

Newsletter February 2019

Editorial

Last month, Georgio Bindoni's lecture provided an interesting perspective on aircraft accidents. I haven't got around to watching the recorded version yet, but I will do in the coming week. I hope to publish something on the subject of aircraft accidents in a forthcoming newsletter.

This month Captain Jonathan Ewer from Bristows will describe "Technology Changes from Sea King through S92 to AS189". This should be provided lots of useful background to anyone harbouring ambitions regarding a career in aeronautical systems. Welcome, Jonathan.

The first few months of any year are particularly challenging ones for the Prestwick Branch. The committee is busy drafting the Annual Report, sending out invitations and planning for the McIntyre and then planning for the AGM. The Branch programe doesn't put itself together and is the result of a lot of hard work by a small band of volunteers – not all members of the committee. If you can spare a little time to assist with the running of the Branch, we would be delighted to hear from you. At the top of the committee's wish list at the moment is somebody to produce our meeting minutes. Any takers?

Thank you to all who took the time to attempt this year's Christmas Crossword. For those still struggling for an answer, the solution can be found on the back page along with this year's winner.

In the newsletter this month, I have resorted to a double helping of 'Prestwick Retrospective'. As promised last month, page 1 features an image from Prestwick's past, but the rest of the newsletter has been taken up with the first installment of a Branch lecture delivered as long ago as January 1975. Does anyone recall the lecture itself? To my shame, I cannot recall who provided the material for this – but in my defence, I was given it was some time ago. It was probably Peter Berry or Quentin Wilson, but whoever it was thank you.

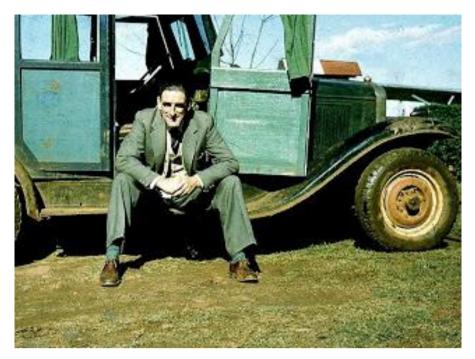
Which is a good cue for my monthly appeal for suggestions for newsletter content. Enjoy the lecture.

Dave

Prestwick Retrospective



Trans-Canada Air Lines Canadair North Star CF-TEM at rest outside the Orangefield terminal at Prestwick. CF-TEM only served with the company from January 1947 until March 1948, on Ioan from the Royal Canadian Air Force. During this time, it operated Trans Canada's inaugural trans-Atlantic North Star service on 15th April 1947. Is this the occasion shown above? The aircraft continued to serve the Air Force until 1st February 1962 when it was written off in a crash at Hall Beach, Northwest Territories. The North Star was a DC-4 airframe with Rolls-Royce Merlin engines. The type also served with BOAC as the Argonaut. (Photo: via Gordon McAdie)



Prestwick 1935-75

Part 1 - Beginnings

Wing Commander N J Capper AFC

The Prestwick Branch main lecture of 1975 was delivered on 13th January by Wing Commander Noel Capper. Noel had been Chief Test Pilot of Scottish Aviation Limited until 1965 and had been associated with the development of Prestwick Airport from very early days. His comments provide an interesting perspective when read again 44 years on. The lecture was published in full in the February 1975 edition of the Royal Aeronautical Society's magazine, Aerospace. There is insufficient space to publish the whole piece in this edition, so Part 2 will follow soon.

Anyone arriving at Prestwick today might well ask, "Why is there a full-scale International Airport here at all?" It may be suggested that it is an accident of the Second World War, and, to a certain extent that is true, but it would be fairer to say that its existence is due to the efforts of one man, David Fowler McIntyre, who was tragically killed in a flying accident in North Africa in 1957. In the new Terminal Building at Prestwick Airport, just above the arrival and departure indicators, there is a small plaque inscribed "In Honour and Memory of David F. McIntyre, AFC, Burgess of the Burgh of Prestwick, whose courageous foresight and acumen led to the founding of Prestwick Airport."

In an obituary, he was described as a man of intense application, shrewd judgement and a gay spirit. I first knew him in 1931 as my flight commander in the Royal Air Force and those qualities were already forming, but at the age of 26 or so, the predominant ones were humour and enthusiasm for anything he tackled. He was an exciting and refreshing man to know, a born leader and a complete aviator. He not only flew as often as he could himself but made sure that all the members of his flight had the chance to get in plenty of flying. He sometimes remarked that it was easy to find 100 reasons for not flying, but all that was needed was one good reason for flying.

In 1933, the Marquess of Clydesdale (who was to become the Duke of Hamilton in 1940) and David McIntyre were both members of No. 602 City of Glasgow Auxiliary Air Force Squadron at Abbotsinch. They were selected as pilots to go on the Houston Mount Everest Expedition. This was a successful expedition and although in less than 10 years time there were many aircraft in service which could have made light of the job of flying over the lop of Everest, in 1933 it was a feat that was only just within the scope of the biplanes the expedition used. Mount Everest was nearly 30,000 ft above sea level and a very long way from the nearest base. The final and successful flight was made in the face of some political complications and it is obvious that McIntyre, seeing that conditions were right, and they would not get another chance, adopted a Nelson-like approach, feigning ignorance and advocated that the opportunity should be grasped. He and the Marquess completed their successful flight and talked their way out of trouble later.

Flying school opens

When they returned to the UK, the Marquess of Clydesdale, like the rest of his family was very fully occupied. McIntyre who was in his father's shipping and stevedoring business began looking round for some outlet for his aspirations and dreams in connection with aviation. At that time, a Government scheme for expanding the Air Force without increasing the Estimates and alarming the Tax-Payers was launched, whereby certain firms were given contracts to open Flying Training Schools. Young men were to do their first 50 hours training as civilians and then enter the RAF as pilots to complete their training. Clydesdale and McIntyre in association with the directors of the de Havilland Aircraft company formed Scottish Aviation Ltd. This company was registered in August 1935, close on 40 years ago. The sites for the flying schools were to be approved by the Air Ministry. Scottish Aviation chose the Heathfield area near Prestwick because Service and civilian pilots had noticed that even in the worst weather, you could fly SW from Glasgow for about 20 minutes and you could guarantee that either Troon Harbour, Ayr or the Glasshouses at Alloway would be in the clear. Heathfield was not in fact available because both Ayr and Prestwick refused to have interference with their long-term housing plans, so Scottish Aviation bought some land on the Monkton side of the Pow Burn, just behind the Orangefield Hotel.

To begin with the airfield occupied 157 acres of land, that had produced record crops of wheat, and another 191 acres were bought to the NE side of the Coylton road to allow for future expansion. Accommodation, including a hangar, offices, lecture rooms and a little control tower, was built by the end of 1935 – it was a copy of the buildings at de Havilland's School at White Waltham - and the small airfield was ready for No 12 Elementary Flying School to open on the 17th February 1936. For a time, an area remained that had not completely recovered from growing a crop of turnips and wooden planks had to be laid for aircraft to taxi out on to the main airfield. There were 16 Tiger Moths, eight instructors and between 30 and 40 pupils.

With one exception, though experienced RAF pilots, the instructors were new to giving flying instruction but, as we were to learn later, the pupils had no inkling of this, and the school set a high standard right from the start. There was an atmosphere of good-natured enthusiasm, but it was decided that good discipline in the air could only be achieved through strict discipline on the ground. The pupils, though civilians, were subjected to a Service type routine. One pupil writing later from his RAF Training School, remarked that after comparing notes with fellow trainees from other civil schools, decided that the Prestwick pupils had been virtually in "open arrest". They found however, that they were more amenable to Service discipline.

Any success that the school achieved can be attributed mainly to two factors. Prestwick's freak weather was no myth and McIntyre's drive and enthusiasm kept things going at a high pitch. Some measure of success was indicated by the continually enlarged training contracts allotted to Scottish Aviation and the completion of courses some two or three weeks ahead of schedule. As early as 1935, McIntyre had said, "In 10 years' time you will see here an international airport and an aviation industry." He really intended it to happen, but it is doubtful if anyone else believed him. Appreciating the importance of the good flying weather, which was to be so significant in later years, he insisted from the beginning that Prestwick enjoyed 365 days fit for flying training in the year. This produced some exciting situations when just to prove the point, instructors would take pupils up in a full gale, confident that there would be two lines of men ready to catch them and literally pull them out of the air as they landed. It was all good fun and as a result, entries were made on the 'Sheets' every day.

It is amusing to recall that when the application was lodged for the use of Prestwick as the site for the School, it was turned down because, as one Member of the Air Ministry Aerodromes Board stated, "Prestwick is exceptionally unsuitable for flying and flying training." It transpired many years later that this particular Member had spent his youth at Saltcoats which is subject to the bad weather in the Greenock rain belt and assumed that the weather a few miles down the coast was just as bad. No full and precise explanation of the weather record at Prestwick has ever been forthcoming except that it is due to many factors including subsidence of the air resulting from higher ground all around, the effect of the Gulf Stream and the fact that it is a coastal area. There are other airfields with excellent records, Lossiemouth, St Eval and Valley but none so consistently reliable as that of Prestwick.

Aircraft factory begins

In 1937, 12 EFTS undertook the training of RAF Volunteer Reserve pilots. The RAFVR was formed to train young men at weekends to become pilots in the Royal Air Force and this meant Service training up to Wings' standard. Hawker Harts were provided for advanced training. Then in 1938 a School for the training of navigators was opened (No. 1 AONS) using Anson aircraft. This meant the provision of radio facilities for communication with aircraft in the air and for giving bearings. In addition to all this, Scottish Aviation started making parts for various aeroplanes and doing modification work on a relatively small scale. Hangars had been built for the Tiger Moths and the Ansons and other buildings were put up to accommodate the beginnings of the aircraft factory. Parts of the Orangefield Hotel were used for the accommodation of pupils and Scottish Aviation built some annexes which included two magnificent squash courts and a swimming pool.

The Orangefield Hotel was built in about 1690 on the site of Monkton Castle which apparently existed before 1600. A poor boy called McCrea who ran messages in Ayr, went to sea and joined the East India Company. He became skipper of a trading vessel and after some exciting adventures he became Governor of Madras. He eventually returned to Ayr and having amassed a fortune, he bought Orangefield House. On his death it was bought by one Charles Dalrymple who was succeeded by his son James. James was very friendly with the poet Robert Burns; he even lent him a horse so that he could visit Edinburgh, and Burns described him as "a friend that sticketh like a brother." He also wrote of him "The owner of a pleasant spot in sandy wilds, I did him note." Above the entrance to Orangefield, the words "A pleasant spot in sandy wilds" were carved in the sandstone. That pleasant spot is now right in the middle of the acres of tarmac which comprise the International Airport. By 1936, Orangefield House had been enlarged and turned into a hotel, but it has now been demolished to make way for a taxi-track.

Fetching Fokkers

Meanwhile the training schools at Prestwick kept up their high standards, many new contracts were accepted and completed. Towards the end of August 1939, McIntyre had been negotiating with the Dutch for the purchase of two four-engined Fokker aircraft for use by the Observer Training School. I have not had a single dull moment during my years with Scottish Aviation and the pattern was set one evening when the Secretary, Stewart Kennedy (now a Director of Hawker Siddeley Aviation) phoned to ask me if I had a passport. After a short conversation I asked him when he wanted me to go to Holland and he said, "Now". I said, "What for?" and he said, "To fetch a four-engined Fokker." I was on the night train that evening with another pilot. We flew to Schiphol next day, had a 'briefing' from KLM pilot Parmentier of Melbourne Race fame, were given a circuit and landing by him and then flew a Fokker 22 and a 36 to Croydon. We were held at Croydon for three days while the Government argued the toss about whether Scottish Aviation should have them or whether they should be commandeered for the RAF. McIntyre had set his mind on getting them and he won, so the AONS received their Fokkers.

Scottish Aviation had built an airfield at Grangemouth which had terminal buildings suitable for civil use and was to have been called the Central Scotland Airport. McIntyre had planned to start a night mail service but meanwhile Grangemouth was used for pilot training and as an emergency fighter base during the War but was finally closed when the big refinery was started nearby.

On the outbreak of War in September 1939, the instructors were mobilised and Prestwick became a Royal Air Force Station. McIntyre who, as Group Captain, became the Officer Commanding Prestwick, seized his opportunity to close the Coylton Road which separated the two pieces of land originally purchased by Scottish Aviation and the airfield was increased to more than twice its original size. During the 'phoney' War period there were many delays as the Empire Training Scheme was gradually formed, but training went on at Prestwick. In April 1940, a great many British aircraft landed at Prestwick on their way to take part in the defence of Norway, but in June when this operation was called off what was left of them flew south again and the grass airfield at Prestwick became a sea of mud because of the very heavy traffic. One pupil who made a precautionary landing in a Tiger Moth was asked by his instructor why he had selected a ploughed field. The reply was, "It looked Just like the aerodrome, Sir."

Atlantic terminal

On the 29th November 1940, a Hudson aircraft arrived at Prestwick from Newfoundland. Everyone was very busy, and this landing was not received with great acclaim, but it was significant in the history and future of Prestwick Airport. Before Pearl Harbour and America's entry into the War, aircraft were being moved by land over the Border into Canada and then flown via Newfoundland to the UK. The UK terminal was at Aldergrove in Northern Ireland but on that day one of the pilots lost contact with the others in the formation and landed at Prestwick. That landing resulted in the naming of Prestwick as the main terminal for all aircraft flying from Canada and, later, from the United States throughout the War. In 1941 the schools were disbanded, first the Elementary Flying School and later the AONS. Transatlantic crossings by air were in their infancy when War broke out and for a time aircrew returning to Canada went by ship. This took a very long time and there was soon a buildup of much needed pilots on the high seas.

With the increasing numbers of aircraft ferried into Prestwick the need was felt for a return air ferry service and in May 1941, the first of seven Liberator transports, bought by BOAC, left Canada to establish the first scheduled landplane service across the North Atlantic. The United States

Military Air Transport Service, whose first transport arrived in Prestwick in July 1941 with a US Army Air Corps Ferry Command Liberator from Washington via Montreal and Gander, eventually became the longest serving foreign operator at Prestwick. To cater for this increase in heavy traffic, it was obvious that a runway must be built. McIntyre demanded that it should be 2,200 yd long and 100 yd wide. The Air Ministry's standard was 1,700 yd by 50 yd and they resisted any increase but fortunately a member of the Air Ministry Aerodromes Board, a Canadian, supported McIntyre's recommendation and threatened to resign if the bigger specification was not approved. The runway was made 2,200 yd long and 100 yd wide.

Another requirement was good radio communication and some form of Air Traffic Control. The nucleus was there for the Air Observer School and the Transatlantic Area Control Centre was moved from Gloucester to Prestwick to direct the ever-increasing numbers of aircraft crossing the North Atlantic. These facilities were set up at a private house, Redbrae, and the main operations room where all details of aircraft crossing the Atlantic were displayed on a chart that was set up in the drawing room. The Orangefield Hotel was requisitioned by the Air Ministry and with the annexe became the Terminal Mess. The squash courts and swimming pool disappeared and a reception Hall with bank, Post Office, and shop were incorporated. A control tower was built by Scottish engineers in the roof of the Orangefield Hotel and though its collapse in the first high wind was predicted, it nevertheless remained intact throughout the War and long after and even withstood gales of 80 mph or more.

The flood begins

During 1942, the first Commonwealth Joint Air Training Plan crews who had just completed their courses were used for delivering aircraft across the North Atlantic to Prestwick. In April, the first of the 'contract carriers', TWA flew a C-75 Stratoliner into Prestwick and the first B-17 Flying Fortress arrived for the US 8th Air Force later that year. P-38 Lightnings were flown via Greenland and Iceland and C-54 Skymasters of the USAAF Transport Command began their services. BOAC, RAF Transport Command and Trans-Canada continued their services which had begun in 1940. During the War, McIntyre, in addition to his tremendous responsibilities as Manager of Scottish Aviation and for a time as Officer Commanding. RAF Station Prestwick, tried to persuade people locally, nationally, in Government and in aviation that Prestwick must be developed as an international airport after the War. In 1943 he drew up a target development plan which included a tunnel to permit an extension of the runway without interference with the main Glasgow road and the railway.

By 1944, transatlantic crossings were more than a thousand a month and in November 25,000 North Atlantic flights had been made with Prestwick handling 8,000 flights in one month. A radio range, the main American navigational aid, had been installed and landing aids were provided in the form of GCA and SCS 51. Another runway had been built, 08/26, 4,500 ft by 300 ft and the Terminal Mess provided comprehensive facilities.

The Scottish Aviation factory which had started in a small way before the War expanded out of all recognition. In 1941 the Palace of Engineering was moved there from Bellahouston Park near Glasgow where it had been built for the Empire Exhibition in 1938. It was dismantled and reerected at Prestwick in just under four months. At first, the work consisted of repairs and modification to Skuas, Rocs, and Lysanders. Then Spitfires and Hurricanes began to come in and as the Lease-Lend traffic built up, Liberators, Hudsons and B-17s were prepared for their operational roles. Maintenance work proceeded on the DC-4s and all the other transatlantic transport aircraft.

When the War ended, Scottish Aviation struggled to replace the wartime work in the factory and McIntyre conducted a vigorous campaign, to persuade the Government to recognise Prestwick as an international airport for Scotland and the United Kingdom. However, the Government had decided in their wisdom that there should be only one international airport and that should be at Heathrow. Scottish Aviation who had provided the most comprehensive technical and other services were threatened with compulsory purchase and were to be denied any part in the development of the airport. As long as Prestwick was not 'designated' all the international traffic was diverted to Shannon in Eire. In those days aircraft had a limited endurance and required a staging post for the Atlantic trip. Although they were very soon to be capable of flying direct from New York and Montreal to London. McIntyre's schemes and aspirations were not condemned to failure and disappointment for, in 1945, Prestwick was the finest airport this side of the Atlantic. Both Heathrow and Northolt, which served London, consisted of an airfield and a few huts. At Prestwick you could taxi up to the Terminal, get fuel, a bed, a drink, cash a cheque, buy a stamp and even get your hair cut. Innumerable services were available for 24 hours in the day and for a long time many airlines appreciated the advantages of the unique flying weather.

As larger types of aircraft became available, the main runway was extended to the North West. McIntyre's proposed tunnel had by then increased in price from some £200,000 to several million so traffic lights were installed to control traffic crossing the runway. The regulations stipulated that traffic must be stopped from the time the approaching aircraft was eight miles out on finals. This often meant sitting in a queue at the 'lights' while a small Cessna or some light aircraft floated in from eight miles away with more than 9,000 ft of runway available for the landing. *To be continued*.

Christmas Crossword Results

David Lacey

Thank you to all those who took the time to complete the Christmas Crossword published in the December newsletter.

The winner this year is Hamish Mitchell. Congratulations Hamish, I will be in touch soon to discuss your prize.

