



ITU/P. Ticon



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Climbing Mont Blanc

■ *On Thursday 30 June 2011, at 1234 hours local time, a team of ITU staff reached the summit of Mont Blanc, 4810 metres above sea level. Fittingly for the staff of the world's telecommunication agency, the climbers immediately established radio contact with ITU's amateur radio station. How did the team face up to such a great challenge?*

Flying the ITU flag

An international team of three men and three women took part in the ITU Mont Blanc 2011 project. The objective of the project was to embark on a great human adventure that would enhance the enjoyment of combined effort, foster a spirit of solidarity among ITU staff, and — in line with ITU's mission to connect the world — establish radio contact from the roof of Europe.

The support of ITU's top management enabled the team to be properly prepared and equipped to face the dangers of the mountain. Dr Touré gave his full backing to this team-building project, which should pave the way for similar initiatives contributing to the spirit of one ITU.

In this article, the team shares their impressions of a splendid human adventure, involving the kind of activity that lays emphasis on cohesion, team spirit and transcending one's own capabilities. The team's ascent had everything to do with flying the ITU flag.

What inspired the ITU team?

Patrick Ticon, the initiator of the project and team leader had for years longed to climb Mont Blanc, the white mountain that — on a clear day — you can see from the cafeteria on the 15th floor of the ITU tower. Patrick says "My guiding lights in this



*The Mont Blanc expedition team (from left to right):
Marta Nury Munoz Echeverri; Patrick Ticon; Bernadette
Maurissen; Karima Benkirane-Demlek; Michel Mbarga;
and Kim Dong-Sik*

ITU/S. Bazin

project were an enjoyment of effort and sense of shared pleasure. I know from experience that everyone's best is revealed through effort. It provides an opportunity to discover wonderful people through learning and succeeding together. Differences are a source of wealth that we sometimes need to cultivate."

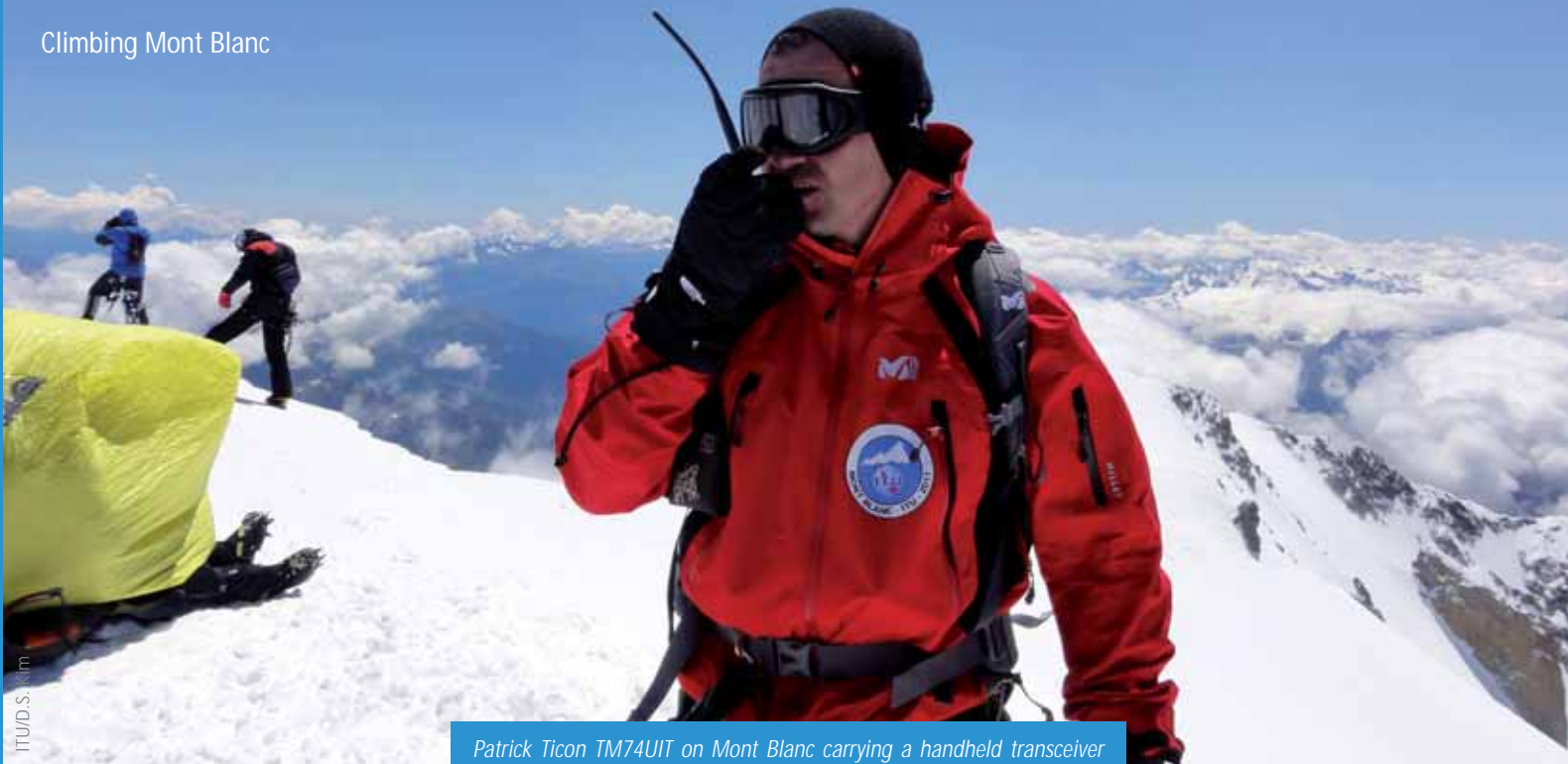
Michel Mbarga explains "This project is a way of demonstrating the kind of strength that gives ITU staff members the determination to carry out and accomplish their various missions."

Marta Nury Munoz Echeverri, who loves mountains and has been climbing them for years, was keen to climb for ITU. "In the course of preparing for our ascent, we found ourselves dealing with and getting to know colleagues we had previously encountered here and there during working hours and with whom our only contact had ever been the briefest of greetings," she recalls.

Karima Benkirane-Demlek, who loves sports but not high-mountain trekking, says although she was apprehensive she didn't hesitate for one second to join the team. "The prospect of being part of a team representing the Union and of climbing one of the world's highest summits convinced me to accept the challenge and prepare myself as best I could."

Bernadette Maurissen saw climbing Mont Blanc as "a great sporting and human adventure." She enjoys her day job as a nurse, and was "proud to be able to represent ITU through this exceptional challenge".

Kim Dong-Sik saw the Mont Blanc challenge as "a real good opportunity to work together in an extreme environment", recalling that recent natural disasters had highlighted the importance of communication and the role of ITU.



ITU/D.S. Kim

Patrick Ticon TM74UIT on Mont Blanc carrying a handheld transceiver YAESU VX-8GR

Training

The team had to be strong both physically and mentally. This meant following a serious training programme. As a warm-up, on 5 March 2011, the team climbed Le Crêt de la Neige on snowshoes. The next stage involved some mid-level mountain expeditions: Le Reculet (1719 metres) on 2 April, Lac Jovet (2240 metres) on 15 April, and Col d'Anterne (2250 metres) on 28 April, as well as repeated ascents of Le Salève. Then it was time for some high-level mountain climbs, with the ascent of Le Buet (3096 metres) on 3 June, Le Reculet again on 4 June, and Le Buet once more on 12 June.

Karima recalls the arduous training schedule. "From our very first training expedition, I discovered something grandiose and magical about walking in the mountains, despite the difficulties and the physical ordeal that can be a part of it."

A schedule of progressive training is the way to reduce the risk associated with poor physical condition. Yet the effect of training went far beyond the mitigation of risk. During the training sessions, genuine bonds of friendship grew between the participants.

Facing the challenges

High-altitude mountaineering always involves risk, whether geographic, climatic, material, training, acclimatization or guidance. In 2010, there were 64 rescue missions on Mont Blanc and four climbers died.

The ITU plan to climb Mont Blanc scrupulously followed the recommended approaches to limiting risk: employing a competent high-mountain guide to provide training and accompany the climbers; ensuring that the team followed a sustained and rigorous training programme to be in good physical shape, and understood the climbing techniques and equipment that would be required; and being kitted out with suitable equipment.

Using amateur radio to keep in contact

When the project started to take shape, Attila Matas, a radio engineer, offered to track the expedition, and help train Patrick so that he could pass the exam necessary to obtain an amateur radio licence before the expedition set off for Mont Blanc.

The idea was for the climbers to transmit their position and altitude every five minutes so that Attila could track their progress from the 4U1ITU radio club at ITU headquarters.



Attila Matas at the ITU amateur club station 4U1ITU in Geneva in communication with the APRS server (<http://aprs.fi>) that collects global real-time position information from radio amateur stations

Keeping track of the ITU climbers

The Automatic Packet Reporting System (APRS) and FM communication channels were set up to track on-line the position of the mountaineers and maintain voice (FM) communication with the expedition using amateur radio communication equipment.

For the APRS communication on 144.800 MHz, the 4U1ITU amateur station used a Kenwood TH-D7A transceiver. For voice (FM) communication on 145.525 MHz, the 4U1ITU amateur station used a YAESU FT-736R transceiver.

Patrick Ticon F4GRZ/TM74UIT was carrying a YAESU VX-8GR handheld transceiver.

The radio amateur stations were able to maintain reliable APRS communication every five minutes and FM communication every hour. This amateur radio operation improved the safety of the ITU Mont Blanc 2011 expedition (through on-line tracking and voice contact) and showcased new online communication methods using modern portable amateur radiocommunication equipment.

But the usual equipment has a range of 30 kilometres, and the point-to-point distance from ITU headquarters to the summit of Mont Blanc is 75 km and distance to Italy (Grand Paradis) is 130 kilometres. Attila had to resort to some tricks to overcome the technical challenge. As he explains, “we used a 7 elements Yagi antenna normally used for amateur-satellite communication on the roof of the ITU and we turned it in the direction of Mont Blanc. Information from the handheld transmitter YAESU VX-8GR (beacon) carried by Patrick F4GRZ was processed at 4U1ITU radio club at ITU headquarters using the APRS* tracking system, and then channelled to Finland where there is a global amateur radio tracking server (<http://aprs.fi>). The server in Finland is open to the whole world, so anybody in the world could track the expedition on the web in real time. We used a similar radio also for FM voice communication. The ITU call sign was 4U1ITU, and the French Administration licensed the special call sign TM74UIT for the mountaineers.”

* APRS was developed by Bob Bruninga, WB4APR

Satellite tracking step by step to the summit

By Sunday, 26 June 2011 (Day 1 of the expedition), the team was ready. The guide was waiting. The accommodation was booked. And special insurance coverage had been taken out. On that Sunday, the six members of the team met on the forecourt of the ITU tower, and set off in two cars for Argentière to pick up their mountaineering gear (helmets, harnesses, ice-axes and crampons), on their way to meet their guide, Serge Bazin, at Montenvers station in Chamonix. From there, they made their way to the ice school near the Mer de Glace (1908 metres) to spend the day familiarizing themselves with the equipment, returning to Chamonix to stay for the night.

On Day 2 (Monday 27 June), after a morning with Serge at the climbing school near Chamonix, the team travelled to Courmayeur in Italy, to spend the night at the Victor Emmanuel II refuge (2750 metres).

Day 3 (Tuesday, 28 June) saw the team leave the Victor Emmanuel II refuge at 0430 hours to climb the Grand Paradis (4067 metres), arriving at the summit at 0915 hours (first APRS tracking). After climbing down, with a stop at the Victor Emmanuel II refuge for lunch, the team returned to Chamonix for another night.

On Day 4 (Wednesday, 29 June), Serge and the team took the Houches-Bellevue cablecar and then the Mont Blanc tramway to the Mont Lachat station, at an altitude of 2077 metres. From there, they walked to the Nid d'Aigle and then on to the Tête Rousse refuge (3167 metres), where they spent the night.

Then came Day 5 (Thursday, 30 June) — the big day. Waking at 0400 hours, the team was pleased to find that the overnight rain had cleared and the weather conditions were favourable. Leaving the Tête Rousse refuge at 0445 hours, the excitement was tangible. Attila picks up the story: "I came to ITU headquarters ready to make contact with the team at 0430 hours. Looking towards Mont Blanc, I saw that it was raining, so I thought that the attempt would be called off. Then the APRS satellite tracking image started to move, and I made radio contact with Patrick, who said that he expected to be at the top of Mont Blanc at around 1230 hours."

The team needed to make an early start while the ice still held the rocks in place. Once the sun began to warm the mountain, the danger of rock-falls would increase. By 0800 hours, the team had made the icy and difficult climb to the refuge du Goûter (3817 metres).

Leaving the refuge du Goûter at 0830 hours, the climbers struggled upwards in the thin air, passing the Dôme du Goûter (4304 metres) and the Vallot refuge (4362 metres). At 1234 hours they reached the summit of Mont Blanc, and established VHF radio contact with ITU's amateur radio station. At ITU headquarters, the excitement exploded in a series of shrieks and cries "Wow! Perfect timing!" Attila contacted the climbers whose progress had been tracked in real time, "Hi Patrick, congratulations!"

Then the team had to make the long and exhausting climb back down, via the Goûter refuge and the notorious Couloir du Goûter, to spend the night at the Goûter refuge before heading back to Geneva on 1 July 2011.



Planting the ITU flag on the summit of Mont Blanc

Enjoying the ITU team's success

"Facing the challenge of climbing Mont Blanc created great team spirit and deep friendship. Not everyone needs to climb a mountain, but just doing something sporty, like walking or swimming, is good for the mind as well as the body," says Bernadette.

"Everybody warned me. Watch out! You will see what the altitude does to you... they were right. I felt as if I had lost my full physical capacities, and all I had left was my will power and the one objective: to reach the summit. At one point I really asked myself what I was doing up there. Patrick kept encouraging me, you can do it, I know you can, keep going. We finally made it to the top, and it was amazing," recounts Michel. Kim Dong-Sik, who celebrated his 50th birthday on the first day of the expedition, also admits that "the climb was very hard, and I was surprised to be able to reach the summit".

Although they are all amateur climbers, they approached the challenge with professionalism, building up their strength

individually and as a team, identifying and mitigating risks, and relying on the telecommunication expertise of their ITU colleagues to track their progress and keep in contact.

The modern APRS tracking system used by 4U1ITU radio club added to the security of the team and allowed the team's exploits to be followed throughout the world. On the mountain, news spread rapidly by word of mouth between the refuges. Other climbers saw the ITU logo on the jackets and backpacks of the ITU team, and asked about the Union and its work. News spread of a blind soldier who was making the climb, and the ITU team met him during their ascent.

Patrick concludes, "There is an interesting exchange at the human level, you discover your colleagues in a different way, you learn skills you did not necessarily think you had the capacity for, and then there is the effort side: helping each other, surpassing yourself. My thanks to all concerned for the energy devoted to this project and for the confidence shown by ITU."