

KMC Western Zaalaisy Expedition 2019

The Trans-Alay Pamirs of Kyrgyzstan's Deep South

75th Anniversary of the Karabiner Mountaineering Club

MEF Ref No19-18



Bel-Uluu Glacier camp, on the morning of the first ascent of Ak Chukur (Photo: Steve Graham)

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*This report has been written and edited by Andy Stratford
with written contributions and photographs from all team members*

This report is dedicated to the memory of expedition member Andy Vine, our fellow adventurer, tragically killed in an avalanche in Scotland, February 2020. Rest in Peace.



Andy Vine (1978 – 2020)

INTRODUCTION

In August 2019 six members of the Karabiner Mountaineering Club (KMC) embarked on an expedition, associated with the 75th Anniversary of the founding of the club, to the mountains of Western Zaalaisy, Kyrgyzstan. The Trans-Alay Pamirs delineate the southern border between Kyrgyzstan and Tajikistan, with the Western Zaalaisy subrange about 75 km west of Peak Lenin. Research has shown these valley systems in this sub-range of the Kyrgyz Pamirs to be virtually unexplored by mountaineers, offering at least 12 unclimbed peaks in the region of 5000- 5500m and a further 6 between 4500-5000m.

The expedition had 3 principal aims:

- To explore mountains to the east and west of the Altyn-Daria valley of Western Zaalaisy.
- Ascend unclimbed peaks.
- Assess the potential for future expeditions.

One of the reasons we chose Kyrgyzstan over the Himalaya is that with careful choice of specific area and suitable local transport arrangements, it is possible to fit in 15-16 days at base camp within a 3-week holiday period. Many Himalayan adventures tend to take 7-9 days to get to BC once you include flight days, time dealing with IMF or similar permit necessities and a long stint travelling and trekking in followed by two weeks at BC and 4-5 days to get back out and fly home. So, for a team short on holiday from work, Central Asia made lots of sense and gave us the chance to maximise climbing time and summit opportunity.



Central Asia overview map

EXECUTIVE SUMMARY

Our two key aims were to come back safe, and to complete first ascents – we achieved four first ascents and all returned home without any serious illness, injury, or mishap so just from this perspective the expedition was a success.

Summary of first ascent (FA) peaks climbed / attempted :

- Ak Chukur, 4958m, FA Monday 19th August, S Graham, A Stratford, S Hurworth, A Vine
- Pik a-Boo, 5077m, FA Friday 23rd August, S Graham, J Kitchen, E Thompson
- Broken Peak, 5122m, FA Sunday 25th August, S Hurworth, A Vine
- Ak Kalpak, 5112m, FA Tuesday 27th August, S Graham, J Kitchen
- Pk 5084m, retreated. Attempted on Tuesday 27th August, A Stratford, S Hurworth, A Vine.

After the final team members arrived in the southern city of Osh on 10th August (other members had arrived over the previous few days) we approached the Altyn Daria valley by 6WD ATV in two days, establishing a comfortable base camp at 3170m in dusty summer nomad pasture. Google Earth and Soviet Military Maps were utilised in advance to identify possible ABC approaches, viable peaks, and climbing routes in three valleys to the West, however, once on the ground, only one valley, the Bel Uluu proved viable and from this Steve, Andy S, Stuart and Andy V completed the first ascent of Ak Chukur 4970m (4958), via 'Deception Route' (PD) on Monday 19th August – an easy glacier ascent with a final pitch of steep mixed climbing - to a 2x2m rock platform overlooking a precipitous 1.5km drop to the Altyn Daria below. The other two valleys – Kaska Suu and Min Terke proved challenging to access due to several dangerous river crossings, so; we turned our attention East. Jared and Emily undertook vital recce work and by the time the Ak Chukur team returned we had two further objectives identified.

Approached from an unnamed side valley 2km NE of Base Camp, Pik a-Boo 5122m (5077), so named as the summit remained hidden for the majority of the climb, was a first ascent at AD- via the North Glacier Route - several mixed and ice sections to a snow arete then a small rock pinnacle summit, climbed by Steve, Jared and Emily on Friday 23rd August.

From the Kok Kikki valley Stuart and Andy V made a first ascent of Broken Peak 5122m at PD+ via the Golden Tower Traverse on Sunday 25th August, the only rock ridge route of the expedition. From a side valley of the Kok Kikki and after an alpine start on Tuesday 27th August Steve and Jared forced a route through difficult crevassed terrain, much of the time on steep bare glacier ice using dozens of ice screw placements, eventually summiting Ak Kalpak 5112m as a first ascent via a route they named North Ridge Chasm Route (due to the complex crevasse system and huge abyss openings on the final summit approach) and graded Difficile. On the same day, Andy S, Andy V and Stuart attempted a similarly steep route direct up the north face of the glacier under Pt 5084. Retreat ensued from 4480m as the trio had moved too slowly on the bare glacier ice.

We had a rich mountaineering experience in a remote area, which, given how difficult access can often be to unexplored areas, was remarkably easy to get to within just 3 days of leaving the UK. We were almost certainly the first mountaineering team in decades to spend significant time exploring the main valley and side valleys.

There is significant future potential for first ascents in the Western Zaalaisky.

Acknowledgements & Thanks

The team were supported in-country by ITMC and had superb base camp support from experienced cooks and fixers Alexey and Sacha, and from driver/mechanic Ruslan.

The team would like to acknowledge our principal sponsor, MONTANE, who provided various items of clothing to expedition members which were gratefully received.



The expedition received funding from:

- Karabiner Mountaineering Club
- Mount Everest Foundation
- Montane Alpine Club Climbing Fund
- British Mountaineering Council
- Austrian Alpine Club Sektion Britanika.

We also gratefully acknowledge the support offered by **Expedition Foods** and **Terra Nova**.

We would like to acknowledge **CRUX**, who whilst they were not asked for sponsorship, supplied three of our team of six with 'load hauling' sacks – the incomparable AK-70.



TEAM

Andy Stratford, 50, British, Expedition Leader (KMC, FRCC, AC, AACUK)

A keen climber and mountaineer with expedition experience in the Cordillera Blanca plus some Alpine and Norway trips, Andy is a compulsive organiser and planner, embedded after many years of working in production and logistics in the outdoor events industry. He has trekked in Nepal, Peru, Morocco, Taiwan and the Alps. His legendary navigational skills have resulted in many an adventure including a minor incident in which a mountain was incorrectly climbed.

Steve Graham, 47, British (KMC, FRCC, AC)

After a trip to Ladakh (Indian Himalaya) in 2016 when the first ascent of Peak 6210 was abandoned due to a final unprotectable 20m vertical wall of death choss, Steve conceived the 2019 expedition with Andy S on a drive home from the Alps in the summer of 2018. Steve has 15 years climbing experience in the UK (Scotland a favourite), the Alps, Norway, India and South America, plus qualifications as an ML and Winter ML. He doesn't like onions, is a big fan of Borat and has experienced Andy's navigational expertise first-hand several times over.

Emily Thompson, 36, British, Expedition Medic (KMC, AC, AACUK)

Emily is Assistant Leader of Holme Valley MRT (Pennines) and has a Casualty Care qualification which meant she was perfectly placed to act as defacto expedition medic. With commercial peaks over 6000m to her credit in Nepal and Bolivia, several trips in the Alps, ice climbing in Norway plus significant Scottish experience her broad base of mountaineering and hardcore fell running was more than enough to compensate for her dislike of leading on gritstone!

Andy Vine, 40, British (KMC, CC)

The only team member to have previously visited Kyrgyzstan (MEF 16-27 TortoiseButler 2016), Andy also led an expedition to the Himachal Pradesh in 2001, successfully making the first ascent of Mount Tagne 6111m. With a keen interest in tech and maps, Andy figured out the Soviet map overlays onto Google Earth and led on the communication tech and protocols. Andy sports a fabulous beard and has a penchant for mountaineering in his underwear. It is an interesting look.

Jared Kitchen, 35, British (KMC)

With over a decade of rock-climbing experience and typically leading E2 trad and 7a sport, Jared's enthusiasm has resulted in a bout of freelance instructing, following his attainment of the SPA and ML awards. With several summer trips to the Alps, and winter experience in Norway, the Alps and of course, Scotland, Jared was ready to undertake his first Greater Ranges expedition and, as a vegetarian, experience with trepidation the delights of Kyrgyz cuisine where all the best known and most widely cooked national dishes invariably contain nefarious animal parts.

Stuart Hurworth, 32, British, Expedition Treasurer (KMC, AACUK)

With no dietary restrictions, nor any concept of what 'normal' quantities of food might be, Stuart's reputation as a human dustbin was of great concern to the other team members. If there wasn't enough to eat, would the rest of the team come back with missing limbs? Consequently, the employment of the two cooks was primarily a matter of survival for the rest of the team. Stuart's mountaineering skills are wide – trips to the Alps, Norway and Scotland over a decade prepared him well for this, his first trip to the Greater Ranges.

Jared



Emily



Andy S



Steve



Stuart



Andy V



Local In-Country ITMC Support Team:

Alexey - Cook

Sacha - Assistant Cook

Ruslan - Driver / Mechanic

UK Support Team:

Alia Sheikh (Vine) – UK comms; Tracker monitoring; emergency co-ordinator; social media (Twitter)

Colin Maddison – Weather analysis and daily weather reports

Emily Pitts – Social Media (Facebook)

Jo Stratford – UK Comms and emergency back-up



L to R : Andy S, Ruslan, Alexey, Andy V, Steve, Stuart, Emily, Jared, Sacha



Leaving Base Camp: 25kg to 28kg loads to Bel Uluu valley for Ak Chukur - a tough five days ahead!

LOCATION



Map 1 - Kyrgyzstan and surrounding countries - location of Pamir and Tien Shan mountain ranges



Map 2 : 2nd Day of Journey to Base Camp and locator map for our exploration area.



Map 3 : Map showing the Bel Uluu, Min Terke, Kaska Suu and Kok Kikki valleys

RESEARCH and TRAINING

Mountains - and why we selected the Western Zailiisky

Due to our trip being just 21 days in-country plus 2 days for flying, we started off with some criteria which aimed to maximise the number of possible climbing days. Of the five points listed below, the one which took slightly higher priority at the outset of the research was the desire to go to an area where there had been few, if any, first ascents.

- The mountains needed to be mostly no higher than 5500m so we wouldn't face any serious acclimatisation issues.
- We desired multiple objectives, not just one mountain.
- We wanted an area (just two or three valley or glacier systems) where there had been very few, if any first ascents.
- Base camp needed to be reasonably accessible - ideally 2 days from either Bishkek or Osh to maximise climbing days.
- Technical objectives below Difficile.

There were three primary sources for the text-based research

- 1) The Book - "Mountaineering regions of Kyrgyzstan" by Vladimir Komissarov (VK)
- 2) UK Expedition reports via MEF, BMC, Alpine Club and very occasionally other sources
- 3) Foreign expedition reports by following weblinks and mentions often contained in the UK reports, sources included; Asian Alpine e-news, American Alpine Journal

For mapping we used the sketch maps in VK's book plus the Soviet Military Maps (SMM) from Mapstor or Loadmap. We also used Google Earth Pro extensively and a hybrid of SMM overlays on Google earth.

We started by looking at reports over the last ten to fifteen years mostly in the main Tien Shan range. The areas included Western Kokshal-Too, Akshyyrak, Borkoldy and Djangart. We also had a very brief look at the Jany-Jer and the Jetim / Jetimbel ranges just via the VK book and google earth, and quickly discounted these areas. Whilst in the thick of researching the first four areas listed, we came across issue 37 (Sept 2018) of the Asian Alpine e-news which had a detailed section on the Trans-Alay Pamirs including the Western Zaalaisky area. We hadn't really considered the Pamirs up to this point, and the article piqued our interest and we subsequently did some detailed google earth research combined with Soviet maps. We received positive feedback on the area from Vladimir Komissarov by email and just a couple of months later had decided that of all the five areas under consideration, the Western Zaalaisky scored most highly taken across all the criteria. Perhaps the most critical of these was the almost total lack of previous expeditions to the area, and the non-existence of any reports, other than the recce by Vladimir Komissarov as per the Asian Alpine e-news.

Links

To save readers further work in seeking out expedition reports from Western Zaalaisky, we are fairly convinced that as of 2019 there are none available in English. We didn't search for Russian accounts

Asian Alpine -e-news - https://asian-alpine-e-news.com/asian_alpine_e-new_issue_no37.pdf

Mountaineering Regions of Kyrgyzstan - This 400 A4 page downloadable pdf book on Kyrgyzstan, essential - <https://kac.centralasia.kg/mountaineering-regions-of-kyrgyzstan/>. It contains many Orographic Maps plus a significant amount of information on first ascents.

For general information on mountaineering, logistics and relevant recent experience in Kyrgyzstan, there a few reports which are comprehensively written, contain a wealth of inspiring writing and photographs, and are, in our opinion, essential reading for any aspiring first ascents expeditions. These are summarized on the MEF website and downloadable from the BMC website and other repositories.

Borkoldy 2017 - <https://www.mef.org.uk/expeditions/borkoldoy-expedition>

Kiulu 2016 - <https://www.mef.org.uk/expeditions/kyrgyzstan-expedition>

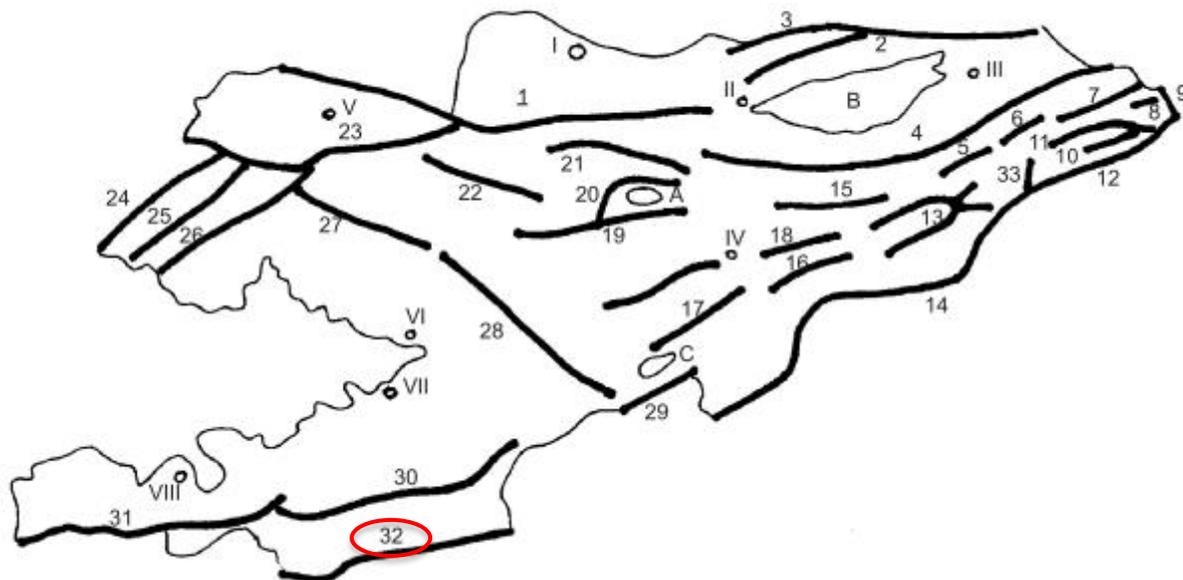
Bristol Djangart 2013 - https://www.67hours.co.uk/files/Bristol_Djangart_Expedition_2013.pdf

QUB Dzhiragaktu 2012 - <https://www.mef.org.uk/expeditions/tien-shan>

Drawing and table below reproduced with the kind permission of the author, Vladimir Komissarov

Appendix 1. Figure 1. Orographic map of main mountain ranges in Kyrgyzstan

Mountain Range	Mountain Range (next)	Main cities and localities
1. Kyrgyz Ala-Too	17. At-Bashi Range	I. Bishkek
2. Kungey Ala-Too	18. Naryn-Too Range	II. Karakol
3. Trans-Ili (Zailiskiy) Ala-Too	19. Moldo-Too Range	III. Balykchy
4. Terskey Ala-Too	20. Sonkul-Too Range	IV. Naryn
5. Akshyyrak Range	21. Jungal-Too Range	V. Talas
6. Kuilu Range	22. Suusamir Range	VI. Jalalabad
7. Sarydjaz Range	23. Talas Range	VII. Osh
8. Tengri-Tag Range	24. Pskem Range	VIII. Batken
9. Meridionalnii Range	25. Sandalash Range	
10. Kaindy Range	26. Chatkal Range	
11. Engylchek Range	27. Atoinok Range	
12. Kokshaal-Too Range	28. Ferghana Range	
13. Borkoldoy Range	29. Torugart-Too Range	
14. Western Kokshaal-Too Range	30. Alay Range	
15. Jetim Range	31. Turkestan Range	
16. Jany-Jer Range	32. Pamir, Trans-Alay (Zaalayskiy) Range	



Budget Costings

The Borkoldy 2017 report has a useful comparator table of different expedition costings although these date mostly from 2013 or earlier. We considered this and did our own research, which produced costs ranging from £11k to £14k for six of us. We then made a commitment that we would cap personal contribution (incl. flights and UK airport travel) to a maximum of £2,000 per person. We hoped to reduce this personal contribution by making successful grant applications - more on this and the actual costs in the later Expedition Accounts section.

Duration, Transport and logistics

The majority of expeditions into Kyrgyzstan fly to the capital city, Bishkek, however for the Pamirs a flight arriving at Osh (the second largest city) from Moscow or Istanbul can be easier as it saves a 10-12hour drive from Bishkek. Alternately Pegasus air operate a three times daily local flight service Bishkek-Osh and vice versa at cheap prices (£20-£40 per flight). Most if not all 6WD ATV's are in Bishkek-Karakol so if arriving in Osh for the Pamir region, your driver / team will likely come down from Bishkek anyway. ITMC have extensive holdings of gear to rent, again all in Bishkek, and of course this also had to come in the truck. However, given the slow speed and lack of comfort in these trucks, we would recommend minimising road transport where feasible.



6 Wheel Drive URAL ex-soviet military truck built 1984 aka 'The Beast' (Photo: Andy Stratford)

The efficiency of three-week trips to central Asia can be seen from the table overleaf. The majority of the three-week (22 or 23 day) trips managed 15 or 16 climbing days. Extending trips to four weeks did not always result in a substantial increase in climbing days.

There are undoubtedly several logistics companies for trekking and travel operating in Kyrgyzstan, however two stand out as being more experienced in a mountaineering context. One is Tien Shan Travel, the other is the Bishkek based ITMC. This company is operated by Vladimir Komissarov, who also happens to be the current president of the Kyrgyz Alpine Club (KAC) and author of the only mountaineering guidebook to Kyrgyzstan.

The table on the next page shows a selection of recent expeditions and various statistics which may be of use to anyone *planning* and thinking about a trip to Kyrgyzstan.

Year and Name of Exped. (No. of likely first ascents) *	Name of Leader & (No. of team members)	In-Country logistics support	Range and Sub-range visited	Approach method(s) & city	No of days UK – UK	No of nights at Base camp (no of travel days)
2019 KMC Western Zaalaisky (4)	Andy Stratford (6)	ITMC	Pamirs – Western Zaalaisky	Overland – Osh	23	16 (2 + 1)
2017 Borkoldy (14)	Neil Cox (7)	Tien Shan Travel	Tien Shan - Borkoldy	Overland – Bishkek	28	20 (2 + 2)
2016 Kiulu (3)	Andy Vine and Miles Gould (2)	ITMC	Tien Shan - Kiulu	Overland - Bishkek	22	15 (2 + 2)
2015 British Southern Fergana (3)	Paul Josse (4)	ITMC	Tien Shan – Fergana	Overland – Bishkek	22	11 (3 + 2)
2014 Djangart DMARD / CAKE (5)	Jamie Goodhart (9)	Tien Shan Travel	Tien Shan - Djangart and Khan Tengri	Overland + Heli Bishkek	34	16 (2 + 1)+ 9 (1 + 1)
2014 Jiptik (0)	John Proctor (3)	Batken Travel Service	Trans-Alai Pamirs – Turkestan Range/Jiptik	Overland – Osh	unclear from report	unclear from report
2014 Navlikin (0)	Emily Ward (9)	ITMC	Tien Shan - Western Kokshall-Too	Overland – Bishkek	30	18 (3 + 2)
2013 Bristol Djangart (7)	George Cave (6)	Tien Shan Travel	Tien Shan - Djangart	Overland + Heli – Bishkek	23	16 (2 + 1)
2012 QUB Dzhirnagaktu (2)	Conor Gilmour (6)	ITMC	Tien Shan - Western Kokshall-Too	Overland – Bishkek	32	18 (6 + 4)
2005 Harvard Borkoldy (9)	Lucas Laursen (8)	ITMC	Tien Shan - Borkoldy	Overland – Almaty	25	16 (3 + 2)

**No of first ascents is slightly interpretative, as some expeditions have reported a traverse of 4 minor tops and a major top as a single FA, and others as 5 FA's. Where a ridge traverse of several minor tops, described as a 'route' feels appropriate from the report text we have interpreted any such FA's as a single summit. Where reports are clear and express their own opinion that summits are of "dubious prominence" or other such phrase, we have opted to omit these from the statistics. New routes on previously climbed mountains are omitted entirely for clarity, although some expeditions did some interesting new lines on previously climbed mountains.*

Mapping

The Soviet Union mapped most of the globe and produced good resolution maps, particularly of its own territory - this series of maps are the best maps we could find for the area we were climbing and they have been used by all the other expeditions that we know of. The soviet maps are available for download as images and can also be used via an app for the android operating system. The other major source of mapping information is Google Earth, which makes satellite imagery available.

Soviet Maps Images:

[This link](#) provides a good guide to downloading soviet maps. In the margin around the edge of each map is the soviet grid system, but also latitude and longitude. Thankfully, the maps are orientated on the lat-long grid, and not the soviet grid system - the gridlines of the soviet grid are not horizontal and vertical on the map. The lat and long coordinates are written on the corners of the map and at the centre of each map. There is also a ruler along the edge of the maps with alternating black and white stripes for every minute of latitude or longitude although this is sometimes missed off the edge of the area that was scanned. We decided that we wanted to be able to report our position using a map alone, so we added lat and long gridlines using the marks on the edge of the map as a guide. To produce climbing maps, we found it useful to remove the margins and then join four maps together, add lat and long gridlines, crop the maps to cover convenient areas, and then add grid line labels. These were then printed and laminated as A4 or A3 sheets. Andy Vine had found on the 2016 expedition that maps make a good gift to the locals, promoting good will and smooth negotiations for help with load carrying, so we did the same on this expedition.

Soviet Military Maps (SMM):

The soviet maps can be accessed using the free android app "Soviet Military Maps", and the paid for "[Soviet Military Maps Pro](#)". The latter costs about £12 and is a one-off payment which has no stated expiry date. The Pro version allows you to cache maps for offline use, which worked well for us. The app includes a "*you are here*" dot on the map, which uses your phones' GPS. The maps cover the whole world, so they also provided a fun way to learn the sounds of Cyrillic letters by sounding out names you're familiar with - like МАНЧЕСТЕР (Manchester).

Google Earth:

For remote areas, google earth seems to give low resolution images, unless an area has been looked at several times over a few days, in which case, higher resolution images become available. It is possible to overlay the soviet maps onto google earth by removing the margins of the map, and then using the corner coordinates to position the map (see Map 4 overleaf).

iPhone:

Google Earth didn't work at all with iPhone when offline and the soviet military maps app is not available for iPhone at time of writing. iPhone users in the group used "[Maps Plus](#)" which did not give satellite imagery or terrain altitude data, but did allow the soviet maps to be imported, and used the GPS to give a "you are here" dot.

The image should be imported into Google Earth as an overlay and then its properties can be edited using the location tab, where the coordinates of each corner can be entered. This works well on a PC for assessing an area for suitability and planning objectives and camps. The overlays can also be exported from Google Earth for use on a mobile phone running the Google Earth app, although this turned out to be problematic during the trip. Google earth caches satellite images and terrain altitude data automatically if it has been downloaded. So, for about a week this worked reliably, including a "you are here" dot for either the overlaid soviet map or satellite image. After this time though, it suddenly stopped working, until it reconnected with the mobile network at the end of the trip. A more rigorous but less straight forward method is the use of [multiple data points and regression analysis](#)



Map 4 – Early research mapping experiment (Actual BC not quite in the location shown) produced using Google Earth and Soviet Military Maps - easily relatable to map 6 showing what we climbed.

Weather

It is widely accepted that the best period for mountaineering pretty much anywhere in Kyrgyzstan is late July to late September - roughly a nine or maybe a ten-week window. Some teams do go outside this period but they are few and far between. Conditions in the Pamirs and Trans Alay Pamirs of Kyrgyzstan tend towards summer Alpine and are a few degrees warmer by day and night than most of the Tien Shan. There tends to be little precipitation during the day in August - but we did have rain on the odd night and 6 inches of snowfall the night before we climbed Ak Chukur. Overall, the weather was benign but 75km further east, there was unseasonably heavy snowfall on 7,134m Peak Lenin which stopped quite a few teams from completing in their time window - so the weather can clearly be very localised.

Food planning

We opted for taking out 8 days' worth per person of dehydrated/lightweight foods from the UK for use at ABC. Team members had slightly different approaches; Some took just the expedition foods (or similar brand) dinners and breakfasts, some took energy bars (especially 'naked' range of date-based energy bars), packet noodles, cup-a-soups, and some made up their own breakfasts (e.g. Muesli or Granola and dried fruit & nuts and milk powder in a zip seal bag which takes boiling water). We collectively planned to purchase an extensive selection of exceptionally cheap dried fruit and nuts we knew would be available from the Osh market. In country we opted for a cook at base camp. This added cost but was a decision which none of us regretted for one minute once we had tasted the quality and quantity of food produced.

Camping / walking / mountaineering weekends and group training

One advantage of us all living geographically close and being members of the same mountaineering club were the opportunities we could create to spend time together prior to the expedition. This had overlapping objectives; to build on what were already strong friendships, spending more time walking, mountaineering, and climbing together, gaining greater understanding of each other's styles, psyche, technical skills, tactics and tent habits! Specific team arranged or existing KMC calendar meets resulted in seven occasions over five months where team members got together. We hope the details below are of use to others for group training and bonding ideas. Name in brackets denotes organiser.

1st - 2nd March Scotland - Wild camp / Munro's (Jared, KMC Meet) - AS, SG, AV, SH, ET, JK.

Originally designated a winter climbing meet, but with little snow in Scotland, exped members split into teams for a weekend of Munro's, wild camping/bothying in challenging weather and terrain in the Ben Alder area.

March 22nd -24th - Lake District - Wild camp and climbing (Andy S, Team meet-up) - AS, SG, AV, SH

A dry walk in to Floutern tarn, Buttermere preceded a windy and wet wild camp with wind so strong it snapped a Quasar tent pole! A dry day followed; we enchaind mountaineering routes on Grey Crag, Buttermere.

May 17th/18th - Cadair Idris - Wild camp / mountaineering (Emily T, team meet-up) - AS, SG, AV, SH, ET.

A beautiful weekend in a stunning spot, the team camped by Llyn Y Gadair overnight. Sunday morning we climbed Table Direct (V Diff) to reach the ultra-classic Cwfry arete (Diff) climbing most of both routes moving together, pitching the odd section.

June 8th/9th - Lakes Hut2Hut – walking weekend (Andy S, KMC Meet) - AS, SG, SH, AV, JK, ET

A walk from Beetham Cottage (FRCC) in Hartsop, to Salving House (FRCC) Rosthwaite on day 1 in utterly foul weather then returning via another route the next day

June 29th/30th - Lliwedd - Mountain Routes (KMC Meet) - AS, SG, SH, JK A weekend on Lliwedd climbing classics such as Avalanche, Red, Wall, Longlands, Terminal Arete, Route 2 and Shallow Gully.

5th-7th July - Scafell - Burnmoor Lodge Mountain Routes (Andy V, KMC Meet) - AV, SH, JK, ET.

A weekend of Lake District multi-pitch climbing such as Botterill's Slab and Moss Ghyll Grooves.

8th July - Peak District - Crevasse Rescue (Jared) - AS, SG, AV, SH, JK, ET - An evening of crevasse rescue practice.

Individual training

Andy S - As much hillwalking as reasonably possible over varying distances and terrain. Sometimes at pace and other times carrying packs with considerably more gear than was required. A little easy running - mostly 5k distances. Some scrambling enchainment's. Climbing tended to concentrate on mountaineering type routes. One 12-hour day of endurance grit at Stanage climbing around 30 routes from V Diff to VS. No Gym work.

Emily - General fitness predominantly fell running in the Peak District and North Wales. Over winter period considerable load carrying for expeditions to bothies was also undertaken as well as trips to the mountains for walks, scrambles and long mountaineering routes.

Stuart - General fitness from a variety of activities. Trips into the mountains for scrambles, walks and some climbing, especially long mountaineering routes. When out with non-expedition members, typically carried all or some of their items as additional load. Did a 7-hour mine tour, variety of group training weekends and used an acclimatisation tent (see next section)

Andy Vine - Cardiovascular training took the form of mountain biking, which works because it's so much fun that you don't realise how exhausted you are. Long walks with extra weight in the pack and Scottish Winter trips with the KMC. The training weekends we did as a group were valuable for fitness, and just to spend more time together. As the expedition got close, time became squeezed with preparations and so training reduced. Learnings: plan around this by training hardest 6 weeks before the trip began, and then accept that only maintenance level training will be possible in the last couple of month or so. Summary: The training left me fairly well prepared for the trip. A course of 10 altitude training sessions at the Altitude Centre Pod in Manchester was possibly beneficial.

Jared - General fitness mostly fell running. More specific training was to increase mountain walking in terms of distance, total altitude per trip, and load carrying. This included multi-day trips. Training on rock mainly on long and easy mountain routes was often with expedition partners to increased speed and fluidity. Training specifically for performance on rock averaged 3 sessions per week at the gym and/or crag. Revision of technical skills including movement, crampon and axe techniques and rope skills was through drills. Specific sessions were dedicated to practice of self-rescue and crevasse-rescue skills. The latter was also shared with team during a crevasse rescue training session.

Steve - A mix-up of exercise and activities across the months leading up to departure, but the main focus being time in the hills clocking up the miles. Many wild camping trips (full week in the Lakes) and long mountaineering routes, technical rock climbing being less prominent - considered less ideal for big mountain preparation. Road cycling, swimming, gym sessions etc. also part of the standard weekly mix-up routine, with specific focus on ankle physio and strength conditioning necessary for maintaining movement and usage of an injury experienced a few years prior.

Other training and preparation strategies

Hypoxic Tent (or as Stuarts partner Beth put it “The Wendy House for Masochists”)

Stuart spent approximately 6 weeks sleeping in a hypoxic tent - essentially a less breathable tent with clear plastic sides and with small areas of fabric. The tent has a nozzle with tube attached leading from a hypoxic generator. The generator itself is noisy, with a fan and loud puffing noises every 3 or so seconds as it pumps the air into the tent. The tent is hot and clammy and develops a lot of condensation in the morning - it can be uncomfortable. The idea was to spend enough time in it to gain so-called long-term acclimatization changes in physiology such as an increase in red blood cells and the ability to maintain fluid balance while at altitude. A pulse oximeter was used to test blood oxygen levels while in the tent, which were typically between 92-86% (99% while outside). A gas analyser was not available, so oxygen concentration was not measured but it is postulated that this tent is approximately equal to being at an altitude of 3500m. While symptoms typically seen at altitude were experienced, such as breathlessness, headaches, increased urination and tiredness, the tent was only used for typically 6-8 hours a night which is less than $\frac{1}{3}$ of a day, perhaps not enough for long term adaptations to take place. In addition, while away from home several weekends were not experienced within the tent. In a completely unscientific way Stuart fared reasonably compared to his compatriots at altitude, experiencing some discomfort, headaches and exhaustion but not typically more so than others. It seems sleeping in the altitude tent as described was likely the equal of a more rigorous training regime.

Acclimatisation Pod

Andy Vine took 10 sessions in the acclimatisation pod at Ellis Brigham in Manchester and describes the experience as follows. *The outer case of the pod itself doesn't do anything, it's just somewhere to sit while you wear a mask. The mask reduces the oxygen concentration, so it doesn't allow the user to acclimatise to lower pressure, just lower oxygen concentration, although this is probably the most important thing. The pod is run remotely from London, and you are monitored with a pulse oximeter finger clip. The clip didn't always work, but I brought my own pulse oximeter. It was easy to reduce my blood oxygen quite considerably by breathing normally. Changes in breathing had a big effect on blood oxygen, so with practice I was able to keep it at the target of 80%. To begin with, falling asleep was a bit of a problem as this causes a drop in blood oxygen and then alarms go off. I was advised to hold the mask on without using the elastic straps around my head. The pod went up to a simulated altitude of over 5000m and I think it helped quite a lot. It's hard to tell for sure because I was exhausted on the trip from fairly bad diarrhoea.*



Ak Chukur Summit Panorama (Photo: Steve Graham)

THE EXPEDITION

How does a first ascent feel?

As five of the six of us had yet to complete a first ascent, any success in this regard would undoubtedly prove extra special. I don't know that it will ever be easy to share the totality of a personal state of mind, body and soul in those seconds, minutes and hours that flow around that pinprick in time when you step foot onto a summit that no other human has stood on. In those last seconds, as the self-doubt and fear of failure ebb swiftly downslope a new emotional wave comes crowding in-to your oxygen starved brain. There is a rush as those last seconds of concentration on crampon footwork, ice ace placement, the whereabouts of the slack rope all take subsidiary importance to the realisation that in one second you are there.

The watch second-hand stops. Realisation swims and fades in waves as your vision struggles with what you see – realisation that you are on top of the world. All the world, everywhere you look there are mountains, old mountains, the ancient earth, beautiful jagged snowy, rocky pointy peaks billowing into the distance. Poor brain. Processing such rich technicolour imagery whilst having to cope with the rush of neurochemicals; serotonin and endorphin crowding on every available receptor and still there is more, there is your soul. Somewhere inside, away from all this mountain eye candy, all this brain pleasure glue, there is something else. Something in your heart, a sense of satisfaction, a sense that if the world ended in the next 3 nanoseconds it wouldn't matter, and that somehow you are forever bonded to this place, to this tiny little piece of our precious earth that you are stood on. It all makes sense. Being a mountaineer all makes sense. *Andy Stratford 2020*



Steve experiencing that first ascent feeling, Ak Chukur 4958m

Mountain names and referencing

All mountains climbed were previously unclimbed and they are referred to by the names we gave them, or in one instance, a given name. They have two heights quoted – the height as per the old Soviet Military maps and the actual height we recorded with usually at least two GPS devices in brackets after, e.g. Ak Chukur 4970m (4958). All other Mountains are referred to by their given names (where they exist) plus the height as per the Soviet Military maps. If no name is recorded then the mountain is simply Pk 5432m.

Explanation of Grades

The grading system used in this expedition is the alpine grade system. This grading system summarises entire routes by denoting a single alphabetical grade. All attributes of each climb are considered: Length, altitude, exposure, objective danger, technical difficulty of climbing and how sustained the difficulties are. There are no fixed criteria, for example; a short steep section of ice may receive a higher grade at high altitude and/or greater exposure, than at low altitude with an easy retreat. As a general guide the following table may be used to rationalise the grades given to the routes climbed during the expedition:

Facile (F)	Straightforward. Snow and ice will often be at an easy angle. Little objective danger.
Peu difficile (PD)	Routes may be longer and/or at greater altitude. Snow and ice slopes are steeper but generally <45 degrees. Objective danger is increased, and routes require increased technical skills. There may be some exposure in short/easy sections.
Assez difficile (AD)	Difficulty is increased and/or more sustained. Snow and ice may be between 40-60 degrees for shorter sections. Increased technical skills are needed, and some belayed/ protected climbing is necessary. There may be increased exposure, and there may be significant objective dangers.
Difficile (D)	Climbing is difficult and sustained. Snow and ice slopes are longer with sections at 50-70 degrees. Belayed and protected climbing is necessary. Exposure is more serious, frequent and/or sustained, and objective dangers are serious and/or frequent.
Très difficile (TD)	Climbing is hard and serious. Sustained snow and ice at an angle of 60-80 degrees with long sections of hard climbing. Objective dangers are serious and frequent, and exposure is very serious. Climbs are often committing and require a high level of technical skill.

As previously stated, all mountains climbed during the expedition were previously unclimbed and in remote areas. Each climb was a multi-day ascent at altitude with limited communications. The level of commitment was greatly increased in respect, and this was accounted for when grading the routes climbed.



Stuart having that first ascent feeling; summit of Broken Peak 5122m (Photo: Andy Vine)



Steve and Jared on Ak Kalpak 5112m (Photo: Emily Thompson)

Introduction & Summary

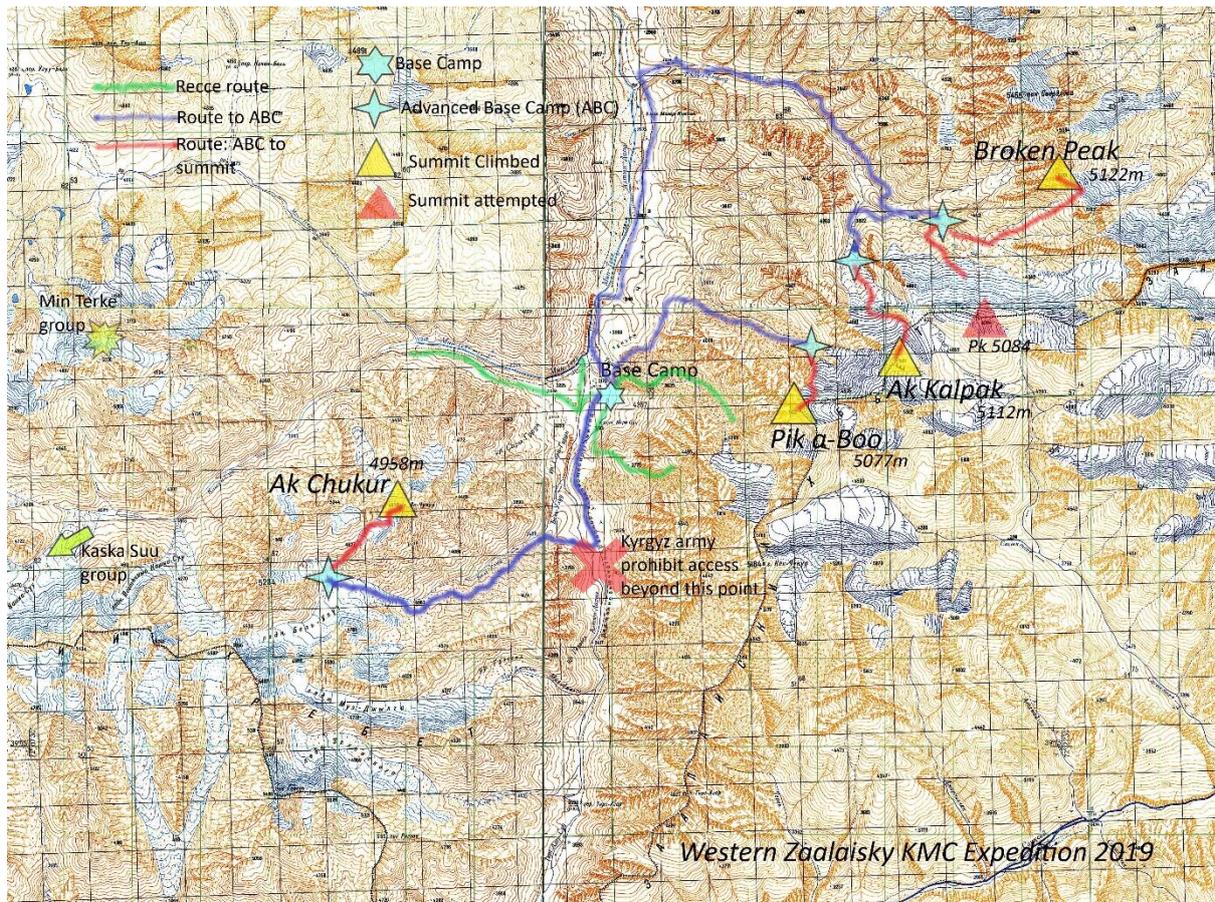
After the final team members arrived in the southern city of Osh on 10th August (other members had arrived over the previous few days) we approached the Altyn Daria valley by 6WD ATV in two days, establishing a comfortable base camp at 3170m in dusty summer nomad pasture. Google Earth and Soviet Military Maps were utilised in advance to identify possible ABC approaches, viable peaks, and climbing routes in three valleys to the West, however, once on the ground, only one valley, the Bel Uluu proved viable and from this Steve, Andy S, Stuart and Andy V [completed the first ascent of Ak Chukur 4970m](#) (4958), via 'Deception Route' (PD) on Monday 19th August – an easy glacier ascent with a final pitch of steep mixed climbing - to a 2x2m rock platform overlooking a precipitous 1.5km drop to the Altyn Daria below. The other two valleys – Kaska Suu and Min Terke proved very difficult to access due to several dangerous river crossings, so; we turned our attention East. Jared and Emily undertook vital recce work and by the time the Ak Chukur team returned we had two further objectives identified.

Approached from an unnamed side valley 2km NE of Base Camp, [Pik a-Boo 5122m \(5077\)](#), so named as the summit remained hidden for the majority of the climb, was a first ascent at AD- via the North Glacier Route - several mixed and ice sections to a snow arete then a small rock pinnacle summit, climbed by Steve, Jared and Emily on Friday 23rd August 2019.



Andy S and Steve on the summit of Ak Chukur -4958m (Photo: Andy Vine)

From the Kok Kikki valley Stuart and Andy V made a [first ascent of Broken Peak](#) 5122m at PD+ via the Golden Tower Traverse on Sunday 25th August, the only rock ridge route of the expedition. From a side valley of the Kok Kikki and after an alpine start on Tuesday 27th August Steve and Jared forced a route through difficult crevassed terrain, much of the time on steep bare glacier ice using dozens of ice screw placements, eventually summiting Ak Kalpak 5112m as a first ascent via a route they named North Ridge Chasm Route (due to the complex crevasse system and huge abyss openings on the final summit approach) and graded Difficile. On the same day, Andy S, Andy V and Stuart attempted a similarly steep route direct up the north face of the glacier under Pt 5084. Retreat ensued from 4480m as the trio had moved too slowly on the bare glacier ice.



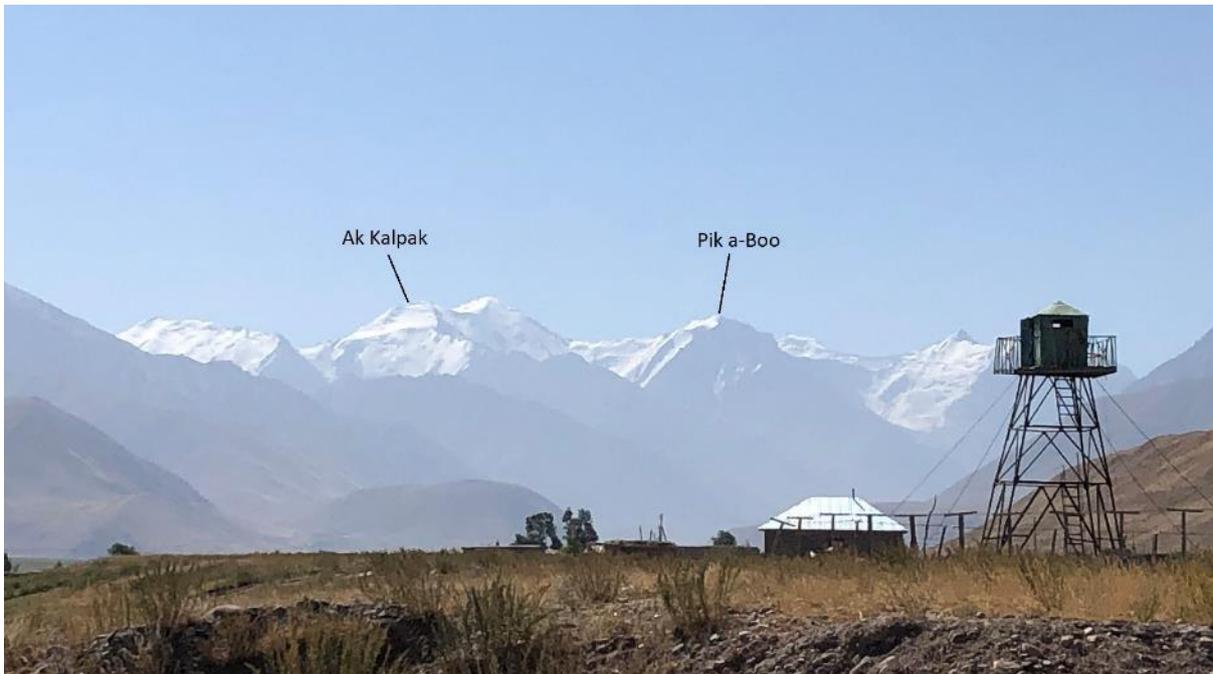
Map 5 - summits, routes, Base Camp and ABC's. (Andy Stratford)

Summary of first ascent (FA) peaks climbed / attempted:

- Ak Chukur, 4958m, FA via Deception Route PD Monday 19th August 2019
S Graham, A Stratford, S Hurworth, A Vine
- Pik a-Boo, 5077m, FA via North Glacier Route AD- Friday 23rd August 2019
S Graham, J Kitchen, E Thompson
- Broken Peak, 5122m, FA via Golden Tower Traverse PD+ Sunday 25th August 2019
S Hurworth, A Vine
- Ak Kalpak, 5112m, FA North Ridge Chasm Route' D Tuesday 27th August 2019
S Graham, J Kitchen
- Pt 5084m, retreated. Attempted on Tuesday 27th August 2019. A Stratford, S Hurworth, A Vine.



Steve on the Bel Uluu glacier on the recce and kit drop for Ak Chukur. The mountain on the far right is 'Bel Uluu Mont Blanc 5402m'. See future potential section. (Photo Andy Stratford)



Ak Kalpak and Pik-a-Boo from the mouth of the Altyn Daria valley. The higher peak behind and right of Ak Kalpak is entirely within Tajikistan and so was off limits due to our permits. (photo: Andy Stratford)

Day by day summary

AUGUST 2019	Activity summary. Andy Stratford (AS), Andy Vine (AV), Emily Thompson (ET), Jared Kitchen (JK), Steve Graham (SG), Stuart Hurworth (SH).
Thurs 8th	AS, AV, SG travel Manchester to Heathrow (car) and fly to Osh via Moscow.
Fri 9th	06.00 AS, AV, SG arrive Osh (950m), rest and local sightseeing, markets recce for shopping. ITMC support team travel from Karakol to Bishkek by car (6hrs) and load 6WD Ural truck with Base camp eqpt.
Sat 10th	ET, JK travel Marsden (Yorks) to Heathrow and fly to Osh via Moscow. AS, AV, SG taxi 2hrs to Kyrgyz Ata National Park. Acclimatisation walk and climb to Peak Iced Tea 2835m. ITMC support team Ruslan (Driver), Alex (Cook), Sacha (Assistant) arrive in Osh from Bishkek (12hr drive) in 6WD truck.
Sun 11th	ET, JK - arrive Osh 06.00. ET, JK, SG - shopping 6hrs with Alex and Sacha. AS, AV - sick and unable to leave hotel. SH - fly from Heathrow to Osh via Moscow.
Mon 12th	06.00 SH arrive at hotel in Osh. 09.00 all team load 6WD, shopping for fresh meat. Depart Osh 11am drive south to Pamirs over 3650m mountain pass. Overnight stop at Hotel Tatina at Sary-Tash (arr. 7pm) (3100m).
Tues 13th	08.30 depart Sary-Tash – arrive Base Camp (BC) location in Altyn Daria valley at altitude 3170m at 2.45pm. Set up BC
Weds 14th	AS, SH, SG – acclimatisation climb and recce to 4000m up western ridge of Pk 4495m (east side of BC valley) Extensive photographs of Bel-Uluu approach and mountains. JK, ET, AV - acclimatisation and Recce up the Bel-Uluu valley to moraine terminus. Cache 2 nights food pp x 6, 1 stove and 1 tent at 3932m. JK unwell (altitude).
Thurs 15th	All 6 team members recce Min-Terke /Kaska Suu River crossing in morning at 3450m (all team agree that there is no safe option to cross) Afternoon sort kit and load up ready to walk in Bel-Uluu valley. All sleep at BC. AV unwell (sickness).
Fri 16th	6WD drop all six team at 3,350m at entrance to Bel-Uluu valley. AS, SG, SH – reach moraine cache at 3932m. Set up Moraine Camp at 3950m by stream on grassy ground. AV, ET, JK – reach Eagle Meadow Camp at 3746m and camp there. AV unwell all day (sickness), JK unwell on arrival at Eagle Meadow (altitude).
Sat 17th	AS, SG, SH – acclimatisation climb & recce. Equipment drop to possible site of ABC at 4450m then descended for another night at Moraine Camp 3950m. AV, ET, JK – walk short distance to Moraine Camp. AV unwell (sickness) – stays at camp whilst ET, JK – walk up moraine to 4250m for further acclimatisation. All six-team sleep at Moraine Camp 3950m. JK unwell (altitude).

Sun 18th	AV recovered from sickness and decides to climb on to ABC. AS, SG, AV, SH – climb to ABC at 4,450m. Build tent platforms on moraine. Snowstorm from 7pm – 150mm snow in 2-3 hours. ET, JK – descend to BC – 50mm of snow at BC overnight
Mon 19th	AS, SG, AV, SH – First ascent Ak Chukur 4970m (4958m) 9hr round trip. Stay at ABC that night. JK, ET – recce valley to east to 4,000m for possible approach to Pk 5171 (Ak Kalpak) and Pk 5122 (Pik a-Boo).
Tues 20th	AS, SG, AV, SH take down Ak Chukur ABC (4450m), walk 8km, descend 1300m to BC. JK, ET – recce of Rubble Ridge and valley immediately behind BC to 4250m. ISM team arrive in valley and camp a few hundred yards away.
Wed 21st	All at BC. AS, AV, SG, SH – rest and washing day at BC. ET, JK – recce river crossing and possible access to multi-pitch rock climbing on Min Terke Buttress opposite BC. ET, JK, SG – sort kit & pack for 2-3 day climbing mission to attempt Pk 5171 or Pk 5122.
Thur 22nd	ET, JK, SG (with assistance from Sacha and Alexey) - walk to (Pik a-Boo) ABC at 4188m. AS, AV - short morning walk then pack kit with SH for 5-night exploratory foray into Kok Kikki valley.
Fri 23rd	ET, JK, SG First ascent Pik a-Boo 5122m (5077m) 10.5hr round trip. Stay at ABC that night. AS, AV, SH – drive to Kok Kikki farm in 6WD, await donkey transport. Camp at farm. ISM pack up and depart valley for another location in Western Zaalaisky.
Sat 24th	ET, JK, SG – return to BC. AS, AV, SH – donkey transport (for kit) to establish ABC Kok Kikki east at 4005m. AS returns from ABC to BC on foot and motorbike to retrieve missing kit.
Sun 25th	AV, SH – First ascent of Broken Peak 5201m (5122m) 11hr round trip. Stay at ABC that night. ET, JK, SG, AS – pack and drive to Kok Kikki farm. Donkey transport to establish ABC Kok Kikki south at 3923m. AS continues back to ABC Kok Kikki east at 4005m.
Mon 26th	AS, AV, SH – recce North Face Direct route on glacier for Pk 5084. SG, JK, ET – recce route from ABC Kok Kikki South for Pk5171 and cache gear.
Tues 27th	SG, JK – First ascent of Ak Kalpak 5171m (5122m) ET – waits at Kok Kikki ABC South, mostly fending off cattle from the tent! AS, AV, SH – Attempt Pk 5084m via North Face Direct. Retreat from 4450m due to ice conditions, slow speed, only 1 x 50m rope and concern about safe descent.
Wed 28th	All descend Kok Kikki valley using donkey transport (pre-arranged collection at east/south intersection) for equipment to Kok Kikki farm, then to BC in 6WD. Pack for morning BC departure.
Thurs 29th	Clear BC and depart at 9am for Osh. 11hr drive arriving 8pm.
Fri 30th	In Osh – day off sightseeing and resting. This was a travel day in the original itinerary, but we gained a day in Osh by one long push from BC the day before.
Sat 31st	In Osh (Kyrgyz Independence Day from USSR in 1991).
Sun 1st September	All depart on 05.30 from Osh to London via Moscow. Arrive Heathrow 12 noon and drive back to Manchester arriving home around 7pm.

ROUTES

Detailed route descriptions of the peaks summited and attempted on the expedition, along with accounts of each climbing trip, written from the personal perspective and style of different team members.

Ak-Chukur (existing local name) 4970m on Soviet Map, GPS Height; 4958m

- First ascent Monday 19th August 2019.
- Climbers: Steve Graham, Andy Stratford, Stuart Hurworth, Andy Vine.
- Summit Lat N 39°17'48.110 Long E 72°12'54.996
- Approach 100m, 1km over fresh snow-covered moraine/steep scree (breaking trail).
- Route: 'Deception Route' PD (450m). 1km climbing SW Glacier followed by final 100m snow climb and (crux) rock corner onto summit spire platform.
- Summit day: Depart ABC; 09.30 am. Summit 1.50 pm. Returned to ABC at 5pm
- Weather clear and sunny, partial cumulous, wind negligible. Summit day preceded by overnight 10-15cm of fresh snowfall.
- Total BC return trip: 5-days (4 nights), Bel-Uluu valley approach.
- Height / Position of ABC 4522m Lat N 39°17'02.568 Long E 72°11'50.483



Ak Chukur route (Photo and Topo: Andy Stratford)

Cross moraine and scree by any suitable route to reach the SW Glacier. Walk easily up the Glacier crossing some small crevasses, to the double humped rock summit at the very top of the glacier. Climb steeper snow towards the left rock summit for 50m to reach a small snow arete-scoop, then a 15m crux pitch of a chossy rock and snow corner (protectable) onto a final run-out 30m to the highest point of rock, 2m x 2m platform. Descent; Walk back to the lower rock tower and abseil direct to the arete-scoop. Reverse Route on Glacier. MORE DETAILS: <https://twitter.com/PamirPioneers/status/1170012618280656896>

Andy Stratford's personal account of climbing Ak Chukur

I awoke to a pale light barely penetrating the remaining snow on our Trango tent. Sleep had been fleeting, disturbed, full of fitful, confidence gnawing dreams about the mountain buried in snow, the return route down the dangerously steep and eroded glacier on loose scree, and the need to get out and shake snow off the tent during the overnight storm.

The previous afternoon we had arrived early but spent 3 hours building our tent platforms on the chaotic jumble of moraine burying the sad remnants of the glacier below. Barely awake I stumbled onto the treacherous unstable blocks I edged around the tent shaking it free of snow. The light was brighter now, a classic Alpine scene before us, skies clear, no wind, a beautiful day was promised. Maybe, just maybe, this was our day after all.



The overnight snowstorm at Ak Chukur ABC ~4500m (Photo: Stuart Hurworth)

It was still cold when we left, crossing tedious and difficult moraine but soon the heat built up as we made a rising traverse across the valley side walls to gain the toe of the glacier. I overheated so removed thermal underwear and dropped a dry bag with 2kg of excess weight to collect on the way down.

We roped up in pairs as the glacier looked benign ahead and, stopping a little way on to assess the route we were deceived by the three possible summits, the smallest of which was the actual summit....its all about perspective. Hence the eventual route name – Deception Route. A classic zigzag up the easiest line on the glacier, crossing small crevasses brought us to a steepening of rock and a left turn to what was, by now the

obvious summit pinnacles. I built an ice screw belay in a scoop of Neve-Ice and Steve led up a steep chossy corner with a cam and nut for protection. A short traverse left followed then, after all the planning and dreaming Steve was there. I followed up and Steve brought me onto the tiny 2x2m platform.

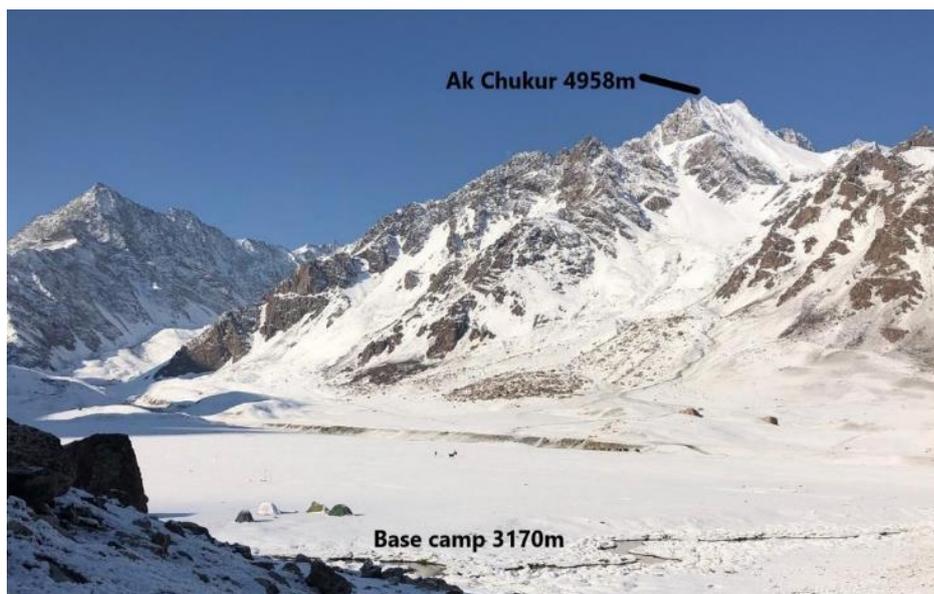
I breathed in the entire Pamir Range, an uninterrupted vista of snowy peaks stretching along the border, into Tajikistan and the giant 7000'ers of the Pamir massif way to the south. The view to the north west was startling as the mountain fell precipitously in what appeared a near vertical sweep of glacier shattered crags, vertiginous drops and piles of unstable scree to the valley floor, and the tiny dots of our base camp tents 1.5 vertical kilometres below. Many hugs were shared, selfies taken then Stuart and Andy V had their turn on the summit.

We agreed that I would rig a 4m length of tat to abseil off another pinnacle as downclimbing the chossy corner was an unnecessary risk. As Andy and Stuart prepared to abseil, they looked back up at the summit and saw what can only be described as some sort of Mouse-Ferret perched majestically on the summit, looking directly at Andy Vine. We believe our Mouse-Ferret was a near threatened species called [Mountain Weasel](#). He ran down the abseil, past Stuart. Unsurprisingly we were all too startled to catch it for a photo.

Once we had landed safely at the belay scoop, we had each a 2-minute sat phone call home to share our news. My voice choked with emotion as I told Jo how much I missed her and that we were safe and had made a first ascent. "just get down safely, its not over till you are down" my wife reminded me!

An hour later I was cursing leaving the gear on the now bare scree slopes, cursing the 100m I had to reascend to find it, and cursing carrying it back across the moraine, although without the snow it was considerably less treacherous.

We packed our tents and left about 9.00am the following morning, keen to get to the main river and cross before it was a raging torrent. Stuart found the safest line yet of our four different routes of ascent and descent of the glacier and landed us at an easy river crossing point to boot. After another 5 hours walking with our 25kg loads we arrived back at BC to share our success, and replenish, refuel, and rest. We had made a first ascent. We had got back safe. The expedition had just hit another gear.



Ak Chukur from base camp on the morning of the first ascent after extensive overnight snow, there is normally little snow visible in this view (Photo: Emily Thompson)

Pik a-Boo (given name). 5122m on SMM, GPS Height 5077m.

(A Russian translation for 'hidden mountain' is *Skrytaya Gora*).

- First ascent Friday 23rd August 2019.
- Climbers: Steve Graham, Jared Kitchen, Emily Thompson.
- Summit Lat N 39°18'47.938 Long E 72° 18'42.938.
- Approach; 100 vertical metres and 1km on moraine/scree.
- Route; 'North Glacier Route' AD - (900m), climbing on ice-snow 40-55 degrees. Several large undulating mixed and short steeper ice sections (60deg) from the 4870m col to the final summit approach snow arete. Small rock pinnacle summit (the last of three).
- Summit day: depart ABC; 06.45am. Summit; 12noon. Returned to ABC at 4.15pm
- Weather clear and sunny with approx. 15mph wind on the summit approach.
- Total BC return trip: 3-days (2 nights), unnamed valley approach.
- Height / Position of ABC 4188m at Lat N 39°19'34.904 Long E 72° 18'52.153



Pik -a -Boo Topo montage (created by Jared Kitchen)

[Pik-a-Boo Tweet Thread with photos](#)

Emily Thompson's personal account of climbing Pik-a-Boo

After the reconnaissance earlier in the week, a site had been identified for ABC which was pitched in the moraine beneath the North Glacier at ~4200m. We also load carried additional water to the site with the help of Sacha and Alexey, knowing that there was no obvious water source in the valley. As we flattened the moraine and pitched the tent, we could see a storm hit BC in the valley below. Luckily, we escaped the storm and the next day our route was in good condition.

With the surface snow melted and the scree on the left now bare, we decided that the left route onto the left of the corrie was probably the least preferable to try, given the potential for rockfall. So we agreed to climb the glacier to the right, which would become our North Glacier route onto Pik a-Boo.

We woke at 4.30am for breakfast and to kit up. We weren't particular speedy as we didn't start our ascent till 6.30am. A bit of kit faff and lots of breakfast eaten and tea drunk. Climbing initially with head torches we soon had daylight as we reached the foot of the glacier, albeit we were in the shade right until the col at 4870m.

The initial climb up the glacier was slow due to the altitude but it wasn't technical or strenuous. We ascended the glacier by its left edge, sticking close to the rocky ridge, before making a bold and committing traverse rightwards above the bergschrund to the col. The route had a 500m+ run out below us, but the good neve turned to good solid ice and the angle was not steep so we climbed without protection, moving together.

Once at the col we had a great view into Tajikistan. The route to the left of the col led to a mountain within the border of Tajikistan which we were not permitted to enter. Pik a-Boo is a hidden mountain to the right of the col and is fully within Kyrgyzstan. Our route traversed rightwards from the col and tackled several rock pinnacles. From the col there appeared to be two summits and it was unclear which was the highest. We committed to finding out...



Jared and Emily on the summit of Pik a-Boo (Photo: Steve Graham)

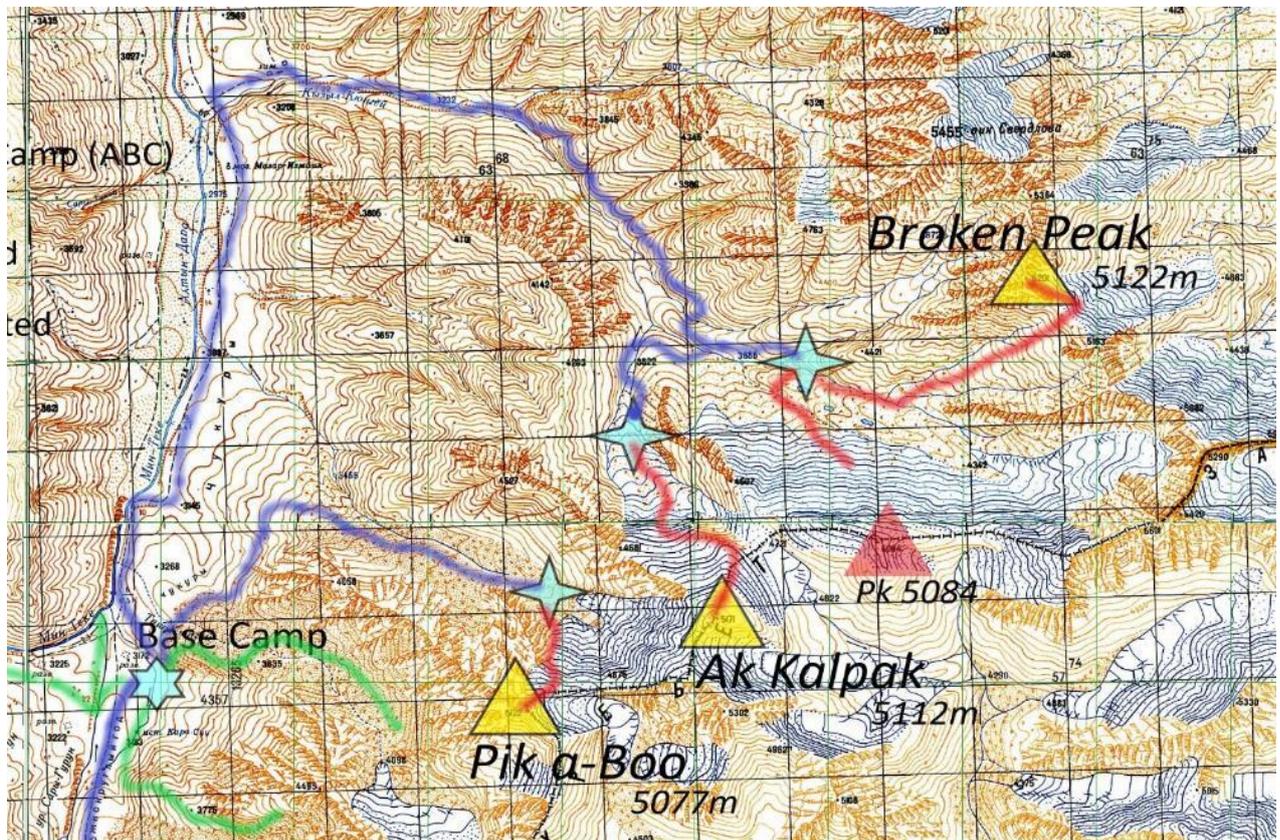
The traverse across the pinnacles looked like it should have been straight forward, but in fact the route undulates considerably, so we were never sure what was ahead and whether we would be able to progress. The rock across this section was broken and friable and so it was preferable to stick to the ice. Half-way along the ridge we met a spicy section which required down climbing. We climbed unprotected on this section as conditions were good, but later we placed protection to safeguard the descent. It was now clear that the first summit was the highest of the two, but to reach it we needed to climb a steep snow arête that rose leftwards from the last rock pinnacle. This was steeper than we thought and at the altitude made it feel a long way.

We paused at the end of the ridge to eat and drink before Jared lead the final push to the summit up the snow. After the snow arête the final summit involved a scramble over friable rocky pinnacles to reach the true top. We arrived around 12pm stepping upon the summit together.

Our GPS devices confirmed the altitude to be 5077m. We graded the North Glacier route of Pik a-Boo AD-. We spent about 45 minutes at the summit taking photos and videos and taking GPS altitude evidence. It was noted that the summit was actually 50m less than marked on the Russian map. Was it the poor quality of the rock which had crumbled over the years? Or a mistake in surveying initially?

Pik a-Boo could not be seen fully from BC or ABC. It was our old soviet maps and reconnaissance that led us to attempting the mountain, and we did not know what awaited us above the North Glacier when we set out. Two days later when approaching the Kok-Kiki valley to attempt Ak Kalpak, we caught the full view of Pik a-Boo. It can be seen prominently from the north of the Alтын-Daria.

We retraced our route across the pinnacles to the col before descending back to ABC. The descent across the bergschrund was not in as good condition having had the morning sun on it, so we were careful in our descent. We stopped at ABC for the night before the descend back to BC.



Map 6 - section showing detail of the eastern valleys (Andy Stratford)

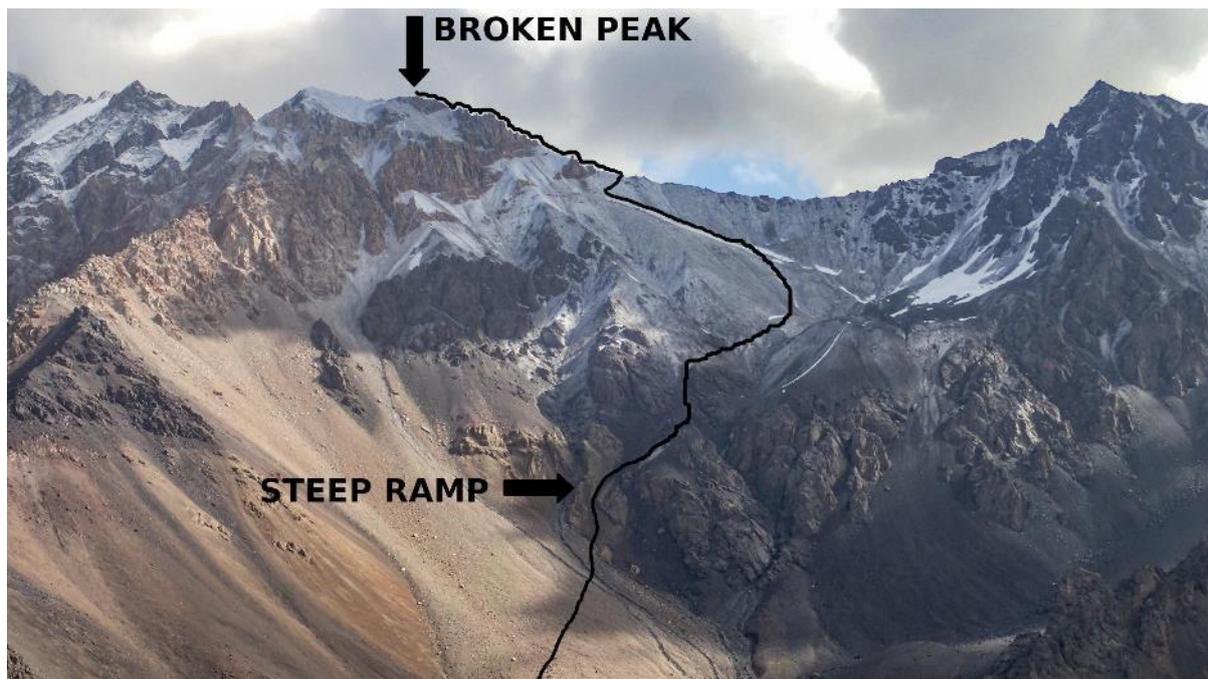
Broken Peak (given name). 5201m on SMM, GPS Height 5122m.

(A Russian translation for 'Broken Peak' is Pik Slomannioy)

- First Ascent Sunday 25th August 2019.
- Climbers: Stuart Hurworth, Andy Vine
- Lat N 39°21'28.1 Long E 72° 22'28.4
- Approach; 1000 vertical metres and 1km up gully then scree.
- Route; 'Golden Tower Traverse' climbing on rock ridge for 200m Grade; PD+
- Summit day; Depart ABC; 8.30am. Summit; 5pm. Returned to ABC at 7.30pm
- Weather clear and sunny with negligible wind
- Total BC return trip: 5-days (4 nights), Kok Kikki valley approach.
- Height of ABC 4005m at Lat N 39°19'34.904 Long E 72° 18'52.153

800m up gully E from ABC to large flat alluvial fan, climb scree ENE for 800 vertical metres easy at first then more difficult, to gain the ridge at approx. 5000m. Walk NW 100m along ridge to base of first rocks then move together along ridge for approx. 200m passing several towers and gendarmes to summit. Descent: reverse the route.

MORE DETAILS: <https://twitter.com/PamirPioneers/status/1206575010376232960>



Broken Peak topo (Photo: Andy Vine)

Stuart's personal account of the day

Andy Vine and I awoke into bright sunlight around 8.30am after some alarm confusion, the previous evening Andy asked me to set my alarm for 5.30am but somehow that didn't register

We quickly dispatched the usual morning tasks and ascended our previously reced route along a slowly rising stepped boulder strewn gully immediately behind the campsite. The gully was about 1km long with moraine to the right and steep rocky cliffs of frequently golden but usually suspect looking rock. Meandering along the gully brought us to a large, almost perfectly flat sandy alluvial plain “the beach”, what a beautiful place it would have been to camp! From here we could see most of the obstacles we would have to negotiate and plotted the most likely and hopefully safest route around them. It looked like a relatively easy walk up some, admittedly scree plastered slopes, all the way to the ridge, where the next obstacles could be spied. The trickiest bit appeared to be choosing the best path around some small cliffs lower down.



“The beach” an alluvial plain on the route to Broken Peak (Photo: Stuart Hurworth)

The hillock we ascended above the sandy plain was deceiving! We expected a quick 20 minutes from our beach viewpoint, but it took well over an hour. The perpetual hillock took us to the cliffs and the start of our suffering and torment caused by the punishing endless scree scramble.

One step forward, if you’re lucky another step, then a bit of a slide, panting, try another step, some things fall down, panting, slide, another step or two was more or less how about the next 5 hours went! Better than the best step machine I’ve ever been on! Doubling or tripling the footfall required per vertical distance. All kinds of scree were encountered, small, large, sharp, and extremely fine silt like areas, which although you didn’t slide on, you’d sink into like soft powder snow.

We started this journey up what seemed like the best line, a clearly divided gully, straight down the middle, golden scree on the left, black scree on the right, like a river confluence from different lands. At the bottom of this Andy managed to scarily easily dislodge a waist high boulder (probably several tonnes), which luckily didn’t roll directly towards him, some quick avoiding action was taken with a jump! Following this, we proceeded very carefully up the rock confluence, staying close together, but off to the side to reduce the risk of one injuring the other with the consequence of our toil. Overcoming the narrowest and steepest part of the gully gave some minor respite as the endless scree slope opened up above us and we flopped onto a convenient flat spot of silt, likely large enough for a tent or so.

We continued left of the gully, the scree bigger and quite awkward in places, Although it had felt like we were making good progress, it now seemed like every 30 minutes we ticked off was not getting us much further up the mountain. Aerobic exhaustion set in, we had to rest momentarily after every scramble slide movement.

We could see an easier line above and to the right, a switchback; we crossed the stream near a small outcrop and onto what appeared to be glaciated terrain, any ice very deeply buried by scree. Continuing across we gained a lateral moraine path upwards and back left, this proved relatively easy on the legs, although not the lungs, and led us to the only patch of snow on the face. We decided to use this rather than the scree either side and donned crampons, partially for the rest it gave! After around probably 200m of walking/80m of vertical ascent we took crampons off, now being remarkably close to the ridgeline above, although seemingly not with an obvious 'easy' way up.

We slowly zig zagged our way onto the ridge via a wide, steep, fine scree covered slope, on top it was quite broad with some ice on the north side. We had hoped it might be possible to nip over and get the slightly lower (5178?) but pointier summit done as a double act gained from each end of the ridge. However, time, skill, fitness, expertise and too much pointiness were against us! It looked like an interesting objective, appearing that a steep snow couloir must be ascended from the north side of the ridge, but then disappearing out of view before the summit pinnacle.

We made for the left end of the ridge, and it was clear when we arrived, we couldn't simply walk to the summit, the peak was capped with golden rock and the north side was precipitous, steep glaciated terrain. 4pm - we roped up for moving together, left our bags, and I began climbing, quickly finding myself above the north side having to do a delicate stretch across the void, every handhold seemingly not attached. I happened upon footprints in the snow, they appeared large, but I am uncertain if they were just multiple prints of the same animal. I assume snow leopard or ibex.

In a great position with awesome views, on nice looking but awful broken rock I passed over several short towers and past suspect pinnacles, weaving, climbing and scrambling along the ridge. We swapped over on one of several cols and Andy climbed up some particularly awkward vertical scree, which I could only negotiate by belly flopping to spread myself out over the largest possible area and hope for adhesion.

Shortly after this Andy gained the summit, and around 5pm, we were rewarded with the most awesome panorama; higher than the endless array of snow and glacier covered ridges and mountains to the south, and to the east below the huge glacier draped peak, and to the north, along the rising ridgeline, Pk Svetlova.(5465m)

We noticed a line of exceptionally large and deep footprints in the silt leading off to the West and the subsidiary ridge above the campsite – a snow leopard perhaps? The silt was amazingly covered with patterns of red, green and grey lines as if the rock veins had just atomised into powder without moving an inch.

After a lot of selfies and photos, we reversed the route, Andy leading all the way back to the bags, with a slight divergence onto a short steep downclimb to avoid the big stretch.

At 5.30pm we started our scree descent and delighted in the ease of locomotion, every step becoming tens of steps! Making it back down to "the beach" by around 7pm, feeling really quite exhausted, and eventually emerging from the gully shortly after sunset at 7.30pm to yells and screams of joy by Andy Stratford who'd been nervously waiting for us for hours with no communication device to know our progress or knowledge of our timings. He'd noticed my main head torch was in the tent and became concerned we would be benighted, as an aid he'd place his torch on top of the tent with its flashing beacon enabled. I'd only taken my small headtorch to the summit we now called Broken Peak.

Ak Kalpak (given name). 5171m on SMM, GPS Height 5112m.

- First ascent Tuesday 27th August 2019.
- Climbers: Jared Kitchen and Steve Graham.
- Lat N 39°19'23.123 Long E 72° 20'04.868.
- Height of ABC 3923m
- Approach; 350 vertical metres and 1km on moraine/scree.
- Route; 'North Ridge Chasm Route' Difficile (1160m). Sustained climbing on ice-snow 50-60 degrees. Challenging complex crevasse system and Bergschrund curtain to negotiate ~100m from summit. Chossy rock pinnacle summit (50m south of initial snow subsidiary summit).
- Summit day climb (to/from ABC) 13 hours.
- Weather very mixed - clear & sunny, dark & threatening, several snow flurries.
- Total BC return trip: 4-days (3 nights), Kok-Kikki valley approach.



Ak Kalpak route photo's and topo montage (Jared Kitchen)

Jared Kitchen - Detailed Route Description and account of summit day

A local farmer had taken us far up the Kok-Kiki, crossing the river and to some grass meadows beneath the moraine. We pitched our ABC here at ~4000m. The next day we recce'd the route and cached our gear under the entry glacier at ~4300m. From ABC the route was long (~1200m) and next day we started in alpine style at 4am.

The entry glacier was steep with a central section that increased to 55°. We tied together alternated lead placing protection. Our route tackled the left edge until the angle reduced and we could traverse into the col at ~4600m. There we met some fleeting morning sun.

The North Ridge was to the right of the col. The ridge was covered in an even steeper glacier and was much longer. We picked a route to the left that avoided the obvious crevasse system and got stuck in. Initially the slopes were passable without protection, but soon the steepness forced us to move together placing gear. A method known as simu-climbing. The slope was covered in ice and in total we placed 80+ ice screws during the ascent and descent. Hard work...

One third up the ridge there is a small shoulder to rest. The views into Tajikistan were epic. The sky had now become threatening but did not break. On reflection, this was a good thing. The clouds meant the snow and ice remained firm. On a hotter day the route may have been a lot harder...



Steve on the ridge of Ak Kalpak (Photo: Jared Kitchen)

From the resting shoulder, the route continues up the ridge and becomes steeper and harder still. Below the summit ridge the final bergschrund is tackled. This crevasse swooped down vertically from the skyline before turning horizontally to bar our path at around 5000m. On the left on the horizontal section, it became a large chasm. Stevie attempted to avoid the chasm by climbing further left, but the crevasse system became complex and he retreated to the belay. Jared then attempted to cross the bergschrund on the vertical section to the right. He found and tested a path across the crack but could not commit to the move and returned to the belay. One last chance; Stevie then retraced Jared's footprints. He crossed the chasm by Jared's path and belayed on the other side. Jared followed. We knew then that the ascent was in the bag...

The final snow arete led airily to a small snow dome. Here we saw the paw prints of the first ascensionist – a Snow Leopard? Just beyond the dome, 50m away, a chossy 10m of rock marked the summit. Our GPS's agreed the altitude of Ak Kalpak was 5122m. It was climbed by Jared Kitchen and Stevie Graham by the North Ridge Chasm Route and given the grade of D (Difficile). Total climbing time (ABC-ABC) was 13 hours.

Ak Kalpak was another mountain whose summit was hidden from BC and ABC. Several days later when driving out of the Altyn-Daria, the view back let us see our good work. Ak Kalpak along with Pik a-Boo are prominent peaks of the Western Zaalaisky. Ak Kalpak has the form of a traditional Kyrgyz hat, the Kalpak. Its colour is bright white (Ak).

Pk 5084m

- unnamed
- Attempt on Tuesday 27th August 2019.
- 5084m on SMM, GPS Height unknown. Lat & Long not verified as summit not reached
- Approach; 1.5km and 200 vertical metres across moraine
- Route; 'North Face Direct' climbing on steep bare glacier ice Grade; AD+ or harder. Marked on the image below as "tomorrow's route".
- Retreated at 4480m due to difficult ice conditions and speed of climbing and concern over speed and length of descent.
- Weather clear and sunny with negligible wind
- Climbers: Andy Stratford, Stuart Hurworth, Andy Vine
- Total BC return trip: 5-days (4 nights), Kok Kikki valley approach.

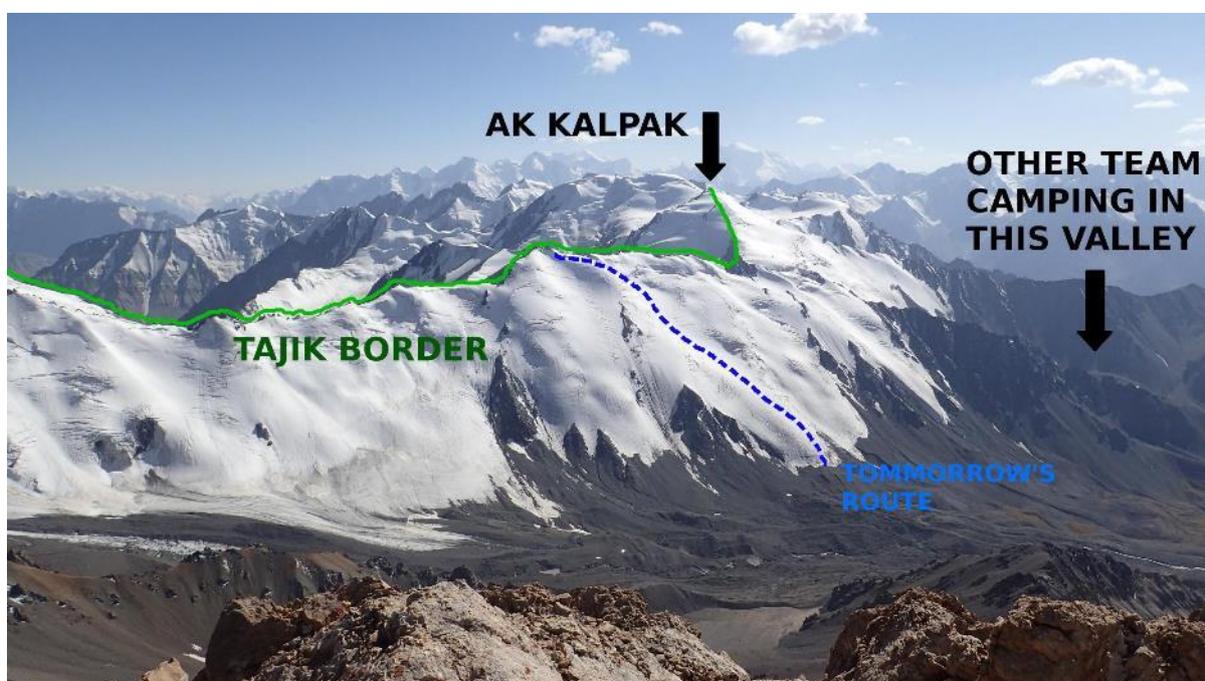


Image of Ak Kalpak and Peak 5084 taken from Broken Peak (Photo: Andy Vine)

The morning after Stuart and Andy's success on Broken Peak we lounged at ABC in the morning sun and studied the photos taken from high on the ridge of the remnants of the once mighty glacier that draped from Pk 5084 on the opposite side of the valley. Later that morning we took light bags and a bit of gear to go and have a look at the possible line up close. We had another tortuous journey across chaotic moraine from Broken Peak ABC at 4005m to reach the base of the headwall at about 4180m. As we expected at that time of day the bare glacier ice was wet and releasing small stones continuously. I geared up and climbed a full rope length to test the ice for axe placements, crampons and ice screws. It wasn't the best but was doable. We agreed tactics - we would move together on a full rope length placing screws every 15m or so which meant about 120m of rope travel before a belay to change over. We back calculated our expected speed and then descent and opted for a 6am start from the tent the following morning, cairning the entire route back thoroughly.

Sometime in the middle of the night my brain switched back on. I realised that we had only carried a single 50m rope from base camp. I lay awake worrying for a while what that meant for the previous days' calculations, but somehow drifted back off.

Padding away from the tent, into the gloaming, I decided light was right and switched the headlamp on. The first moraine to climb out of the camp was the steepest and by the time I topped out by the first of our Cairns, I was using natural light. The carefully positioned cairns made a second route finding mission much easier to the headwall. On arrival we discussed the issue of the one rope and the calculations. We all realised that 3 of us trying to abseil down on a single 50m would probably not be a goer with our start time and the distances. We decided to have a go anyway.

The ice had refrozen well. There was no sound of stonefall. The wall of ice rose steeply above, the line obvious that we would take, passing under seracs and up steeper short ice walls. I had a nagging feeling that we had started too late. I climbed away up the steepest, stoniest and barest section, followed by Andy then Stuart, we soon got in the rhythm and the first simul climbing pitch of about 120m seemed to go quickly. The ice was bullet hard and at times the climbing felt more tenuous than was really comfortable as a few mm of pick and crampon bite didn't seem a lot. Gathered at the changeover, we were all relatively OK with the terrain, the level of objective danger, and our tactics for both safety and speed. I looked at my watch and held back from a comment.

Stuart led off and we gathered again after another 120m. This time I needed to say it "this isn't going to work lads". We are not going to get up and down fast enough here, and we have no margin for error with just the one rope. After some discussion we decided to see if we could climb the next pitch much quicker. Sometime later, gathered back at the next belay now at 4480m altitude, and with a little increase in speed, but not enough, we all agreed to call it a day. As we were not yet on the most difficult and steep terrain, we opted for simul downclimbing rather than abseil, but this still took ages and it was gone noon by the time we were back on the moraine. So that was it. There was no time for an attempt on any other mountains, but we were safe even though we had failed, it had been an enjoyable day.



Lunch with the farm owner who supplied the donkeys for Broken Peak-Ak Kalpak (Photo: Andy Vine)

Illness, injury and near misses.

There were no serious illnesses requiring any more treatment than Paracetamol and Ibuprofen. Significant quantities of Imodium were used by some members of the team!

No-one suffered any injuries requiring medical treatment and apart from the odd plaster or bit of tape the extensive medical kits were unused.

There were no near misses in terms of rockfall, avalanche or such like, although Andy V did nudge a massive boulder that rolled slightly toward him at the bottom of the loose gully on Broken Peak! On Ak Kalpak Steve and Jared had significant danger from crevasses but nothing that would count as a near miss as neither of them actually fell in. Arguably the most significant objective danger we faced was on the numerous river crossings, these should not be underestimated!



Andy Vine on the return afternoon crossing of the Altyn Daria river, upstream of the confluence with the Kaska Suu. On the morning crossing the water was just above ankle depth. (Photo: Andy Stratford)

Other expeditions

International School of Mountaineering (ISM) Virgin Summits expedition 2019

A 21 strong team from ISM arrived at 4.30pm on Tuesday 20th August, exactly one week after we had set up our base camp, consisting of ten client's and five guides along with cooks, several assistants/porters and a driver. Apparently, ISM had recced the Altyn Daria valley the previous year and this location was one of the prime locations for their commercial 'Virgin Summits' expedition. There was some confusion as to how both groups had ended up in the same valley when both were using the same logistics operator - ITMC.

We gave ISM info about the peak Ak Chukur 4970m (4958) which we had just made the first ascent of and some info about the other peaks which are naturally accessed from an ABC situated on the Bel Uluu Glacier. Our team had already recced two peaks Pk 5171 (eventually Ak Kalpak) and Pk 5122 (eventually Pik a-Boo) immediately behind base camp to the east, and we informed ISM that it was our intention to send an acclimatised team up the following day. We explained that we had recced as far as the Kaska Suu / Min Terke river confluence in the west and that the crossing looked difficult. At that stage we had not completely ruled it out as we still had a request out to the local horseman for animal transport.

The following day ISM sent a strong team to cross the river which, at some point, included the use of a Tyrolean. The video we saw that evening from one of the ISM Russian staff was hair raising; the water looked very deep, was raging fast with much white water but was dirty brown in colour, and perhaps most significantly there was the distinct and clear sound of boulders moving! We subsequently found out that some ISM team members had been stranded overnight on the wrong side due to the very fast and dangerously high water, luckily, they all managed to safely re-cross the following morning. Later that day (Thursday) we spoke with Adrian Nelhams of ISM who reported that access to the mountain group 'Min Terke' via the Min Terke river gorge involved 4 gnarly river crossings each with a high level of risk. This reinforced information we received that day from a local horseman who had said that he considered the route to the Min Terke pastures too dangerous for his animals and declined to transport our gear to an ABC in the area for any price.

With the army prohibiting all access to the upper Altyn Daria and the Tersagar pass beyond the Bel Uluu river confluence, the Min Terke was ruled out due to safety concerns with the river crossings. The KMC team having already picked off the best easier peak in the Bel Uluu (Ak Chukur) and being ready poised and acclimatised to attempt two other peaks to the east, ISM's options were too limited for such a large group climbing in five teams of three (one guide to two clients). Consequently, on Friday 23rd ISM pulled out and headed back north for another valley system and a wider range of more suitable prospects.



Donkey-tastic! Our load carrying transportation up the Kok Kikki valley. (Photo: Andy Stratford)

LOGISTICS

Local support and local transport

KMC team logistics in Kyrgyzstan were supported by ITMC from whom we hired a 6WD URAL truck, a driver, a cook, and an assistant as well as a dining tent, cook tent, all the cooking equipment and a toilet tent to cover the pit. The three-man team from ITMC were highly professional, very experienced, dedicated to the job, enthusiastic about their country and the mountains and great company despite speaking little or no English. The Microsoft translator app was particularly useful and Andy configured his with a Russian-English Keyboard swap and after a few days quite complex conversations were taking place using the app.

Donkeys & horses

Finding animals to transport our kit was not easy. Partly this was an issue of language, but also the fact that none of the locals in the valley had ever worked with or even met a mountaineer before. The farmer at the mouth of the Kok Kikki valley provided donkeys, but it took several days for Sacha and Alexey to find that he was the right man to ask.

Permits and Army checkpoints

The Kyrgyz Army **have a permanent base / checkpoint with watch towers at the main river crossing to enter the Altyn Daria valley for which border area permits are required.** We applied for and received these in advance at \$30 per head (via ITMC) so there were no issues when we had them checked. Once in the valley, we had our permits checked daily for the first five days by soldiers on patrol in the upper reaches of the valley. The soldiers were very insistent on actual checks of the pieces of paper, however this was done with professionalism and in a friendly manner. Mentioning the obvious English football teams helped with the usual banter about Manchester and Liverpool being foremost. For anyone who knows Steve (who hails from Liverpool), this is inevitable! After a few days the permit checking subsided and we then interacted with the soldiers we met differently, comparing weights of kit, showing them ice axes, sharing snacks and having conversations via the phone app translators.

The Army officer in charge did not allow any access to the upper Altyn Daria beyond the junction with the Bel Uluu valley (towards the Tersagar pass) even if permits were shown. *This is critical information for all potential teams looking at this area in future – the commander on the ground seems to make the decision, and it appears no piece of paper will get you further if he won't allow it.* See also the commentary in the section entitled ISM. The out of bounds area is marked **on Maps 5 & 7**

Vaccinations

All team members were individually responsible for their own decisions on travel vaccinations. Team members sought advice from travel clinics, GP's and the internet. All team members decided to ensure that they had up to date tetanus and typhoid vaccinations. In addition, team members also immunised against Hepatitis A and also due to the nature of the remoteness of our expedition, and risks associated with hospitalisation should injury occur, Hepatitis B. Some but not all team members also chose Rabies and/or Polio vaccinations.

Insurance

Research was undertaken as to the various insurance cover available on the market for this expedition and conversations were had with a few companies (Global Rescue, BMC, DogTag, AACUK) to ascertain levels of cover for individuals and for the group, covering ages and known medical conditions. The priority for selecting insurance was on the criteria of best rescue and repatriation provision, as well as value for money.

It was decided to use DogTag insurance as they provided the highest level of emergency rescue cover and cover for equipment. Our insurance detailed needed to be registered with ITMC and the Kyrgyzstan Mountain Rescue team two weeks prior to the trip. Details were also given to our UK point of contact should an emergency arise.

First Aid

Two group first aid kits were created to ensure we were self-sufficient for every eventuality. Supplies were sourced from Medisave; drugs from Boots Chemist and Nomad's Pharmacy for specialist prescription drugs.

Base Camp Kit	ABC Kit
Anti-histamines	General Antibiotic
Antibiotics	Paracetamol
Anti-Nausea	Ibuprofen
Laxative	Aspirin
Imodium	Rehydration sachets
Eye wash	Phenylephrine (sinus)
Antacids	Glucose gels
Paracetamol	Diamox
Ibuprofen	Dexamethazone
Aspirin	Nifedipine
Rehydration sachets	Penthrox
Glucose gels	Anaesthetic throats sweets
Anaesthetic throats sweets	Naproxen
Burn gel	Finger pulse oximeter
antiseptic cream	Tuf-kut scissors
Dettol	Scalpel no.15 blade
Cotton wool balls	Melolin Dressing 10cm X 10cm
Tweezers 9cm	Large Dressing - Sterile 10x12cm
Dressing scissors 5" sharp/blunt	Zinc oxide adhesive tape
Fabric plasters - assorted x 100	Conforming Bandage - 5cm X 4m
Blister plasters	Conforming Bandage - 15cm X 4m
Melolin Dressing 10cm X 10cm	Steri-strip skin closures
Large Dressing - Sterile 10x12cm	Woundclot Trauma 8 X 20cm
Triangular bandage	Professional 70% alcohol swabs
Conforming Bandage - 5cm X 4m	Pocket face mask
Conforming Bandage - 15cm X 4m	Safety pins
Steri-strip skin closures	Gloves
Professional 70% alcohol swabs	Sam splint
Sewing needle	Pencil
Safety pins	Incident cards
Gloves	
Cotton buds	
Small cling film	
Pencil	
Incident cards	

First aid supplies packed were intended to cover major issues likely to arise. The kits were compiled from the list advised for a 6-person team from the Cicerone Wilderness First Aid book (packed as a useful reference guide) and the Medex 'Travel at High altitude' guide. In addition, we took Penthrox as a major painkiller.

Three of the team flew out earlier and two of them contracted stomach bugs in Osh, meaning that they entered the mountains still feeling the effects of this. In hindsight we could have done with more Imodium. All team members also packed a personal first aid kit suitable for their own needs.

EQUIPMENT

Climbing equipment

For the purposes of packing, we split into pairs and made up three complete racks. We acknowledged this would be more than required, but we wanted flexibility to climb as three pairs. Each of the three racks was slightly different - the list below is a representative one.

- x1 Belay Device (incl. spare)
- x2 120cm Sling & small Screwgate
- x1 240cm Sling & large Screwgate
- x1 15m Abseil Tatt, Knife, Maillon & Wiregate
- x1 Abalokov Threader
- x3 HMS Screwgates – large
- x2 Ice Screw – Long
- x4 Ice Screw – Medium
- x2 Ice Screw – Short
- x1 Nut set (x11) split on 2 No. Biners
- x3 Pegs - various types
- x4 Cams - various sizes & Wiregates
- x2 Hex's - various sizes & Wiregates
- x10 60cm lightweight unsewn extenders (on Wiregates)
- x2 Snow Stakes

Ropes - as a group we took a variety of ropes for flexibility - these were;

- x2 60m half ropes (8.5mm)
- x2 50m triple rated ropes (8.7mm and 9.1mm for use as singles or halves)
- x1 60m half rope (8.5mm) as a spare to replace anything else
- x1 30m half rope
- x1 30m single rope

Notes on usage of climbing gear...

Unsurprisingly, the two-triple rated 50's saw the most action as, predictably, team members wanted to cut weight! We found these ropes adequate most of the time, although on one occasion, where Stuart, Andy V & Andy S were climbing **Pk 5084m** they ended up with a single 50m rope where 2x 60m halves would have been better for an abseil descent. This contributed significantly to their decision to retreat. We did not use the 30m half ropes at all for climbing, but one did get used to secure loads on a donkey. It was then given to the donkey man as a gift. Perhaps on a river crossing they would have been useful and could have been left in place. Maybe a 30-50m length of static line would be better for this purpose.

Snow shovels & avalanche probes were debated and, in the end, only one member took them, as a team we were not expecting large amounts of snow in the area (although we did get 6 inches one evening).

In personal kit each member took a pulley (for crevasse rescue) of whatever sort they owned, 3 prussiks, several screwgates, slings and a climbing knife (although at least one had this as a combined tool with an Abalokov threader). One member also took a terrier (small bulldog) which was not required as typically either rock or ice was encountered, and the ice easily took screws. Pegs & Pitons were taken but not used by any party.

Crampons & Axes

All team members took standard 12-point mountaineering crampons of various sorts– Grivel G12's, Petzl Vasak, Petzl Sarken, Black Diamond Snaggletooth and two (not always paired) mountaineering axes. DMM Raptor, DMM Cirque, Petzl Sum'Tec, Petzl Quark, Black Diamond Venom, Grivel Haute Route

Tents

We took enough tents so that we didn't need to take all the base camp tents down. The Trango 3's which we used at all ABC's were brilliant, spacious, bombproof tents and we would all highly recommend them. With hindsight it would have perhaps been advantageous to have some lighter weight options as well - as all the tents suitable for ABC were both weighty and bulky. However, as a team, we had what we had i.e. none of us had suitable lightweight single skin or lightweight 4 season tents, so we needed to work with it.

Base Camp:

- x1 Mountain Hardwear Trango 3 – 3pp tent, 5.1kg (Jared and Emily)
- x1 Mountain Equipment Dragontail - 1.5pp tent, 2.2kg (Steve)
- x1 Terra Nova Quasar – 2pp tent, 3.8kg (Andy V)
- x1 Terra Nova Giant Quasar – 2pp tent, 4.0 kg (Andy S)
- x1 Terra Nova Super Quasar – 2pp/3pp tent, 4.8kg (Stuart)

ABC's:

- x2 Mountain Hardwear Trango 3's – 3pp tents at 5.1 kg each

Power and lighting

All members took portable Powerpacks, for example the Anker PowerCore 10000. Albeit heavy, they're small and recharge devices rather quickly, quicker than solar panels - very beneficial for phones & headtorches when away from BC on multi-day trips. Any Powerpacks taken should be kept warm if possible, as drawing power (if any there due to the rapid loss when cold) from a cold battery can damage its ability to retain charge - this includes mobile phone batteries.

Anker Powerport solar panels (2-port 15W & 21W types taken) were a useful addition to portable powerpacks which tend to be heavier than the solar panels. Energiser Lithium AAA batteries (3 sets of 4) were taken for the SPOT Gen 3 GPS tracking device which was used all day every day away from BC and was still running on the second set of batteries at the end of the trip. We were lucky to have a portable generator at Base Camp which we used for charging and for electric lighting in the communal tent.

Everyone took a principal head-torch and at least some sort of a spare.

Food and cooking at Base Camp

There was some debate about the need for this BC service pre-departure, but for sure, for the extra cost the benefits are huge! It pays massive dividends, conserving time, effort & energy for the climbing. The food cooked at Base Camp was nothing short of stunning, especially as it all came off a basic 2 ring stove! We simply cannot give enough praise to Alexey and Sacha for their creativity and variety, quantity, quality and punctuality of meals. The diet was superbly balanced with plenty of fresh veg, rice, pasta, meat and fruit supplemented with breads, milk and cheese from the local nomads. The time saved on cooking made such a difference to our opportunities to check maps and photos, debate and discuss options, do our washing, chill out, prepare and repair kit, explore the local area and just have time to soak in the very special time that we had together in this unique and precious environment. Jared and Emily are both veggie and had no problems getting a decent menu, although on the odd occasion it was clear that a dish had been cooked and the bits of meat just removed! Our return exhausted from ABC's on several afternoons were amazing as food was immediately brought out for us to refuel and recharge



Veg dumpling petal... Delightfully delicious art! (Photo: Steve Graham)



Lunch in the happy dining tent (Photo: ITMC support team)

Food and cooking at ABC's

We took three Alpkit Koro gas cartridge type stoves (remote canister hose) and some smaller to screw on directly. All main Stove kits had a 2-litre pan for boiling water (mostly the type with heat exchangers). The others were all taken as spares. The Koro's proved themselves very reliable in the benign conditions. The team used a variety of expedition freeze dried foods, from both Expedition Foods and Summit to Eat. All sachets were of the 800 or 1000 calorie size and were substantial meals. Both companies' food was found to be good and filling with little difference in quality or price. A big thanks to Expedition Foods sponsorship the menu choices often being a major tent discussion topic at ABC's.

Breakfasts varied for team members with some making their own muesli//granola mixes, others using pre prepared porridge sachets and some using freeze dried meals.

Lunches above ABC consisted of bags of mixed dried fruit & nuts made up from that purchased at Osh market and various snack bars, mini-cakes & biscuits. This was supplemented by breads, cheese, cold meats and boiled eggs all laid out for us after breakfast by the BC team.

Evening meals consisted of powdered soups, freeze-dried main meals (and sometimes deserts) with copious amounts of tea/coffee/hot chocolate consumed.

Perhaps the only thing we would have had more of was Chocolate, but it seemed to be low on the priority list on the big shop in Osh!

Water purification and filtration

At Base camp water was taken from the clear stream flowing alongside, however we still chose to boil anything intended for drinking, whether for hot brews (obviously), or allowing to chill for drinking water.

At high elevations we attempted to camp near clear flowing streams, and even in the higher moraine covered glacial basins, small water flows could be found after carefully listening and removing small boulders. Often these streams ran clear in the mornings and were then very silty in the afternoons. We were keen to avoid drinking too much sediment from the glacial melt, so we took a two-stage filtration system. We used Milbank bags to remove the sediment, and then either used chlorine tablets or a sawyer drinking water filter.

The dual-filter system could be rigged up (inserted into a Camelbak reservoir and outlet drain tube) as a gravity fed sediment-filter system feeding into a large water container. Chlorine tablets have the advantage of not only sterilising the water but also the container and its spout and continues to do this constantly. The disadvantage is that the tablets take half an hour. The sediment filter worked reasonably well, except that it froze up on occasions making the filtration slow. Where the water was clear enough, we did without the sediment-filter, opting to just boil or add chlorine tablets. A pumped sediment filter would be preferred in future if a light enough and one could be found because the Milbank system was slow.

An MSR Trailshot filter with an integrated pump was also used and worked as expected and proved to be invaluable despite its small size. Jared, Emily and Steve relied on this for filtration of water on their summit successes and while it occasionally clogged with silt it worked exceptionally well, albeit a slow way to filter large volumes of water.

Weather information and monitoring

We received daily text messages to the Sat Phone with a weather update, sourced from a couple of websites by experienced mountaineer and KMC club member Colin Maddison, to whom we owe a debt of gratitude for the diligent support. Data points for these were many miles away but they provided some confidence in that they were mostly reasonably stable. The forecast did predict the snow dump that we had, although at that stage we were committed and chose to continue as it looked like a relatively short lived issue.



Emily didn't even get her feet wet – an amazing jump! (Photo: Andy Vine)

Communications

We took three satellite communications devices with us. A traditional Iridium 9555 sat phone, an InReach tracking & messaging device made by Delorme (now owned by Garmin) and a SPOTGen3 GPS tracker device. We bought the sat phone from eBay and sold it on after the trip. The InReach device was hired from the Alpine Club, and the SPOT Gen3 device was hired from a specialist independent provider. We tested all in the UK prior to departure, which proved helpful on usage understanding and familiarity etc.

The Sat phone worked well for voice calls and was very reassuring to have with us. The battery lasted for about 48 hours on a charge and we left it off most of the time. It was less predictable for text messages, but we found that making a test call made it connect to the network and therefore it sent and received messages at the same time. It had no built in GPS so we had to enter coordinates manually from our phone GPS. The 9555 was first released in 2008 and so the interface is a bit dated; those who had experienced predictive text had an advantage in operating it. Text message was generally a more practical way than voice calls to communicate with the UK due to cost. The phone could receive texts sent for free using a web page.

The Delorme InReach was hired from the Alpine Club, so not all the functionality was available to us. It could send and receive text messages and it tagged each text message sent with GPS coordinates. It also had a big red button which would call for help from anywhere in the world via the GEOS alliance. After some research we found that this was a potentially slow way to get help because it would come via local police, rather than calling the helicopter that we were insured for. We opted to type out an SOS manually in the event of an emergency. The Delorme could send its location every few minutes, but this wasn't covered by our subscription plan. The unit also has three pre-set messages that can be sent to a designated contact, but this would need to be set up by the AC before the unit was sent out to us. The interface was more modern and easier to use.

The SPOTGen3 device was set up with 3 predefined messages of our choice (character count limits). You pressed the appropriate button to send one of these messages directly back to the pre-selected UK support team members. Following advice, we chose to make one an SOS message – upon receipt of such message the UL team would instigate the necessary pre-arranged emergency procedure, namely calling the in-country ITMS office and Mountain Rescue Service. This was chosen over the additional SOS specific function which just sent a call for help via GEOS (as explained above, the less efficient method of rescue request going via the local police). Our predefined messages were...

- OK message: SPOT team all good. Cascade message to DIR & SP teams.
- Custom message (non-SOS help): Text DIR team & call SP team – SPOT team need assistance.
- Help (SOS) message: UK contacts please activate SOS Emergency Plan.

The SPOT was able to send its GPS location every few minutes, which proved to be very engaging for people at home who could follow our routes on several web-based mapping (incl. 3D earth) sites/apps. It was also extremely valuable for our UK support team, providing a live feed of the climbers' progress without the climbers having to operate the device during the climb (see later Social Media section) It also proved helpful for Emily on the day she opted to stay at ABC whilst Steve & Jared summited Ak Kalpak – their progress being watched live in the UK and details being relayed via the InReach messaging device.

BASE CAMP

Local people

Our Base Camp location in the North-South oriented Altyn Daria valley was not the total wilderness you might have imagined when looking at the map. The Tersagar Pass (3,600m) is the high point of the theoretical through route between Kyrgyzstan to the North and Tajikistan to the South. We say theoretical, as the route is effectively closed! At its Southern end the North-South valley terminates in a remote Kyrgyz border outpost and from all our research there is little other Tajik settlement close by of any significance. However, the Kyrgyz army pay close attention to the valley as a possible route for nefarious illegal cross border activities and consequently a road passable for at least part of the year by 4WD is maintained for army purposes.

Overall, the valley is populated by small farm settlements some of which are permanent and some of which are seasonal. About 800m upstream of our base camp was one such seasonal shepherds/hunters encampment and so we were frequently visited by both the farmers, hunters and their sheep and goats. Cattle are also kept far up the Bel Uluu valley and the tracks proved useful as a means of travelling to the Ak Chukur high camps.

While communications with Kyrgyz locals was not easy it was made possible by universal gestures, our Microsoft translate phone app and aided by our Kyrgyz-Russian crew. Generally, the local people were extremely hospitable, friendly and welcoming and very curious - none of them having ever seemingly encountered mountaineers before!



Our Base Camp was on flat open pastured grass ground half-way along the valley, with a small stream adjacent. This provided clean running water which was boiled for cooking and drinking. It was also periodically used by very brave (ridiculously cold!) team members to wash and clean clothes. The team had 5 sleeping tents large mess tent for eating, socialising and meeting, and the crew had a large tent for storage and cooking. The crew slept in the spacious and insulated sleeping compartment of the URAL 6WD truck

Steve and the nomad boy at Base Camp (Photo: Andy Vine)

Waste, environment etc.

All waste was removed from the area when we left with some biodegradable materials being burned during the expedition in pits away from the camp. A toilet tent with waste pit was erected far from the camp main area and used by all members of the team.

UK HQ AND SOCIAL MEDIA

More than ever, expedition brand sponsorship is dependent on the social media presence of the team and its members. The features of the satellite communications devices may seem gimmicky, but the ability to generate a buzz around different elements at varying points throughout the trip translates into happy sponsors, and with any luck, more support for future trips.

When contacting the UK support team, we designated Alia Sheikh as the primary contact to receive updates, and as the primary emergency contact who would call the helicopter if required. Alia was also in charge of updates on Twitter and both during and after the expedition did an incredible job of creating a great social media profile for the expedition. Alia passed messages on to the rest of the UK support team, including Emily Pitts who oversaw Facebook updates. [Ak Chukur Facebook post](#)

Ideally, a social media presence for the trip should begin as early as possible, and in our case, the team in the UK created a plan that generated interest prior to the start of the trip, with a 'countdown' starting on Facebook. They introduced facts relating to expedition preparation, alongside visuals created using apps such as Canva, to increase engagement. Members of the expedition posted on their individual accounts and these were shared by the main KMC club Facebook page. Members directed their followers towards Twitter and Facebook accounts for the expedition, including friends and family who wanted to be kept up to date on the trip. Using both Twitter and Facebook were a reasonable way to target a range of demographics. Posts on both Twitter & Facebook were tagged with sponsors' names, and in turn the sponsors 'shared' the posts. Also, on Twitter, engagement in the form of conversations with different members of the public created an extra buzz, which boosted followers and the feel-good-factor around the trip. Main Twitter Page: [KMC Pamir Pioneers](#)



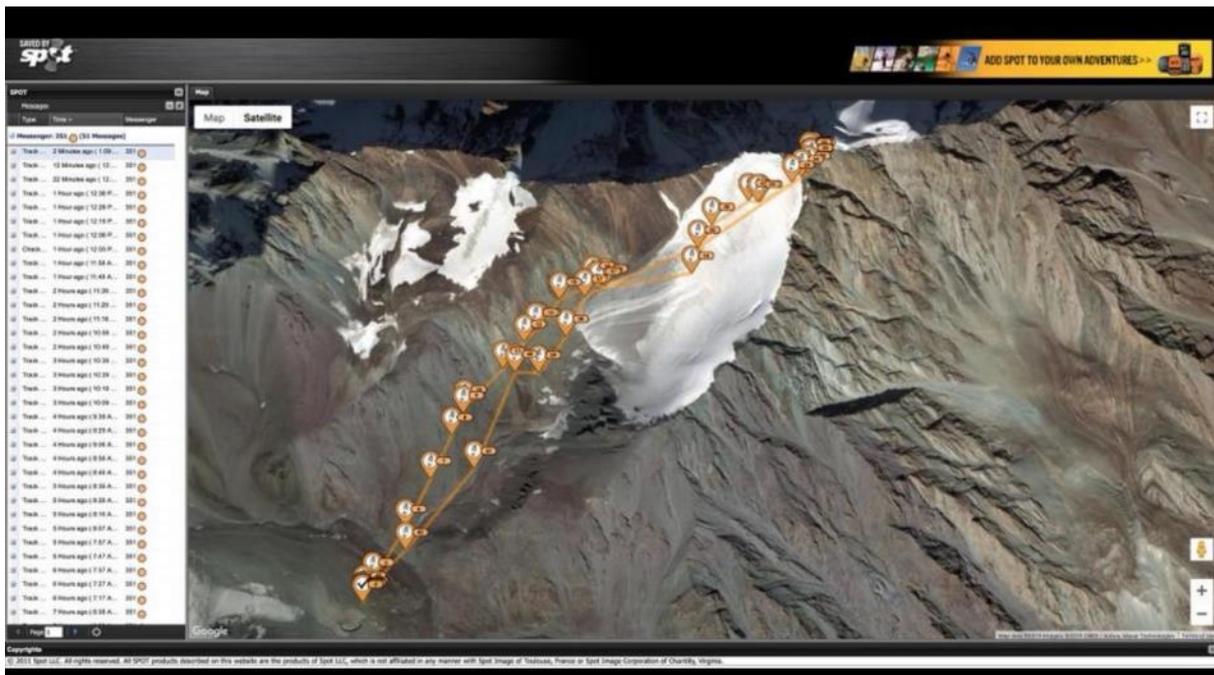
Twitter Interview: <https://twitter.com/PamirPioneers/status/1164587920717680640>



While half of the [#KMCPamirPioneers](#) are ensconced in Advance Base Camp at the foot of Peak 5171, and the other half are presumably cracking open [@ExpeditionFoods](#) somewhere to the North...

Shall we DO AN INTERVIEW? 😊

Once the expedition was underway, real time information was invaluable in keeping engaged followers updated. The UK team posted tracks from the SPOT device and relayed texts from the team, providing followers with up-to-the-minute updates. Messages relayed on to social media were well received, increasing engagement and positive messages to the team. Bandwidth did not allow pictures to be sent, but summit pictures would have been desirable.



During and after the expedition, we received enthusiastic feedback from followers and sponsors – particularly Montane, which evidenced the desire from sponsors for expedition teams to generate positive social media engagement. Emily Thompson has published [this account](#) of her expedition experience on her blog [Tink Adventures](#)



Steve celebrating the naming of Ak Kalpak after the hat he is wearing

FUTURE POTENTIAL

There is significant future potential in the Western Zaalaisky overall, but future expeditions should note that other than the obvious comments about glacial retreat and potential for unpredictability of local climate there are two factors which need to be carefully considered. The first is river crossings; attempts to cross rivers in these parts can be extremely hazardous; even the 21 strong team from ISM, who had significant experience, expertise and equipment were forced to back off their approach up the Min Terke valley. The second is the interpretation of the Army Commander on the ground on the extent that your border permit allows you to access certain areas. Neither our team, nor ISM, or Vladimir Komissarov himself, could persuade the local Army commander to access beyond a point in the main Altyn Daria valley, effectively discounting access to the upper reaches of the valley and the side valleys towards and beyond the Tersager pass and the Tajikistan border.

The Min Terke group looks like it has some excellent objectives between 4900m and 5300m. From the limited information and first-hand views of what we could see, seemed to have had potential for a small sized expedition of a couple of teams to access via a potential northern approach using animals rather than vehicles. See map 7 and 8 overleaf.

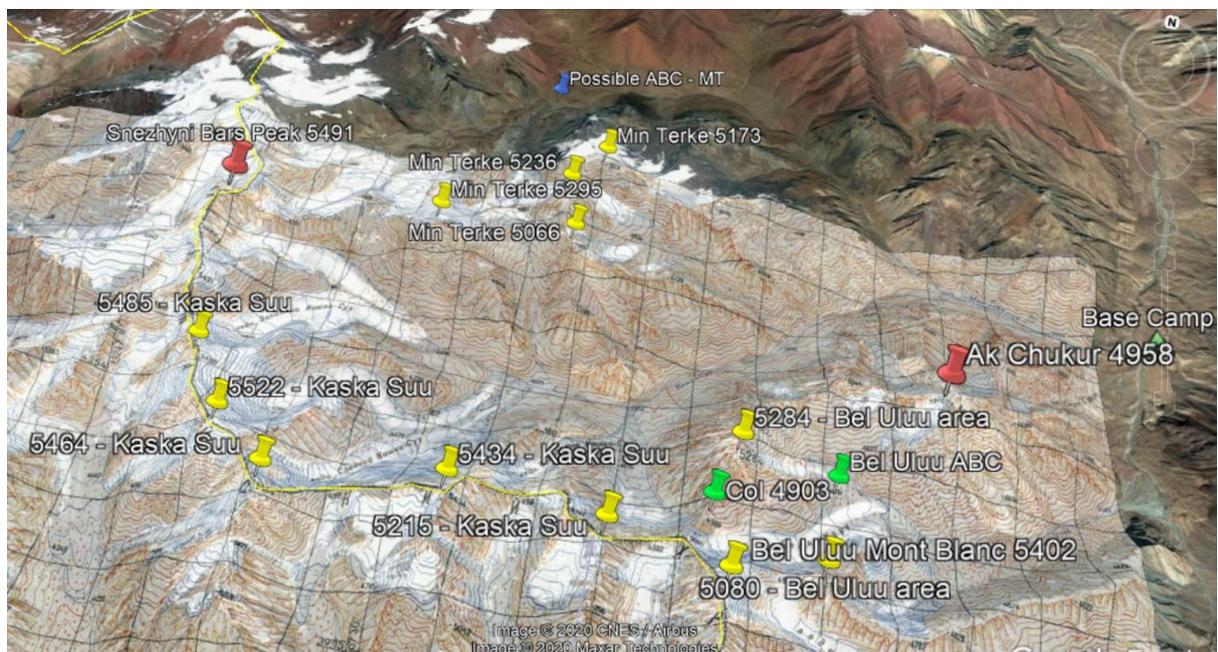


Steve nicknamed this imposing mountain (5402m) 'Bel Uluu Mont Blanc'. Photo taken 10 km distant on the East side of Altyn Daria valley, it is no less impressive close up. More photos available – contact Andy.

Other than an ascent of Snezhyni Bars Peak traverse 5491m in 2002 by D Popov recorded by VK in Issue 37 of Asian Alpine e-news we think the Kaska Suu group 4900m to 5500m remains unvisited. It might also be possible to access the northern part of the Tajik/Kyrgyz border range that forms the northernmost extension of the Kaska Suu range from the north, perhaps on a variation of an approach route to the Min Terke. Potential expedition organisers be aware; this is highly speculative, we have not researched it, but instincts are that it is worth a look. For further information contact Andy Stratford by email stratfordac@outlook.com or contact VK directly at ITMC.



Map 7 West side of Altyn Daria showing Ak Chukur, Bel Uluu Mont Blanc and Min Terke (Andy Stratford)



Map 8 - Research Map using Google Earth with SMM overlay transparency set high level, possible ascent routes to peaks plotted in red. Other than Ak Chukur and Snezhnyi Bars we believe all the peaks remain unclimbed.

EXPEDITION ACCOUNTS

KMC Western Zaalaisky 2019 – Final Accounts

INCOME:

Personal Contributions = £1420pp x 6pp £8,521

Grants:

Karabiner Mountaineering Club Expedition Fund £1,500

MEF £1,650

BMC £550

Montane Alpine Club Climbing Fund £1,200

AAC UK £600

Subtotal Grants £5,500

Total Income £14,021

EXPENDITURE:

Flights and UK travel £4,164

Insurance £1,578

6WD hire incl. standby charge and driver for 22 days £3,107

Border Permits £145

Miscellaneous in-country travel & airport transfers £199

Rental of BC kit - tents, stoves etc. £797

Accommodation in Osh and in transit, some food in Osh £710

Hired staff (excl. driver) 2pp for 22 days £1,539

Dehydrated food brought from UK £240

Gas cannisters for ABC £79

All food for BC £556

All comms equipment rental and usage charges £433

Medical – group First Aid kits £310

Miscellaneous £165

Total Expenditure £14,021

All Grant applications were submitted in the first 3 months of 2019 and co-ordinated by Andy Stratford.

Team members contributed to the various applications in several ways – including mapping, budget research, team biographies, contact with in-country logistics and the written narratives about aims and objectives. To achieve this, we had regular meetings starting in the September of 2018, the first few of which were mainly about trying to find the right area to go to!

We would like to make a special final acknowledgement to the generous benefactors of the Karabiner Mountaineering Club Grant fund – the first of our funds to be confirmed. We had an incredible amount of goodwill and support from our fantastic club. Here’s to the next 75 years!