and Peachey recced the upper reaches of the Aylati to find a less demanding crossing, but had to resort to the original crossing point with the assistance of Rob to moderate the river flow being above their knees. Huw took over the challenge of the barrel and base camp proved to be an idyllic resting location.

Monday 11th August – Third carry

Acclimatisation appeared to be going well, as several members of the team set personal best times for walking up to the drop off point (2hr45mins). This facilitated a pleasant crossing of the river much earlier in the day. Hannah patiently assisted Scott in creating a food inventory for the trip, whilst Ian and Rob made the first ascent of "A grand tour of Africa" HVS 4c. Hannah and Adrian recced the route onto the Fersmana over mobile scree slopes.

Tuesday 12th August – Bad weather/rest day

Relatively clear morning with a slight westerly flow and cumulo nimbus to the north. Cloud built up over peaks to the south and then moved up the valley around 2pm with rain setting in for the rest of the day.

Wednesday 13th August – Approach to moraine camp

Cloud cleared up through the day, so the whole team walked up the valley to establish Fersmana camp on a flat sandy area on the Fersmana terminal moraine. Some cloud persisted into the evening.

Thursday 14th August – First ascent of peak 4,645m

Hannah, Rob and Ian departed at 5:30am in cold clear conditions to negotiate the boulder maze of the debris covered Fersmana snout. The west ridge (F) of peak 4,645m proved to be less challenging and they made swift progress up to the summit with good views of surrounding peaks. Adrian recced the approach to the Sarychat glacier, whilst Scott recced the approach up the west side of the Fersmana before returning to moraine camp. Adrian, Rob and Scott then crossed the Fersmana moraine to relatively easy going on the east side up to establish a camp next to the Sarychat glacier snout.

Friday 15th August – First ascent of Pik Donstanski 4,780m by West couloir 600m D A 3:30am start was greeted by a hard frost and loud cracking noises as we made our way up to the bottom of the route around 6:30am. Clear skies gave way to cloud rising up and over from the south as we crossed the 3 bergshrunds by some delicate snow bridges. Progress was good despite the dinner plating hard ice as we moved up together with good ice screws. Some fairly alarming rock fall began around 9:30am and microwave sized blocks were avoided by climbing the right hand side of the gully. Steeper (75°) ice and more dinner plating slowed progress, so the summit was reached via the steep icy crest at 12:30pm. The whole party opted for traversing the ridge to the north, which proved to be 5km of up to PD+ climbing and the first ascents of Pik 4,545m and Pik 4,601m "The Castle". The weather continued to deteriorate, so contact was made with Hannah at base camp, who then valiantly proceeded to make her way up to moraine camp with provisions and sleeping bags for us. Thankfully as darkness became uncomfortably close, the clouds and snow lifted to reveal a suitable gully to descend back to our camp next to the Sarychat glacier. The yellow single skin tent proved to be a welcoming beacon in the fading light and vital source of Yorkshire tea!

Saturday 16th August – descent to base camp Snow fell through the night and through all of the day as well. Rob departed his hooped bivi early to meet Hannah at moraine camp as Adrian and Scott leisurely packed up the single skin tent and then joined the whole team back in basecamp.

Sunday 17th August – Reconnaissance of peaks 4,471m, 4,753m, 4,489m and 4,879m. Huw and Ian headed up the slope across the river to the east of base camp. They took the easiest line of ascent (~700m) up a slope initially on scree, then on snow (deteriorated rapidly in the sun). This lead to a broad ridge which in turn lead to views of the "Alf glacier", and peaks 4471, 4753, 4849 and 4879. A steep 200m slope was descended and bivvy established just to the north of peak 4471. Heavy snow and graupel began around 4pm and didn't really stop until well into the next day.

Monday 18th August – bad weather

A retreat was made at first light back to base camp, risking the snow slope down to base camp seemed the best plan, before it got loaded anymore. The slope was reasonably scary and was descended in an appropriately rapid fashion before stripping down to boxers to cross the river in the snow. A return to base camp in this manner was rewarded with some (mac) tea, but no medals.

- Tuesday 19th August ascent of 'Where Vulture's dare' 500m HVS 4b HM and RM Rob and Hannah made the most of the sunshine after 3 days of snowfall and climbed El Naranjo, despite there being lines of dampness and snow and ice at the top! See appendices 1 for topo and route description. Meanwhile Scott's and Adrian's digestive systems 'violently protested'.
- Wednesday 20th August Alf glacier (HM, IP & HG) and Fersmana glacier (AD& RM)
 Hannah, Ian and Huw made the 8AM cold river crossing, breaking ice in flip flops is an experience (described by Hannah as a delicious splash)! Less snow on the approach slope this time, efforts to avoid the unpleasant snow at the top by

deviating on to the rock lead to Ian becoming "severely out of [his] comfort zone" in a chimney, and Huw having his own spicy moments "don't follow me, I'm having a bad time". Hannah found the snow reasonable. The same route was taken again from here, and a bivvy set up (the yellow haven) on the moraine on the opposite side of the glacier (~4,200m) to the north of peak 4471.

Rob and Adrian departed at a more leisurely 10am for the Fersmana glacier and made good progress along terraces on the west side. After negotiating through the mobile mess of the debris cover glacier, footprints in the fresh snow ahead led to a serious drop in team morale. These turned out to be Ibex prints that bizarrely went all the way up into the cirque below peak 5,611m. Soft deep snow at the end of the medial moraine resulted in establishing a camp at ~4,200m. Wind transportation of snow was observed at higher altitudes.

Thursday 21st August - First ascent of Pik 4,789m via North ridge PD

Hannah, Ian and Huw aborted a 2am start due to high winds, so delayed until 5am. A quick ascent of a 45-50° 100m snow slope saw them on to the top of very broad ridge (max. 45°). This was followed easily up, over a number of crevasses to the summit. A second summit appeared around 100m further along the summit ridge, which may have been higher. The intervening ridge was heavily corniced, shedding snow and un-protectable, we did not consider it worth the risk. The peak we reached had an altitude of 4798m. A descent was made down to a subsidiary summit at 4474m, and a picnic was enjoyed by Hannah and Huw. After soaking up the atmosphere the team returned to the yellow haven in around 1.5 hours. After a rest, Ian and Hannah scouted up the glacier to the south, meanwhile Huw had a walk to the top of a tiny little peak to the west of the bivvy at 4261, which had a good view of a possible descent back to the valley to the north. On return a plan was made to attempt 4849 the next day.

Adrian and Rob awoke at 2am to temperatures well below -10°C and frozen boots despite best attempts insulate them. Unfortunately the snow had not consolidated at all due to the persistently low temperatures. Despite a thin breakable windslab crust over knee deep uncohesive powder and graupel, they pressed on to reach the foot of the Little Poobah at 5:30am. Given the SW aspect of the intended couloir of ascent, unstable snow pack and wind transportation of snow during the previous days, they decided to return to the single skin tent and assess the snow conditions. Temperatures remained low throughout the day with minimal consolidation of the snowpack and fresh large avalanche activity was noted on nearby Pik Neizvestniy, so the pair took the difficult decision to make the arduous return to base camp, as they were also running out of time and good food.

Friday 22nd August – First ascent of peak 4,849m via West Face AD 700m

Waking up at 2am, again high winds were encountered. Camp was left around 4am, and a steady approach up the Alf glacier to the east of 4471 to the col between 4849 and 4879 (2hrs). Few crevasses were encountered until the ascent of the west face of 4849 began. Here began Huws day of falling in crevasses, starting off with the bergshrund at 6am, which was crossed relatively easily by everyone else. After this a steepening slope was climbed $(30^{\circ} \text{ to } 60^{\circ})$ with a concerning amount of windslab and wet powder underneath, meaning a race against the sun was on. The slope followed

to the ridge, which was traversed (a respectable distance from the edge, as sunlight was seen through a large number of weird looking cracks) 350m to the south to below the summit. A section of steeper (70?), extremely worrying quality snow was encountered and hurried past, before the final 45 degree summit slope lead to the top (GPS reading 4919m). Spectacular views in all directions, including many unclimbed peaks in China (see Future exploration). Vulture footprints on the summit. An easier descent was (thankfully) found down the south ridge, via a short abseil, then down snow slopes back to the col. The snow was now reacting ominously to the sun with worrying cracks developing. After Huw fell through a large number of crevasses, the col was reached. Debris of a reasonably sized avalanche could be seen, making the team feel better about not being up there with the sun now on the face! On returning to the bivvy a few hours later, clouds seemed to be gathering so the team headed back to base camp. The river was in high spirits when we got back, and the rest of the team came down from camp to assist with the returnee's crossing. Meanwhile Rob made the first ascent of Grit Expectations E1 5a.

Saturday 23rd August – First ascent of 'More cheese vicar' HVS 4c* 460m RM and AD Whilst the rest of the team rested and prepared for carrying loads in the following days, Rob and Adrian climbed a more direct central line on El Naranjo. There were several good pitches that warranted stars and some that certainly didn't! See appendix for topo.

Sunday 24th August – Ascents of new routes on trad crag

3 new routes were climbed up generally good limestone with reasonable cracks and protection on the buttress to the north of El Naranjo;

Rannimal Point HVS 4c * 370m R. Middleton and Hannah Moulton.

Love and Marriage VS 4b* 250m A. Dye and S. Gillespie.

The Garlic Fische HVS 5a* 360m H. Goodall and I. Peachey.

Climbing gear was then deposited near the Aylati river before returning to base camp.

Monday 25th August – Carry out to Aylati camp.

One load was carried up to Aylati camp via a rock bridge in the impressive gorge through moraine before the confluence with the Sarychat river. Base camp was then dismantled and the remaining load carried up to Aylati camp.

Tuesday 26th August – Carry out to Kotur river

Low visibility and wet snow further dampened the spirits of the team as the penultimate carry was made up and over the ridge to the Kotur river. Thankfully Sergei had arrived a day early, which improved team morale and the sun came out as we headed back over to the Aylati for the final carry. Sergei then drove us towards Naryn, with a camp near the edge of the Western Kokshal too.

Wednesday 27th August – Return to Naryn

A quick morning journey was followed by reacquainting ourselves with the civilisation of Naryn and it's beverages.

Thursday 28th August – Return to Bishkek

Sergei returned to the Western Kokshal to rescue ill climbers, whilst we were left to endure an 'over adventurous' minibus driver. Thankfully we made it back to Bishkek in one piece for lots of eating.

Friday 29th August – Bishkek

More eating and enjoying the limited cultural highlights of Bishkek.

Saturday 30th August – Return to the UK

Adrian, Scott, Rob and Hannah returned to the UK, whilst Ian and Huw indulged in more of Bishkek's cultural highlights.

Sunday 31st August – Ian and Huw return to the UK.

12.0 Weather

8th - 14th August

A moderate westerly flow was notable throughout this period, which brought squally showers across the main divide and particularly on the Chinese side. This was typified by cloud over the higher summits (particularly to the west) light frosts at basecamp and some light fresh deposits of snow down to 4,500m overnight. On the 12th August this developed into persistent precipitation which moved up from the Chinese side and enveloped basecamp around midday, with fresh snow down to ~4,100m.

The 15th August dawned clear and bright with a hard frost, although with high cirrus. Cloud developed on the Chinese border peaks around 6:00AM with a southerly wind. This continued to build and unfortunately enveloped the peaks further north from around 1pm with thunder, low visibility and wet snow down to 4,000m, which wasn't ideal for traversing unclimbed ridges! It continued to snow down to ~3,300m until the 18th August.

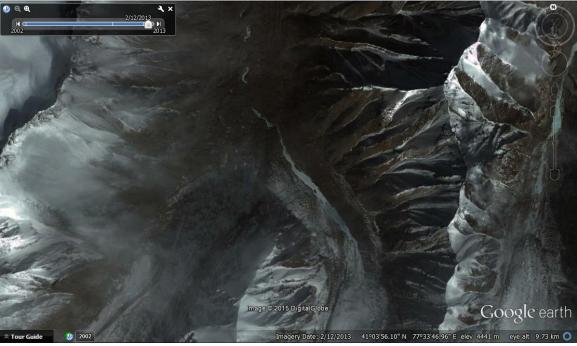
Thankfully the 19th dawned clear and bright, with heavy accumulations of snow above 4,000m preventing any heat fluxes from surrounding mountain sides, the weather then became settled and cold. Severe night frosts led to the water source stream behind base camp freezing solid during a couple of nights and ice around the edges of the main Sarychat river, so temperatures were likely to have been below -8°C at base camp (~3,400m). The temperatures during the early morning at Fersmana camp on 21st August were below -10oC, with a southerly wind adding to the wind chill. This southerly wind was much more severe at the Yellow haven bivi next to Alf glacier. Few clouds were seen during this period.

A notable cloud build up (from the south and west) and gradually rising temperatures preceded another spell of poor weather. This broke on the morning of the 26th with low visibility and rain/sleet/snow down to the Aylati river making the final carry out challenging in the low visibility over the plateau.

13.0 Glaciology

Both the Sarychat and Fersmana glaciers appear to be thinning rapidly. The Sarychat has retreated dramatically in recent years (see images below), with increased crevassing since the 2002 Google Earth images. The debris cover over the terminus area of the Fersmana glacier is clearly insulating the ice, as the large granite blocks will be effective in trapping cold pockets of air that further accentuates the insulating effect of the thick debris cover. Active glacier ice exists beyond the extent of the glacier marked on the American Alpine map, although it is difficult to establish exactly where this ends (approximate line marked on map). There is clear evidence of rapid thinning on the Fersmana glacier, with extensive thermokarst features just to the south of the debris area.





15.0 Potential for future exploration

The ridge to the west of the Pal'gov glacier appears to have several unclimbed peaks, with glacier approaches and questionable rock (see appendices 1). Soviet climbing competitions have operated in the area, although it seems likely that they would have concentrated on the higher summits. The peaks to the south of Pik Neizvestniy in China appear to have had little attention and contain numerous unclimbed summits; these are on the central horizon in the image below (photo Ian Peachey). Some of the summits on the central ridge in the foreground are also unclimbed.



There also remains potential for adventurous Alpine rock routes on the eastern side of the Sarychat river, which could lead up to the unclimbed peak 4,879m (see below).



Appendices

First Aid and Medicine

The remoteness of the fersmana valley required a extensive medical kit. Thanks are kindly due to Dr Brendan Sloan for first aid kit and medicine advice and for offering to be a Dr by phone as needed. Thanks are also due to Mrs J Liddell for acting as a home contact and liaison should a rescue be required.

First Aid Kit Contents were as follows:

Army dressing x 2 Roll bandage x 2 Sam splint Sterile dressing Zinc Oxide tape **Plasters** Blister plasters Antiseptic wipes **Iodine** Eyewash/ Saline, Eye bath **Tough Cuts** Gloves **Hyperstop** Pencils and waterproof paper Avalanche book Wilderness medicine book

Medications carried included:

Paracetamol 500mg tablets – for mild to severe pain
Ibuprofen 200mg tablets - moderate to severe pain and anti-inflammatory effects
Codeine phosphate 30mg - moderate to severe pain
Ciprofloxacin 500mg tablets - for severe diarrhoea
Metronidazole 400mg tablets - for bloody diarrhoea/giardia/dental infections
Co-amoxiclav 625mg tablets - for severe cuts/chest infection/skin infection
Acetazolamide 250mg tablets - For altitude sickness prophylaxis
Nifedipine 10mg tablets - For high altitude cerebral/pulmonary oedema
Dexamethasone - For high altitude cerebral oedema
Piriton – For allergies