# BNAPS News July 2014

*BNAPS News Vol 4 Iss 4 – July 2014*

## Non Functional Lycoming Engines Move Ahead at Norvic Aero Engines St Neots Works

Photos of work in progress at Norvic Aero Engines Ltd St Neots facility have recently been sent to BNAPS by Jon Howard who is supervising the preparation of a pair of non-functional Lycoming 540 engines for our restoration project. Many thanks go to Norvic's CEO Richard Boddie and to Jon Howard and his team at St Neots for supporting BNAPS with this vital contribution.

## Aurigny Air Services Moves into a New Era

*The mood lighting at the Embraer 195 reception gave Aurigny Air Services Trislander G-JOEY an almost futuristic appearance.*

Trislander G-JOEY made an appearance at a reception on Guernsey to celebrate the delivery of Aurigny's new Embraer 195 jet to be used to maintain the air link from Guernsey to Gatwick. This event marked the first of the major changes for Aurigny along with the introduction into service of the Dornier 228s that will eventually take over the services currently operated by the present fleet of 4 Trislanders.

Read more about the adventures of G-JOEY in the article by Tim Osborne on page 3.

## Proptech Promotes BNAPS at the Goodwood Festival of Speed Aviation Exhibition

Many thanks go to Proptech for promoting BNAPS and the restoration of VCN on their display stand as part of the Goodwood Festival of Speed 2014 Aviation Exhibition held on 26-29 June, 2014.

Proptech's Customer Support Engineer, Ali Mant, reckoned that there might be a bit more in the BNAPS collecting box this year as the Aviation Exhibition was better sited alongside the Moving Motor Show with more visitors passing through the area.

## Specialist Companies Provide VHF Communications and ADF Antenna Components

Continuing his quest for finding original components for VCN, Bryan Groves has recently made contact with two specialist antennae companies with great success.

H R Smith have been suppliers of a variety of antennae to Britten-Norman for many years and have now donated two VHF Communications Antennae to the project. These are ex test units and just require a coat of white paint and they will be ready for installation.

For the ADF antenna Bryan needed a 24 foot length of special high strength Aerial Wire to construct the ADF Sense Antenna which runs from the cabin roof above the crew position to the top of the Fin. Bryan got in touch with the suppliers Chelton Ltd, trading as Cobham Antenna Systems, who like H R Smith, have been supplying a variety of antennae to Britten Norman almost from the start. All of the other four Chelton components required to construct this antenna have been sourced from our good friend Ben Wilson at Saywell International.

## Supporting BNAPS & Islander VCN's Restoration

SAYWELL
Proptech
Skybus
WIGHT PAINT SUPPLIES
The Propeller Inn
B N Britten-Norman
CORMACK ISLANDER AIRCRAFT
apph
Bembridge Heritage Society
NORVIC Aero Engines LTD
Airframe Assemblies
AQS Ltd
SWIMEX ENCLOSURES
H.J. BENNETT EST. 1948

Aurigny Air Services pilot, Tim Osborne, unexpectedly played a part in the Jersey Battle of Britain Air Display last September when he was called upon to fly Trislander G-JOEY to fill a gap in the display line up when some of the scheduled participants could not make it to the show due to adverse weather. Thanks go to Tim as he has kindly put together his account of another adventure for G-JOEY for this BNAPS News exclusive:

## Trislander G-JOEY's Airshow Debut - Jersey Battle of Britain Air Display 2013 by Tim Osborne

In the late afternoon of Wednesday 11 September 2013, I was asked to position the Aurigny Britten Norman Trislander 'G-JOEY' from Guernsey (my base) to Jersey Airport, because it was going to be a static display on the grass next to the apron for the Jersey Battle of Britain Air Display the next day on the 12 September. As it happened, I was positioning over to Jersey that Wednesday afternoon anyway because I had my six-monthly flight test - the OPC (Operator's Proficiency Certificate) - rostered the next morning on the day of the Display.

*Trislander pilot Tim Osborne relaxes in G-JOEY before the display.*

The next morning saw me take my OPC which, thankfully, I passed after a 90 minute flight. Not long after my post-flight debrief, I received a phone call from my Aurigny Operations Department, saying that they had been contacted by the organisers of the Air Display, who said that two or three of the aircraft (including the Battle of Britain Memorial Flight, the Wing Suit Display and the Lynx helicopter) scheduled to take part that afternoon had had to pull out at the last minute due to weather problems on the mainland and, in order to fill in the gaps, they asked if Aurigny could put on a short air display with JOEY – the little yellow Trislander made famous in the books by Peter Seabourne, and loved by many children (and adults) in the Channel Islands and further afield. As I was not doing anything else until I was supposed to position back home to Guernsey later that afternoon, they asked if I would like to fly JOEY in the Air Display! Wow …… how could I turn down that flying opportunity of a life time for a general run-of-the-mill airline pilot!

Considering the majority of my 11,000 or so flying hours consisted mainly of flying the F.27 turboprop and BAe146 whisper jet on predominantly unexciting and mundane short-haul UK and Western European routes, this was something I had thought would never happen in my flying career, and so my answer - after no consideration whatsoever – was 'yes'!

Permission had been granted by the relevant Authorities, as well as our new CEO, and so I was asked to attend the Display pilots' briefing that lunchtime. Meanwhile, our Aurigny Jersey Station Manager – Dave Cox – had heard of our unscheduled display, and cornered me asking if he could come up with me for the experience; he had already asked our Fleet Manager if he could do this, because normally only the display pilot or pilots are allowed to take part in the Show. I was happy for Dave to come as I knew him quite well and he also held a Private Pilots' Licence, so it was arranged that he would keep me company as an official 'Observer'.

*G-JOEY's pilot Tim Osborne (left) and observer Dave Cox with Trislander G-JOEY before the display.*

Later that lunchtime, we both attended the briefing in a wooden hut on the other side of the airfield, and I looked a little out of place in my pilot's uniform – mainly because the other pilots were in their cool one-piece flying suits! The briefing was given by an ex-Red Arrow's pilot, and he gave me a flight display briefing book with all the necessary details, and told me that I was to take off on runway 27 and plan my time, via the North-West, North-East and South-East Corner Holds, to commence my display at 15.11 local time and, incredibly, that I was allowed to go down to 200 feet above sea-level – the same as all the other display aircraft! Everything was meticulously planned, so I had to deliver the goods on time, or it would mess up the next display after mine – the Hunter and the Saab Viggen. The Air Show was to take place just off the long beach between St Helier and St Aubin's Bay on the south coast.

I had a 4 minute window for my display, so I had to think about what I would do to use that time exactly – and not a minute more …..! At around 14.15, I completed the walk round, refuelled, and then Dave and I climbed in and took our seats. After a final brief from me – and making sure Dave and I were happy with everything, I started the engines. As I taxied for take-off, I could feel the adrenalin starting to kick in, and knew that this was going to be one of the most exciting things I had done in my 23 year commercial flying career!

At 14.45 I pushed the throttles forward and the three 260hp Lycomings 'roared' – or should I say 'screamed' - into life, and we took off, reduced power, and with a right turn, we made our way to the first holding point off the North-West corner of the Island at 1000 feet (all the display aircraft were to hold not higher than 1000 feet). After one left hand orbit, we then flew east along the seaward side of the north coast to the next hold off the North-East coast – all the time keeping a constant eye on the time; as I had flown the Trislander for the past five and a half years, I could judge its speed and distance fairly accurately, and so I was relying on my experience to get the timings spot on!

On the way to the North East corner hold, I contacted Display Control on 118.55Mhz, and they told me not to hold at this point, but to continue south bound down the east side of the Island to the final holding point off the South-East corner where I could just fly around until I was cleared into the Display Area. At this point there was no altitude limit, and so I just flew around at 700 - 800 feet above sea level, taking in the scenery of the coastline whilst waiting for my turn to fly towards the Display Area. After a few minutes, Display Control cleared me into the Display Area to arrive at my scheduled time of 15.11, so after checking my watch I flew one more orbit, increased speed and then headed west towards the harbour in St Helier on the south coast.

*A fine view of Trislander G-JOEY during its display sequence.*

As we neared the harbour, I started descending and aimed for the south of Fort Regent – this would set me up nicely with the start of the display line. We passed the Fort at around 500 feet, and aimed at the large white marker buoys along St Aubin's Bay which marked out the high speed display line – all the while descending until I reached between 200 – 250 feet by the third marker. Though I was concentrating on flying, I could see how close we were to the huge crowds of thousands along the sea wall; I stayed level at this height and flew along the display line until the last marker, when I started a left turn along the curve of the beach and out to sea whilst slowly climbing up to 800 feet. I had worked out that I could get another orbit in, so I kept the left turn going and aimed to come in again around the south of Elizabeth Castle. As I flew around the Castle towards the harbour, I started dropping down and, in a descending left turn over the harbour marinas, lined up with the display markers once more for a last fly past. As I flew along the display line at 200 – 250 feet again, this time I waggled the wings for a few seconds as JOEY said his goodbye to the crowds, and flew along the curve of the bay again until I had to climb up towards and over Noirmont Point, and, as JOEY disappeared out of sight from the spectators, I turned right over St Brelades Bay at 800 - 1000 feet to position for a left base leg join for runway 27 at Jersey Airport.

*Following Tim Osborne's display Trislander G-JOEY parked alongside the Red Arrows at Jersey Airport.*

I managed to complete these two display orbits in the 4 minutes I was allowed, so the next aircraft – the Sea Fury – was not delayed. The excitement was not quite over yet because it is customary for all the display aircraft to do a low pass 'run and break' over the runway, so I was allowed by ATC to fly over the runway at 200 feet over the runway – and JOEY said thank you by giving a long 'wing waggle' before pulling up in a slow climb to the right and into a relatively

tight circuit to land – after which ATC thanked me, as they had never seen a Trislander do this before because they're used to seeing them trundling along on routine, boring flights!

Once parked some photos were taken by one or two photographers – including some photos of JOEY parked next to the Red Arrows (who were the last display act of the morning). I positioned JOEY back home to Guernsey later that afternoon – but this time on a normal routine flight!

The next day when I was back to work in Jersey, one of the ground staff, called Peter- who had been in the crowds along the sea front the day before watching the Air Display- said that when JOEY appeared flying low and close to the crowds, all the children started screaming and shouting in excitement and that everyone was talking about him – because no one expected JOEY as he was a last minute change to the schedule, and the public were not used to seeing JOEY doing things like this! Peter even said that he felt a lump in his throat when JOEY appeared! Since then he has called me the Yellow Arrow pilot! One of our ground staff filmed the low pass over the runway - see the video via this link:-
http://www.youtube.com/watch?v=KDKhC4fn3DQ
Myself and Dave thoroughly enjoyed this once-in-a-lifetime experience, and if asked to do it again, I would jump at it – though I think that will never happen again as JOEY and the other Aurigny Trislanders are due to be phased out in the near future and replaced by Dornier 228 aircraft; although final plans for JOEY are not finalised, it seems most likely at this time that he will end up on a metal pole outside of Guernsey Airport! No comment! Tim Osborne, June 2014

**Aurigny Air Services Trislander G-JOEY at Bembridge for the Islander 30th**

G-JOEY, c/n 1016, was a welcome visitor to Bembridge Airport in the summer of 1995 to support the 30th anniversary celebration of the first flight of the prototype BN-2 Islander, G-ATCT.

**43 Years Ago - Aurigny Air Services First Trislander G-AYWI at the Paris Air Show**

Aurigny Air Services first Trislander, G-AYWI, c/n 262, came into service on 1 October, 1971.
Earlier in the year G-AYWI is seen here as part of the B-N line up at the Paris Air Show.

# VCN Restoration Progress Report May 2014 – July 2014

The arrival of an elusive tail bumper and the unexpected acquisition of a throttle box cover were given an enthusiastic welcome by the restoration team. Bryan Groves and Paul Brook have continued much detailed work on the instrument panel and associated electrics. Meanwhile Bryan has been seeking out more of the many detailed parts needed in this area. Virtually all the original instruments have now been sourced and the search goes on for a representative line up of the radio/navigation kit.

Guy Palmer prepared a state of play resume of current work in progress for the recent BNAPS Trustees meeting as below:

**1. Fuselage Tail Cone** - Keith Winter, Bob Ward and Bob Wilson undertook repairing and fitting the tail cone to the fuselage. A crack and the redundant holes in the tail cone were repaired and the tail cone successfully installed.

**2. Tail Bumper** – Keith Winter made new attachment angles for the new undrilled tail bumper using the old angles as a guide. The old angles have been twisted and damaged beyond repair. Keith has riveted the angles to the bottom of the rear fuselage.

**3. Flaps** – Roger Young has continued work on de-corroding and paint stripping in preparation for local repairs, priming and painting.

**4. Elevator** - Bob Ward made a start on de-corroding and paint stripping the elevator. The narrow chord fluted trim tab fitted to this elevator is badly damaged along the trailing edge and may need to be replaced.

**5. Tailplane** – Patrick Gallagher continues with the huge job of rubbing down, de-corroding and priming the top of the tailplane, and is making excellent progress.

**6. Baggage Bay Door hinge** – Keith Winter manufactured and installed a new fuselage mounted lower baggage bay door hinge, which has always been missing. The door now hangs correctly, although it has not yet been fitted.

**7. Fin and Rudder** - work has continued on paint stripping and de-corroding the fin and rudder. The replacement fin leading edge has been received from Airframe Assemblies.

**8. Port Wing tip** - Rita Edgcumbe and Jeni Gallagher have been paint stripping the original port wingtip which is missing its leading edge section. We have two sets of wingtips available. Neither set is structurally complete and a decision will be made as to which to use, or if we should use the best parts of both.

**9. Fuselage doors** – Guy Palmer has been cleaning, repairing and de-corroding the interiors of the three cabin doors. The interior panels, the window apertures and the interior edges of the port rear door and the starboard door have been etch primed. These two doors require new/refurbished door seals and new rubber support strips in the window apertures.

**10. Dorsal Fin Fairing** – this item was recently recovered as part of the missing items found in the B-N Car Park back in April. Sometime in the distant past the part had been damaged and resulted in a severe crease across the centre of the fairing. This has now been repaired with the help of local car body repair craftsman, Bill Mason.

**10. Systems** - Bryan Groves and Paul Brook are continuing with installing and wiring up equipment into the instrument panel and surrounding structure.

**11. Documentation** - Charles Shiverall has produced good documentation of all the undercarriage parts that were donated by APPH. In the process Charles has clearly identified a parts breakdown diagram to show what parts we have and what we still require.

The following series of captioned photos capture some of the highlights of the restoration work underway in the period May 2014 – July 2014;

All the old paint on the fin is seen here being removed with paint stripper by Rita Edgcumbe and Roger Young.
A new leading edge section has been made and will be trimmed and drilled to suit then fitted as part of ongoing work.

The rudder has been rubbed down and etch primed but still requires further work.

The tail plane has been transformed after much hard work by Patrick Gallagher.

The view here also shows the result of recent work to clean up the edges and apply etch primer.

Keith Winter has made new support brackets for the tail bumper.

The nose landing gear assembly attachment frames have been repaired and the front bulkhead rubbed down ready for etch priming.

The dorsal fin extension is seen here after having received attention from local car body repair craftsman, Bill Mason, to reshape the item and remove dents and distortion due to handling damage that had occurred sometime in the past.

The fibreglass tail cone has been repaired and refitted to the fuselage by Keith Winter, Bob Ward and Bob Wilson.

Passenger doors have been cleaned of all original paint, de-corroded and etch primed by Guy Palmer.

**Looking Ahead** - A decision has been made to go ahead with spray painting the fuselage before putting it into temporary storage to free up the workshop space thus allowing work on the wing to proceed.

The team is now completing work on the pilot and passenger doors and to refit them in place. The baggage bay door will be given attention to restore a good surface finish and will then be refitted. Windscreen panels will be re-installed. For the side windows the flexible window mount mouldings are being located that will then allow the windows to be refitted.

Once fully prepared and masking applied, where necessary, the fuselage will be spray painted with a white base coat, two coats of thinned Aurigny yellow followed by a top coat of Aurigny yellow.

When the fuselage reaches this stage it will then be moved from the workshop into temporary storage to enable work on the wing to get under way. A set of wing trestles that will allow the wing to be positioned horizontally is being made by BNAPS Supporter Club member Pete Dalby.

**The Druine Turbi G-APFA**

by Peter Graham

This is the first of an occasional series of stories by the author looking at aircraft other than the Islander and Trislander that were built by, operated by or somehow associated with John Britten and Desmond Norman. It concerns Druine Turbi G-APFA, a two seat ultra-light aircraft of wooden construction designed for amateur construction in the 1950's by the Frenchman, Roger Druine.

Our story starts with the formation of the Ultra Light Aircraft Association (ULAA) in late 1946 to promote ultra-light amateur aircraft design and construction. Meanwhile, John and Desmond had become friends whilst serving their time at the de Havilland Technical College at Hatfield, and on leaving the college, they worked at Bembridge in 1949/50 on the design of the BN-1 Finibee G-ALZE, an ultra-light single seat aircraft. This aircraft was subsequently built for them by the first Britten-Norman employee and member of the Supporters Club, Peter Gatrell.

*The BN-1 Finibee nearly ready for first flight P.Gatrell*

This project was encouraged by the ULAA, but sadly its performance did not live up to expectations, much to the chagrin of all concerned, and within a short time it had been disassembled and stored in Col. Britten's boat house on Redwing Quay at Bembridge Harbour. It was to remain there for over twenty years, used only as an increasingly frequent source of materials, before it emerged into the light of day again and is now on display at the Southampton Hall of Aviation after restoration by RAF apprentices at Cosford. The main point of contact at the ULAA during the trials and tribulations of the Finibee was one of its founding members, a young Arthur Ord-Hume.

ULAA members acquired a number of unusual single-seat ultra lights in the late 40's. These included the unique 1945-built Brunswick Zaunkoenig, G-ALUA (a registration remarkably close to the society's initials, and one which they acquired through the combination of an 'inside contact' and submitting an application at the appropriate moment, more on this theme later) and the bright red Luton LA4 Minor, G-AFIR. This aircraft was originally built in 1937, had been damaged and then stored during the War in the roof of a garage in Barrow-in-Soar. Arthur Ord-Hume acquired the aircraft for £25 whilst still at school and re-built it from the ground up.

*Zaunkoenig G-ALUA  Brian Totman*

*Luton Minor G-AFIR M West*

Interestingly, 50 years or so later, both aircraft still survive, the Zaunkoenig having returned to Germany and the Luton Minor currently on yet another major rebuild, this time by Jim Cresswell of Lymington. The writer poses the question as to whether this Luton Minor represented the first time that virtually only the registration survived of the original machine, so comprehensive was the post-War re-build, and has in mind the transformation of the short-nose Aurigny BN2A Mk.III-1 Trislander G-BAXD msn 359 into the long-nose BN2A Mk.III-2 Trislander G-XTOR msn 359, utilising a 'new' fuselage and wing.

The Authorisation to Fly regime, designed to allow light-weight amateur built aircraft that would not qualify for a Certificate of Airworthiness, to fly for recreational purposes in UK airspace, had been introduced in the 1930's. When private flying was allowed again after the War, the new legislation did not allow for home-built aircraft. This effectively condemned a number of aircraft that survived from 1939 to the scrap heap.

After much aggravation, lobbying and potentially flying the aircraft illegally, Arthur Ord-Hume obtained in April 1951 the very first Authorisation to Fly to be issued post-War by the Ministry of

Transport and Civil Aviation for an aircraft that had been the subject of a very substantial amateur re-build, and a vote of thanks is required to the ULAA from all those people who have subsequently been able to construct their own aircraft in the UK. As an aside, Arthur has championed the Luton Minor and, as a teenager, the writer was able to see one under construction and one under overhaul at the bottom of his garden in Lake on the Isle of Wight (G-ASAA and G-AFIR). Little did he know that the O-H7 Coupe (G-ARIF) was under assembly in the roof of Arthur's bungalow!

In 1949 the ULAA had become the Popular Flying Association, or PFA for short, and had extended its remit beyond ultra-lights. Some time later it was looking for a two seat light aircraft that could be flown around the country to promote its aims. Roger Druine had designed the single seat Turbulent, a type that became very popular in the UK from the late 50's through the adoption of the type by the Tiger Club and series production by Rollasons at Croydon.

*Druine Turbulent G-APNZ  Brian Totman*

*Big brother' Druine Turbi  G-APFA  Brian Totman*

Who can forget the sight of three diminutive Turbulents at airshows in the 60's flying in a fairly loose formation in anything but calm conditions, and yet remaining tied together by colourful bunting, or five or more playing follow-the-leader, all seemingly with registrations ending in 'Z' and its 'big brother', the two seat Druine Turbi. It was this latter design that was selected, the plans were acquired and Arthur asked if he would build one for the PFA.

Unfortunately, due to family commitments, he was unable to take on the task and the PFA returned to John and Desmond, who of course they knew from the Finibee project, and the newly formed Britten-Norman Limited agreed to take on the contract. At that time, the company occupied Unity Hall in Star Street, Ryde, owned by the Britten family. They were also later to lease Bembridge Airfield from the local farmer, Edwin Taylor, at a very attractive rent following

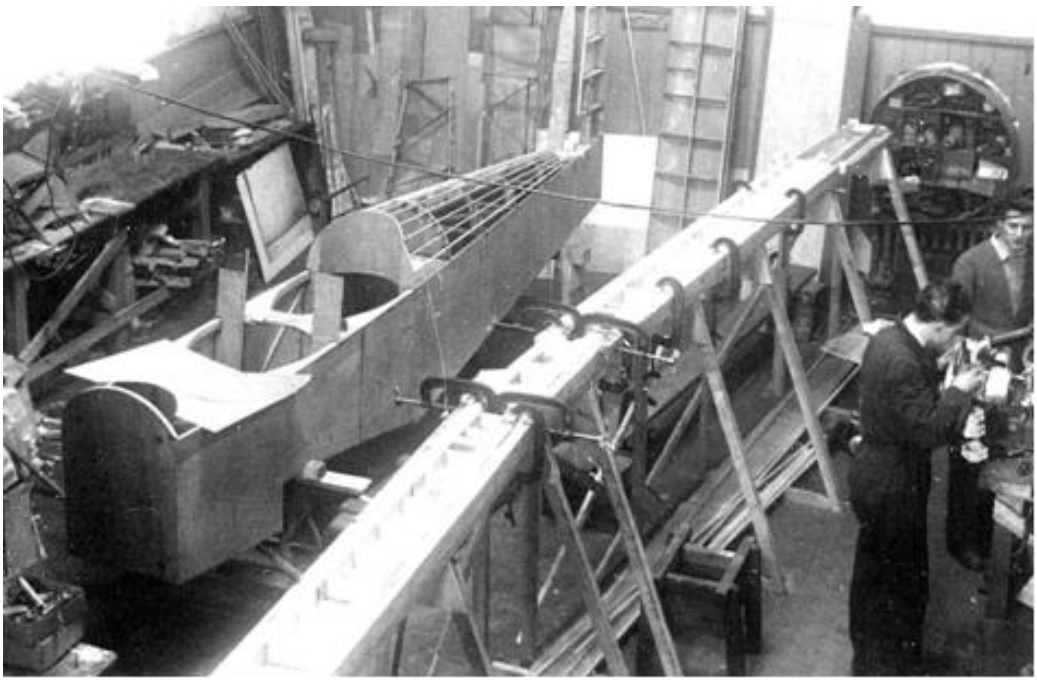
the sudden disappearance of the incumbent manager by one door, followed by the appearance of Customs and Excise by another…

To publicise their aims, the PFA also persuaded Associated Rediffusion, the fledgling commercial television company, to film the construction for broadcast on a regular basis in their news and current affairs programme, This Week. Unfortunately, although a considerable footage of This Week film survives, the film about the Turbi is not held by the National Television and Film Archive and seems to have been lost.

Construction of the Turbi started in November 1956, with parts being manufactured by employees of B-N and its sister company, Crop Culture (Aerial) Limited, more or less continuously but always with an eye to working on the main business of the time, notably converting Tiger Moths and Austers for crop spraying duties when demand required.

In order to set the scene on the Isle of Wight in late 1956/early 1957, it is now necessary to make a small diversion (well, actually quite a large one…). In July 1956 Col. Nasser nationalised the Suez Canal and in a period of heightening tension, Jim McMahon (Tiger Moth G-ANRH), Bill Stevens (Tiger Moth G-ANRL) and Desmond Norman (Auster J1N Alpha G-AORN) passed through Cairo (having been refused an advance flight clearance and hence not without some local difficulties) on the 19th September for an important Crop Culture cotton spraying contract in the Sudan. On the 29th October, the Israelis invaded Egypt and by the time the spraying contract was completed in early November, the team was unable to return to the UK by the usual northerly route through Cairo. As a result, two tired Tiger Moths and the Auster were forced to travel west from Khartoum right across Africa to Nigeria, with virtually only a school atlas to guide them, before turning north for home. They left on the 15th November and traversed the continent via El Obeid, El Fasher, El Geneina, Abeche, Fort Lamy, Kano and Lagos. Whilst in West Africa, an opportunity arose to demonstrate the efficacy of the Micronair rotary atomiser developed by Crop Culture, in the banana plantations in Kindia, a short flight inland from Conakry, the capital of Guinea. The results were so positive that the French Government agreed a significant spraying contract in the Cameroons, and all hands at Star Street were required to prepare the spraying fleet. To finish the story of the epic journey from Khartoum, the team arrived safely in the UK on the 5th December after further hair-raising adventures en route.

*Turbi wing under construction, Star Street, Ryde April, 1957  Arthur Ord-Hume*



*Turbi fuselage under construction, Star Street, Ryde April, 1957  Arthur Ord-Hume*

As might be expected, the Turbi took back stage. Naturally this wasn't appreciated by the PFA, nor was it by This Week, since they had already transmitted the first programme in the series and had a January deadline to meet for the first flight programme. January stretched into March and Britten-Norman was under severe pressure from all sides.

In early 1957, Arthur Ord-Hume was working for Handley Page at Cricklewood in the Design Progress Office. In view of his experience and the problem of completing the Turbi, Desmond asked him to move to Bembridge for the not inconsiderable wage of £10 per week, to complete the construction task, aided by other employees as available. Arthur flew to Bembridge on the 16th March, 1957 in a DHC.1 Chipmunk G-AOSY hired from the Elstree Flying Club, landing gingerly in what had become an overgrown paddock. Negotiations were held at St. Denis, the Britten family residence in Bembridge and the upshot was that Arthur took on the job of completing the Turbi, which by then consisted of the fuselage sides and a basic wing structure.

One perk of the job was the use of an Auster J1N Alpha, G-ANHW, to commute from Elstree and gather parts for the Turbi, on condition that it was collected from Croydon. This turned out to be a rather tired and 'musty' aircraft that tended to fly one wing low, and that was known thereafter as 'Horrible Willie' (shades of a later B-N hack, the Cessna 185B G-AYNN, universally known in the firm as 'Nasty Nasty', some said because an unwary pilot would get a lot of landing practice as it bounced from tail wheel to main wheels, and others because of a habit of occasional engine hesitation when mid-Solent….). However, it did enable Arthur to move his belongings to the Isle of Wight, mostly in the cabin, but in the case of his bike, tied to the wing struts!

Work progressed well at Star Street, if behind the intended schedule, and the structurally completed fuselage, wing and empennage were transported by the local furniture removers, Laceys, to the hangar at Bembridge Airport. No doubt the sight of a 29 foot aircraft wing sticking out the back of a removals van would cause a stir in Ryde today, I suspect not at the time, as the locals were well used to seeing Tiger Moth fuselages being towed behind the Britten family car with the tail skid and a volunteer, often Peter Gatrell, holding it in the boot on their way to Bembridge!

*"In the van", Ryde, April 1957  Arthur Ord Hume*

By the time that the aircraft came to be registered, the official view of 'special registrations' had been marginally relaxed and it was possible to reserve G-APFA. The writer has been told that this relaxation was in part due to a Westland Widgeon helicopter operated by the Evening Standard being re-registered (normally an unheard-of event at the time) as G-ANZL, having previously operated with a rather inappropriate registration in the G-ANAx series that hadn't been weeded out at source.

*Ready for flight, Bembridge, May 1957 Arthur Ord-Hume*

*Ready for flight, Bembridge, May 1957 Arthur Ord-Hume*

The aircraft was completed in May 1957 and Desmond decided that he should make the first flight, despite protestations that he had little ultra-light experience and was rather tall for the aircraft at 6′ 2″. Supporters Club member, Peter Ward, remembers Desmond removing his shoes "to get greater sensitivity, old chap", (the alternative story being that Desmond's size 12 shoes were too big to fit the pedals and simply had to be removed!), climbing into the back seat and setting off down the runway.

The take-off run went on and on, with minor excursions into the air until Desmond decided he wasn't going to achieve sustained flight and brought matters to a sudden and premature conclusion in the field beyond the runway, there being no western boundary at that time. This caused the fuel tank to separate from its supporting lugs with minor damage to the fuselage and left Desmond with a long walk across the fields in just his socks. Surprisingly, no one seemed to see him waving from afar….

With the pressure on to be ready for the first flight on camera in just two days time, the team worked all night to repair the damage and the first flight took place on the 13th May, 1957 in the hands of Harold Best-Devereux of the ULAA. The next day, This Week filmed the 'first flight' and their series was completed

The aircraft was never a sparkling performer with its original and rather heavy 65hp Coventry Victor Flying Neptune, loaned by the manufacturer in a continuing attempt to have this modified agricultural engine accepted by the flying fraternity.

Considerable efforts were made by Arthur to reduce the engine weight, replacing the cast iron sump with one made in aluminium etc., but the Turbi never did fly with two on board until the engine was later replaced with a Continental. Whilst the aircraft retained the Coventry Victor engine, it also suffered from cooling problems manifesting themselves in the engine cutting out at inopportune moments. Arthur recalls this happening to him over the Solent on his way to the PFA rally at Sywell (and subsequent display at the Do-it-Yourself Exhibition in London) with the only 'land' in sight being a US aircraft carrier. Fortunately as he approached the carrier, he was able to restart the engine and simply performed a low-level fly by. Could this have been a forerunner to the landing of Islander G-AVUB on HMS Hermes in the Solent some ten years later?

*At the Do-it-Yourself Exhibition 1957 Arthur Ord-Hume*

It is some coincidence that Fred Keitch, the current owner, visited the Do-it-Yourself Exhibition in 1957 and saw the Turbi on its display stand, little realising that 23 years later he would become the proud owner!

Having completed the contract, Britten-Norman sought a modest payment from the PFA who sadly at that time were constantly short of funds. As a result, the aircraft was tied down outside the hangar under a tarpaulin pending a resolution. The problems were eventually overcome with the formation of a trading company at Elstree, Ulair Limited, owned by Harold Best-Devereux and Edward Mole, which paid for the aircraft and leased it to the PFA for their demonstration flying. The Turbi finally departed Bembridge on the 14th September, 1957.

*Fred Keitch and Tony Eastelow with G-APFA  Fred Keitch*

In order to make the Turbi suitable for the intended purpose, it was modified for Ulair in 1958 at Elstree with a lighter 65hp Continental engine and a glazed cockpit canopy (not the prettiest of results). In June 1962 the aircraft was sold to the Wolverhampton Ultra Light Flying Group at Halfpenny Green and then in August 1971 to Keith Sedgwick. It then moved to Bill Evans at Dunkeswell.

Since the 20th June, 1980 it has been in the possession of the current owner, Fred Keitch at Cullompton near Exeter, initially in partnership with Tony Eastalow and then alone from the 2nd June, 1984. Fred flew it from a 300-yard strip on his farm until the early 90's when pending work on the engine and other interests led it to be dismantled and stored with 1,744 hours flown since new.

Currently, the aircraft remains dismantled but is stored safely in a barn. Fred's aim is to re-cover and re-assemble the aircraft, overhaul the engine and to get it flying again, joining the other two homebuilt Turbis on the UK register, G-AOTK (built at Hatfield in 1955-58 by seven de Havilland Technical School apprentices, including Neil Harrison who subsequently worked for Britten-Norman) and G-APBO (built at Rutherglen 1959-60 by PFA Group No. 39).

Finally, the author would like to express his appreciation for the generous assistance received from Arthur Ord-Hume, the late Jim McMahon, Peter Gatrell and Fred Keitch, without whom this story would not have been possible

**47 Years Ago - G-AVCN at the Paris Air Show**

*This photo came to BNAPS courtesy of Graham Summers. Islander G-AVCN is seen here in Glos Air markings showing the flag for B-N at the Paris Air Show in June 1967.*

**Demonstration Tour of the Middle East and Pakistan**

by Neil Harrison
(B-N Sales Executive 1969 - 1971)

*BN2A-8 Islander G-AXXF* *© B-N Historians*

Sunday 28 June 1970 I departed Bembridge in BN2A-8 G-AXXF (msn 134) at 10:30 on a sales tour that was to extend into a delivery flight. "X-ray Foxtrot" had been a demonstrator since it first flew the previous November and was sold to our Australian distributor, Islander Aircraft Sales of Lakemba, New South Wales. A ferry fuel system was fitted comprising two 40 Imp Gal drums mounted on a wooden cradle fixed to the seat rails behind the pilots' seats. The passenger seats were stowed in the baggage bay aft.

With the standard 108 IG useable wing tanks plus the 80 IG ferry system the endurance was around nine-and-a-half hours. After a 40-minute flight to Gatwick to clear customs I routed IFR to Ljubljana, a six-hour flight arriving at 18:30 GMT.

IAS had agreed to allow B-N to demonstrate en route to Sydney. On 29 June I performed two demos to the Yugoslav military in Ljubliana before moving on, with an en-route refuelling stop in Zagreb, to overnight in Belgrade. I spent the 1 July in Belgrade and performed three more demos to the Yugoslav military followed by an open-air party with plenty of music and dancing under the stars with representatives of the "prospect". On 2 July I departed Belgrade mid-morning on an eight-hour non-stop to Beirut over-flying Thessalonica, Rhodes and Cyprus.

Over the next two days in Beirut I gave eight demos to military and civil prospects directed our way by the British Air Attaché at the embassy. In those days Lebanon was a popular tourist destination for wealthy Arabs and Europeans and there seemed to be lots of prospects for local regional air services. There was no hint of the horrific conflicts to come.

*Peter Nock*

I was joined in Beirut by the highly experienced freelance ferry pilot Peter Nock who would take 'XF to Sydney after the sales demo programme. I knew Peter well. A year earlier, when I was still an editorial writer on "Flight",

Peter had invited me to join him in ferrying two new Beagle Pup 150s together in formation from the factory at Shoreham to Baghdad for the Iraqi Air Force. In view of his several decades of previous experience in the Middle East (including the ferrying of several dozen DH Mosquito from France to Israel in the late nineteen forties) I was glad to have his company on the next section of the sales tour.

On Sunday 5 July we departed Beirut in the late morning for Baghdad. The elapsed time, with a seventy-minute "diplomatic" stop in Damascus, was five hours. On 6 July I performed five demos to the Iraqi Air Force. We had been in prior contact with them through the Iraqi military attaché in London and were a potential customer for three Islanders, two with camera floors. Negotiations continued after the demos and a provisional contract was drafted in 1971 but the order was never consummated, possibly due to the receivership later that year.

On 7 July Peter and I flew 'XF to Basra and Fao (the oil terminal on the extreme southern tip of Iraq) and performed three demos to the Iraq Petroleum Co (IPC) in/out of the short sandy strip at Fao before returning to Baghdad via Basra. The low-level flights to/from Basra were especially interesting to see the marsh Arab settlements in that region of southern Iraqi. IPC bought an Islander (msn 298) in early 1972, was nationalised later that year and the state-owned entity that acquired its assets, the Iraq National Oil Company, bought another three in 1975, so in retrospect the demonstration of the Islander's capabilities was well worthwhile.

On 8 July we departed Baghdad for Tehran at 1100 local time with Peter at the controls. Peter recalled:
*"As we were approaching the Iran border, Baghdad control called us up to say we should return immediately. Neil's face lit-up and he said, "You see they are interested after all." Noting the controller's tone of voice it sounded more like an order than a request. My feelings were not quite*
*as optimistic. There was certainly a party in uniform to meet us on the ramp at Baghdad, only they hadn't come to assess the Islander with a view to purchase. Someone high up had the idea that we were on a spying mission. They almost took the aircraft apart and were trying to look up the undercarriage legs, also opening every inspection panel looking for cameras."*

I have long imagined that the officer in charge of that party in uniform was Saddam Hussein, but I can't be sure with hindsight. It was to be well over a decade before Saddam came to world attention. But the lead officer certainly had the facial build and prominent black moustache that was to become so familiar. After a couple of hours and refitting the ferry tanks, we were cleared on our way to Teheran where we arrived at dusk after a 3hr 40min flight.

Sir Mark Norman joined us in Teheran with the prospect there of being met by the Shah's son (a senior commander in the air force and who duly came. Friday 9 July was a day of rest and Saturday 10 July was spent removing the ferry tanks and smartening up the aeroplane. On Sunday 11 July we performed six demos to the Iranian AF and to a couple of commercial operators. One of these, Pars Air, a local feeder airline based in Mashhad (NE Iran) bought its first Islander in 1971, three more in 1972 and a final example in 1977. This operation came to an end in 1979 with the revolution, and Iran Asseman Airlines operated the surviving aircraft thereafter.

The Blue Mosque at Esfahan

On 12 July we left for Bahrain, stopping at Esfahan en-route for 90 minutes just long enough to visit the Blue Mosque. The next day we went on to Abu Dhabi where we stopped for a day, leaving at 06:30 on the 15th for a five-and-a-half hour flight to Karachi, followed after a two-hour stop, by another five-and-a-half hour flight into the night along a line of violent thunderstorms off to our left heading NNE to Rawalpindi. We were conscious that just two months previously the pilot of an Islander (msn 123) on a demonstration into Rawalpindi was unlucky to encounter a raised track across the runway in the fading light of nightfall and wrote the aircraft off, fortunately both occupants were unhurt.

After three demo flights on the 16th we left for Lahore and the next day returned to Karachi, with an intermediate stop at the city of Nawabshah. After three demos we left early the next day on a five-hour-fifteen-minute flight to Delhi in India for an over-night rest.

Another early start and we were off to Dacca, in what then was known as East Pakistan and now as Bangladesh. I note from my logbook that six hours of this six-hour-twenty minute flight was flown by me on instruments (Peter was having the day off in the right hand seat). No rest for the wicked, and I gave six demos the next morning to an aerial dressing operator, starting at 05:00!

Peter remembered that *'We, or more accurately Neil, had been fitting and removing the ferry tank installation quite a number of times. My part in this had been strictly limited to plumber's mate and in the heat of mid summer this was the better part of the job. After some of his longer spells inside the aircraft Neil came out looking as if he had been under a shower*.'

After the final reconnection of the ferry fuel system, I returned to the UK leaving Peter to finish the delivery. As the ferry fuel system was only a two-drum, as opposed to the usual four-drum there were rather more landings than usual. Peter flew via Bangkok, Singapore, Bali, Darwin, Mount Isa and Charleville to Bankstown, which is the general aviation field for Sydney. A month later I was back on the demonstration treadmill, this time taking Islander G-AYGT on a busy one-week tour in Sweden. Abingdon, June 2014

BNAPS News readers are invited to submit relevant aviation and B-N related illustrated articles and photographs for publication.

## Islander Fuselage Section Donated to BNAPS

Frank Matthews, a retired policeman and aviation enthusiast living in East Preston, West Sussex, has for a number of years been working on the front section of an Islander fuselage to fit it out as a sit in exhibit. After developing his skills to construct a replica pilot's door and a starboard passenger door together with an avionics bay cover, Frank has decided that he would like his project to go to a good home and has offered it to BNAPS, an offer that BNAPS has been most pleased to accept.

*Frank Matthews' Islander fuselage is seen here in May 1991 shortly after arriving at his East Preston home*.

Once transport has been arranged from West Sussex to the Isle of Wight the plan is fit out the fuselage section as a "sit in" exhibit and at a later stage to make it the basis of a BN-2 Islander static flight simulator.

The fuselage section was originally part of Islander c/n 287, VQ-SAC, that was written off in the Seychelles in 1976. The damaged aircraft was brought to the UK for use as part of a test rig with the Dowty Fan Powered Islander project at Shoreham.

Subsequently the fuselage was given to the aircraft engineering college at Shoreham. After a few years use as a training aid, sometime around 1990 it was then left outside and abandoned. The fuselage was seen by Frank and he acquired it as the basis for a retirement project.

## Were You There?

This picture was included in BNAPS News May 2014 issue – thanks go to Bob Ward, who was there, and was able to name most of the people in the picture. The occasion was a visit to Bembridge by James Callaghan MP and his son.

From left to right, those present were: John Britten, Desmond Norman, James Callaghan's son, Dave French, James Callaghan, Bob Ward, name not known, Jack Griffin, Ian King, New Zealander – no name at present.

## BNAPS Items for Sale

BNAPS Ltd is the sales arm of BNAPS and in selling books and memorabilia etc. makes a significant contribution to our restoration funds. These items can be purchased direct from BNAPS Ltd, at BNAPS events and sales stands and by mail order. If you need a current price list or wish to purchase specific items please contact Rita on 01983 875790 or by e mail: m_edgcumbe@yahoo.co.uk

*The mug bears a striking image of G-AVCN and is dish washer proof. Price for BNAPS Supporters is £6.00 and for non-members £6.50, UK p&p is £2.00.*

*BNAPS fridge magnets and key rings- Price for members is £2.00, for non-members £2.50 UK p&p is £1.00*

## More BNAPS Supporters Needed

If any BNAPS Supporters Club member knows of someone who would be interested in joining please pass on contact details to our BNAPS Membership Secretary, Rita Edgcumbe.

The principal aims of the BNAPS Supporters Club are "*to assist BNAPS to preserve the history and aircraft of Britten-Norman through member donations and to provide assistance with the day-to-day operations of the charity*" - anyone with an interest in local aviation heritage is welcome.

As a point of clarification, whilst BNAPS has contact with B-N Group from time to time, as a charitable trust BNAPS is an independent organisation.

## *Forthcoming BNAPS Events*

With the approaching summer months we will resume our social evenings at the Propeller Inn in September time.

**BNAPS Workshop Open Weekend**
**26/27 July, 2014**

On 26/27 July BNAPS will be running an Open Workshop alongside the Bembridge Harbour Family Fun weekend. Access to the workshop will be by mini-bus shuttle starting and finishing at the Tollgate Café on the Embankment Road. BNAPS Supporters Club members and visitors are invited to attend. There will be no charge but all donations will be gratefully received. Details will be circulated nearer the time

BNAPS is planning to have a publicity and sales stand at Sandown Airport for the **Microlight Spamfield** rally on 6/7 September.

### BNAPS on the Internet -

Information about BNAPS, including back issues of BNAPS News, can now be found on Ivan Berryman's website: ivanberrymandirect.com/bnaps.htm

### *BNAPS Trust*

BNAPS is a Registered Charity, No. 1100735, set up to "preserve the history and aircraft of Britten-Norman with the support of members' subscriptions, sponsorship and donations"

BNAPS registered address is:
The Great Barn,
Five Bells Lane,
Nether Wallop,
Stockbridge,
Hampshire,
SO20 8EN.

Trustees are Peter Graham, Bob Wilson, Guy Palmer and Bob Wealthy. Bob Wealthy is now Chairman of the Board of Trustees effective from 13 November, 2013.

### How to contact BNAPS:

**Email:**
solentaeromarine@hotmail.co.uk
**Telephone:** 01329 315561
**Post:**
BNAPS (Dept NL)
c/o The Propeller Inn,
Bembridge Airport,
Sandown Road,
Bembridge,
Isle of Wight, PO35 5PW.