

CREVASSE ROULETTE: THE FIRST TRANS-ANTARCTIC CROSSING 1957–1958. Jon Stephenson. Rosenberg Publishing, Sydney, 192 p. illustrated, hard cover. ISBN 978-1-87705866-0. A-49.95.

In 1955, a young Australian geologist, Jon Stephenson, was fortuitously in London when he read of Dr Vivian Fuchs' plan for a Commonwealth Trans-Antarctic Expedition. His only experience with snow had been in Tasmania, and a brief snowfall in London. However his geology qualifications were impressive, and he was also Australian, helping with Commonwealth representation together with South Africa and New Zealand.

Stephenson and his companion Ken Blaiklock were the first men to drive dogs to the South Pole since Amundsen, accompanying Fuchs' six vehicles, three Sno-Cats, two Weasels and a Muskeg tractor. The dog teams were also useful finding a way through heavily crevassed territory. The crossing party began at their purpose-built base, Shackleton, on the Filchner Ice Shelf from the Weddell Sea side, while Sir Edmund Hillary, recent conqueror of Mt Everest, was charged with establishing fuel depots from the Ross Sea, up the Skelton Glacier to support Fuchs' crossing via the South Pole. His vehicles of choice were specially adapted Ferguson tractors towing a caboose for accommodation; a far cry from the comparative luxury of Fuchs' large Sno-Cats.

Fuchs had not expected Hillary to actually drive to the South Pole, but the strong-willed and feisty New Zealander had other ideas and did so, admittedly with failing tractors and nearly out of fuel. This caused some controversy, and both Fuchs and Hilary have written their own books on the TAE. Stephenson has some interesting commentary on this touchy issue (pages 109–110).

Jon Stephenson's geological work took him away from Antarctica in later years (except for visits to Heard and McDonald islands in 1963 and 2002), and he did not return until 2004 to go on a cruise to South Georgia and the Antarctic Peninsula. Flying from Ushuaia to Buenos Aires *en route* to Australia, he chatted with a Californian woman also returning from an Antarctic cruise. He told her about the TAE, and was asked about the title of his book on the adventure. Told there was none, she insisted, 'You must write one'. The result is a fascinating comprehensive account of the TAE from a man who not only was a key expedition member, but who took wonderful photographs with his Leica 3c camera, using Kodachrome 1, which are a key feature of this generous A4 format book.

Its title, *Crevasse roulette*, is dramatically illustrated by the front cover illustration of Fuchs' leading Sno-Cat straddling a huge crevasse, its front right track dangling helplessly over a dark abyss. In it was riding not only the expedition leader 'Bunny' Fuchs, but his deputy David Stratton. Had they both plunged in the TAE would have been leaderless.

Using his own diaries, photographs and self-drawn figures and maps, Jon Stephenson has written a page turning account of one of the great Antarctic expeditions, where technological advances like steel hulled ships, reconnaissance aircraft, and relatively sophisticated over snow vehicles like Sno-Cats worked hand in glove with Nansen sledges, rawhide lashings and sledge dogs. Science was a key objective of the TAE because of the International Geophysical Year. Stephenson,

surveyor Ken Blaiklock and glaciologist Hal Lister built their own pre-fabricated hut at a southern outpost named South Ice and manned it through the winter, taking weather observations and studying snow and ice formation, a new departure for Stephenson who also managed to get his hands on his beloved rocks on field expeditions to previously unknown nunataks in the area. On one of these, the Whichaway Nunataks 30 miles from South Ice, Stephenson and Blaiklock were dropped in by aircraft but had to man haul back to South Ice by themselves. Bad weather and atrocious surface conditions delayed them, and they ran out of food and fuel. Fortunately Fuchs, concerned for their welfare, flew in and rescued them in the nick of time (pages 49–50).

The whole Trans Antarctic Expedition was perilously close to not happening at all, when one of the expedition ships *Theron* became beset in the Weddell Sea pack ice for more than three weeks, raising the spectre of duplicating what happened to Shackleton in 1914 when he attempted a trans-Antarctic crossing from that very location. Fortunately aerial reconnaissance and a certain amount of good luck got both the ships *Magga Dan* and *Theron* to the Filchner Ice Shelf where they were able to unload directly on to the sea ice to supply the expedition base, Shackleton.

No successful crevasse detector has ever been invented to this day, and Fuchs and his assortment of vehicles were constantly plagued by crevasses when they finally set out on the trans Antarctic crossing in early October 1957. Their vehicles had to be roped together for safety in some of the worst sections, and this made progress even more slow. Rock features in Antarctica are splendid to look at, but deform the constantly moving ice as the irresistible force meets the immovable object. Syd Kirkby, a pioneering surveyor with ANARE (Australian National Antarctic Research Expeditions) during the same era, worked with both Weasels and dog teams and preferred the dogs. The Weasels were originally designed for the D Day landings in Normandy. They carried an explosive charge designed to destroy them if they had to be abandoned on the field of battle. Kirkby considered that was their best design feature. His other pertinent comment about nunataks was that, 'if you can see them you are too close'. In one extremely crevassed section it took Fuchs three days to achieve a few hundred metres, probing every metre of snow with long wooden poles, even where they set up their tents. Wrote Stephenson: 'Fuchs must have felt his plans to cross Antarctica were more than fragile, and under severe threat' (page 89).

Beyond South Ice and as they climbed on to the featureless polar plateau, the going became less crevassed, but progress was slowed breaking through the razor sharp sastrugi, sculptured by the relentless polar winds. The mechanics were kept busy repairing broken sledge couplings and more serious fractures to the Sno-Cat chassis. (The Weasel broke a track and had to be abandoned. History does not record whether it was blown up to deny it to any enemy.)

Stephenson and Blaiklock, with their dog teams, charged ahead in brilliant sunshine acting as scouts for the vehicles as they headed in tandem for the pole. Stephenson later wrote: 'In retrospect, we were enjoying our independent exploration, and I revelled in this, following Ken's team into the unknown. It was a wonderful privilege, though I didn't fully appreciate it until some years later' (page 101).

Fuchs, who did not regard public relations as a priority, was surprised to hear that Hillary had reached the pole. This made headlines all over the world, and Fuchs was distinctly unamused by Hillary's private message to him that he thought Fuchs should winter his vehicles at the South Pole, and complete the crossing the following year, advice that Hillary himself later acknowledged was gratuitous and unnecessary. Fuchs just ploughed on anyway in his own good time and completed the expedition as planned. The two men greeted each other cordially at the US Amundsen-Scott station at the South Pole, and Hillary accompanied Fuchs in the back of one of the Sno-Cats to complete the crossing of the continent to Scott Base on the shores of the Ross Sea.

Fuchs was particularly anxious to complete his crossing without any logistic contribution from the Americans. During refuelling at D700, established by Hillary's NZ Party, Stephenson noted Fuchs' 'silent fury' when he saw some US olive-green fuel drums in the stack and ordered them not to be used. 'This was one of the few occasions I saw Bunny angry' (page 116). Stephenson conjectures they are probably still there.

Jon Stephenson has given us a magnificent description, from the inside, of one of the major Antarctic journeys of exploration of the 20th century. We all owe a debt of gratitude to the American Antarctic tourist who, in 2004, demanded he write this comprehensive and beautifully produced book. (Tim Bowden, PO Box 75, Pacific Palms NSW 2428, Australia.)