BY A (NOT SO OLD) HYDROGRAPHER

'As it Was'

On 14th October 2004 a large French flag was lowered to reveal the name <i>Pourqui-Pas?</i> on the hull of a magnificent new ocean survey ship which will be jointly operated by the French Navy and Ifremer, the French Research Institute for the Exploitation of the Sea.

Amongst those present at this ceremony in the Chantiers de lâ€[™]Atlantique Saint-Nazaire was Madame Anne-Marie Vallin-Charcot, granddaughter of a great French contributor to the exploration of Antarctica. The ceremony took place almost 70 years after the loss of the fourth *Pourquoi-Pas?* on reefs off Àftanes on the west coast of Iceland on the stormy night of 15th September 1936. Jean-Baptiste Charcot, a brave and distinguished leader, went down with his ship. He had triumphed over the perils of polar exploration. He had seen wartime service in command of a RN Q-ship during the First World War. The lost ship had carried him on his second voyage to Antarctica, during which significant new discoveries were made on the western side of the Antarctic Peninsula during the period 1908-10.

Charcot was the son of an eminent neurologist who was determined that his son should also follow a medical career. Until his father's death, Charcot was compelled to fulfil his love of the sea through sailing. Three of his yachts were named *Pourquoi-Pas?* A substantial inheritance enabled him to build his first research ship, the Français, and to conceive a plan for exploration in the Antarctic, matching the efforts of expeditions from Belgium, UK and Sweden. He soon discovered the true cost of financing such an undertaking and successfully mustered public support and the approval of the French president.

The cruise of the Français took Charcot as far south as Alexander Island, at the base of the west coast of the Antarctic Peninsula, before a serious grounding forced him to head north. Meanwhile, he had gained invaluable experience in leadership of a polar expedition that over-wintered in theatre. The scientific results of his expedition gained the support of the French government and the major scientific institutions for a follow-up voyage. Le pà re Gautier at St Malo constructed a new, larger vessel, the *Pourquoi-Pas?* Her engines were made by Labrosse et Fouché of Nantes. Among the numerous scientific instruments donated to the expedition was a complete oceanographic outfit from Prince Albert of Monaco. The *Pourquoi-Pas?* left Le Havre on 15th August 1908.

Three naval officers were placed under Charcotâ€[™]s direction, and they were instructed and equipped for their hydrographic tasks by the French Hydrographic Service. Lieutenant Bongrain, second in command of the expedition, subsequently expressed his gratitude to the director of the service, M. Bouquet de la Grye, and to his successor, M. Hanusse. Bongrain and his colleagues, Lieutenants Godfroy and Rouch, had been able to draw up their results in the offices of the Service with expert advice from Messrs. Renaud, Favé, Riou and Rollet de lâ€[™]Isle.

Bongrainâ€[™]s published 'Sailing Directions' are a model of honest reporting. He noted the many gaps in the rapid sketch surveys on which their general charts were based and he urged a most careful lookout! Charcotâ€[™]s account of the voyage makes frequent reference to the laborious process of deep-sea sounding where ice conditions permitted. Nonetheless, Bongrain was obliged to recommend safe routes on the strength of uneventful transit by the *Pourquoi-Pas*? and other exploring vessels and whalers, or by the absence of grounded icebergs. The main objective of the expedition was to lay down the coastline, as illustrated in Bongrainâ€[™]s frontispiece, and this work was tied to astronomical and baseline measurements at the wintering station at Port-Circoncision on Petermann Island. The stay there permitted more comprehensive work, including tidal, gravity and magnetic observations, evidence of which is apparent in Bongrainâ€[™]s sketches. He also used photography for some coastal views, whilst his skill in traditional draughtsmanship is shown in the illustration of Charcotâ€[™]s newest discoveries.

The achievements of Charcot and his team in improving the knowledge of the bays and refuges of the Antarctic Peninsula are a true inspiration for the members of the IHO Hydrographic Committee for Antarctica (HCA) who are currently developing a co-ordinated survey plan for the area. Cruise ships with tourists now follow in Charcot's footsteps, whilst several countries maintain a continuous presence in scientific bases on the continent. Several of these are in Marguerite Bay, which is named after Charcot's wife. Here, whilst he made every effort to obtain soundings, Bongrain noted "the reconnaissance of this region has only been started and a very great hydrographic task remains." A co-ordinated IHO survey plan for the International Polar Year 2007-08 will be a tribute to Charcot and his fellow pioneers, particularly in view of his international outlook and inspirational team leadership.

Further Reading

- Le Pourquoi-Pas?Dans L'Antarctique, Jean-Baptiste Charcot, Arthaud, 2003, ISBN 2-7003-9597-2.
- Voyages en Océanographie; Oceanographic Institute of Monaco, 2003, ISBN 2-7260-0226-9.