International Sichuan Expedition 2010

to Mt. Grosvenor and Mt. Edgar Sichuan, China, Oct-Nov 2010





Mount Everest Foundation Expedition

(Expedition Reference 10/22A)

Final Report

Author: Bruce Normand

The compiler 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.

(Cover image of Mt. Edgar courtesy of T. Nakamura.)

International Sichuan Expedition 2010 Report

Contents

1	Aim		3
2	Summary		3
3	Introduction 3.1 3.2 3.3	on Purpose Geography Access	3 3 3 4
4	Team		4
5	Preparation 5.1 5.2 5.3 5.4 5.5 5.6 5.7 5.8	Conception Objective	5 5 6 7 7 7 7
6	Expedition	n Log	9
7	Conclusion		18
8	Acknowledgements		19
Appendix A Appendix B Appendix C		Bibliography Contact Information Maps	19 19 19

1 Aim

The goal of the expedition was to climb new routes on the satellite peaks of Minya Konka (7556m) in southwestern China's Sichuan Province. The specific targets were the W Face of Mt. Grosvenor (6376m), the E Face of Mt. Edgar (6618m) and the W or S Face of San Lian Feng (6684m, unclimbed).

2 Summary

The expedition was led by Bruce Normand (Scotland), climbing with Kyle Dempster (USA). This pair shared logistics with, but climbed independently of, the French pair of Christian Trommsdorff and Jean Annequin and the Chinese pair of Yan Dongdong and Gu Qizhi. The expedition spent one month in the Minya Konka region, from mid-October to mid-November 2010, working first from a base camp in the NW corner of the range and, once acclimatised, from a hotel in the town of Moxi. Dempster and Normand were successful in making the second ascents of both Mt. Grosvenor and Mt. Edgar, each by new routes. The former was a moderately technical ice line climbed in a 24-hour push, the latter an eight-day marathon featuring highly technical ice and mixed passages, an involved descent line and considerable objective danger.

3 Introduction

3.1 Purpose

The original goal of the expedition was to climb unexplored mountains in eastern Tibet, but this proved impossible due to prevailing political conditions. As a back-up plan, the Minya Konka Range continues to offer serious potential for alpine-style climbing on little-known and highly committing peaks. From among these, three specific faces were chosen on Mts. Grosvenor and Edgar and on San Lian Feng.

3.2 Geography

The Minya Konka Range is located in southwestern China's Sichuan province, where the outermost uplifts of the Himalayan plateau meet the plains of eastern China. Although barely larger than the Mont Blanc massif, it contains more than 10 6000m summits which have seen one ascent or fewer. These form a north-south chain of satellites around Minya Konka itself, at 7556m one of the most imposing and dangerous mountains on the planet. A sketch map of the range may be found in Appendix C.

Several of the satellite peaks around and to the east of Minya Konka were climbed by a Swiss team in 1981. To the south of Minya Konka, essentially on an extended ridge of the main peak, are several tops culminating in Jinyin Shan (6410m, climbed by the Swiss). To its north is a long line of 6000m peaks, including Langemanyin, Daduomanyin, Leduomanyin, Grosvenor and Jiazi, with a sub-chain of peaks connecting

Grosvenor to Mt. Edgar. All of these mountains lie in the low 6000m range, and possess a variety of steep faces with rock, snow and ice lines. Rock quality is mixed, with good buttresses in isolated locations (including Edgar and its neighbour P6134) but very poor rock on the W Faces of Grosvenor and Jiazi.





Left: view of Edgar, Jiazi, Grosvenor and Minya Konka from the northwest (photo from Google Earth). Right: E Face of Mt. Edgar at sunrise (photo courtesy of T. Nakamura).

3.3 Access

The mountains of Sichuan are no longer "unexplored" in the sense of eastern Tibet or the central Chinese Tien Shan. Many expeditions have visited the area, an adventure trek leads around the range, and the Hailuoguo Glacier has become one of the biggest tourist attractions in all of China. For the northern end of the range, the town of Kangding can be reached in 6-7 hours from Chengdu, and the village of Laoyuling in a further 30 minutes. Laoyuling is the starting point of a 3-day trek, which passes the western side of the massif and leads to the Minya Konka temple at the southwest side of the peak (also the starting point for the normal route). For the eastern side of the range, the town of Moxi is also 6-7 hours from Chengdu, and has significant infrastructure due to the development of the Hailuogou tourism complex.

For climbing teams operating on the west side of the range, an appropriate place for a base camp (BC) is the meadow of Shang Riwuqie (4300m), some 7-8 hours' trek from Laoyuling. Horses may be obtained from outfitters in Laoyuling. The east side of the range is precipitous, with valley floors at only 1500m and steep access gullies offering few suitable camping locations. While options exist for such camps, the policy of the 2010 team was to arrive acclimatised and avoid setting up any centres of operation in the high valleys; however, porters are available in towns such as Xinxing for those wishing to attempt this.

4 Team

The expedition members were Bruce Normand (Scotland) and Kyle Dempster (USA). This pair shared logistics with, but climbed independently of, the French pair of Christian Trommsdorff and Jean Annequin and the Chinese pair of Yan Dongdong and Gu Qizhi. Chinese mountaineers are able to climb in alpine style and without obligatory guides only by registering as foreigners within a foreign expedition. The logistics were arranged entirely by the climbers themselves, the majority of the organisational burden being

handled by Yan Dongdong. The team was accompanied on Mt. Edgar by liaison officer (LO) Mr. Li Zongli.

5 Preparation

5.1 Conception

The specific ideas for the 2010 expedition were the product of a short reconnaisance visit in February 2010 by Normand and Yan. They hiked to Shang Riwuqie, gaining an understanding of scales and logistics and finding desperately dry late-winter ice conditions on the west faces above the prospective BC. Because the monsoon lasts from April to October in the mountains of Sichuan, and because the mountains are raked all winter by dry, northwesterly winds off the Tibetan plateau, this makes autumn the season to find ice.

All six team members felt that Mt. Edgar offered the most challenging target. Gu and Yan decided that its North Face would be a suitable challenge for them. The other four climbers decided to focus on the East Face. All six members wanted to acclimatise before arriving at the base of Edgar, for which two weeks in Shang Riwuqie and an attempt on Mt. Grosvenor offered the best possibilities. An attempt on San Lian Feng would be a bonus or a consolation, highly dependent on the weather and on the outcome of the first two climbing attempts.

5.2 Objective

Mt. Grosvenor (Riwuqie Feng, 6376m) is located at the northern end of the range, beside Jiazi Feng (6540m). It has seen one ascent, by Roger Payne and Julie-Ann Clyma, who in autumn 2003 followed the Southwest Ridge and descended by the Northeast Ridge. Both the West and North Faces present 1500m walls with challenging mixed lines; the West Face is split in half by an obvious central couloir line which has been attempted twice, by Andy Cave and Mick Fowler in 2003 and by a Korean team in 2010. Both teams visited in the spring and were repelled by a lack of ice and rotten rock.



Left: West Face of Mt. Grosvenor. Right: Jiazi and Grosvenor from the southwest.

Mt. Edgar (East Konka, 6618m) occupies a special position among the Minya Konka satellites. The highest peak not connected directly to Minya Konka, its summit was reached from the south by a Korean team in 2002. It drew the attention of the alpine community only recently, when its imposing East Face was photographed by Tamotsu Nakamura. In May 2009, the Russian/Kyrgyz team of Alexander Ruchkin and Mikhail Mikhailov tried to find a way to climb this face, but failed because they could not see it. A month later, the US team of Johnny Copp, Micah Dash and Wade Johnson was then killed in an avalanche while trying to approach the SE Face.





Two images of the eastern side of Mt. Edgar, courtesy of Tamotsu Nakamura. At left is the view up Yanzi Gou from the town of Xinxing (from the ESE), which is the approach for the E Face. At right is the view up Nanmenguan Gou (from the ENE), the next valley to the north, which is the approach for the N Face.

San Lian Feng (6684m) is one of the last remaining unclimbed peaks in the range. It is the term give to three of the four peaks on what may be considered as the extended South Ridge of Minya Konka itself. Its main peak, located between P6858 and the subpeaks P6468 and P6368, has a 1300m West Face which is accessed from a high glacier basin and appears to be a steep snow and mixed route.

5.3 Permission

Applications for permission to climb in the Minya Konka range must be addressed to the China Sichuan Mountaineering Association (SMA). Fees for climbed 6000m peaks are on the order of 1000USD. The SMA will also provide a mandatory LO. In this case, Mr. Li Zongli was a trained mountaineer (trained by the China Mountain Development Institute) and a man genuinely passionate about climbing and mountains. Unusually competent and helpful, he had also been LO for the ill-fated 2009 US expedition. The mandated SMA LO fee is also one of the highest on record, being equivalent to 50GBP per day plus expenses. Paper permits for our peaks were said to be "unavailable because the registrar was not present in the office," and thus we were given only a handwritten receipt given for the money paid. An official permit is not now expected.

Specifically for the E Face of Mt. Edgar, access to the approach valley (Yanzi Gou, or "Swallow Gully") is controlled by a local development company which charges for admission. In exchange it is improving the road, but this is currently a massive

construction site prone to major landslips. Access has been closed since June 2010, but large construction crews continue to work there. A Russian team wishing to climb the E Face in the autumn of 2010 was refused admission, and was forced to try the N Face. The SMA does not recognise this ban but has no control over the situation, and in fact encourages climbers to try to enter (by provision of information). It is not known when this confused situation will change.

5.4 Logistics

The expedition arranged all of the logistics itself. This included permits and vehicles, mostly arranged by Yan. The members bought mountain food in a Carrefour supermarket in Chengdu, staples in a local market in Kangding and kitchen equipment in a hardware market in Kangding. Climbing provisions are readily available in Chengdu, where many high-end supermarkets offer foreign and convenience food and many outdoor shops sell good-quality Korean gas for 15CNY per cylinder. Almost no food was brought from abroad.

Climbing equipment consisted of standard half ropes (60m x 8mm), rock (nuts, cams, pitons) and ice (mostly short screws) racks, cord and a V-threader. No fixed rope was carried. The team carried a two-man bivouac tent and an MSR Reactor stove. Annequin brought an Iridium satellite telephone which was not used by the other pairs.

5.5 Insurance

Normand had full expedition insurance through the BMC, and Dempster full accident insurance through US company Humana One with global rescue through the AAC.

5.6 Medical

No vaccinations are required for travel in Sichuan. Normand brought a comprehensive first-aid kit provided by sometime expedition partner Don Bowie, but this was never needed. Neither member used any altitude medication.

5.7 Travel

Dempster flew from Salt Lake City to Beijing with Delta Airlines, proceeding to Chengdu on a domestic flight. Normand arrived from Shanghai on a separate domestic flight.

5.8 Finances

Full financial details are presented in tabular form. Numbers are quoted for convenience in UK pounds (GBP), and at the approximate average exchange rate prevailing in Oct-Nov 2010, 1.00GBP = 10.20CNY. Numbers are quoted only for the two-man team of Dempster and Normand, with shared costs indicated by "/2" or "/3."

NB: MEF (and BMC) funding was shared with Chinese climbers Gu and Yan. For Chinese nationals it is not currently possible to climb unguided in their own country, except on sub-6000m peaks in Sichuan; however, it is possible to register as a foreign climbers on a foreign expedition by paying the same fee as foreign climbers. This was viewed as appropriate use of UK climbing resources in promoting climbing by the

citizens of countries in the Greater Ranges. At a pragmatic level, paying Gu and especially Yan was an appropriate form of compensation for all of the organisational work they performed on behalf of the expedition.

Expenditures

Item	GBP
Airfare (International)	1110
Airfares (Domestic)	830
Insurance	870
Equipment	350
Medical supplies	240
Peak fee Grosvenor	660/2 = 330
Peak fee Edgar (*)	660/3 = 220
LO salary (*)	1380/3 = 460
Food and fuel (*)	750/3 = 250
BC equipment (*)	180/3 = 60
Transport (*)	540/3 = 180
Horses (*)	330/3 = 110
Accommodation	360/3 = 120
Meals	240/3 = 80
	£5210

Income

Normand was the grateful recipient of grants from the MEF and BMC.

Donor	GBP
Mount Everest Foundation British Mountaineering Council	£1000 £800
	£1800

This money was used to pay costs of £1280 (equivalent costs marked above with *) for Gu and Yan, with the remaining £520 used against Normand's expenses.

Personal contributions from the two climbers were then £3160 from Dempster (including international airfare) and £1530 from Normand.

Bruce Normand would like to thank the expedition's sponsors for their generous support.

6 Expedition Log

18th Oct

Normand and Yan met in Chengdu and visited the SMA office to pay for permits. Dempster and Trommsdorff arrived and the team spent the afternoon shopping for food in the local Carrefour supermarket.

19th Oct

The team obtained a vehicle and travelled to the town of Kangding, a seven-hour drive through the first outlying ranges of Minya Konka.

20th Oct

Final shopping in the markets of Kangding completed the expedition kitchen and food supply. With local outfitter and horseman Tashi, the team moved up to the village of Laoyuling (3200m).

21st Oct

Dempster, Normand and Yan made an approach trek of four hours from Laoyuling to Xia Riwuqie, a pasture at 4000m on the Minya Konka circuit trek.

22nd Oct

The team completed the approach in a further 3 hours to reach BC in Shang Riwuqie (4300m). In addition to sleeping tents, the team prepared the kitchen and erected the cooking tent by mounting and tensioning a large tarpaulin over some of the available boulders. The site is generally dirty from use as a summer pasture, but a large amount of rubbish had also been left by a climbing team, presumably the Korean party which visited in August 2010.

23rd Oct

The members made short acclimatisation hikes and retensioned the cook tent in view of the prevailing winds.

24th Oct

Further general exploration was performed. Yan left to trek as far as the Minya Konka temple as part of his reconnaissance and acclimatisation. Annequin and Trommsdorff arrived with a local cook/guard. Normand crossed the pass to the south of BC to obtain views in all southerly and westerly directions, while Dempster climbed a snowy north face to 5000m.

25th Oct

The weather remained generally good, with sunny mornings, scattered clouds and strong westerly winds. Dempster included a visit to the base of the W Face of Grosvenor in his hiking schedule.



Left: Leduomanyin (6112m) from above Shang Riwuqie. Right: full West Face of Mt. Grosvenor, showing several possible lines to the right of the Central Couloir.

26th Oct

Dempster and Normand carried some gear to the base of the W Face, Normand electing to camp there for one night.

27th Oct

Normand descended. Annequin and Trommsdorff left to spend two nights camped at 5000m. Yan returned after a circuitous journey. The weather remained fine.



Left: Dempster approaching the crux pitches at 5800m on Mt. Grosvenor. Right: Dempster in the crux.

28th Oct

Dempster and Normand left BC at 3am, climbing the moraines and their previous footprints to arrive at the base of the face at 5:30am. Fast-moving clouds covered the moon, heralding the arrival of a disturbance which was to deliver a cloudy, windy day with afternoon snow showers. The pair soloed up the starting snow cone and found easy, low-angle ice for several hundred metres. This brought them all the way to the base of the crux pitches at approximately 5750m by 9am. Dempster led the two 85-degree pitches, finding occasionally thin ice over slabs, but generally adequate protection. Normand led on for three long, simul-climbing pitches of mostly 55-60-degree ice in the upper couloir, first on its left side and then in the centre. The weather had deteriorated to the point where swirling clouds and blowing spindrift obscured the view of onlookers in BC. Dempster led a final steep exit step and the climbers arrived in the shelter of the summit cornice at 5pm. After a welcome break from the cold of the battering wind, during which the ragged clouds broke to reveal some evening sun, the pair walked onto the summit of Mt. Grosvenor at 6pm.





Left: view onto Little Konka from high on Mt. Grosvenor. Right: view of N and W Faces of Mt. Edgar (6618m) from summit of Mt. Grosvenor.

The wind remained strong as the climbers started down the whaleback of the Northeast Ridge. The ridge remained low-angle and became corniced after some time. Darkness fell as the pair continued down increasingly delicate slopes on the windward side of the cornice edge. Normand, leading, had a close call with a miniature serac collapse. When there was no longer any chance of efficient going on the ridge, the climbers began to descend snow slopes directly into the North Face. After a short time they encountered the difficult mixed terrain of the face, and embarked on the abseil descent of an unknown line in darkness alleviated only by the sight of Yan's headlamp at the base of Jiazi. After 15 abseils, including rock horns, V-threads and occasional abandoned rack material, the climbers arrived in the upper glacier bowl below the North Face at 2am. They tried to continue the descent but were stopped by open crevasses and steepening slopes which

suggested an icefall. They set up the bivouac tent they had carried for safety, brewed some fluid and slept out a short, cold night.



Left: W Face of Mt. Grosvenor showing central couloir. Right: N Face of Mt. Grosvenor, showing line of abseil descent (from final snowfield at left on summit ridge).

29th Oct

The morning brought clear and sunny weather. By the time the climbers had had some drink and snacks, Yan had arrived through the tiny icefall. While he returned to his bivouac and to his reconnaissance of Jiazi, Dempster and Normand stumbled down the tedious descent of snow-covered boulders and loose moraine, returning to BC in midafternoon. They were welcomed by Annequin and Trommsdorff, who had returned from their acclimatisation and were planning to depart in the morning for a route on the right side of the West Face while the weather held.

30th Oct

On a fine day, Annequin and Trommsdorff climbed eight pitches of their route to reach a bivouac site on a steep snow col at 5800m. Dempster and Normand rested and watched passing blue sheep. Yan returned to BC late in the day.

31st Oct

Annequin and Trommsdorff weathered a windy night, but another fine morning brought with it storm-force winds. The climbers decided to seek safely by descending, returning to BC in the middle of the afternoon.

1st Nov

The weather continued to deteriorate. Yan went once more to the base of Jiazi to remove some equipment he had left there.

2nd Nov

Snow had fallen overnight. Annequin and Trommsdorff elected to leave, walking out in low visibility with the cook/guard. The other climbers rested.

3rd Nov

Yan left to hike out and travel early to Moxi to investigate the access situation. Snow continued to fall with zero visibility, but accumulation was low. The day was occupied by sleeping, burning rubbish and packing or eating the remaining food.

4th Nov

Tashi arrived with an assistant and five horses. All of the climbing and kitchen equipment was carried out to Laoyuling by evening, and on to a hotel in Kangding. Snow had fallen down to an altitude of 3600m.

5th Nov

The team spent the day resting and drying equipment in Kangding.

6th Nov

Resting continued in the morning. In the afternoon, the team availed itself once more of Tashi's services to drive via Laoyuling to Moxi. This required crossing the 3900m pass separating the Minya Konka range from the Lamoshe range (directly above Kangding), and then making the very long descent to 1500m in the verdant valley floor around Moxi. Yan had already found a small hotel, Gu had arrived from Siguniang, and in the evening the team members discussed strategy and emergency contingency plans with their LO, Mr. Li Zongli.





Left: lower Yanzi Gou. Right: E Face approach gully.

7th Nov

Gu and Yan had chosen to approach the North Face unsupported. Dempster and Normand chose to use one local porter to lighten their loads as far as the American BC of the previous year. Annequin and Trommsdorff chose to employ two local porters for a multiday reconnaissance and acclimatisation trip. The locals' solution to the problem with access to Yanzi Gou was quite simply to leave at 5am and hike in before the security staff

began work. This the two pairs proceeded to do, walking through the dawn in unforecast light rain and thick mist, while passing landslides and significant numbers of resident construction workers. The fork for the E Face looked as though it had been ripped out by a very recent, massive flood, with steep, unstable slopes everywhere. Dempster and Normand were forced to make an advance reconnaissance to convince their porter to continue. Annequin and Trommsdorff decided to remain in the main valley, where they were later evicted by security staff until Li could intervene on their behalf. Dempster and Normand continued up the unstable gully to a height of approximately 3100m, at which point the porter directed them up a side valley to a very small, flat spot among mossy boulders which he claimed had been the site of the American BC. The complete absence of erosion or rubbish made this claim dubious. The porter had been expecting a tent and food, which the climbers had not been told to provide, and so the porter was paid and left in a hurry. The climbers attempted some further route-finding in the snow-choked forest and around the precipitous morainal edges, concluding that they were far too low in the gully and would have to return to its main branch to carry on.

8th Nov

The mist of the previous day lifted slightly to reveal steep, forested slopes. Shouldering all of their gear, the climbers made the descent and continued up the main gully, finding the same steep, unstable, recently flooded terrain for another 700 vertical metres. Occasional rockfall indicated how dangerous this approach would be during rain. Clouds rose to obscure all the views of the mountain. At 3800m was a small glacier descending from the Edgar side, and the climbers passed around this, walking onto it above the first icefall at 4100m. Here they made camp as a light snow began to fall.



Left: Dempster at 4200m on the approach glacier below the E Face of Edgar. Right: climbing options on the left side of the E Face.

9th Nov

The snow continued for much of the night, but the accumulation was under 5cm. The morning was completely clear, revealing the massive E Face of Edgar towering directly

above the bivouac site. An avalanche swept down the narrow approach gully (a glacier approximately 100m wide). The climbers waited for 2 hours of direct sunshine, which caused no further sliding action, before deciding to ascend the gully. They soon found a major slide track created by ice blocks from collapsing seracs up and to the right. This made for fast going and showed clearly where the danger zones began and ended. Beyond 5000m, the climbers exited the slide track into deep powder and proceeded slowly throughout the afternoon. The weather remained perfect all day. Camp was made by digging a semi-cave in very deep snow at the base of the first ice, at the unexpectedly high altitude of 5500m.

10th Nov

The E Face of Edgar had revealed itself as a large scoop rimmed with cornices. The right side of the scoop, facing SE, was steep, blank rock; the left side, facing NE, was seamed with thin ice lines, which offered the only hope of advancing; the centre was a large drain, down which all the spindrift and collapsing cornices from the face could be expected to fall. The climbers had chosen the left side, and Normand led up two full pitches of ice to 70 degrees, passing the lowest rock band and continuing up steep snow to 5800m. Dempster then led a completely dry, M6 step to access another small snowfield, proceeding to the base of the thickest ice line on the left side of the face. This yielded two pitches of steep climbing (to WI5), made delicate by the fact that the thin ice would occasionally shatter, leaving only slabby rock. This rock was, however, more solid and more featured than expected, providing (with enough work) adequate protection at all times. Once again, the weather had remained good, with only afternoon clouds and light winds on this sheltered side of the peak. A third pitch at nightfall gave onto another steep snowfield, where the climbers were forced into a sitting bivouac.



Left: Normand leading the first ice step. Right: Dempster leading the first rock step.

11th Nov

Sunrise was required to raise the temperatures enough to move, but the left side of the face was quickly plunged into shadow again. Only one good ice pitch led to a leftward traverse, and then to steep, slabby walls with insufficient ice to make any of the planned lines climbable. Clouds descended over the peak and strong winds were visible on the crest above. Dempster pushed on left and up tenuous terrain, gaining the last viable gully

line below the obvious exit col at 6200m. The next pitches remained exceedingly delicate, with most progress depending on removing rotten ice in order to dry-tool the steep rock beneath. The climbers were forced out across a slab and back into the final, steepening gully below the col, always finding ice just firm enough for tenuous progress. With the last of the light, Dempster finally exited onto the ice below the col and pulled out into snow and into the biting winds. The climbers quickly kicked out a tent site and dived inside to deal with eating, drinking and warming themselves while weathering the storm-force winds outside.



Dempster leading some of the crux pitches of "The Rose of No-Man's Land", WI5 M6.



Minya Konka (left) and Daduomanyin (right) from the 6200m bivouac.

12th Nov

The morning was clear and the winds as strong as ever. The tent had an excellent view of Minya Konka to the south, Daduomanyin to the west and the summit crest of Edgar directly above. The nature of the E Face had forced the climbers to exit well below the summit, and now a long, leftward traverse was required on 45-degree ice to gain the final slopes from the south. With axe and crampon points by now completely blunt, this was a slow and tedious exercise. Only at 6400m was an obvious descent line visible to the south

and west, despite thicker clouds moving in on the strong winds. The climbers continued without packs, skirting a large crevasse and remaining close to the corniced edge, below which they had climbed for days. The summit crest was reached in a complete white-out, which made it impossible to assess whether the highest point had even been reached (perspective photographs reveal two candidate summits, separated by some 100m of horizontal crest, and the southern one was climbed). A long descent in low visibility ensued, the climbers trying to aim the drainage they had viewed from above during the clear morning. The day ended at nightfall in a glacial basin at 5700m above a large, steep crevasse zone, with thickening snow beginning to fall.



Left: traverse to the summit slopes. Right: on the summit of Mt. Edgar, 6618m.

13th Nov

On another clear morning, the climbers decided that the only way to descend would be through the icefall below them. A very tedious day of hiking in deep snow, down-climbing around ice towers and abseiling into crevasses ensued. The most serious icefalls were bypassed on the true left of the steep drainage, in morainal clefts. The afternoon weather deteriorated to thick mist and occasional snow. At nightfall the climbers were on dirty slabs with icing ropes, zero visibility and no apparent anchor options, which caused them to spend the night on a small snow bench.

14th Nov

The weather was unchanged, with light snowfall and extremely low visibility. The climbers found a place for a reliable abseil sling, pulled the badly iced ropes with great effort, and continued to climb down the gully. After some time, the slope eased to reveal a landscape of snow-covered morainal boulders, which later formed into a steep gully of the type the climbers had ascended one week previously. The snow ran out at 3500m and the gully gave suddenly onto a road at 3300m. The pair were able to flag down a passing construction lorry, and, after walking over two fresh avalanche scars which had closed the Yanzi Gou access road, were able to hitch a lift all the way to Moxi.

There they found Gu and Yan, who had returned after a five-day bid on the North Face of Edgar: after a very slow approach in the wild access valley, they discovered that the cold conditions and the fact that Gu had only single boots (the double boots he had ordered had been delivered too late for collection) made proceeding much too risky. Annequin

and Trommsdorff had had an encounter with representatives of the company controlling access to Yanzi Gou and had been ordered out; Li had solved this problem and the pair had gone back in, exploring the upper valley and climbing a 6150m snow peak to complete their acclimatisation. They were now awaiting favourable weather with which to plan a route on Edgar, but neither the forecast nor the objective-hazard report from Dempster and Normand were particularly encouraging to them.

15th Nov

Li left to return to his office. Gu left to go home and collect his new boots. Annequin and Trommsdorff abandoned their expedition attempts in the face of another poor weather forecast, the former returning home and the latter leaving for some general reconnaissance of the range. Yan remained in Moxi with Dempster and Normand as they began a phase of rest and recovery before a possible attempt on San Lian Feng.

16th Nov

Rest and recovery was delayed as Normand fell ill.

17th Nov

No significant bad weather arrived. However, Dempster felt little recovery and Normand remained ill.

18th Nov

While Normand's illness had subsided, neither climber felt at all strong. The weather remained unsettled.

19th Nov

The forecast remained unsettled, with further snow due at the weekend. In view of this situation and continued feelings of deep lassitude, the two climbers decided that their recovery was simply not adequate for facing another serious challenge. They chose to abandon their expedition at this point. Yan did not change his plan to meet the returning Gu the following day for a last bid on unclimbed Baihaizi (5924m), next to Lamoshe on the Kangding-Moxi pass.

20th Nov

Dempster and Normand travelled to Chengdu in order to leave for home.

21st—25th Nov

Gu and Yan attempted Baihaizi, finding deep snow and bad avalanche conditions which forced them to turn back some distance short of the summit.

7 Conclusion

The expedition was successful in its declared aims of climbing new routes on the West Face of Mt. Grosvenor and the East Face of Mt. Edgar. The region around Grosvenor

offers considerable potential for alpine-style climbing at moderate and high levels of commitment and technical difficulty. By contrast, the region around Edgar is generally steep and unstable, leading to high objective dangers which make its eastern side quite inimical to any form of safe alpine activity.

8 Acknowledgements

The expedition acknowledges with gratitude the generous assistance of the Mount Everest Foundation and the British Mountaineering Council.

Appendix A: Bibliography

Considerable information concerning the mountains of Sichuan may be found in the works of Tamotsu Nakamura, collected in volumes of the Japan Alpine News, and in the Mountain Info collections in CLIMB magazine.

Appendix B: Contact Information

China Sichuan Mountaineering Association

It is possible to contact the CSMA directly, although for detailed discussions one may require an agent. Prospective climbers should be aware that climbing regulations in all of China are subject to rapid and unpredictable change. They should also be aware that the SMA is the most progressive of China's mountain bureaucracies, the only one which leaves open the possibility of unguided climbing by Chinese citizens and takes a flexible approach to the activities of foreign climbers around their prescribed peaks. The SMA comes under severe pressure every time an accident occurs, and this leads to restrictions on climbing throughout the province. Thus it is essential for teams to act responsibly, climbing safely, notifying people of their intentions and having a fully thought-through self-rescue capability.

Expedition members' contact information

Bruce Normand: bruce.normand@gmail.com
Kyle Dempster: kdemp_911@hotmail.com

Appendix C: Map

Sketch map of Minya Konka massif:

