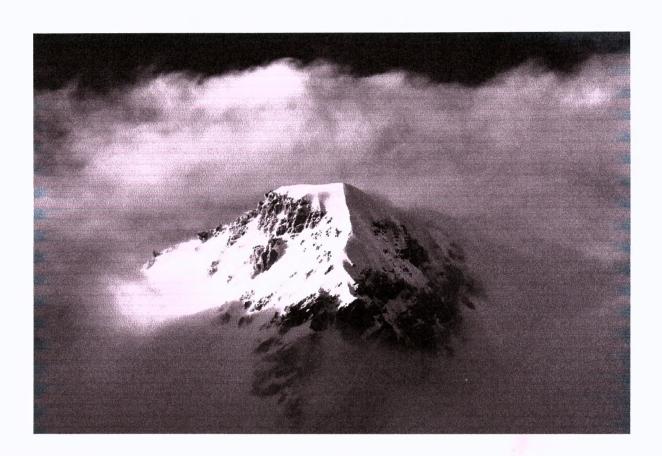
The Anglo New Zealand Expedition to the Celestial Mountains of Kyrgyzstan Kokshaal-Too, Tien Shan



12 October 2013

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

We would like to extend our sincerest gratitude towards the organisations that provided financial and material support for our expedition: The Mount Everest Foundation, The Alpine Club, and the Austrian Alpine Club. Facewest also kindly provided discounted food and equipment. Without their kind support, this expedition may never had trodden where no man has trod before.



CONTENTS

Expedition Objective	3
Description of the Area	3
The Team	3
Expedition Summary	5
Calendar of Activities	7
Description of Routes Climbed and Attempted	8
PT 4871 – PEAK FOTHERINGHAM	
PT 4950 – PEAK KINMUNDY	
PT 5051 – PK MACMILLAN	10
Pt 5168 – PK VINTON-BOOT	11
Pt 4911 – ATTEMPTED	12
Pt 5278 – DJANGHORN AND TRAVERSE	13
Previous Expeditions to the Area	16
Logistics	16
Permits	16
Travel	16
Food	17
Equipment	17
Health, Medical, and Insurance	18
Weather and Ground Conditions	19
Geology	19
Finances	20
Map of Area and Peaks Climbed	21
Prospects for Future Expeditions	22
References	32

EXPEDITION OBJECTIVE

The objective of the expedition was to explore the unclimbed peaks in the Djangart area of Kyrgyzstan. This area had only been visited by five previous expeditions since 2008 and the potential for exploring further was obvious. The expedition's key objectives were ascents of Pt 5025, Pt 5112 (both in the Sauktor area), the highest unclimbed peak in the region, Pt 5318 and Pt 5274 at the opposite end of the same ridge.

DESCRIPTION OF THE AREA

The Djangart Region is a part of the Kokshaal-Too Range that forms the border between Kyrgyzstan and China. The Kokshaal-Too, or 'Forbidden Mountains' is part of the greater Tien Shan Range that covers most of Kyrgyzstan. The Djangart Region lies approximately 95 km south of the city of Karakol.

The region takes its name from the area's main river and a high pass. The Djangart Pass (N41 40.678 E78 48.951, 4158 m) separates the Djangart and Kaichi Valleys whereas the Djangart River flows from the Djangartynbashi Glacier on the east side of the Djangart Pass. The river roughly parallels the Kyrgyz-China border, with four glacial valleys running approximately north-south perpendicular to the two. From west to east, these valleys are the Djangartynbashi, Akoguz, N1, and N2, Chulaktor, and Sauktor. The glaciers in these valleys range from approximately 3500 m in elevation at the toe to 4000-4200 m at the head. Numerous peaks in the region exceed 5000 m, with the highest being Pt 5318 located on the ridge between the N1 and N2 Valleys. After passing the N2, the Djangart River turns to the north where it is joined by the Sauktor River and eventually reaches the larger Ak-Shyyrak River.

THE TEAM

Tom Bell, 35, Trainee Paramedic (Leeds, UK).

Tom started climbing with the Leeds University Climbing Club in 1997. He was an active member of the club until 2004 including serving on the committee. Tom has climbed all over England, Scotland and Wales in summer and winter and has gone on climbing and mountaineering trips to Europe, Asia, Australia and New Zealand. Tom has led alpine TD, E2 and Scotlish V but would normally prefer to go for something longer and easier than technically challenging. He has put up new routes in England, Scotland, Morocco and Zimbabwe. Tom has hiked up to 6000m in Nepal and climbed Mt Kilimanjaro. Tom is a member of the BMC and Austrian Alpine Club and Alpine Club.



Richard (Reg) Measures, 30, River modeller/scientist (Christchurch, NZ).

Reg has been climbing extensively since 1999 and alpine and winter climbing since 2001. The majority of Reg's alpine experience has been in the European Alps and New Zealand although he has also climbed in the Canadian Rockies, Andes and Ladakh region of the Himalayas. He has a well-rounded alpine experience including ridge traverses (e.g. Grands Montet ridge, Aiguille Verte; Bouquetins Ridge, Arolla), steep rock (e.g. Gervasutti Pillar, Mt Blanc de Tacul; Cordiller Pillar, Grands Charmoz), snow/ice (e.g. Shroud, SW ridge Mt Aspiring; Lagard Couloir Direct, Les Droites; Sign of the Times, Mt Crosscut, Darran Mountains, NZ (first complete ascent)), and mixed (e.g. first ascent of Geezers Need Excitement (500m, Scottish VII, 7), S Face Mt Talbot, Darran Mountains, NZ). He has experience of long multi day ski touring and remote walking trips in Europe and New Zealand. Richard has hiked up to 5100m in Ecuador (1997) and 6000m on a British Schools Exploring Society (BSES) expedition to Ladakh in 2001. In 2008 Reg went on a six month sailing and rock climbing expedition around the north of Scotland in small yacht. Reg is a member of the Alpine Club, New Zealand Alpine Club and Canterbury Mountaineering Club.



Timothy Elson, 28, Database developer (Edinburgh, UK).

Tim has been climbing for 13 years. His main focus has always been on Alpine Climbing – highlights of which include the first ascent of the East Face of Mount Cline in the Canadian Rockies (700m TD, E3), a one day ascent of the Emperor Ridge on Mount Robson (Canadian Rockies), The Shroud on N Face of the Grands Jorasse, the Largard Couloir Direct on Les Droites, The Gervasutti Pillar on Mt Blanc de Tacul, and South Pillar on the Bar des Ecrin. Tim has climbed extensively in Europe (throughout the Alps, Norway and Spain) and the UK with routes up to Scottish VI and E6. Tim is a member of the Alpine Club, BMC and Jacobites Mountaineering Club (Edinburgh).



Neil Thomas, 32, Hydrogeologist (Christchurch, NZ).

Neil started rock climbing in 1995, graduating to Scottish winter climbing in 1999. Since 2002 he has done numerous trips to the European Alps climbing and ski touring. Highlights of Neil's European alpine experience includes the Swiss Route on N Face of Les Courtes, Preuss Route on Tre Cime, South Face of the Rateau, South Face of the Rosengarterspitze, South Face of the Aigiulle de Midi, North Face of the Tour Rond, and NNE ridge of Aiguille de L'M as well as long multi day ski tours in the Oberland, Valais and Ecrins regions. Neil moved to New Zealand in 2011 and his climbing there includes the SW ridge of Mt Aspiring and Linda glacier route on Mt Cook.



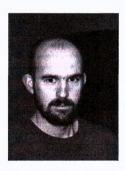
Hugh Thomas, 32, Risk Manager, (London, UK).

Hugh started climbing aged 15 in Scotland. His first expedition was to Greenland in 1997 with the British Schools Exploring Society to explore a new area around Tasermiut Fjord. He returned to Greenland in 2001 to Schweizerland on the East Coast to successfully climb new routes and explore the area. Since 2002 he has undertaken numerous of trips to the Alps with various routes up to ED1, such as North Spur of Chardonnet, E Face of the Rateau, W Ridge of Salbit, N Face of Cima Grande. Hugh has also climbed extensively around the world, for example, in New Zealand and the USA, as well as putting up new rock routes in the Moroccan Anti-Atlas, Bisotun in Iran, and Turkey up to E2. Hugh is an active member of the Climbers Club, and North London Mountaineering Club and a member of the Austrian Alpine Club.



Max Folkett, 32, Environmental Regulator, (Leeds, UK).

Max began his adventures as a 12 year old scout. He started climbing at 17, meeting other members of our party as a student at Leeds university. Technical rock climbing has been Max's main focus, climbing up to E5 in standard throughout the UK. He has climbed a few sea stacks in Scotland and would have climbed more, if midges weren't so taken by him. Max has also climbed long traditional routes in the Ecrins, Bragalia, Val di Mello regions of the alps, culminating in a successful ascent of the route Feri Ultra on Pico Luigi Amadeo. When conditions allow Max regularly heads to Scotland to climb and is steadily working his way through his list of classics up to VI in standard, and some lesser known gems. He has also ski toured in Rogers Pass, Canada, the Bernese Oberland (2007 and 2009) and completed the classic haute route. He has climbed to 3,999m on these trips and hopes to change that!



EXPEDITION SUMMARY

The expedition team arrived in Bishkek from London and New Zealand on Saturday 3 August (Neil, Tom, Max, Reg) and Sunday 4 August (Hugh and Tim). A hectic and stressful weekend was spent shopping for food and equipment in the market. On Monday 5 August, together with a team of climbers from Bristol, they departed at 6am via minibus for Karakol. At Karakol they switched to a 4WD truck and drove to Maida Adyr, arriving late in the evening after 14 hours travel from Bishkek.

The following day the team flew to basecamp (41 44' 10.15" 78 56' 29.88", c. 3200m) at the junction of the Djangart valley and the N2/N1 glaciers, via a 25 minute helicopter flight from Maida Adyr, shared with the Bristol team. The team quickly discovered that the helicopter had dropped them in the wrong place, approximately 10km from the intended site in the Sauktor valley! However, there was no shortage of alternative objectives.

Basecamp in the Djangart valley



The team split into two parties (Hugh, Tom and Neil, and Reg, Max and Tim) and spent the initial few days acclimatizing and exploring the area, visiting the Chulaktor, Akoguz, N2 and N1 glaciers and reaching approximately 4500m. Both teams then headed up the N2 glacier for a few days and made successful ascents of Peak Fotheringham (Pt 4871 41 39'31.66" 79 00'25.22"), Peak Kinmundy (Pt 4950 41°39'58.57"N 79° 1'32.80"E) Pk Andrea (Pt 4566 41 40'19.94" 79 00'43.70"), Pk 5051, and Pk Vinton-Boot (Pt 5168). These ascents were made in excellent weather in good snow/ice conditions. The route up the N2 glacier (and all other glaciers) was found to be straightforward with an excellent campsite on the glacier at c. 4200m. There were very few crevasses on the glacier and indeed one member of the party walked up from basecamp in trainers.

During this period Reg, Max and Tim also made an initial attempt from the N1 glacier on the traverse of Pt 5274 to Pt 5318, however, this attempt was cut short by rock fall, in which Max sustained minor injuries and damaged trousers (torn!).

After a short spell of poor weather, Hugh, Tom and Neil spent three days exploring the Akoguz glacier, scoping out routes and enjoying the difficulties of crossing the Djangart river. Reg, Max (after recovering from his injuries) and Tim spent three days exploring far up the Sauktor glacier. They attempted to climb Pt 5112 but abandoned

the attempt due to poor weather. The weather during this period was relatively poor, with cloud covering most peaks and significant snowfall above c. 4000m.

River crossings presented some challenges!

A further two days of poor weather then restricted both teams to basecamp. Chapattis, single malt and cards saw them through. Once this storm cleared, Hugh, Tom and Neil headed back up the Akoguz glacier to attempt Pt 4911. Unfortunately this attempt was unsuccessful due to a difficult rock step and a dangerously crevassed ridge. Reg, Max and Tim walked up the N1 glacier and successfully completed the first traverse of the ridge from Djanghorn (Pt 5274) over Pik Betelgeuse (Pt 5100) in a continuous 30hr push, including descent straight back down to basecamp to ensure they didn't miss the helicopter originally booked for 8am that morning (they arrived with 15 minutes to spare!).

Fortunately for Reg, Max and Tim (who were somewhat tired), the helicopter turned up a day later, and the extra day at basecamp allowed the team to clear up, wash, and deal with rodent invaders, before being picked up by the helicopter and flying back to Maida Adyr. However, at Maida Adyr, the team were told to stay on the helicopter rather than take the 4WD back to Karakol as planned. A



The 2013 Anglo New Zealand Expedition to the Celestial Mountains or Kyrgyzstan

team of Czech trekkers, and a number of other Tien Shan Travel staff explained that an outbreak of bubonic plague had closed the roads back to Karakol, and the only way out was via a further helicopter flight to Karkara on the border with Kazakhstan. This second flight lasted 45 minutes and took 20 people (including pilots) over a pass at 4500m, affording amazing views of the Tien Shan mountains. We discovered back in Britain that 4500m is the maximum operating altitude for this type of helicopter, which explained the slightly odd noises we heard!

The team was met in Karkara and an 8hr minibus ride deposited them back in Bishkek on Thursday 29 August, allowing time on 30 August for the all important carpet shopping. Hugh, Reg and Tim flew out early on Saturday 31 August. Neil, Tom and Max departed on Sunday 1 September after spending Kyrgyz Independence Day in Bishkek, watching traditional horse games – the equivalent of the FA Cup Final but with more intimate seating

CALENDAR OF ACTIVITIES

Data	Dov	·	Hugh/ Neil/	Reg / Max / Tim	Notes
Date	Day		Tom	Reg / Wax / Till	
03/08/2013	1	Sat			Neil, Max, Tom, Reg arrive in Bishkek / Shopping
04/08/2013	2	Sun			Hugh / Tim arrive Bishkek / Shopping / Police search after Neil claims to be British and subsequently provides a NZ passport
05/08/2013	3	Mon			Travel to Maida Adyr via minibus and 4WD truck
06/08/2013	4	Tue			Helicopter to Djangart basecamp
07/08/2013	5	Wed	Chulaktor Glacier Chulaktor	N2 Glacier	Acclimatisation trips
08/08/2013	6	Thur	Glacier	N2 Glacier	Acclimatisation trips
09/08/2013	7	Fri	N2 Glacier	Acoguz Glacier	Acclimatisation trip
10/08/2013	8	Sat	N2 Glacier	N1 Glacier	More acclimatisation trips
11/08/2013	9	Sun	N2 Glacier	N1 Glacier	More acclimatisation trips
12/08/2013	10	Mon	Rest day	Rest Day	Rest day – bad weather
13/08/2013	11	Tue	N2 Glacier	N2 Glacier	All walk in to N2 Glacier
14/08/2013	12	Wed	N2 Glacier	N2 Glacier	HNT Recce Pt 4871 and move to higher camp RTM Ascent of Pk 5051
15/08/2013	13	Thur	N2 Glacier	N2 Glacier	HNT Ascent of Pt 4871: Pk Fotheringham RMT Rest and recce day
16/08/2013	14	Fri	N2 Glacier	N2 Glacier	HNT Ascent of Pt Andrea and descent to BC. RMT Ascent of Pt 5168: Pk Vinton-Boot, Open Misère
17/08/2013	15	Sat	N2 Glacier	N1 Glacier	HNT reascend to N2 with more food RMT descent from N2
18/08/2013	16	Sun	N2 Glacier	N1 Glacier	HNT Ascent of Pt 4950: Pk Kinmundy RMT head up N1
19/08/2013	17	Mon	Rest day	Rest Day	HNT descend to BC RMT hit by rockfall and descend to BC
20/08/2013	18	Tue	Rest day	Rest Day	Poor weather
21/08/2013	19	Wed	Attempt to cross Djangart	Sauktor Glacier	HNT attempt to cross Djangart but are turned back by waist deep current. RMT head up to explore Sauktor glacier
22/08/2013	20	Thur	Akoguz Glacier	Sauktor Glacier	HNT head up Akoguz RMT attempt Pt5112 – bad weather stops ascent
23/08/2013	21	Fri	Akoguz Glacier	Sauktor Glacier	HNT Exploration of glaciers and routes RMT Return to basecamp
24/08/2013	22	Sat	Akoguz Glacier	Rest Day	HNT stopped by border patrol
25/08/2013	23	Sun	Rest day	Rest Day	Poor weather
26/08/2013	24	Mon	Akoguz Glacier	N1 Glacier	
27/08/2013	25	Tue	Akoguz Glacier	N1 Glacier	HNT attempt on Pk 4911. Descent to BC. RMT climb ridge traverse of Pt 5278 - Pt 5100
28/08/2013	26	Wed	Basecamp pack up	N1 Glacier	RMT arrive back at BC after a 30hr effort
29/08/2013	27	Thur			Helicopter out / Extra flight due to plague quarantine zone / Bus to bishkek
30/08/2013	28	Fri	Bishkek	Bishkek	Carpet shopping in Bishkek.
31/08/2013	29	Sat			Hugh, Reg, Tim fly home. Neil, Tom and Max go to Kyrgz independence day games
01/09/2013	30	Sun			Neil, Tom, Max fly home

DESCRIPTION OF ROUTES CLIMBED AND ATTEMPTED

Notes:

- The spot elevations provided are taken from Soviet military maps for the area dated 1976-1980, which is
 provided in Appendix B. The accuracy of these maps has not been independently verified, but they are
 the only known set of maps for the region. [Maps are labeled K-44-86 and K-44-75R]
- The peak names included in this report have been proposed to the Kyrgyz Alpine Club.
- Route lengths are the approximate elevation change from the glacier to the summit.
- The peaks we climbed are not the three peaks that we first identified as objectives largely due to the unplanned relocation of basecamp and the July American Expedition climbing PT 5318 (Peak After You) and the Bristol Team climbing PT 5025.

PT 4871 - PEAK FOTHERINGHAM

Approximate Coordinates of Summit: 41° 39' 30.31" N 079° 0' 32.88" E

Access From: N2 Glacier Date of Ascent: 15 August 2013

Route Grade: AD

Route Length / time: 400m from glacier to summit, 2hrs from bergschrund to summit.

Team Members: Hugh Thomas, Neil Thomas, Tom Bell



View of Pk Fotheringham looking south from the N2 glacier. The route follows the left hand snow slope, traverses the summit ridge and descends via the glacier on the right of the photo. The facing arête is an obvious line for future expeditions.

Route description

The route crosses the bergschrund and climbs steep snow/ice (max 60 degrees) up to the ridge. Follow the ridge to the summit, staying mainly on the south side crossing easy mixed ground (Scottish II/III).

The descent continues along the snow ridge from the summit to the col between Pk Fotheringham and Pk Sutherland. (Scottish II). Descent down the glacier is trickier than it looks, and several large crevasses need to be negotiated (best done early rather than at midday).

PT 4950 - PEAK KINMUNDY

Approximate Coordinates of Summit: 41°39'58.57"N 79° 1'32.80"E

Access From: N2 Glacier

Date of Ascent: 18 August 2013

Route Grade: PD

Route Length / time: 400m from glacier to summit, 2hrs from bergschrund.

Team Members: Hugh Thomas, Neil Thomas, Tom Bell



The route up Pk Kinmundy looking south-east from the glacier. The route follows the skyline ridge (marked in red) on good quality rock.

Route Description

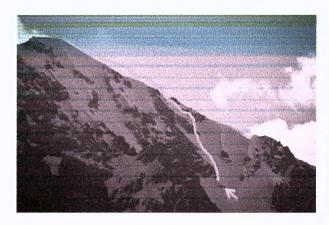
The route follows the ridge up fairly easy snow slopes (max 45 degrees), crossing the bergschrund at c. 4500m and continuing to the summit without difficulties. Descent is via the route of ascent.

PT 5051 - PK MACMILLAN

Approximate Coordinates of Summit: 41° 41' 43.24" N 079° 0' 45.08" E

Access From: N2 Glacier

Route Name and Date of Ascent: Frima Face, 14 August 2013 Route Grade: D-, 45-60° short sections of 70°, (Scottish III) Route Length / time: 950m 5 hrs up and 4 hours down Team Members: Reg Measures, Max Folkett, Tim Elson





Above photos taken from moraine on lower N2 glacier, looking south. The left photo is a zoomed in version of the photo on the right.



Photo taken from upper N2 glacier, looking north

Route Description

Climb the NW face of the W ridge through the narrows (steepening). Take the right fork through another steep section and continue front pointing up to the ridge, veering left at the top of the face (700m vertical to ridge). Follow the ridge to the summit.

Descent was via the west ridge then the SW face which consists of moderate snow slopes (40° max). These snow slopes can be followed down to scree leading back to the N2 glacier.

PT 5168 - PK VINTON-BOOT

Approximate Coordinates of Summit: 41° 40' 30.84" N 079° 1' 37.91" E

Access From: N2 Glacier

Route Name and Date of Ascent: Open Misère, 16 August 2013

Route Grade: TD (Scottish V)

Route Length / time: 500m (from upper glacier), 18 hour round trip

Team Members: Reg Measures, Max Folkett, Tim Elson



Photo taken from the N2 Glacier looking South East at the North West face of Pik Vinton-Boot.

Route Description

Lay all your cards on the table – climb the obvious couloir on the NW side of PT5168 to the snowfield in 9 pitches. Exit left up easy snow slopes and mixed ground to the ridge. Follow the ridge to the summit.

Descent: Continue traversing along the ridge to the NE. Follow the ridge to the col between PT5168 and PT5290. Easy snow slopes lead down a flat glacier ('the oval'). From here it is possible to descend the true left of the glacier, hard against the base of PT5168 around the serac barrier to the base of the Open Misère couloir.

PT 4911 - ATTEMPTED

Approximate Coordinates of Summit: 41° 39' 43.74" N 078° 57' 38.01" E

Access From: Akoguz Glacier Date of attempt: 27 August 2013

Route Grade: D?

Route Length / time: 500m / 3hrs to col

Team Members: Hugh Thomas, Neil Thomas, Tom Bell

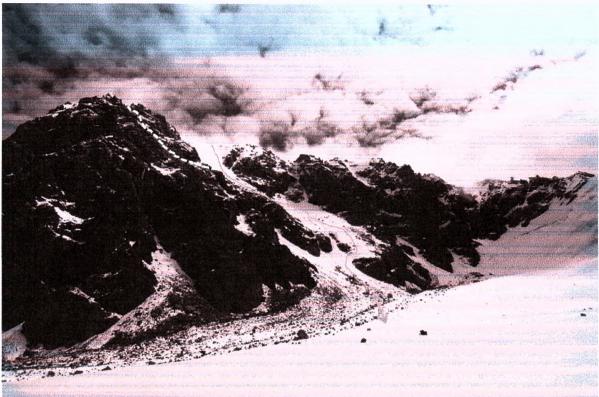


Photo from the Akoguz glacier looking east towards Pt 4911. The attempted route is shown in red. An alternative is shown in vellow

Route description

We followed the easy snow slope up to the ridge (steepens at top to 50 degrees). Once on the ridge we discovered a large crevasse running parallel to the ridge. This did not appear to be the line of the cornice, however, it was deep and the snow bridge was not solid (Tom fell in twice). After trying to gain the rock step on the left we decided to turn back as the crevasse appeared to be unstable and return once the sun had heated everything up may have proved difficult.

An alternative route may be possible (see dashed line above) and appeared to lead directly to the summit via a hidden couloir.

PT 5278 - DJANGHORN AND TRAVERSE

Approximate Coordinates of Summits:

Djanghorn (5278m) 41° 40' 5.71" N 078° 59' 21.70" E 5207m 41° 40' 24.70" N 078° 59' 9.30" E

Pik Buddyness (5172m) Pik Betelgeuse (5100m) Access From: N1 Glacier

Route Name and Date of Ascent: South Ridge & Traverse, 27 August 2013

Route Grade: ED (HVS, A2, Scottish IV)

Route Length / time: 750m from Bergshrund to Summit 2.5km of Ridge Traverse, 30hrs (back to basecamp)

Team Members: Reg Measures, Max Folkett, Tim Elson

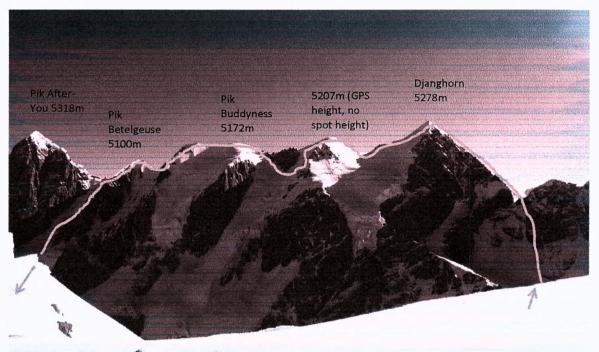


Photo looking NE from near the summit of pk4911m (looking at the SW side of the ridge).

Route description

South ridge: From the N1 glacier ascend snow slopes (up to 40°) towards the col south of the Djanghorn. Find a way through a short (up to 10m) easy ice/mixed step c100m below the col and climb up to the base of the S ridge (N of the large gendarme in the col). From the col climb rock on the west (left) of the ridge crest for approximately 100m (3 pitches, crux). Traverse right around the ridge crest and work your way up rock and mixed ground onto the crest itself. These pitches from the col all contain significant fractured and loose, sharp granite. The climbing gradually eases although unavoidable short tricky steps are encountered until easy snow slopes lead to the summit (7 pitches in total during first ascent).

Traverse: Follow the ridge crest down and up to the next summit (GPS height 5207m – no spot height on map but it is the highest point on the ridge between 5274m and 5318m). From here it is easiest to leave the ridge crest and descend to the west (left) of the ridge for c150m to bypass rocky pinnacles on the ridge. After traversing below the rocks ascend a snow slope back to the ridge crest and p5172.6m (Pik Buddyness). From here follow the corniced ridge over p5100m (Pik Betelgeuse) to the 'Needle Col'. It would be possible to continue from here over p5318m (Pik After You) – the ridge appears to be approx. Scottish III – this was our original plan but we had to descend to basecamp in case the helicopter arrived!

Descent: Descent from the needle col to the N1 glacier is straightforward. One short section (2 pitches) of 60° bare ice was abselled during our descent.

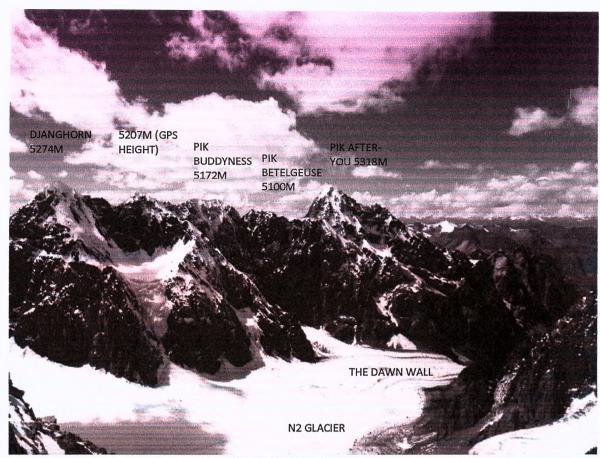


Photo from high on Pik Vinton-Boot looking West at the immense and complex 'Dawn wall'.

PREVIOUS EXPEDITIONS TO THE AREA

The Djangart Region was first visited by Russians during a 1932 exploratory expedition to the central Tien Shan. It is reported that the expedition visited the Djangart, Kaichi, and Akoguz Valleys, but little documentation is available.

In 2004, Ingrid Crossland and Graham Sutton accessed the region via helicopter and established a basecamp along the Djangart River at the head of the N1 and N2 Valleys. They explored both valleys and made two unsuccessful attempts to reach the summit of Pt 5318, one from each valley. They reached a high point of approximately 4000m, stopped by rock walls and hanging glaciers.

In 2008, a group of six Russians from the Moscow completed an extensive circuit of the Kaichi, Djangart, and Sauktor Regions. During the circuit, they climbed Pt 5291 (Peak Letaveta) from the far eastern branch of the Djangartybashi Glacier, marking the first ascent of any peak in the Djangart Region.

Since 2008, the area has become increasingly popular and a number of expeditions have visited:

- 2010 Anglo-US (Matt Traver / Mike Royer)
- 2011 Spanish, British and Danish/British expeditions
- 2012 Polish expedition.
- 2013 US, Bristol team and us.

The Djangart has been discovered relatively recently by climbers, however, the lower valleys have been visited by the military, hunters, and mineral prospectors for many years. In addition, local nomads use the valley for pasture for yaks, mainly on the north bank of the Djangart river.

LOGISTICS

PERMITS

There are no peak fees to climb in the Djangart, nor anywhere else in Kyrgyzstan. However, it is necessary to have a border permit. Permits must be arranged in advance (approximately one month), and cost about 15 Euros. It is important that all information on the document is correct as it is checked against your passport at border posts and by any border patrols that one may encounter. It is important to keep passports with you at all times in the mountains. We were stopped by a border patrol after descending the Akoguz glacier who demanded our passports and permit and accused us of crossing illegally to Kyrgyzstan from China. Without passports it took much negotiation to explain that our passports were back at basecamp together with our permit, although Tom's demonstrations of BlackDiamond trekking poles did much to amuse them.

Permits can be obtained through one of the many logistics agencies that operate out of Bishkek. We used Tien-Shan Travel to arrange all of our logistics and transportation. They were extremely knowledgeable, helpful, and professional. We highly recommend them.

TRAVEL

Five members of the team flew from the UK via Istanbul with Pegasus airlines (one member flew direct from NZ via Dubai and Bangkok with Emirates and Fly Dubai). Prices were very reasonable from the UK (approx. £550 each). Other alternatives were via Kiev (Ukrainian Airways), or Transaero via Moscow, although the reliability of these airlines was not confirmed.

The team purchased extra baggage in two ways:

- "sports" bags Pegasus accepted mountaineering equipment up to 20kg for £40 each way. Some negotiation was required on the return leg of the flight!
- extra luggage much more expensive at £80 each way for 10kg

We were met at Bishkek by Tien Shan travel who took us to their guesthouse. This accommodation was very reasonable and allowed us sufficient space to pack equipment and food.

The logistics of travel from Bishkek to Djangart were entirely organized by Tien Shan Travel. This organization worked very effectively. The minibus from Bishkek to Karakol took approximately 7 hrs on good roads. From

Karakol the roads deteriorated as we approached Maida Adyr, and required crossing a pass at approx. 3600m. At no point was there any necessity to ford rivers and all bridges appeared to be in reasonable condition.

We had to weigh our baggage at Maida Adyr before getting on the helicopter. We had approx. 500kg of food and kit between 6 of us. In addition, the helicopter took the 6 man team from Bristol on the same flight. In total, the helicopter was carrying 12 people (+3 pilots) and close to 900kg of food and equipment. It didn't seem to be struggling much. We intended to camp in the Sauktor and arranged this with Tien Shan Travel, however we said "Djangart" to the pilot (the name of the Region). This meant we landed by the Djanghart river, thought to be the camp used by the US team a few weeks earlier. This was actually closer to some of our objectives, but best to make sure these things are clear!

The original intention was for the helicopter to pick us up on Wednesday 28 August. However, we called Tien Shan Travel to change this date to Thursday 29 August to make the most of a final spell of good weather. We never received any confirmation of this change, but the helicopter did arrive as requested at 8am on 29 August, although we were ready to leave at 8am on 28 August just in case! Tien Shan Travel also arranged our travel back to Bishkek very efficiently, in spite of emergency plans being made to avoid a bubonic plague quarantine zone.

FOOD

We brought out 16 days of Mountain House freeze dried meals for each person from the UK to provide lightweight and easy to cook meals on the mountain. We also brought out 100 High5 bars (a mix of protein bars and energy bars). Bringing these items of food was well worth it and made mountain food much easier to organize and carry. These supplies provided about 1500 calories per person per day, which we supplemented with instant noodles, chocolate, muesli, nuts and raisins, and hot drinks.

Having said that, Bishkek provides almost everything else imaginable and we spent a significant amount of time devising a selection of menus for food in basecamp. Once we'd bought all our ingredients, we then managed to throw away our carefully prepared recipes on the way to basecamp. However, Max's culinary skills saved us, and we ate particularly well in basecamp.

In Bishkek the Osh bazaar provided copious quantities of dried foods: lentils (stick to red, the green ones stay like bullets), chickpeas, rice, noodles, nuts, dried fruit, spices, biscuits etc. We also bought other essentials in the market, such as washing up bowls, knives/forks/spoons, barrels etc. One item that we particularly enjoyed were "cheese balls" – lumps of dried, sour cheese that livened up our meals and are highly recommended for future expeditions. At least 3kg of these little balls of flavor are needed.

Bishkek also has a Western style supermarket where we bought more specific ingredients. These included muesli bars, muesli, oats, decent pasta, sausages, chocolate, cheese, instant noodles, real coffee, tea, tinned fruit, tinned vegetables etc. Prices are obviously higher than the market, but the range of good quality packaged goods was significantly better. There is a Chinese supermarket too, which provided dried mushrooms, coconut milk and some delicious mini-cakes. It was also responsible for some fish-impregnated noodles and some outrageously pungent shrimp paste – go carefully!

For cooking in basecamp, we rented a 20kg gas cylinder and a double-burner stove from Tien Shan Travel, along with a selection of large pots. We found that just one cylinder was sufficient for our three week stay, although cooking and eating habits may vary.

For cooking on the mountain we used both JetBoil stoves, and petrol stoves. The JetBoil stoves operated fine up to 4000m on gas cylinders that we bought from Tien Shan Travel, but struggled above 5,000m. The MSRs operated on locally bought "95" petrol which Tom found difficult to use at high altitude on his "MSR e-bay", but worked fine on Reg's Primus.

EQUIPMENT

We spent some time coordinating our equipment, through much use of a spreadsheet on Dropbox. Apart from bringing the usual range of equipment and clothing that one would choose for a summer alpine trip, we also brought the following items:

Communication:

 Iridium Satellite Phone: This was brought from New Zealand and was invaluable to our efficiency and safety whilst in the Djangart, as well as for receiving weather forecasts and rearranging the helicopter pickup date. Reception was reasonable.

The 2013 Anglo New Zealand Expedition to the Celestial Mountains of Kyrgyzstan

- Two way radios: The three radios worked well to allow communication between the two climbing teams and basecamp, although the range becomes more limited when blocked by mountains. Lithium batteries were more effective than the supplied rechargeable packs since the rechargeables took too long to recharge using our solar panel.
- 25W folding solar panel. This was invaluable for charging the satphone, kindles and cameras. It came
 with a standard car style plug and provided plenty of power in the sunshine. Generally, kindles needed
 only one charge for the whole trip, and cameras survived without being recharged.
- Each team of three also carried an EPIRB with them at all times. We left a detailed safety plan with a contact in Britain who was also the nominated person on each of the EPIRBs in case of emergency. This plan contained all our contact details, next of kin, insurance cover, and details of how to contact Tien Shan Travel to arrange a helicopter evacuation in case of emergency.

Shelter:

- We hired a large basecamp tent from Tien Shan Travel, along with two tables and six stools. This tent was large enough for the whole team with standing height, and store most of our food and equipment.
- Personal Tents: We had two three man tents (Hilleberg and Terra Nova) and one two man tent for the team. The three man tents meant that nights up on the glaciers were much warmer.

Climbing Gear and Protection:

- Rock Gear: In total we had three full rock racks with us, with a full set of cams, double set of nuts, and a selection of pegs.
- Snow Pickets: We brought 2 MSR snow stakes and 1 deadman, however, at no point were these used for protection.
- Ice Screws: Each team had 12 ice screws of varying sizes, including one long one for Abolakov threads,
- Ropes: In total, we brought three sets of half ropes one set for each team and another set as a spare.

We decided to bring enough gear for any eventuality including long abseil descents. It is not necessary to use this amount of protection on easier graded routes.

Footwear:

- Approach Shoes: Each team member had light boots or trail shoes that were very useful for the hike over the Djangart Pass, reconnaissance hikes, and approaches. A recommended technique for losing a shoe is by throwing in into the Djangart river, instead of across to the other side.
- Climbing Boots: All team members had standard mountaineering boots. Temperatures were not cold
 enough to require plastic or double boots. A few days into the expedition of the sole of Neil's boots began
 to come off and was only saved by using copious amounts of "shoo-goo".
- Rock shoes: Each team member had a pair of rock shoes with them. However, these were only used Djanghorn South Ridge by Max on the lead.
- Snow-shoes: Each team member took a pair of snow shoes out, after hearing reports of previous expeditions struggling with deep snow. We never experienced conditions that required snow shoes, although they were useful on the Akoguz after heavy snow fall and would have helped high on the Sauktor. We wouldn't recommend that future expeditions take these due to the long valley approaches.

Miscellaneous:

- Barrels: We bought two cheap plastic barrels in Bishkek market (55L each) which were invaluable for storing food in, and having more than two might have made food storage easier. Unfortunately a mouse got into one after someone who shall remain nameless decided to leave the lid off one night.
- Binoculars: Extremely useful for scoping out routes

HEALTH, MEDICAL, AND INSURANCE

When travelling to such a remote location, health concerns are paramount and we were prepared to deal with potentially serious issues. Although none of the team were trained medics, we used the advice of various doctors to build a comprehensive medical kit. The contents of the basecamp kit was extensive, including Diamox for altitude sickness, medications and antibiotics for various infections, minor surgical tools such as a scalpel and saline solution, an assortment of bandages and wound-treatment items, and documents listing the kit contents, dosages, interactions, and treatment options. The on-route kits were pared to a minimum of a few painkillers, altitude medication etc.

Aside from on-hand medical equipment, we were prepared for serious issues by individually purchasing comprehensive rescue/medical insurance from New Zealand or the British Mountaineering Council.

No members of the team suffered from serious medical problems. However, most of the team contracted diarrhea at some point (interestingly this was usually in basecamp). We filtered all water from a small stream (non-glacial) with MSR filters. Worth bringing out spares for these filters!

As there were twelve people in basecamp (including the Bristol team), we dug a large slit trench about 400m downstream from our tents and about 150m away from the river. This was sufficient (with some enlargement) for the whole trip and was filled in before we left.

WEATHER AND GROUND CONDITIONS

We generally experienced good weather and climbing conditions. There were only 5 days of significant rainfall, which produced deeper accumulations of snow above 4,000m. During the first week, base camp temperatures were over 30 °C, but fell to below freezing overnight at the end of the trip. Winds were generally SW-NW and did not cause problems for climbing. Summit temperatures were around -7 °C during colder periods. A longer spell of poor weather in the second half of our trip brought knee deep snow accumulations and low cloud which hampered climbing, but this snow stabilized quickly.

We used the services of Michael Fagin at West Coast Weather (www.westcoastweather.com) for bespoke weather forecasts which were received via text and voicemail to the satphone These forecasts proved to be reliable and the longer range (5 day) forecasts were very helpful for planning. Significant periods of bad weather were forecast well in advance and rainfall accumulation figures seemed accurate relative to each other. This service was however expensive at approximately £60 per forecast (including start-up costs) and did not seem to differ that much from the freely available internet forecasts used by the Bristol team. That said, Michael was helpful and flexible, changing forecast dates format as we required.

It was easy to travel through the valleys on good grass and scrub. Moraine travel was often the best way to reach the upper 'white ice' glaciers and there were only short sections of unstable moraine on all glaciers explored. Moraine often yielded the best camp sites too (in fine areas of fluvial deposits trapped behind them). As expected, climbing conditions were best early in the morning and snow softened right up to summit levels when in direct sunlight, with steep East facing walls raked by avalanches for a few days after storms. In the deeply incised north facing couloir of Open Misère temperatures remained well below freezing at all times and we found good alpine and water ice.

GEOLOGY

The geology of the Tien Shan is highly complex, resulting from multiple periods of tectonic activity and associated orogenesis. The rocks are generally Palaeozoic (520 Ma to 250 Ma) in age, although younger sediments occur in the intramontane basins. The majority of folding and faulting occurred in the Paleozoic, but subsequent tectonic activity has continued to the present day, related to the formation of the Himalayas further south and significant earthquakes have occurred as recently as 1942

This complex history is reflected in the strata found in the area, which ranges from sedimentary conglomerates, to metamorphic marbles and on to igneous granites. In general, the the higher peaks comprised granite, which is perhaps not surprising given its relative resistance to erosion and there is significant opportunity for good quality rock climbing. More easily eroded rock types occurred further down the valleys, including some poor quality (from a climbing perspective) limestone.

Around the base camp the predominant rock type was conglomerate, together with some limestones. These appeared generally unstable, witnessed by the significant rock falls observed above base camp (although no debris reached our camp) and by other large scree slopes beneath the crags in the Djangart Valley.

Considerable mining interests are in the area extracting mineral deposits, and mines are located further downstream the Djangart river, close to the airbase at Maida Adyr.

FINANCES

The table below does not include details of flights as these were all arranged individually (especially as Neil and Reg were coming from New Zealand). However, flights from the UK to Bishkek with Pegasus Airlines were approx. £550.

We took out USD in cash to change in Bishkek and found it easy to change these notes (make sure they are new and crisp!). Tien Shan Travel quotes everything in Euros, which caused some exchange rate issues, however, we paid for the main items (helicopter and accommodation) by bank transfer from the UK.

EXPENSES (excluding flights)

FOOD / SUPPLIES	(£)
Local food / supplies purchased in Bishkek	1000
Mountain House meals	688
High5 Bars	103
Meals out in Bishkek (approx)	100
EQUIPMENT	
MSR filters	100
Rental of Basecamp tent / chairs / tables /gas stove	223
Gas cartidges for JetBoil	23
Fuel for MSR stove (20L of 95 petrol)	33
Gas canister for basecamp	20
ACCOMMODATION	
Accommodation in Bishkek (in Tien Shan Travel	
guesthouse)	264
Accommodation in Maida Adyr	122
LOGISTICS	
Airport pickup/drop off	76
Travel Karakol - Maida Adyr	339
Travel Bishkek - Karakol	339
Helicopter from Maida Adyr to/from basecamp	1780
Helicopter from Maida Adyr to escape plague outbreak	396
MISCELLANEOUS	
Weather forecasts	631
Border permits (15euros x 6)	76
Extra baggage - "sports bags" (£40 for each 20kg bag,	
4x outbound, 3x inbound)	280
Extra baggage - 10kg each for Hugh and Tim (outbound	
and inbound)	320
TOTAL	[*] 6913

INCOME

<u>GRANTS</u>	(£)
Alpine Club	1200
Austrian Alpine Club	500
Mount Everest Foundation	1650
Max's family	200
TOTAL GRANTS	3550
PERSONAL CONTRIBUTIONS	3363
TOTAL	6913

The scale of the map is Russian maps of the 1:50,000 and is a composite of the area. 5291,0-

MAP OF AREA AND PEAKS CLIMBED

PROSPECTS FOR FUTURE EXPEDITIONS

The Djangart region has immense potential for future expeditions, both in terms of new routes on existing peaks, and for exploring unclimbed mountains. The photos below give a flavor of some objectives, but there are many more possibilities.

East Face of Pt 5274 - Pt 5318 from the N2 Glacier - 'The Dawn Wall'



The 'Dawn Wall' of Pt 5318 and the ridge is made of solid looking Granite and would hold some awesome 1000m+ rock climbs; in Spring or Autumn the ice lines would make brilliant routes however during our stay we saw numerous avalanches as this face gets the sun first thing in the morning till early afternoon.



Pt 4911 is unclimbed - Hugh, Neil and Tom attempted this peak from the Akoguz Glacier, this is the N1 Aspect of the peak. The gully marked looked objectively safe and very much like the north face of Les Courtes. The wider gully to the left of the arrow looked possible too, and there is a rock feature much like the south face of the Aiguille de Midi towards the end of the N1 glacier out of view in this picture.

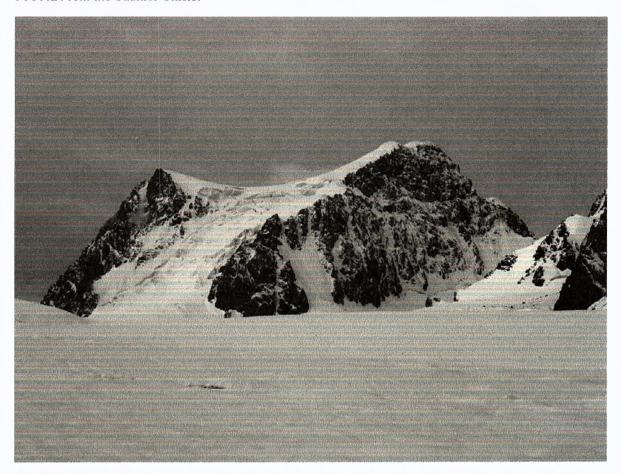
South West Face of the Djanghorn Pt 5278 from the head of the N1 Glacier



The 2013 Anglo New Zealand Expedition to the Celestial Mountains of Kyrgyzstan

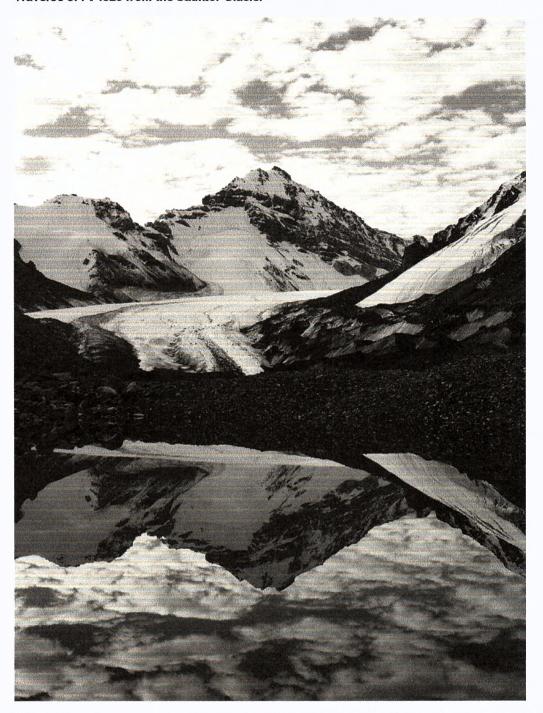
The ice line in the middle looked continuous and would make an amazing climb in <u>very</u> cold weather, however the face suffered from large rock falls (the side of one to the right of this picture hit Max, Reg and Tim on their first attempt on the Djanghorn). Debris from other falls can be seen in the picture.

Pt 5112 From the Sauktor Glacier



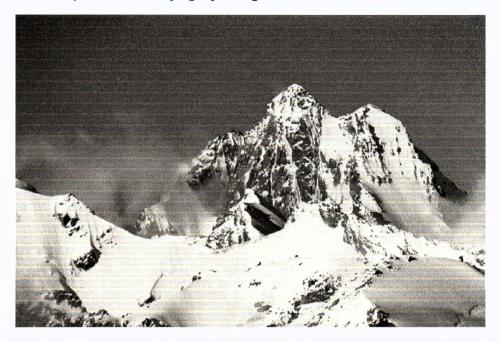
Pt 5112 is unclimbed and was attempted by Reg, Max and Tim who turned round due to deep snow and zero visibility on the obvious glacier route. The climb would probably be about PD however the ridge to the summit may be harder. The North Face looked to have good looking ice/mixed climbed (circa 800m), but the rock quality in the area was generally much poorer than the N1/N2 area. 5112 is actually the spot height and we don't think actually marks the summit, which is more like 5200m.

Traverse of Pt 4828 from the Sauktor Glacier

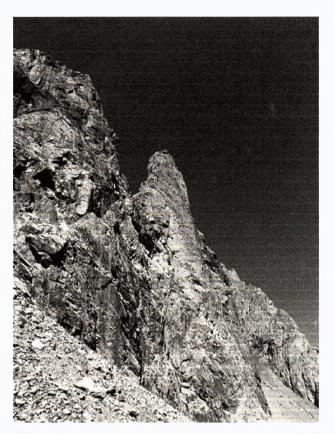


This photo shows the north side of Pt 4824 from the terminal moraine of the Sauktor Glacier. Pt 4828 is unclimbed and the west ridge looked like it should be a 'classic' alpine ridge. Completing the traverse by descending the east ridge would make a great route. From our high point on pt5112 we could see that the trick rock steps on the west ridge were mostly avoidable on snow slopes to the south side of the ridge.

Unknown peak at head of Djangartybashi glacier.



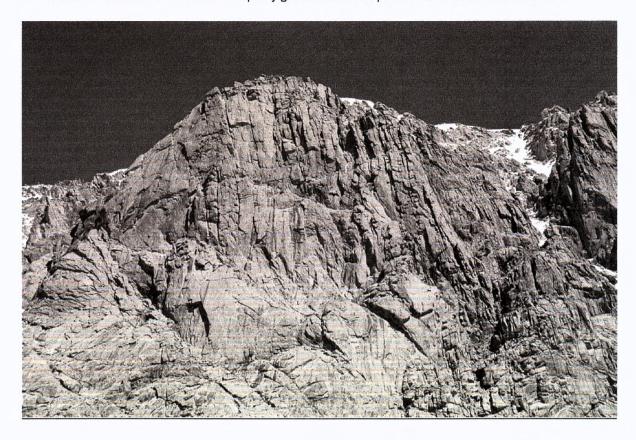
This photo was taken looking ESE from PT4911. We could not work out which peak it was from the maps we had, however it appears to be at least 5000m and towards the head of the Djangartybashi glacier, possibly in China, and with some excellent looking potential routes on it!



This photo shows an obvious rock feature on the true left of the N2 glacier, with the base circa 3500. It gives a general idea for the potential for high altitude alpine style rock routes. The rock in the area was varied but in places looked like it presented excellent and protectable climbing.

400m rock buttress on true R of Akoguz glacier.

The rock on this buttress looked excellent quality granite and would provide fantastic slabs and cracks.



Subsidiary summit of Pt 5291.



This peak had a fantastic looking ice line to the summit. Photo taken from foot of Akoguz glacier, looking E. The summit of PT 5291 is out of the picture, on the left.

Peak "After You" (Pt 5318)

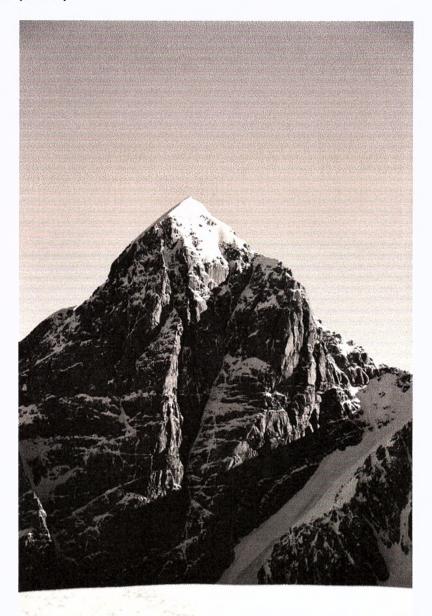


Photo taken from Pt4911 overlooking N1 glacier. This picture shows the SE face of Pt 5318, with great potential for harder rock / mixed routes. The face is approximately 1000m high.

Unknown peak, which looks amazing



This photo was taken from the helicopter on the way back to Maida Adyr from basecamp, looking east. We had no map to work out which it was, or if it has been climbed. Our guess is that it is approximately 5000m+

ALTERNATIVE IDEAS

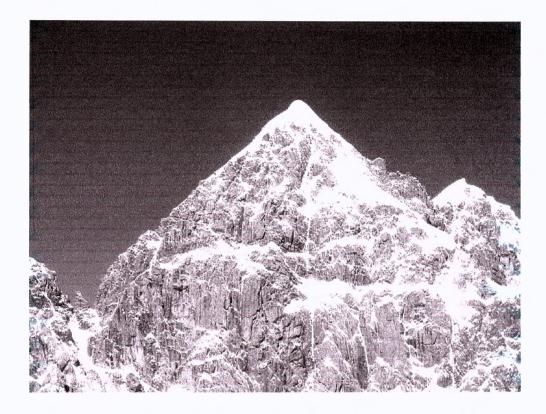
There look to be good possibilities for ski mountaineering in the area.

REFERENCES

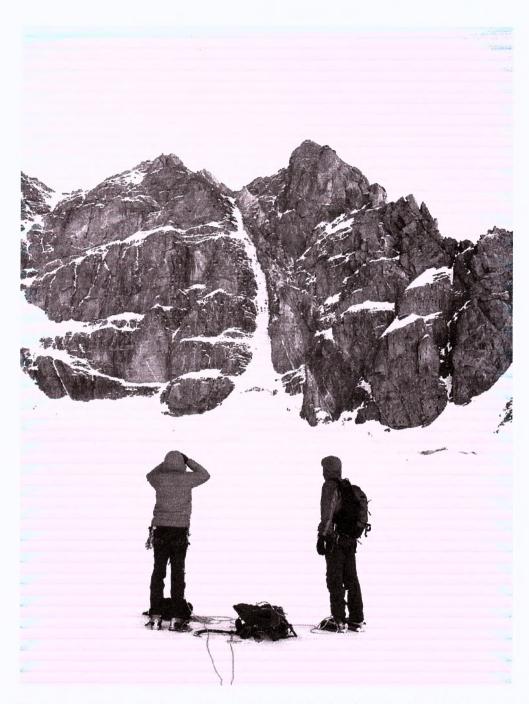
This report and expedition relied on the detailed accounts of previous expeditions. In particular, the background section of this report is grateful to the description of the area which was provided in the 2010 Anglo-American report.

- Jakob Fisker et al 2011 Djangart expedition report
- 2010 Anglo-American Djangart expedition report and website
- Report on a mountain hike V cc the Tien Shan (Northern spurs Mts.Kok-Schaal-tau)
- The Kyrgyz Djangart expedition 2011 written by Richard Tremellen
- Spanish Expedition to Djangart report 2011 (Cati Llado and Tomeu Rubi)
- · Alex Brighton and Richard Tremellen's trip report in the AAC (UK) newsletter

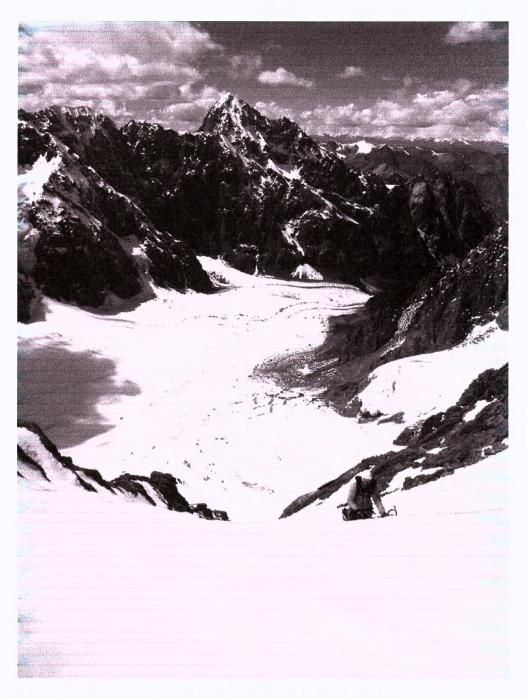
Appendix: Photos



The SE face of the **Djanghorn** from the head of the N2 Glacier. Our line of ascent climbed the hidden SW face and traversed round on to the ridge crest on pitch 4, a little higher than the top of the obvious col gendarme.



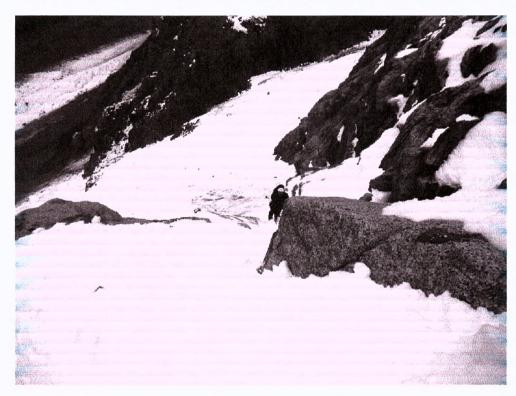
The gully of Open Misère on the reconnaissance of **Pk Vinton-Boot**. The ridge line to the right would go, but the rock may be of suspect quality.



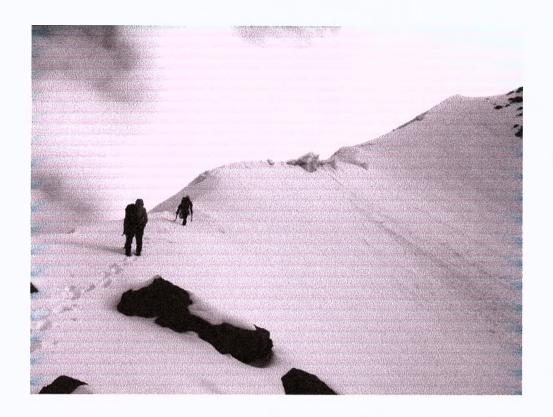
Max on the final snow slope to the ridge on Pk Vinton-Boot.



Reg reaching the 3rd belay mid-crux on Open Misère, Pk Vinton-Boot.



Max on the Frima face of Pk 5051





Reg and Max on the summit Ridge of **Pk 5051**

Self portrait of Max on the summit of **Pk 5051**. The summit is a large cornice – Reg and Tim are about 10m downhill belaying.



Reg, Max and Tim with ${\bf Pk}$ 5051 behind (this is the face we descended).



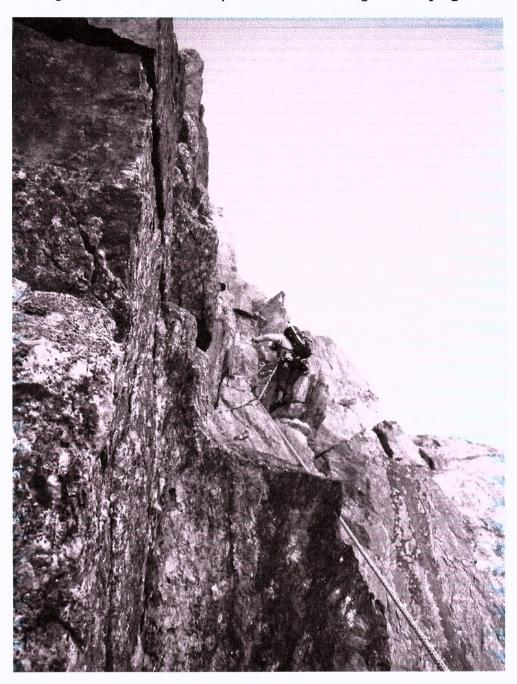
The main Sauktor River. This one is clear. Most are muddy. All are Baltic!



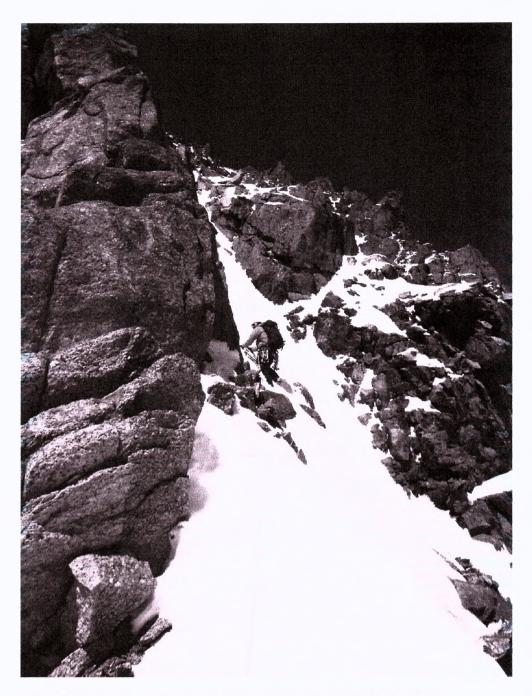
The vast, complex and unclimbed Northern aspect of Pk Letaveta (5291). This mountain was first climbed by the Russian expedition of 2008.



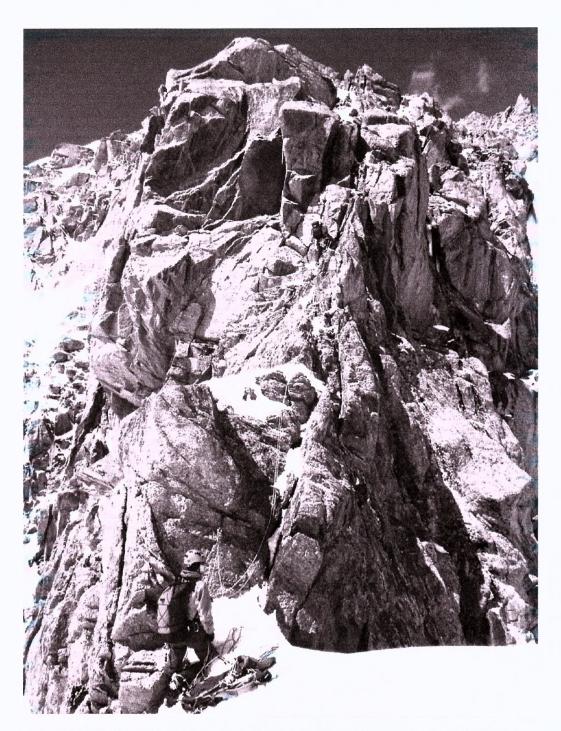
Looking down at Tim on the crux pitch 2 of the south ridge of the **Djanghorn**.



Max leading on the crux of the **Djanghorn**



Max on the upper section of the difficulties on the south ridge of the **Djanghorn**



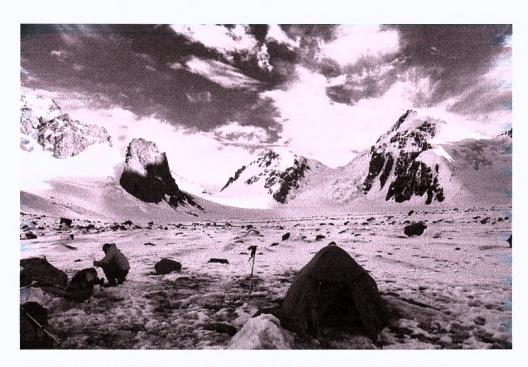
Almost there – the penultimate pitch before easier snow and the summit of the ${\bf Djanghorn}.$



On the ridge between pk 5207 and pk Buddyness. Yes, it is getting dark...



The whole team: from L to R - Neil, Tim, Reg, Max, Hugh and Tom waiting to be evacuated from the Plague.



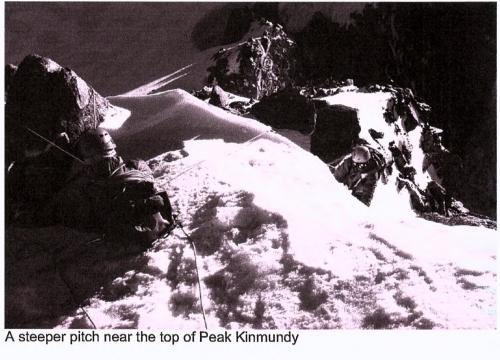
Camping on the N2 glacier – Peak Fotheringham in the background



The ridge towards the summit of Peak Fotheringham



Nearing the summit of Peak Kinmundy



The col of Pt 4911. This picture was taken just at the moment Tom decided to drop into the crevasse...

