

Speech: Flying through Fire and Ice

On the occasion of the 95th anniversary of Chile's Naval Aviation, including commemoration of 50 years since the evacuation of British and Chilean scientists from Deception Island.

'Antarctica – where it is possible to see the splendours and immensities of the natural world at its most dramatic', so said Sir David Attenborough, our leading broadcaster in the recent television series 'Blue Planet'.

Drama was certainly seen by those on Deception Island, over 50 years ago. The British base had been occupied since Feb 1944, but on 5 Dec 1967, there had to be a temporary evacuation, after volcanic eruptions. The scientists returned but had to evacuate again in February 1969 when further eruptions damaged the station buildings. The only previous report of volcanic activity had been in 1842.

In 2016 we celebrated together the centenary of the rescue of Shackleton's men from Elephant Island by Chile's Piloto Pardo in the steamer Yelcho. In 1967, and 1969, it was ships named after that important part of our shared history, that came to the aid of the British and Chilean personnel, stranded on Deception Island.

My colleagues at the British Antarctic Survey have looked back in the archives to find some of the first hand accounts of that time, 50 years ago, and the appreciation of the help from Chile.

The accounts of 1967 relay the heavy ash and poor visibility, and record the concerns about both the Chilean and Argentine bases on the Island. The 27 Chilean personnel were able to join the 15 men at the British base after a very difficult and dangerous journey. The buildings were covered in c. 1 foot of ash and hail. The heavy and rapid rise and fall of the water in the bay meant it was not possible for the Chilean ships – Piloto Pardo and Yelcho – to reach the Island. Helicopters were sent from the Piloto Pardo to effect the evacuation. The report states:

An extremely fine show of flying skill and efficiency had been given by the Chilean Navy.

In 1968 scientists returned to examine a new island which had appeared as a result of the 1967 eruption. But on 5 February 1969 there was a further evacuation because of heavy tremors. The account reads:

Two helicopters from Piloto Pardo arrived through ash and wet snow cloud and picked up whole party and returned them to ship. Landing on ship was extremely difficult as cockpit dome was completely obscured by ash and wet snow. A heavy sea was also running with 30 knot wind... All on board consider rescue efforts by the Chileans a

superb example of skilful seamanship and flying carried out under appalling conditions.

Today, the Antarctic Treaty System, our collaboration, and the science being undertaken in Antarctica is more important than ever. Through the Scientific Research Memorandum of Understanding, with INACH, signed when President Piñera visited London in 2012, BAS scientists have extensive collaborative links with Chilean scientists, involving joint activities in Antarctica, the Southern Ocean and in and around Chile. The projects include investigating aspects of glaciology, physical and biological oceanography and marine and terrestrial ecosystems.

Just a few weeks ago the Chilean authorities helped ensure the smooth transit of vital and unique science instrumentation to move from Antarctica to Iceland. The equipment had been used as part of a collaboration between BAS and the University De Santiago, and funded by INACH, on a joint project to measure atmospheric conditions over Chile's stations at Marsh. It was then transferred to be used on a polar plane, as part of a major international collaboration, to measure atmospheric conditions in the northern hemisphere. This work will yield important insights into climate change.

Those working in Antarctica face many hazards and arduous conditions. Thank you to those pilots of the Armada de Chile, who 50 years ago flew through fire and ice, illustrating the great spirit of collaboration and commitment of all those involved in one of the most beautiful, but harshest places on the planet. Thank you to all those who work in Antarctica to preserve this special place for the benefit of all and to help us understand the world around us.

We are building a new polar research ship – named appropriately the RRS Sir David Attenborough. The facilities on board will transform ship borne science in the polar regions, and I hope some of those insights will be through further collaborations between the UK and Chile.