



Issue 9 -Sep10 -Oct10

Contrails

Newsletter of the Christchurch Aviation Society

Britten Norman and the Islander

Bob Wealthy, a volunteer at Solent Sky Museum, gave us his talk on Britten Norman which had been rescheduled from January due to bad weather. The talk was in two parts, first describing the company from its origins to present day, and then the Islander of which some 750 remain in service worldwide in various configurations for passenger and freight carriage together with the Defender military variants.

The name Britten Norman derives from the surnames of John Britten and Desmond Norman who were fellow apprentices at de-Havilland in Hatfield. Training there included aircraft design exercises which led to the pair creating the BN-1F, intended as a kit form aircraft. The prototype was registered as G-ALZE and flew in 1950 but was not successful; it ended up in a ditch and needed a redesign which included a more powerful engine, stronger undercarriage and changes to the rudder and mainplane. The aircraft took to the air again in May 1951 with Fairey Aviation's chief test pilot Geoffrey Alington at the controls. Further modifications such as tailplane end plates and reduced rudder size were made but the aircraft was not used beyond April 1953. The engine was used to power a wind tunnel for the pair's new venture of crop spraying equipment. The aircraft survived and, following work by the RAF Museum at Cosford, now resides in the Solent Sky Museum.

Meanwhile the two had been working on crop spraying equipment partnered by Jim McMahon, an Australian crop spraying pilot. Redundant RAF Tiger Moths, bought cheaply, were modified with hoppers and rotary atomisers to be successfully resold or used in spraying operations. During such flights in the Cameroons the need for a utility aircraft became evident and the two set about designing an airborne 'Land Rover'.

By 1965 Britten-Norman comprised the successful crop spraying company of Crop Culture (Aerial) Ltd with its own subsidiaries, and also a hovercraft company under the name of Cushioncraft Ltd. A mock up for the BN-2 had been constructed and a brochure produced outlining key performance criteria incorporating 10 seats, cruise of

155mph, stall 55mph, take-off (alt50') of 940 feet with a typical range of 810 miles. Prototype construction was well under way by April 1965 and in June 1965 G-ATCT took to the air. The Paris Air show in late June 1965 saw the Islander on static display. Flight testing showed up a performance deficiency in the Islander's single engine performance and by December 1965 the RR Continental engines had been replaced by more powerful Lycomings. Two Islanders were shown during the 1966 Farnborough air show but shortly after that the prototype G-ATCT was lost in an accident returning from a demonstration tour of West Germany. However, the second aircraft G-ATWU (which was originally the first production aircraft) was used to continue the test programme and certification was gained in August 1967. The first production Islander G-AVCN was delivered to Glos Air in the same month.



Demand was such that airframe production had to be sub-contracted to the British Hovercraft Corporation at East Cowes with final assembly at B-N's new factory at Bembridge. Bob showed a series of pictures showing production through the assembly shop which emphasised the straightforward design concept to good effect.

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Meetings List

Wed 03Nov10, Gliding by Mike Radice.

Wed 05Jan2011, Jet Heritage by Mike Phipp.

Wed 02Mar11, Cold War / Hot Place by Steve Robson

Wed 04May11, AGM and talk tba

Web site www.christchurchavsoc.co.uk

Other Events

Visits

Report on visit to Middle Wallop - overleaf
Cobham, Friday 5th November.

Wroughton visit postponed to 2011

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The four seater BN-3 Nymph was also produced in 1969 as a kit supply aircraft but it never reached production. By this time the successful operation of Aurigny Air Services (originally Glos Air), meant they needed a higher capacity aircraft. To achieve this the novel idea of a third engine in the tail was developed. This concept enabled about 80% commonality with the 2 engine aircraft. Originally named BN-2A MkIII, Islander G-ATWU was modified to become the concept demonstrator and was built in record time from release of drawings in July 1970 to its first flight on 11 September just in time for a surprise appearance at the 1970 SBAC show at Farnborough, only a few hours after its first flight.



In 1971 Trislander certification was achieved and 20 aircraft were built at Bembridge by converting production Islanders. Later Trislander manufacture was moved to Belgium where the production line built a further 61 aircraft before ceasing in 1981 due to financial problems.

Islanders have also been produced in Romania (with fit out at Bembridge). B-N was bought by the Swiss Pilatus

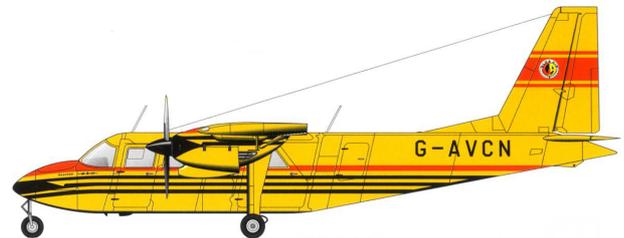
Visit to Middle Wallop

Seven members were able to attend the visit to the base of the School of Army Aviation on Wednesday, 22Sep10. The visit included a walk through the Gazelle and Lynx maintenance hangar where it was possible to see an aircraft with two different registrations as tail units could be fitted to different front fuselages.

The hangar housing the Army Historical Aircraft Flight was next with an Auster, Beaver, Chipmunk, Sioux, Alouette and Scout on show at close quarters. After basic flying training at Shawbury, AAC pilots continue with operational training at MW using the Squirrel, which is operated by FB Heliservices, along with further training on Lynx.

The highlight was to see the Apache with its formidable armament of 30mm cannon and an array of rockets. The tour involved a lot of walking but was well worth while to have a close up view of the many helicopters and facilities

Company in 1977 and was sold on in 1999 to become separately financed later as the B-N Group. In 2010 Romanian production ceased and all new build B-N aircraft will be built in the UK involving the latest Defender 4000 turbine powered aircraft. The first production Islander, G-AVCN, is being restored by the Britten Norman Preservation Society (BNAPS). The airframe was recovered from Puerto Rico, sponsored



by Airstream International with support from B-N, and returned to Bembridge in March 2000.

Following service for several years with Aurigny Air services, G-AVCN had been used in 1976 as a mock up for an amphibious Islander before moving abroad where it passed through a number of owners in the Caribbean. After a good start, for various reasons, the restoration project stalled and the airframe was eventually seen as at risk when it was left in outside storage at Bembridge. With a successful initiative to restart BNAPS operations in July 2010 a covered storage and workshop space was found in East Wight where work is now proceeding with the objective to have the aircraft in static display condition for the Islander's first flight 50th anniversary in June 2015.

Palmail

In November 2008, David Skillicorn, Managing Director of Palmail, gave us an interesting insight into the airline and the problems in operating with high fuel costs.

In May 2009 they introduced a newer 737-500 with the reg G-PJPJ (after the initials of Peter Bath) which offered better economy and longer range along with the well renowned levels of service that earned them high praise in Which magazine.

However, it was very disappointing to learn that the new aviation and economic downturn has now meant that the Palmail dedicated aircraft has seen its last flight for 2010 this weekend (30th October).

Palmail started by providing holidays using other charters and this will again be the case for the winter holiday season using Thomson and First Choice aircraft.