

vision two or three weeks later will understand why the cadets enjoyed it all so hugely. The film, in colour, was truly magnificent, and Captain Villiers's personality somehow brought the savour of salt water into the lecture hall of the Royal Geographical Society.

Wherever possible, speakers in the 'Off the Beaten Track' series are chosen because they speak from first-hand knowledge. Captain Villiers's personal account of the voyage of *Mayflower II*, was followed by a description of the 1957 Transatlantic Race given, as Wing Commander Anderson said in his introduction, by 'one of the most sought after navigators in the sport of ocean racing', Mr. Michael Richey, Executive Secretary of the Institute. This talk aimed not only at interesting the boys but was also intended to emphasize that the Institute is essentially a scientific body. The presentation was extremely lucid and was backed up by truly beautiful slides. A talk by a practical man touching on subjects which the boys meet in their work in the nautical schools, is now becoming a regular feature of 'Off the Beaten Track' meetings.

The general theme of the meeting was to be 'crossing the Atlantic'. Captain Villiers showed how they did it. Michael Richey described how it may be done today. The third lecture, on flying, was to have suggested how it would be done in the future. However, the appearance of Sputnik a few weeks earlier introduced another, and a much more striking future. The Institute was fortunate in securing the services of Dr. J. G. Porter of H.M. Nautical Almanac Office, well known to viewers and listeners, and one of the foremost authorities on the orbits of satellites. This final talk on satellite navigation provided a fitting end to the meeting. Dr. Porter's delightful style, his dry way of debunking popular misconceptions, delighted the boys and his description of the problems involved fascinated them.

The President of the Institute then wound up the proceedings with a vote of thanks to the speakers, and the popular announcement that tea was waiting. So ended the fourth of the 'Off the Beaten Track' meetings which will be described in detail in the next issue of the *Journal*. And once again the lecturers, two of whom had appeared in previous years, and who had given a great deal of time in preparation for the afternoon went away satisfied. Nobody who has been privileged to lecture to the cadets, who has experienced their tremendous enthusiasm, their absolute stillness punctuated by bursts of laughter or applause, will fail to acknowledge a most ample reward.

E.W.A.

MR. HAROLD GATTY

We record with regret the death, at Suva, Fiji, on 30 August 1957, of Harold Gatty, at the age of 54, a Fellow of this Institute and one of the world's leading air navigators.

Mr. Francis Chichester writes:

Harold Gatty is best known for two things: for navigating Wiley Post on the first flight round the world, in 1931, which they achieved in eight days; and for *The Raft Book* which he wrote, produced and published himself during the 1939 war, and of which he told me half a million copies were distributed to U.S. forces.

Gatty was born in Tasmania in 1903 and remained an Australian citizen. He was trained in the R.A.N. College for the Australian Navy but did not enter it. He first entered the Australian merchant navy. He decided to seek his fortune in America and landed in California in 1928 or 1929. At first he could not find a suitable job and for a while could not get enough to eat. This affected him for life and may indeed have shortened it because he developed high blood pressure, and it was against his principles to live sparingly as he should have done.

His first job was to skipper a yacht, which he did not like. All the time he was working at navigation, and he opened a navigation school in California—I think for night classes to start with. To him came Lindbergh and others, and his navigational genius soon became well-known. In 1930 he navigated Harold Brimley, a Canadian, in an attempt on the first non-stop flight across the Pacific, some 4800 miles. This was one of Harold's greatest adventures. After 30 hours flying east from Japan a leaking exhaust pipe made the pilot delirious with carbon monoxide poisoning and Harold had to coax and threaten him into steering the aircraft back to Japan, where they arrived back at the sandhill from which they had started.

Then in 1931, his famous navigation of Wiley Post took place. He was awarded the United States Distinguished Flying Cross which, for a foreigner, required a special Act of Congress, and he was appointed head of the Air Navigation training and research section of the U.S. Air Corps which required the waiving of a defence law. Later, he was appointed by Pan American Airways to plan and establish their first transpacific service which, at that time, was the longest transoceanic air transport route. His story about this task, with the rush to buy one of the king-pin islands required for a stage halt, his visit to the White House about it and the subsequent enactment rushed through, was like a melodramatic boy's adventure story. In the 1939 War Harold was commissioned a group-captain in the R.A.A.F. and became director of air transport for the allied air forces, first in Java and later at General MacArthur's headquarters in Australia and New Guinea.

The Raft Book he produced was a fascinating survival handbook about how to find your way, mainly in the Pacific, on a raft by natural signs. Its chief value was that it gave the holder of the book the hope which is the first essential for surviving shipwreck or air crash. It had its inaccuracies, naturally enough, and an interesting result of one was Dr. Bombard's attack on the book. Bombard was crossing the Atlantic on a rubber raft to prove that a man could survive almost entirely on sea-water and sea-food. On seeing a frigate bird he deduced from *The Raft Book* that he was within 75 miles of land, but after sailing another 1500 miles with no sign of it he grew very angry about it.

Harold bought an island in the Fiji group after the war. He founded and ran Fiji Airways, the first and only inter-island air service. He appeared to have the ideal life and it seemed that he of all men should be free of worry. For twenty years he had been collecting data for a history of navigation in the Pacific. Parts of this collection were used to compile a book *Nature is Your Guide*, a kind of super Raft Book which has now been published by Collins. It is a fascinating book.

Harold was a good friend, generous with his amazingly shrewd, sound advice on navigational matters. Time after time the writer of this note had the benefit of this during the past twenty years. Harold Gatty was a great natural navigator, and a fine man.

Captain G. S. Ritchie, D.S.C., R.N., writes :

Harold Gatty and his charming wife Fenna, who comes from Holland, always looked after me when I visited Suva in both *Challenger* and *Lachlan* and I feel privileged to have known them. His house at Tamavua was delightfully situated on the hillside. Two rooms at least were given over to his library which contained many rare and beautiful books on navigation and travel in the Pacific. Harold was passionately interested in every aspect of the Pacific Ocean and he was happiest when discussing this great ocean which could be seen from his windows pounding the reefs beyond Suva Harbour.

Harold owned the island of Katafanga in the Lau Group with its own lagoon within a fringing reef where he and Fenna delighted to live for three months in the year. To reach Katafanga entailed a formidable journey by boat across the Koro Sea, but once they reached the island they lived unmolested by the world beyond the reef. Here Harold worked on his latest book *Nature is Your Guide*. This book aims to be a survival book on land and will do for those marooned in desert and jungle what Harold's famous *Raft Book* does so well for those cast away at sea. It is sad indeed that Harold has not lived to see its publication.

Harold's knowledge of the Pacific and everything Polynesian was infectious, and to be in his company when he was discussing these things with his usual enthusiasm was to enjoy one of the delights of this world. With Harold Gatty's death our science, navigation, has lost one of its brightest stars.

Mr. D. H. Sadler writes :

Mr. Chichester and Captain Ritchie have paid tribute to Harold Gatty as a navigator and as a man. May I add a brief word of appreciation on the astronomical contents of *The Raft Book*? The methods available for the determination of position and direction from observations of the Sun, Moon and Stars without instruments, or with at most a watch, are well known in principle. They can rarely have been presented more lucidly and, what is more important, more attractively than in *The Raft Book*. No one, least of all a shipwrecked mariner, could fail to be impressed by the description of the traditional Polynesian view of the relationship between stars and Earth; a star in the zenith is a heavenly beacon lighting up the latitude circle which revolves beneath it. This assuredly is the simplest principle of all position-finding methods. The other methods and tables in the book are necessarily somewhat technical, and call for no special comment; but one can imagine them being studied and used with so much more enthusiasm and understanding for such a vivid picture of the friendly beacon-like stars.

The name of Harold Gatty must have been praised by many enforced users of *The Raft Book*, who had not the privilege of knowing either the man or his main work.

MODERN NAUTICAL TABLES

THE Institute has recently carried out an investigation, at the request of the Admiralty, into what navigation tables are required at sea today, bearing in mind particularly the needs of the Merchant Navy. A list of the tables considered