First crossing of the Alps by hot air balloon[1]

Don Cameron

On Sunday 20 August 1972 after seven days of bad weather, the afternoon forecast was bad again. We despaired, but we relaxed. Martin Harris, our meteorologist, went off at 11pm for his nightly conversation with Zürich meteorological service and emerged an hour later looking very serious—'It's on!' he said.

We had been caught unawares by the bad afternoon forecast. It was midnight and we had to be up at 3am for our 5am take off. Also there was quite a lot of work to be done—informing the helicopter pilots and photographers, and last-minute preparations to equipment. This left time for about an hour's fitful doze—we were too excited to sleep.

At 4am, after a special hot breakfast laid on by the Zermatterhof Hotel, the whole team drove through the narrow, deserted streets to the grass square. Martin Hutchins and Giles Camplin driving, Mark Yarry and myself in the back of the Land-Rover and David Inman and Martin Harris riding in the trailer with the balloon and the meteorological equipment. The sky was clear and starry with still air at the valley bottom and an upper wind of 025° according to Zürich meteorological service. This was on the extreme right-hand edge of our acceptable sector. All that remained was a confirmatory ascent of one of our own meteorological balloons to make absolutely sure of our flight path.

The balloon was laid out and we were ready on time at 5am, but a major snag had appeared. A layer of cloud had formed in less than five minutes, and had put a lid on the valley. To ascend through it would be no problem—but how could we tell if our marginal wind direction was satisfactory without our own weather balloons?

Sitting around the spread out balloon we debated what to do. To take off now would risk a flight path with no guarantee of landing out of the mountains—but would that be so bad with a mild wind speed? For months we had agreed on weather minima for this first attempt at a hot air crossing and after a week of frustration and pressure were considering a change of mind. Fortunately we decided 'no', and went back to bed, taking turns to mount guard on the prepared balloon.

On rising for lunch, Martin Harris was more optimistic. The Zürich wind forecast was now almost in the middle of our sector, and the early morning cloud had burned off completely. The air-stream was very stable and thermals would not be strong. One of our large (6 ft in diameter) helium balloons was

[1] Reproduced from *Ballooning*, Autumn 1972

inflated and a tail of toilet paper 60 ft long was attached to aid visibility. On rising it first took a contrary bearing in the local valley wind, but higher up it took an excellent course down the middle of our sector. We decided to go.

Cumulo Nimbus was inflated, all the equipment was stowed in the basket (quickly, because we were troubled by an afternoon valley wind in periodic gusts) and we scrambled into the air to the cheers and clapping of the whole town. The initial climb was chaotic. Movie cameras, still cameras, tape recorders, parachutes, oxygen, emergency supplies, VHF radio, flight instruments, temperature gauge, crash helmets and maps were all in a jumble on the basket floor after our hasty take-off. All these had to be sorted out while at the same time the planned 500 ft/min climb was established. At length, with parachutes on and radios, oxygen and cameras working, we could take stock of the situation.

66 *Hot air balloon crosses the Alps* Photo: Associated Press Ltd

Zermatt was disappearing into its deep valley behind and we were flying close to Gornergrat, the upper terminus of the mountain railway. Although only 4000 ft above our take-off point and with 6000 ft still to go I was taken by the illusion that we were already level with the white tops of Monte Rosa

and the Matterhorn. But the numbers were right, and there was no point in distrusting them at this stage, so we kept up our rate of climb. Envelope temperature was well within limits at 195°F, so no worries there.

Down below the features which we had discussed so often passed underneath; the Gorner glacier, Monte Rosa, the highest peak in Switzerland, and with it the Italian border. Ahead a succession of smaller ranges and on the horizon was a layer of mist which might be the Italian plain. The balloon's drift was directly towards it, and Zermatt was already lost from sight in its deep valley.

There was nothing to do but wait for the miles to pass away, and to admire and photograph the view. The Matterhorn on the right looked an odd shape, as its familiar aspect is from the Zermatt direction. Ahead to the right the valley of Aosta makes a wider than average gap, but it was too far to the right to serve as a landing field. All the valleys were filled with an anticyclonic haze and the sky above was clear of all cloud. Periodically the two photographic helicopters would fly round us and then fly away again, leaving us in our empty silence.

As time went on, we approached the plain on a slowly descending path. At 3600 m with only a small range of foothills to cross the flight seemed almost over. But time ticked on and still the balloon did not seem to want to cross those hills to the flat ground which we could now see so clearly beyond. The air at 3650 m seemed becalmed, so there was no alternative but to restart the oxygen and climb once again to 4900 m to find a wind.

Once over the plain we began the let down, heating intermittently rather than make a cold descent on this occasion. It took half an hour to make the transformation from the air liner world at the top of the haze layer to the more normal ballooning environment of trees, houses and people.

We were landing near a small town and it seemed that its whole population was pouring out. From 500 ft it was clear that this crowd was going to be different from the usual spectators in England following an evening balloon landing. The roads were jammed with cars and throngs of people were running after the balloon, growing more numerous and more excited. We had to land as night would soon be falling so we put *Cumulo Nimbus* down in a field, ripping and at the same time hoping for a quick wrap up, but there was no hope. We were instantly surrounded by a crowd which must have been several thousand. They were very friendly and honest (it was impossible to guard our camera and equipment but nothing was lost) but the oppressiveness of pure numbers was worse than I have ever known. After a long struggle in clothes designed for −10° we had the balloon in its bag and could begin to relax.

Ten hours later, at 3am, the crowd had all gone home, *carabinieri* and customs were satisfied and a full moon shone upon *Cumulo Nimbus* and two full sleeping bags.

Facts and statistics

Balloon type: Cameron A-140
Volume: 140,000 ft^3 (3970 m^3)
Burner: two standard units in an enlarged load frame
FAI class: AX-9
Flight crew: Mark Yarry and author
Fuel carried: 430 lb in ten aluminium cylinders
Other equipment: parachutes, oxygen, altimeter, variometer, ambient thermometer, compass, envelope thermometer, VHF radio, sleeping bags, emergency food
Maximum altitude: 5425 m
Distance: 36 miles
Take-off altitude: 1600 m, Zermatt, Switzerland
Landing altitude: 365 m, Biella, Italy