

# BNAPS News Review

Issue 9

December 2025

## BN-2 PRODUCTION 1965 - 2025

In this issue of BNAPS News Review:

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# BNAPS CHAIRMAN'S UPDATE



Dear BNAPS Supporters,

It is a fact that 25 years have passed since BNAPS was formed. The way ahead for BNAPS has always been of concern, but has now become a topic that has to be addressed more positively and on a wider front as BNAPS enters a post "Saving Charlie November" era.

It is perhaps worth reflecting on what has happened since BNAPS was formed in 2000 by Peter Graham and BN Historians, to undertake the restoration of BN-2 Islander number 3, G-AVCN ("Charlie November"), following repatriation of the aircraft to the UK in March 2000. Later in 2000 BNAPS was registered as a charity in England and Wales, registration number 1100735. Named Trustees were Andy Clancey, Peter Graham and Allan Wright. Peter Graham acted as BNAPS Board of Trustees Chairman.

Although directed principally at restoration of "Charlie November", BNAPS' role was later summarised as follows: "*Dedicated to preserving and recording the history of John Britten and Desmond Norman and their aircraft and hovercraft designs and their crop-spraying business.*"

The original "restore to fly" project that was set up with Britten-Norman Ltd started in late 2000 but, for various reasons, was curtailed around 2006. The dismantled parts of "Charlie November" were later moved to open storage at Britten-Norman's Bembridge site. Concerns were raised locally that the historic aircraft was "at risk". Action was taken in late 2009 to bring various parties together including representatives of BNAPS, Bembridge Heritage Society, British Aircraft Preservation Council, local residents and several individuals who had connections as former employees of Britten-Norman and were involved in the original "restore to fly" project. The situation was reviewed to establish what could be done about saving "Charlie November", resulting in the reactivation of BNAPS with new Trustees, Guy Palmer, Bob Wealthy and Bob Wilson and with Peter Graham continuing as a Trustee and acting as Chairman.

The "Saving Charlie November" restoration project was successfully implemented over the period from 2012 to 2022, as recounted in the book *Saving Charlie November* published by BNAPS in July 2024. Grateful thanks go out to all the people and organisations that contributed to the successful completion of the remarkable and unique "Saving Charlie November" project.

The restored aircraft was officially unveiled in April 2023 at the Wight Military & Heritage Museum at Northwood, near Cowes, Isle of Wight. In that that year BNAPS restoration team received the National Transport Trust's prestigious "Preservationist of the Year" award in recognition of their dedicated work and the high quality of the restoration.

BNAPS currently undertakes a range of activities including care and maintenance of G-AVCN and the surrounding museum space, commissioning of the "Islander Experience" flight simulator based on the front fuselage section of Islander VQ-SAC and restoration of recently acquired Britten Sheriff G-FRJB. Other activities include publication of BNAPS News Review four times a year, collection of B-N memorabilia, research leading to special publications, specialist collectors postcards and organising special events, such as the recent "Islander 60" held in June this year. To ensure that all this work can continue BNAPS needs more people to be involved as new Trustees and as Members of the Supporters Club willing to apply their best efforts to enable BNAPS to have a sustainable future.

If anyone has, or is aware of someone having, an interest in B-N and would like to know more about BNAPS please contact [bob@bnaps.org.uk](mailto:bob@bnaps.org.uk) for more information.

For membership details please email [membership@bnaps.org.uk](mailto:membership@bnaps.org.uk) for an application form.

Many thanks for your continuing support and I hope that you will enjoy reading this issue of BNAPS News Review. Please do not hesitate to get in touch if you have any B-N heritage related questions or possibly have a story or photos that could be considered for inclusion in a future issue of BNAPS News Review.

I wish all our readers a Merry Christmas and a Happy New Year!

Bob Wealthy, **BNAPS Chairman**

**Cover picture:**

View of the BN-2 production facility in the new hangar in mid-1967 with five BN-2s on the assembly line. By this time wing jigs and other tooling have been moved in alongside the assembly line. (BNAPS Archive)

## Wight Military & Heritage Museum Activities Sep to Nov 2025

Main activities undertaken during the period have involved re-assembly of the “Islander Experience” flight simulator and initial work to remove windows and doors from Sheriff fuselage.

### Islander G-AVCN care and maintenance

Wing stands and fuselage support frame have now been returned by Solent Sky. Wheel turning operation was carried by Mark Porter and Norman Hobbs using the wing stands. It was noted that the casing of the tyre on the inboard wheel of the starboard landing gear was creased. This is now under investigation, the present theory is that the foam filling operation was insufficient combined with a possible weakness in the sidewall structure of the tyre.

### “Islander Experience” Flight Simulator

Work continued on the Flight Simulator electronic system integration and fabrication of a support frame for the multi-screen display arrangement. The work was led by Mark Porter and supported by Bernie Coleman, Guy Palmer, Maury Dyer, Glen Finch and Dave Emery.



Support for the central display screen in place. (BNAPS)



Trial evaluation of 3 display screens. (Mark Porter)

From an evaluation of the three screen display arrangement, using an unmatched set of screens currently to hand, it was felt that this was not the best approach for the longer term. Whilst the exercise was useful in showing that a multi-screen display would work an alternative two screen arrangement with the display units having curved screens has been identified as a more effective approach. Suitable curved screen displays have been identified and priced.

Another consideration is that the present flight simulation software, at switch on, requires a series of specific configuration set up actions to run as required. This is seen as a significant limitation for use in the museum environment. Latest software products offer facilities to enable instant and automatic configuration set up at switch on. Also, the capability of the existing software in use has been overtaken by significant advances in the capability and utility of flight simulation software now available. After some deliberation it has been



Instrument panel with USB connected flight instruments throttle box installed with throttle, mixture, propeller pitch and trim controls linked through analogue ports to flight simulator processor. (BNAPS)

decided to embark on a major upgrade. The upgrade is designated as the “Islander Experience” Flight Simulator V2 to include the two curved screen displays together with a current high capability flight simulation software suite such as the Lockheed Martin Prepar3D software package.

Other work has covered an initial assessment of how disabled access to the flight simulator can be organised by having quick removal seats and an access ramp for entry via the starboard door. These features will be incorporated as an ongoing activity.

### **Sheriff Project**

The Sheriff fuselage has been transferred from its temporary support frame to the more substantial support frame used during the restoration of Islander G-AVCN.

Other work associated with the Sheriff’s wing has involved cleaning and repainting the wing spar joining plates. Work is now under way to secure the wing sections in vertical stands, remove the main landing gear assemblies and secure the wing sections under cover.



Sheriff fuselage now on the Islander support frame. (BNAPS)

A work plan for restoration of the Sheriff has been drafted. Although some work will go ahead as effort can be released from the flight simulator activity, setting a time frame will depend upon availability of additional exhibition space at the museum and fabrication of replacement transparencies.

### **Sheriff Restoration and Preservation Way Ahead**

The following is a summary of the restoration activities to be undertaken. Supporting activities will include:

1. Acquisition of replacement windscreen, door windows and side windows
2. Purchase of primer and top coat paint
3. Purchase of various fasteners
4. Purchase of consumable materials for surface preparation

### **Phase 1 Work Items** *(Current activities where resources are available and circumstances permit)*

*Status at end of November 2025 indicated in italics.*

The objective for this phase is to have the fuselage refurbished externally and ready for joining up with the wing in Phase 2.

#### **Phase 1 Activities include:**

1. Remove windscreen, door windows and side windows - done
2. Remove doors for refurbishment, freeing up door securing mechanism, acquisition of replacement gas struts – in work
3. Prepare doors for repainting – in work
4. Prepare nose cone for repainting
5. Clean out fuselage interior – in work
6. Refurbish wing spar joining plate and acquire replacement fixings – in work
7. Move wing sections under cover for winter months – in work
8. Inspect nose landing gear, investigate retract mechanism and assess refurbishment needed to meet requirements as part of a static display exhibit
9. Prepare fuselage for repainting
10. Repaint fuselage
11. Repaint doors
12. Repaint nose cone
13. Investigate companies able to make replacement windscreen and windows, place order once funds are available.

### **Phase 2 Work Items** *(subject to availability of museum space)*

The objective of Phase 2 is to have the wing, tail section and engine cowlings refurbished, and repainted ready for assembly of the airframe.

1. Assess condition of wing and determine any structural work needed
2. Inspect main landing gear, investigate retract mechanisms and assess refurbishment needed to meet requirements as part of a static display exhibit
3. Prepare wing for repainting
4. Assess condition of tail section and determine any structural work needed
5. Prepare tail section for repainting
6. Repaint tail section
7. Assess condition of engine cowlings and determine any structural work needed
8. Prepare engine cowlings for repainting
9. Repaint engine cowlings
10. Assess condition of dummy engines and refurbish if considered necessary
11. Assess condition of propellers and refurbish/repaint if considered necessary

### **Phase 3 Work Items** *(subject to availability of museum space)*

The objective of Phase 3 is to have the aircraft assembled.

This work will be subject to additional display space being available to allow work to proceed.

The work will be conducted in line with a pre-defined assembly procedure including a risk assessment and implementation of risk mitigation measures

1. Join wing and fuselage and set up so that it rests on the landing gear in lowered position
2. Install doors and gas struts
3. Install replacement windscreen door windows and side windows
4. Install nose cone & tail section
5. Install dummy engines
6. Install engine cowlings and install propellers

#### **Phase 4 Work Activities** *(Subject to assessment and review)*

Work in Phase 4 will be subject to the outcome of an assessment of the feasibility, practicality and cost of implementing the following:

1. Fabrication and installation of internal fuselage trim panels
2. Design and construction of an electrical system for internal and external lighting
3. Design and construction of an improved and more representative instrument panel
4. Activation of controls and linkages for ailerons, elevator, rudder
5. Activation of flap operation
6. Activation of landing gear retraction mechanisms
7. Replacement of dummy engines with externally representative Lycoming engines

The main activity ongoing for Phase 1 is item 2 to make contact with specialist organisations that have the capability of fabricating replacement transparencies, comprised of windscreen, port and starboard gull wing door windows and port and starboard cabin side windows. At present it seems that the industry practice is that mould tools are normally made separately and then provided to the organisation that makes the transparency.

Contact has been made with several plastic moulding and mould tool companies and a number of useful discussions have taken place. However, a definitive solution to meet the needs for the Sheriff has yet to emerge and this activity is ongoing and will be for some time. The aim is to get to a point where the cost of mould tooling and transparency fabrication can be defined such that a fund raising campaign can be initiated. At this time the best guess for the cost of the replacement transparencies is around £10,000.

#### **Solent Sky Trislander News** *(All pictures by Bob Wealthy, unless stated)*

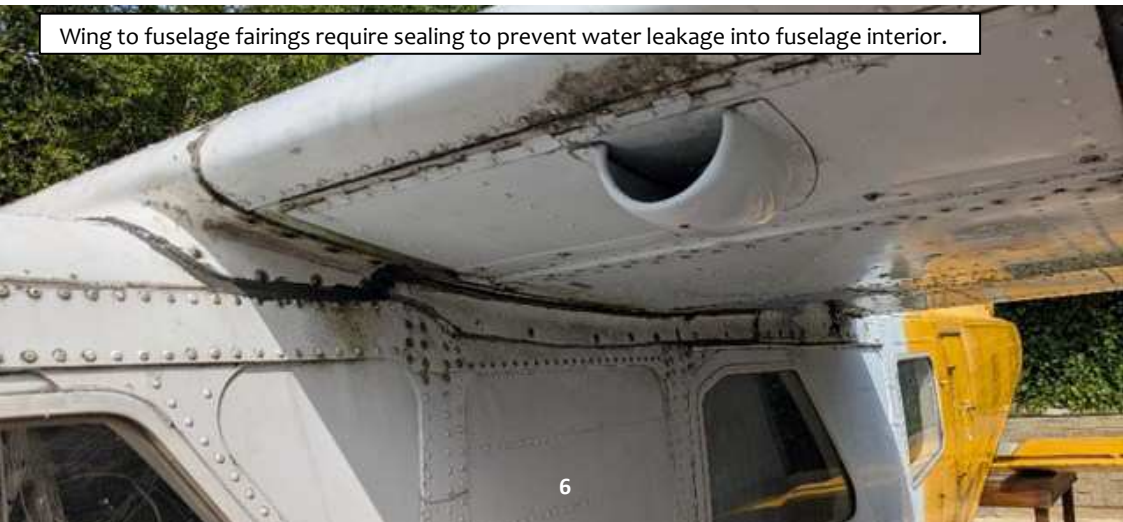
*This is not a BNAPS project, but as our Chair, Bob Wealthy, is actively involved as a Solent Sky volunteer, we will feature updates of the restoration of Trislander G-RLON in BNAPS News Review.*

Work has been undertaken by Solent Sky Volunteers, Ian Haskell, Trevor Morecraft and Bob Wealthy, with much help from Mark Masters of CAV Aircraft Services. Main activities are outlined below:

##### **Wing to Fuselage Fairings and Access Panels**

Following completion of work to install wing to fuselage fairing joints and access panels removed during transport, the fuselage interior is suffering from water leaks following any period of significant rain fall and action is under way to resolve the issue.

Wing to fuselage fairings require sealing to prevent water leakage into fuselage interior.



### **Pilots' Seat**

The pilots' seat was taken to Sew Trim at Swanmore for one of the seat cushion covers to be replaced - this work has been completed. In parallel the seat frame has been dismantled, painted and reassembled and, with the seat cushion in place, re-installed in the aircraft.

### **Tail Plane Inspection and Surface Corrosion Treatment**

Areas of surface corrosion where paint was lifting have been treated and etch primed. Mark Masters has proposed respraying the whole tail plane before re-installation. The tail plane was



Reinstalled pilots' seat after refurbishment.



View of tail plane showing patches of primer after treatment of surface corrosion under existing paint.

transported to CAV Aircraft Services works at Oswlebury near Winchester for repainting on Tuesday 21 October 2025. Provision of transport vehicle was courtesy of Gordon McMath of GM Lifting Services for this move and return of the tail plane after it had been painted on Monday 10 November 2025.

### **Fuselage carpets removed**

Carpet sections have been removed to allow the carpet to be dried out as a result of water leakage. The condition of the carpet will be assessed in terms of suitability for possible re-use or whether replacement carpeting is needed.

The floor structure has been cleaned and inspected and found to be in sound condition. Temporary floor covering will be put in place when working inside the fuselage.



Tail plane after re-painting by CAV Aircraft Services.

## Tail bumper repaired

The tail bumper was incorrectly identified as a tie down point during preparation for the move from Solent Airport. As a result of loads imposed during the move it was found that the tail bumper had broken free from its attachment fixings under the rear section of the fuselage. The tail bumper has been repaired and awaits re-installation.



Tail bumper after repair.

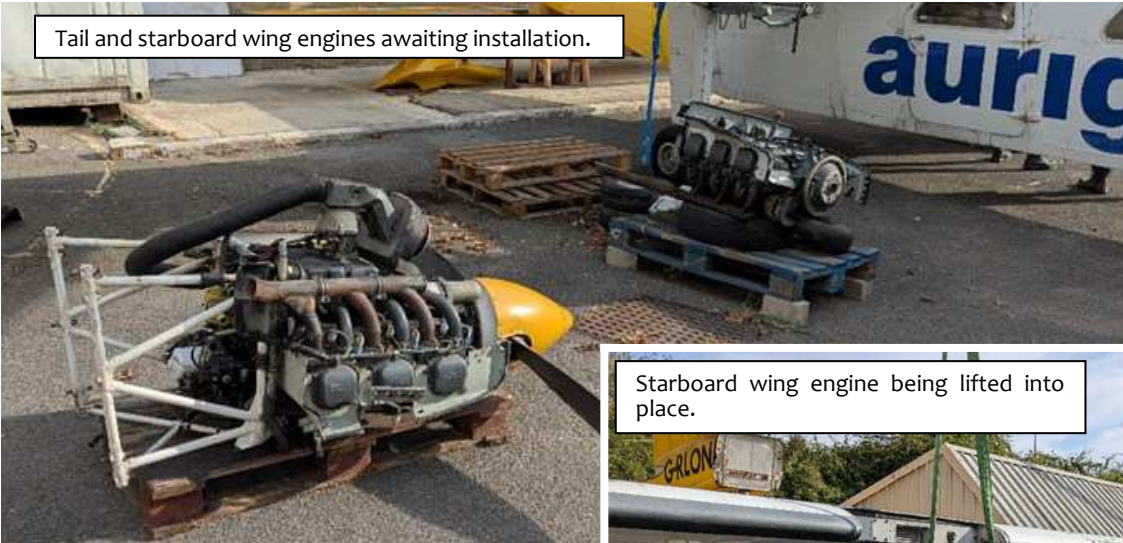
## Treatment of exposed metal patches on fuselage

Work was started to protect various patches of the fuselage surface where paint had flaked off and bare metal surfaces exposed. Localised areas were rubbed own and etch primed to provide a measure of protection during the winter months. As a trial an area has been spray painted brilliant white using a spray can which gave an acceptable result as a temporary measure. Subject to weather conditions all areas treated with etch primer will be painted to blend in with existing painted areas of the fuselage.

## Installation of Engines

All 3 engines were installed on Saturday 23 August 2025 thanks to help from Danny of All Day Lifting Services together with Mark Masters and Reece from CAV Aircraft Services and Solent Sky Volunteers. Cowlings were subsequently installed on port and starboard wing engines.

Tail and starboard wing engines awaiting installation.



Starboard wing engine being lifted into place.



Port wing engine in process of being installed.



The baggage bay interior, door surround and door all show signs of wear and tear arising from many years in service. Yellow items are ballast weights used with the aircraft (Trevor Morecraft).



Tail engine, with propeller attached, being installed and secured in place.



### Nose Baggage Bay Door Investigation

The door was previously thought to be locked. However, recent access to more information about the securing and locking mechanism enabled the door to be opened in the normal way by pulling the securing lever outwards and then rotating the lever upwards and towards the nose.

### Installation of propellers and tail engine cowlings

Work to install the propellers on the wing mounted engines and to fit the tail engine cowlings was accomplished on 11 October 2025. Thanks go to Mark Masters who took time out to guide the activities, assisted by Ian Haskell, Trevor Morecraft and the writer. Thanks go to Alan Jones for extending the hire of the work platform and to Solent Sky volunteer Martin Nolan for helping put together the platforms.

The starboard wing engine propeller and spinner were installed with no real difficulty.

Installation of the propeller for the port wing engine went ahead as Mark Masters was able to provide a ring gear/flywheel part that was previously on the "missing parts list". Installation was trouble free for the port side.

Installation of the upper section of the tail engine cowling was accomplished without any real difficulty. The work was made easier with use of the work stands rather than step ladders. Fortunately, the threaded anchor nuts that take the fixing screws used to secure the cowling to the aircraft tail section were in good condition. Once the top section had been secured the lower section was clipped in place.



Starboard wing engine after propeller and spinner installation.



Port wing engine after propeller and spinner installation. (Trevor Morecraft).

## Ongoing Activities

Outside activities are very much weather dependent. It is planned to re-install the tail plane when some work on the fixings has been completed.

Investigation of water leakage into the fuselage will continue. It has been noted that there is a significant build up of condensation on the inside of the roof skin panels and this can drip down into the interior. Solent Sky is in touch with the group from Duxford Aviation Society that looks after Trislander G-BEVT and have had long running battle to eliminate water leaks affecting their aircraft.

Other work, such as refurbishing passenger seats can continue in under cover areas. The overall aims are to protect the aircraft to the fullest extent for the winter period by temporary measures and get all internal trim, carpets and seatings prepared for re-installation early in 2026 ready for an “official unveiling” – no date at present.

Work to sort out electrical system connections for internal and external lighting will be progressed during the winter period if possible. It is planned to re-instate the flap controls but this is dependent on the serviceability of the flap drive motor that has yet to be determined.



Elevated view of Trislander G-RLON, 11 October 2025.

### David Williams - 28 April 1937 - 22 November 2025

Sadly, we have to report that David Williams, B-N's second employee, has died aged 88.

David became involved with B-N in 1954 in the early days of aerial crop spraying with Crop Culture (Aerial) and the company's exploits in Sudan. He accompanied John Britten and Desmond Norman on the flight from Bembridge to Sudan in the company's Anson that was the support aircraft for in country operations of two crop spraying equipped Tiger Moths also flown from Bembridge.

In over 39 years of service with B-N David undertook numerous duties including paint sprayer, worker on the Cushioncraft, looking after the vehicle fleet, store man, mechanic and delivery driver. Dave was a well-liked and highly valued employee.

We offer our sincere condolences to David's family and friends in respect of their sad loss.



# **Britten-Norman's First Newsletter**

## **INTERNAL BULLETIN "PLANE SPEAKING"**

BNAPS has recently been given a copy of the first B-N Newsletter, "PLANE SPEAKING", produced in early 1967. Thanks go to Jo Hunt, whose father, Frank Mann, was one of the four B-N directors at a time when the company was expanding rapidly to get BN-2 Islanders into production. "PLANE SPEAKING" Issue No. 1 was written by Desmond Norman and was aimed at inspiring the work force to greater efforts, together with informing newcomers of the origins of the company and providing answers to questions.



**Editor: N. D. Norman, J.W. Lewis**

**Issue No. 1 20.1.1967**

### **INTRODUCTION**

The object of this bulletin, which will be published monthly or at lesser intervals, as occasion demands, is to inform everyone working in Britten-Norman and the associated companies of company progress, the policy behind our various activities and to focus general interest on the goals we must achieve to ensure personal and corporate prosperity.

The bulk of our waking hours are spent at business and the editorial policy of this bulletin will be to expand individual knowledge of our company's affairs so that more personal interest and benefit may be derived from all the activities which make up our day's crock. To assist in this a small editorial advisory panel is being formed on which people from all departments will from time to time be invited to serve. There will be an Assistant Editor initially appointed for six editions to ensure continuity. J. W. Lewis, Jig & Tool Section, has agreed to fulfil this function. He will co-opt two more members to advise on the next edition. Their names will appear in the STOP PRESS section. Readers should advise panel members regarding the kind of information they would like to see published.

### **HISTORY OF BRITTEN-NORMAN**

The company was started as a partnership between Desmond Norman and John Britten in 1951 and specialised in the conversion and export of Tiger Moths for top dressing in New Zealand to the specifications of Jim McMahan. The aircraft were bought at Ministry auctions for £40-£80 each, patched up with brown paper and Lassovic tape and flown to Bembridge, to be completely overhauled and fitted with the fertiliser gear designed by McMahan, in the light of his experience flying during the pioneer days of agricultural aviation in New Zealand after the war.

A number of machines were converted, first in the green shed at the bottom of the Britten's garden and later at Unity Hall, Hyde. These were shipped to New Zealand and sold by Jim McMahan, who used to instruct pilots in the U. K. in summer and drop fertiliser with Tigers in New Zealand in the winter.

The first employee of the partnership was Peter Gatrell and the second was David Williams. Gatrell is now Manager of Micronair Production and Williams is in charge of the company vehicle, fleet and is responsible for aircraft and motor fuel sales. The design of the first Micronair atomisers was put in hand in 1954 because Tigers for fertiliser dropping were going out of fashion. Micronair development was carried out in a wind tunnel built at the bottom of the Britten's garden. The fan was powered by the 55 h. p. Lycoming removed from the first Britten-Norman aeroplane, the ultra light BN-1F. The Micronair is designed to produce superior spray coverage at small dosage rates per acre (a gallon per acre or less) and it achieves this by taking advantage of the principle of rotary atomisation of the spray liquid. Before the Micronair gear was introduced, aircraft used the booms and nozzles familiar on tractor rigs.

Today, over 500 sets of Micronair gear are in service around the world and sales with spares have exceeded the £500,000 mark. Demand continues at a satisfactory level for the new "Compact" unit.

In the early days, however, all was not plain sailing and in order to stimulate sales of spray gear we had to take it into the field and work it. This is how our director, Frank Mann, came onto the scene in 1955. He had arranged some cotton spraying contracts in the Sudan and had bravely ordered some Tigers fitted with the then unproven B-N Micronair equipment.

### **CROP CULTURE (AERIAL) LTD.**

A second partnership, Crop Culture (Aerial), was then formed between Britten, Mann, McMahan and Norman. Two spraying Tigers were built up at Unity Hall and accompanied by an Anson I bought from AST at Hamble for £575, were flown to the Sudan in September 1955 by McMahan, Brunicardi and Norman. The season was technically successful, though financially disastrous. However, the partners had faith in the future and Britten-Norman and Crop Culture were formed into limited liability companies with each of the four partners taking up 25% of the shares of the two companies.

The 1956 spray season was profitable and the Micronair spray gear began to sell. Built up from these origins are Crop Culture's operations in Africa, the West Indies, South America and Australia, and B-N's world-wide spray gear sales.

In later editions of PLANE SPEAKING we will describe in detail some of Crop Culture's spraying operations.

Last year Crop Culture's pre-tax profit amounted to approximately £1,000 000, much of which has been ploughed into the "Islander" development programme.

### **CUSHIONCRAFT**

In 1961 Britten-Norman built, at Bembridge, the second hovercraft ever to lift off the face of the earth. This was the Cushioncraft CC.1, powered by a 150 h.p. Coventry Climax sports racing engine. We shall report on our Hovercraft subsidiary company, now trading as Cushioncraft Ltd, in a later edition.

### **NOTES ON THE NEW FACTORY**

The floor area of the main building is 40,425 sq. ft.. The total floor area with side annexes and near fuselage shop being constructed by our own maintenance staff will be 56,160 sq. ft. The present car park area has been laid out to accommodate a second assembly hall of similar size, when required.

The total budgeted cost for the new factory, car park and approach roads, lighting, heating and plumbing is £156,216 - of which £88,982 has been spent to date.

The contractors' completion date for the main building, car park and approach roads was November 1st, 1966. Late delivery of civil engineering work is not unusual but in our case, without the splendid efforts of those putting up with the very difficult conditions in the new building, the production programme would be very much more seriously affected by the late completion.

The new factory is the subject of a 'sell and lease back with option to re-purchase' arrangement with the Isle of Wight County Council.

Without this timely assistance from the County Council, much of the "Islander" production work might have been lost to the mainland, where aircraft construction plant capacity was more readily available.

## TEST PROGRAMME

The structural test programme, completion of which is essential to airworthiness certification, is now in full swing.

Fuselage testing is complete

Seat testing is complete

Fin testing is complete

Tailplane and elevator testing are almost complete

Flying control system testing is almost complete

## Wing

The first two tests, to 'limit' (the equivalent of  $3\frac{3}{4}$  times normal maximum weight flight loads) and one to 80% of ultimate have been completed. Minor buckling of the non-load bearing leading edge structure indicated it would be prudent for a 2nd stiffener to be added in that region so that this skin buckling does not induce a premature failure of the main spar box. Results of the next tests will be watched with interest. Bending deflection was a little less than the calculated figure of 17 inches at the tip. Eventually, the wing will be tested to the point of failure.

As a matter of interest, the fuselage under test exhibited strength properties in excess of both the British and American requirements. It was not taken through to failure point, as the test fuselage will be used for developing later models of the "Islander". It stood without failure loads at which permanent deformation would normally be expected.

## SALES

### Order Book

At the present time deposits on 44 "Islanders" are held and many more possible orders are at various stages of negotiation. It seems that for a time being it will not be too difficult to find customers for a "Islander" provided we can offer reasonable delivery.

Our Market Survey shows that there are 381 air taxi and commuter airline operators employing 2,656 aircraft on the kind of service for which the "Islander" is designed. In addition, there are 1,376 aircraft in the "Islander's" general category in military usage. The growth rate of the air taxi operations is in the region of 20% per annum. This is slightly greater than the growth rate of the trunk airline operators, whose growth is about 14% per annum, the greatest expansion rate of any industry in the world. (The next fastest growing industry is electricity generating).

## COMPANY EMPLOYMENT (at 19.1.67)

Total number employed	410
Directors	3 full time. 2 part time
Monthly	45
Weekly	365
Direct Production	215
Administrative and indirect production	195
Apprentices	30

## ANSWERS

In this section the Editor and his staff will answer any reader's questions which seem to them to be of general interest. Correspondent's names will not be disclosed if anonymity is requested.

### Staffing

Q. Surely there are too many Chiefs at Bembridge and not enough Indians?

A. There are 215 directly productive men and women and 195 indirect, amongst whom are numbered 50 apprentices. This means that our ratio of non-productive to productive is slightly lower than the aircraft industry average on both sides of the Atlantic, which is 1:1. In fact, in the Cushioncraft Division, who are included above, there are more non-productive than productive people, because this Division is still principally engaged in research.

Also included in the above figures are a certain number of staff concerned primarily with the administration of overseas interests. On the aircraft side we are, therefore, well below the aircraft industry norm. This could be an index of efficiency or it could also be the cause of inefficiency - part of the "high cost of low overheads". Questions of this nature will be easier to assess when "Islander" production settles into its stride.

### Flight Test

Q. What is wrong with G-ATWU's tail that seems to be taking a lot of fixing?

A. The elevator tab, although practically the same as that on the prototype, tends to 'buzz'. Whilst not dangerous in any way, this 'buzz' wears out the tab mechanism very fast and can be felt throughout the aeroplane as speed is increased. In addition, we have had a tail 'buffet' which occasionally appeared on G-ATCT, but was not thought to be serious.

'Buzzes' and 'buffets', as we have discovered, can be quite difficult to cure as they are caused by turbulence generated ahead of the tail. We have tried removing or modifying well over 50 possible sources.

The "buffet" is promoted by the engine cowls and has meant that we shall have to fit moveable cooling gills so that the lower cowl can be made as neatly fitting as possible.

The 'buzz' problem is alleviated by cutting down the span of the tab and keeping it away from turbulent area behind the fuselage and engine nacelles. However, this fix has meant that we have had to change the tab mechanism so that we can still trim the aeroplane with the smaller size tab.

Problems like these call for endless patience, and theory is very little help. However, Mr George Miles and experts from the R. A. E. have both contributed useful suggestions

and we hope we are now in sight of the end of this programme.

## New Factory

- Q. Why have we built a couple of hundred yards of concrete, but missed out the last few feet of the entrance?
- A. The Isle of Wight Rural District Council require that the entrance be tarmacadam and apparently foundations for this type of surface should be laid in good weather, e. g. no frost or rain.

We'll contribute an item on the overall flight test programme next month.

## A LETTER FROM THE ASSISTANT EDITOR

Why me? And what qualifications have I got for this?

I don't know, but I am pleased to have (as you all will) this opportunity to air my views. Because like most of us, I am concerned with being contented at work.

Communication is, I think, the only way by which we can come to understand others' actions. What is happening around we and why we are asked to do something which is incomprehensible to us.

My own conclusions about what I really work for come to a little more than just money which is, of course, the prime reason. If I work for money only, from 8 a. m. to 6 p. m. or 7 p. m., life would be hell and so what I do must become important to me, by doing my best, no matter how insignificant the job - to finish it complete in its entirety by trying to make as near perfect as possible, even though it never comes off.

This is true, not just bull, otherwise Jabroc\* would have driven me round the bend.

I am sure we would all like to work surrounded by the same team spirit that was here in the prototype days, no matter how big the firm becomes - I can see no reason why we can't.

What I have written I believe, as I believe Mr Norman when he mentions personal and corporate prosperity. The most directors can do it set up the work, pour all their funds into the project and rely on us to do the rest. And from where I work if we don't pull our fingers out and build the first dozen 'planes before the summer holidays - all our efforts could have been in vain.

## STOP PRESS

### Editorial Advisory Panel

Harry Goldsmith and John Dimmick have been co-opted to advise on the next edition of *PLANE SPEAKING*.

Most of us, those at the main Airport especially, have noticed that even the most senior (and sober?) can "put their foot in it" sometimes.

### Editor's Note:

\*Jabroc is densified beech wood laminates bonded together and is used in the aircraft industry to make special tooling, jigs and templates for manufacturing and assembly processes.

# FROM THE ARCHIVE

## DESMOND NORMAN'S AVIATION EXPLOITS POST B-N:

### THE FIRECRACKER STORY PART 3 - BID FOR THE RAF ORDER

At the 1982 SBAC Farnborough Show NDN Aircraft announced that Specialist Flying Training Ltd, based at Carlisle Airport, that had been set up to train foreign military pilots, had placed an order for three Turbo Firecrackers, model designation NDN-1T, with options on a further four, the aircraft were being marketed by a new company known as Firecracker Aircraft (UK) Ltd.

Work on the order was started in September 1982 at NDN Aircraft's premises at Sandown Airport, Isle of Wight and the first of the type, registered as G-SFTR, made its maiden flight on 1 September 1983. Test flying for the certification programme got underway on that day conducted by Peter Phillips and Desmond Norman. The Turbo Firecracker was granted its UK Certificate of Airworthiness by the Civil Aviation Authority (CAA) in March 1984.



NDN-1T Turbo Firecracker c/n 005, G-SFTR, with c/n 006, G-SFTS, that made its maiden flight on 18 February 1984 (NAC)

A news item titled "All Set to Take Off" in the Isle of Wight Weekly Post, Friday 9 September 1983 issue, outlined the opportunities presented by Desmond Norman's the new aircraft, particularly for the Isle of Wight community:

*Speculation that the Island could be set for a jobs bonanza was fuelled at a preview of a new aircraft. Businessmen have pinned their hopes on the Firecracker turbo-prop trainer, developed at Sandown at a cost of more than £5m, and soon a decision will have to be taken over whether and where to put it into full-scale production.*

*In the early sixties Desmond Norman, the man at the helm of the Firecracker project, helped to make the decision that the British Hovercraft Corporation should produce the early Islander aircraft which later turned into the best selling aircraft of its type in the world. Mr Norman has designed the Firecracker, and the early planes have been produced by a workforce of under 50 helped by up to 24 workers from the British Hovercraft Corporation (BHC) at East Cowes.*

*BHC's early involvement led to questions that there might be a repeat performance of the sixties link-up after Firecracker Aircraft confirmed that it would need to pair with a company with an established reputation. While BHC has recently been boosted by orders for its "new generation" AP1-88 hovercraft, aerospace work has been hit by the world-wide recession, and it is known there is spare capacity for that type of work.*

Whether Firecracker Aircraft looks for a major industrial producer is governed by orders from the RAF and export customers, and at this stage Mr. Norman was saying very little about any possible BHC involvement. “We would prefer not to enter into that sort of speculation at this stage” said Mr. Norman, although he did confirm that BHC staff had helped produce the first Firecrackers. “That happened because at that time BHC did not have much work and we needed work done.”

Mr. Norman confirmed that the RAF was looking to replace its ageing Jet Provost trainers by the end of the decade, and this could lead to orders for 150 turbo prop trainers starting as soon as 1986. “This would cause us no problem at all,” said Mr. Norman, whose current production facilities at Sandown Airport are geared to a limited production of Firecracker trainers and Fieldmaster crop sprayers. Mr. Norman said if the Firecracker netted “the RAF order it would help its export potential enormously. There is an export potential for us of about 900 aeroplanes in the long run worldwide,” he said.

Those behind the Firecracker's campaign to persuade the Government to buy British face competition from the Swiss PC7 trainer already produced by Pilatus, the American Beech T-34C and the Brazilian Embraer 312 Tucano. On the home front British Aerospace has announced plans for a turbo-prop and a turbo-fan trainer. The Firecracker will sell at between £450,000 and £660,000, depending on the specification laid down by individual customers, which compares favourably with competitors' prices ranging from £750,000 upwards. The aircraft has been produced entirely with investors' money and no cash injection from the British taxpayer, and 18 months ago was boosted by Specialist Flying Training taking up the Firecracker cause and ordering the first three trainers for use by overseas air force trainees.

After its second flight the chairman of Specialist Flying Training and Firecracker Aircraft (UK), Ltd., Sir Peter Wykeham, described the Firecracker as a splendid British product which can really out-perform the opposition.

### **NDN-1T Turbo Firecracker G-SFTR Flight Test and Certification Programme**

Test Pilot Peter Philips and Desmond Norman wasted no time in jointly embarking upon the flight test and certification programme for NDN-1T Turbo Firecracker G-SFTR immediately after its maiden flight on 1 September 1983. Flight testing was completed by March 1984 and the NDN-1T granted its type certification.

Initial flights confirmed that the aircraft flew well, however, the landing gear was not retracted as the CAA had raised concerns about emergency lowering. The next few flights were flown “gear down” to explore low speed handling and performance. There was some concern that the stalling speed might in fact exceed the 60kts BCAR limit, air speed indicator calibration would be checked when more experience had been gained with the aircraft.

The landing gear emergency lowering issue was soon settled to the satisfaction of the CAA and NDN Aircraft and this allowed the full flight envelope to be explored and BCAR compliance assessment test flights to proceed. The early flights had shown up areas where further work was required including the stall speed being too high and lateral stability marginal, directional stability did not raise any concerns and was considered to be good. It was felt at the time that the “deficiencies” were BCAR non-compliances with the civil requirement specification values, the aircraft was at all times safe and controllable and, in retrospect, if the aircraft was being tested as a purely military type changes made during the flight test programme may not have been necessary.

The flight test programme addressed stall characteristics, flight resonance, spinning and recovery, controllability and systems. The main outcomes from the test programme resulting in aircraft modifications were:

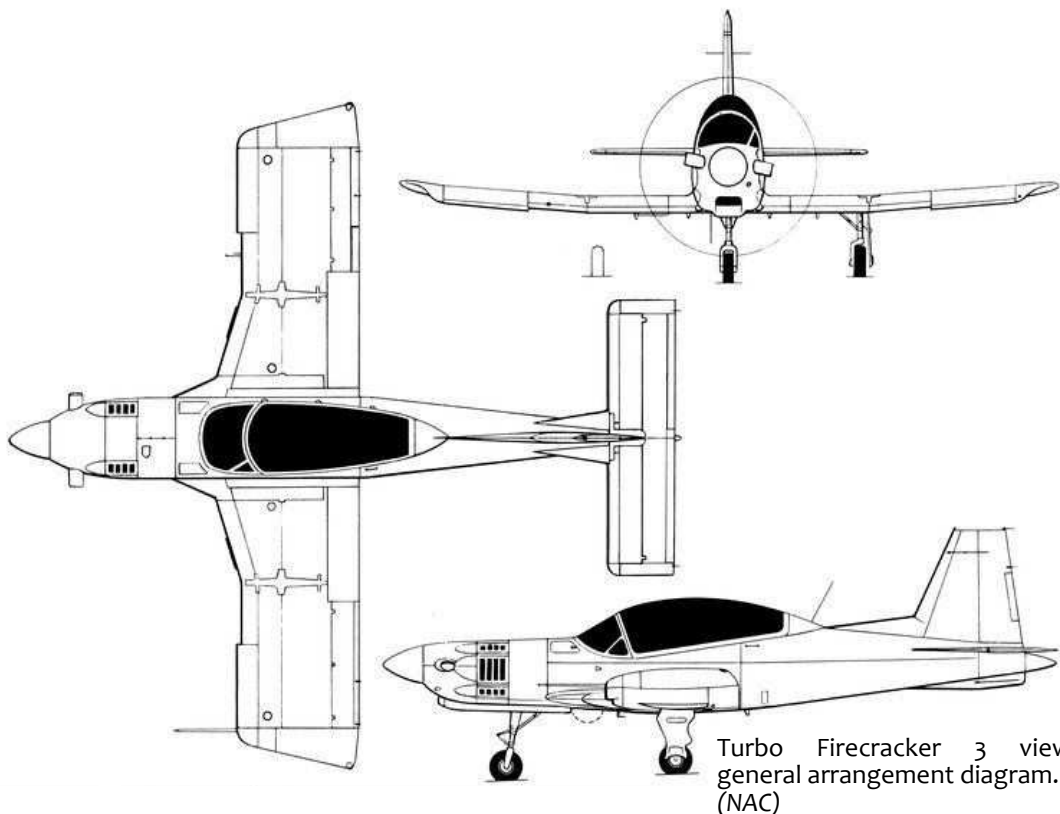
- Modification of the wing leading edge camber to reduce the stalling speed;

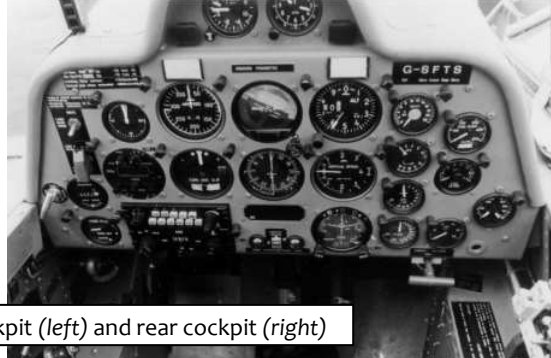
- Incorporation of a “breaker” strip on the starboard wing to minimise the effect of the port wing stalling first;
- Minor changes to aileron control gearing and installation of a ventral strake to refine spinning and recovery characteristics;
- Repositioning of the air pressure pitot mast to reduce air speed indicator positioning error;
- Incorporation of a light spring in the elevator control circuit to improve low speed longitudinal characteristics in the approach configuration.

The flight test programme was completed in around 7 months and involved just over 100 hours of flight during the period from 1 September 1983 and, apart from modifications, the aircraft had remained totally serviceable throughout the period. Type certification was approved and a Certificate of Airworthiness granted on 23 March 1984, NDN Aircraft flight test team were rightly proud of their achievement and praised the help given by the CAA and its Flight Test Department in completing a complex and unique flight test programme for the NDN-1T Turbo Firecracker.

#### **NDN-1T Turbo Firecracker Flight Test by Alan Bramson - Pilot June 1984**

Following a comprehensive evaluation of the flight characteristics of the Turbo Firecracker, Alan Bramson summed up his views on the forthcoming Jet Provost replacement contract, the importance of the selection for British industry and his views on the Turbo Firecracker being the best aircraft suited to the needs of the RAF...





NDN-1T Turbo Firecracker front cockpit (left) and rear cockpit (right)

A number of manufacturers have an eye on the forthcoming Jet Provost replacement contract that, sooner or later, must be placed by the RAF. The Central Flying School has been keen to buy another jet, but I-gather that the Chief of Air Staff has decided that the JP replacement must be a turboprop. In my view this is absolutely correct; the cost of training pilots on jets when some of them may fail after perhaps seventy expensive hours is no longer realistic - particularly when a much cheaper-to-buy and operate turboprop is now available which can reproduce the kind of handling a student will have to face at a later stage.

Short-list contenders for the contract are the Turbo Firecracker, the Australian A-20, the Embraer Tucano, and the Swiss Pilatus PC-9 which is a development of the PC-7. I have flown the PC-7 and the Tucano. Both are beautiful aircraft. but they fly like relics of WW2. When you open the power for takeoff the PC-7 has the acceleration of a lightplane, and since it is much heavier the more powerful Tucano has little more urge. The Turbo Firecracker gives you a real shove in the back. The PC-7 and the Tucano both handle beautifully in the traditional straight wing sense. The Turbo Firecracker flies like a swept-wing design: in fact it more closely represents a modern jet than does the current Jet Provost.

In terms of price an equipped Turbo Firecracker is likely to be considerably cheaper than either the Swiss or the Brazilian aircraft. Not unnaturally, certification of the Turbo Firecracker has encouraged various interested parties to say their piece on television. Thus we had Sir Raymond Lygo, (BAe managing director) telling the taxpayers that his company wants to involve itself with Pilatus because it is a well established outfit. Now British Aerospace are my favourite plane-makers: but I believe Sir Raymond is wrong on several counts. First he should be intent on building what is most suitable for a modern air force. And will the Swiss really give BAe world marketing rights in their new PC-9? Then we had the managing director of Specialist Flying Training tell us that the RAF has always trained its pilots on British aircraft and it is inconceivable that the tradition should cease. Well, that is not a compelling argument; and in any case very many more RAF pilots learned on American Harvards during WW2 than on British Miles Masters.

Surely there can be only one main consideration: the RAF must have the most suitable trainer. "I'll scratch your back if you scratch mine" reciprocal trade agreements (BAe want to sell their Hawk abroad) may be acceptable when dealing with washing machines and bottles of wine: but the training of future RAF pilots is sacred, beyond international trade deals and to be protected at all costs.

Having flown three of these turboprop military trainers, I am in no doubt that Turbo Firecracker is the most suitable on grounds of handling characteristics, price and the fact that it is a home design waiting to provide jobs in the UK where they are badly needed. How about building them at Chester, Sir Raymond, or perhaps Prestwick? And think of the foreign air forces that are in the market for a good modern trainer that is cheaper than the rest.

If more performance is required NDN will be offering the same engine uprated to 750 hp. I can hardly wait to try that!

## Turbo Firecracker at 1984 SBAC Farnborough Show

A rare public appearance of the NDN-1T Turbo Firecracker at the SBAC Farnborough Show in September 1984 was one of the main talking points of the show. On 1 September a new company was announced, Hunting Firecracker Ltd. The aircraft would be marketed as the NDN-1T Firecracker in advance of submitting a bid for the AST-412 Jet Provost replacement contract.

With new brochures promoting the Hunting Firecracker and confidence in the certificated NDN-1T Firecracker type and its proven performance, and Desmond Norman's unshakeable belief that it was clearly best suited to the RAF training requirements under AST 412, Desmond Norman set out to do his utmost to secure the contract, not just for his own



NDN-1T Firecracker G-SFTR at the 1984 SBAC Farnborough Show (Ken Haynes)

company but in the interests of the British aviation industry.

Competition for the AST 412 contract was intense and in later stages political considerations tended to unduly influence the final selection of contenders. Despite exceptional efforts by Desmond Norman and his team during the campaign the final decision was in favour of the Embraer Tucano to be manufactured by Shorts in Northern Ireland. The sequence of events and what happened next for Desmond Norman and his Firecracker will be related in the next issue of BNAPS News Review.

**Hunting Firecracker**

Designed and built in Britain to the Royal Air Force requirement for a new basic training aircraft

- Unique British private venture design
- Project managed by a major UK defence system Prime Contractor to MOD
- Low cost and simplicity of operation
- Handling qualities similar to those of operational fast jets

**Performance Characteristics**

Wing span	24 ft 0 in (7.316 m)
Length overall	27 ft 6 in (8.330 m)
Height overall	10 ft 8 in (3.230 m)
Wing aspect ratio	2.52
<b>Weights</b>	
Empty	2647 lb (1202 kg)
Maximum adwp	3200 lb (1457 kg)
Maximum fuel	1840 lb (834 kg)

Hunting Firecracker Aircraft Limited  
 Registered office: Reading, UK  
 Principal Executive: MARK DOD  
 Sales enquiries: 1 Clarendon Road, Reading, RG2 0AA, UK  
 Tel: (01493 4981)  
 FAX: (01493 4982)

# BN-2 PRODUCTION - PART 1 1964 TO 1968

With B-N's new production facility at Bembridge now being geared up for new build BN-2 aircraft it is perhaps timely to review the various arrangements and locations related to BN-2 production over the past 60 years. Over this time BN-2 Islander, Defender and Trislander variants have been produced in the UK, Belgium and Romania together with assembly of kits in the Philippines. Since the first production BN-2, c/n 3, G-AVCN came off the line at Bembridge in 1967, to date 1253 of the type have been built. The BN-2 is the only British aircraft to have been in continuous production for nearly 60 years.



Bembridge 1967 to 1974, 1994 to 2010.

Britten-Norman via Peter Gatrell



East Cowes 1968 to 1974, 360 kits supplied to Bembridge for final

BHC via George Marsh



Solent 2011 to 2023, kits supplied from Romania.

Alan Saunders



Gosselies, Belgium 1973 to 1979.

BNAPS Archive Collection



Bucharest, Romania 1969 to 2010. Additional kits supplied to Bembridge and Solent.

Romaero via Tony Smart



Bembridge 2025 onwards.

Allan Wright

Construction of the BN-2 prototype was given the go-ahead in January 1964. Work got under way in the 1930s built hangar and adjacent flying club outbuildings on the south side of Bembridge Airport that had been leased for a number of years from the airport land owner as B-N's main works .

Original home of B-N at Bembridge Airport was in this hangar, originally constructed in the 1930s, and in an adjacent building. (Peter Gatrell)



The following images show the original Bembridge Airport hangar (seen above) in use in the early 1950s through to mid-1967 when production activities were concentrated on the new B-N works – a large purpose-built hangar constructed on waste land acquired by B-N to the north east of Bembridge Airport.

View of the hangar in the mid-1950s full of ex RAF Tiger Moths ready for conversion when B-N was involved in the aerial crop spraying business. (Peter Gatrell)



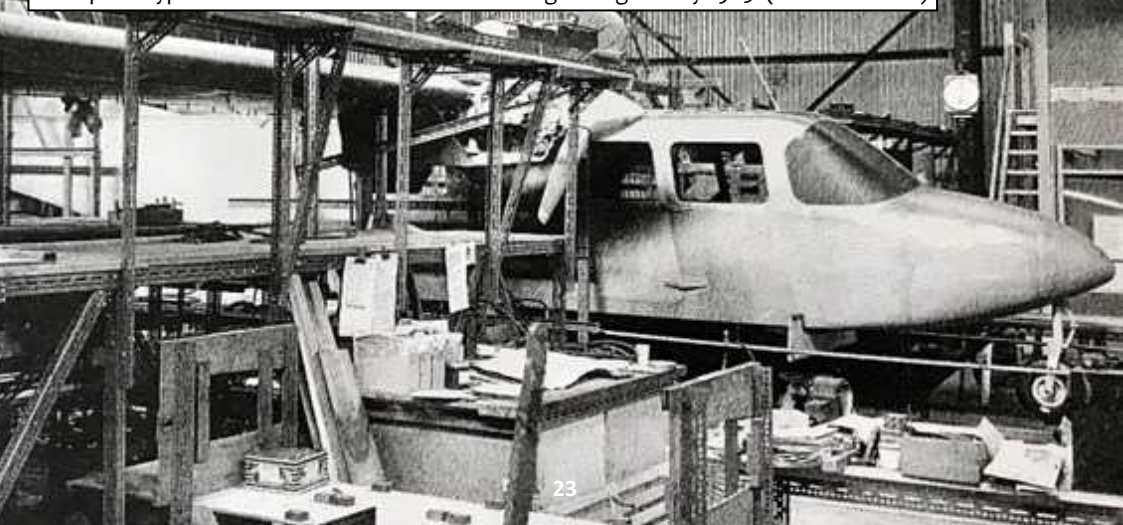
The Bembridge hangar was extended in 1962 to provide additional space for construction of B-N's early hovercraft designs – the Cushioncraft CC-1 and CC-2. Cushioncraft work was later moved to St Helen's Duver as the hangar was needed for construction of the BN-2 prototype. (B-N via Peter Gatrell)

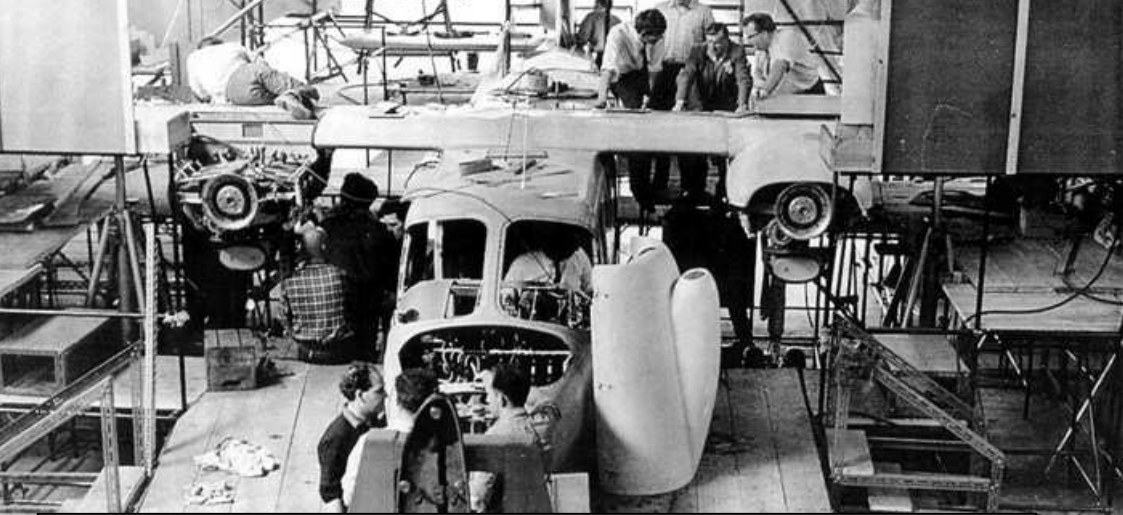


(left) BN-2 fuselage sections in an assembly jig at the workshop on St Helen's Duver in February 1966. (B-N)  
(below) Wing jigs set up in the hangar to build the wings for the prototype and early production aircraft. (B-N via P Gatrell)



BN-2 prototype under construction in the Bembridge Hangar early 1965. (B-N via Jo Hunt)

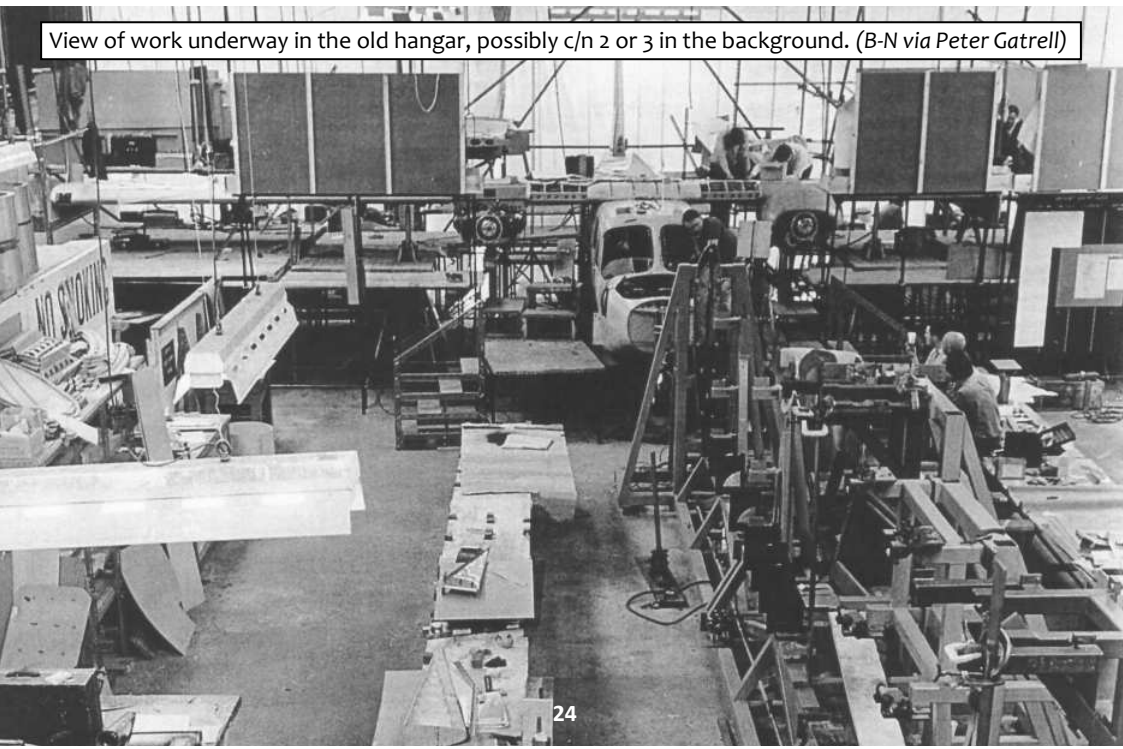




BN-2 under construction in the Bembridge Hangar early 1966. This example could be c/n 3 G-AVCN. (B-N via Peter Gatrell)

Following the decision in January 1964 to go ahead and build the BN-2 the Bembridge hangar became a hive of activity. Wing assembly jigs were set up in the hangar and the prototype BN-2 c/n 1 was assembled there leading to it being rolled out on 10 June 1965 and made ready for its maiden flight that took place on 13 June 1965.

The next two BN-2s were also assembled in the Bembridge hangar and follow on aircraft were assembled in the new hangar. Wings continued to be made in the old hangar, while the assembly was being set up. Soon after the wing jigs and fuselage sections were moved to the new hangar as planned.



View of work underway in the old hangar, possibly c/n 2 or 3 in the background. (B-N via Peter Gatrell)



View of the new hangar and BN-2 assembly line. For publicity purposes BN-2 c/n 3, G-AVCN, is positioned as though it has just been rolled out prior to departing for the Paris Salon in May 1967. (B-N via Peter Gatrell)



When Britten-Norman's new factory is in full swing at the end of this year it will undoubtedly draw praise as one of the finest yet conceived for light aircraft production. Under the roof of this single 500ft x 100ft building will be housed virtually the entire construction process for the Islander from raw material to flight-ready aircraft. Although headroom throughout the building is generously in excess of that needed for the Islander this will be reduced by a floor over most of the area for use as storerooms and the like. At ground level at the southern end of the building is the metal forming and raw materials handling section (where a 1,500 ton rubber press is soon to come into operation). Next, on the right-hand side of the hangar, is the wing assembly section progressing from a boom-gluing jig to spar assembly frames to a pair of torsion box assembly jigs and then to a pair of wing final assembly jigs. To the left of this area is the detail fitting shop, and such sub-assembly jigs as those for the empennage and control surfaces, doors, cowlings and so forth. Fuselages will be made in an extension building adjacent to the left-hand side of the production flow; these assemblies will enter for a convenient mating with the wing. As seen in the heading photograph of this article, the final assembly area will

accommodate up to six wing/fuselage groups. Substantial sliding doors then separate the paint-spraying bay from which the almost complete machines will pass to the pre-flight section.

At the time of the Flight visit there were five fuselages in final assembly and all jigs were full of major components for at least 15 aircraft. Many parts and sub-assemblies were to be seen for the 30th machine and beyond, and B-N does not expect any hold-ups in the supply of bought-out parts and equipment. The third Islander (the second definitive production machine) should fly this month and it is hoped that there will be seven aircraft flying by June.

The labour force is approaching capacity (160 workshop and 160 management, technical and administration) for the planned production rate which should reach one aircraft per week by the end of this year and then, with learning curve experience, two per week by the end of 1969. From the evidence already at Bembridge, plus the proven ability of this company to achieve miracles in a very short time, there seems no reason to doubt that the production target can be reached.

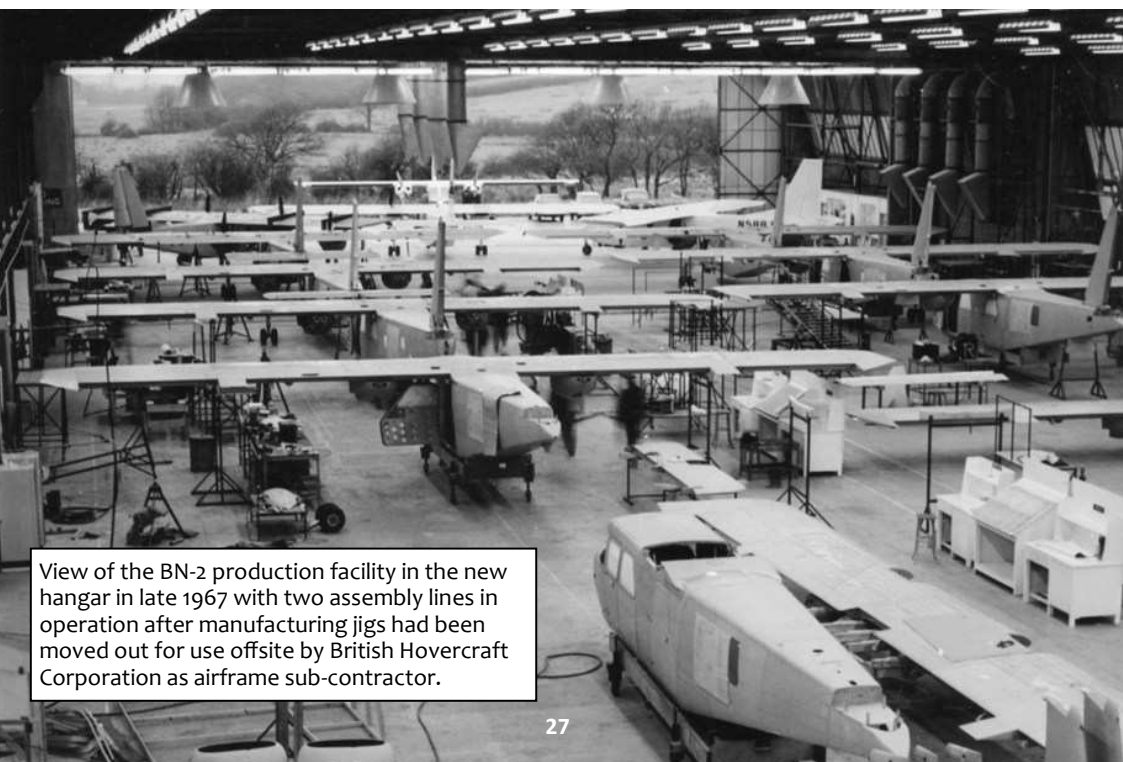
However, it was not long before there was a major change brought about by the world-wide demand for BN-2s that the company was obliged to undertake a complete reorganisation and expansion of its production capability.

In early 1968 B-N announced that the whole of the new hangar floor space would accommodate the final assembly line capable of handling ten aircraft in work. The manufacture of all detail parts together with minor and major airframe sub-assemblies would be put out to sub-contract to British Hovercraft Corporation at East Cowes on the Isle of Wight.

The text of Desmond Norman's letter follows:

#### **Expansion of Islander Production with BHC Subcontract**

*The worldwide demand for the Islander is building up to such an extent that we now need to reorganise our entire production. The latest orders brought back by Mr Britten and Mr Maynard from their overseas visits last week have brought the order book to well over 200 units.*



View of the BN-2 production facility in the new hangar in late 1967 with two assembly lines in operation after manufacturing jigs had been moved out for use offsite by British Hovercraft Corporation as airframe sub-contractor.

To meet this demand it is necessary to utilise the whole floor space of the new factory for final assembly. This means that manufacture of all details together with 11 minor and major sub-assemblies must be put out to subcontract.

After the most careful consideration of all the factors involved and in particular, those relating to employment in the Isle of Wight, we are pleased to announce that agreement has been reached with the British Hovercraft Corporation at Cowes whereby that company assumes upon a subcontract basis responsibility for the whole production process, including the final assembly in our factory here at Bembridge. By placing the entire manufacturing process under this one control we have been able to obtain BHC's cooperation in assuring the greatest possible continuity of employment for all who are concerned with Islander manufacture.

Britten-Norman will continue to be entirely responsible for all other functions of the company, for example design, development, testing, final inspection, sales, equipment buying and product support. Cushioncraft development will continue as programmed.

Work will start on two new models of the Islander, one being a turbo-charged version of the standard aircraft and the other having a 'stretched' fuselage. The efficient and successful development of these and other new products is essential to the continued expansion of Britten-Norman's sales.

British Hovercraft Corporation had previously been awarded a subcontract for manufacturing BN-2 wings. This was superseded by a subcontract for manufacture of 236 aircraft for B-N.

The story of BN-2 production will be continued in the next issue of BNAPS News Review with Part 2 covering BHC's activities and the move to set up BN-2 manufacturing in Romania.

### **Construction Numbers**

An aircraft's Construction Number or "constructor's number" abbreviated to c/n, is a unique identification for each aircraft built by a manufacturer. It's like the "VIN" (Vehicle Identification Number) on a car. It is also known as "MSN" - manufacturer's serial number, or just "SN" - serial number. Unlike the external registration markings (or "tail number" - like a number plate for a car), which can change many times in an aircraft's life, a c/n is the true identity of an aircraft. The c/n is not usually carried externally on aircraft and can be found on an identity data plate somewhere on the airframe. For the BN-2 this data plate is fixed to the upper internal edge of the pilot's door frame.

Britten-Norman started at c/n 1 for the prototype G-ATCT, and then ran sequentially as each aircraft was built. Production started in Romania with a kit, c/n 85, supplied from Bembridge. This was reallocated c/n 601, and then there were two production lines, both running in sequence.

When the Fairey take-over took place, the Bembridge production transferred to Belgium, but continued in the same sequence. However, when numbers approached 599 there need to be a rethink, and the following construction number sequences were created: 1001 onwards for Belgian production of Trislanders; 2001 onwards for Belgian production of Islanders and Defenders; and 3001 for Islanders constructed in the Philippines.

When Belgian production ceased with the collapse of Fairey, the Romanian sequence was in the late 900s, so a new sequence was started at 2101. When the Defender 4000 was created in 1994 a new sequence was started at c/n 4001 for all BN-2T-4S and BN-2T-4Rs.

Today this sequence continues as the Bembridge production with c/n 2317 being the aircraft currently in build.

We will list all the construction numbers used in more detail in the next BNAPS News Review.

# B-N Aircraft News *from BN Historians*

**7** (BN-2A-26) C-GSAD Matane Air Services, Matane, Quebec, Canada. Registered to 9221-8908 Québec Inc, St-Augustin, PQ 18.9.25.

**719** (BN-2A-26) VH-IZH Torres Strait Air, Horn Island, Queensland, Australia. 15.9.25.

**816** (BN-2A-27) VH-89M Colville Aviation Services, Atkinsons Dam, Queensland, Australia. To Torres Strait Air, Horn Island, Queensland, Australia. 11.9.25.

**847** (BN-2A-26) Ng7TS Air Charter, San Juan, Puerto Rico. 2025. Operated as Air Flamenco. Re-registered **N906GD**.



N906GD (c/n 847) at Isla Grande (Air Flamenco)

**2040** (BN-2A-26) Ngo8GD Island Air Charters, Fort Lauderdale, Florida. Registered to Corpus Terra Investments, Hialeah, Florida. 10.9.25.

**2212** (BN-2B-26) D-ILFH FLN - Frisia Luftverkehr, Norddeich, Germany. Noted at Manston 21.3.25. To Daniel Brem-Wilson, Biggin Hill, Kent. 6.5.25 as **G-BPXS**.

**2253** (BN-2B-26) D-IEST FLN - Frisia Luftverkehr, Norddeich, Germany. Noted at Manston 21.3.25. To Daniel Brem-Wilson, Biggin Hill, Kent. 29.4.25 as **G-BTLY**.

**4005** (BN-2T-4S) G-SURV Britten-Norman. Noted outside at Solent 11.11.25 and again 27.11.25 doing taxi runs. For Xen Aviation, Georgetown, Guyana.

**4009** (BN-2T-4S) G-BWPO Britten-Norman. Allocation to ECT Aviation Lyon, France withdrawn. Allocated to World Mobile Stratospheric, Ipswich, Suffolk.



G-SURV (c/n 4005) during taxi trials at Solent 27.11.25. (Ian Wikberg)



## FACEBOOK GROUP ROUNDUP *by Allan Wright*

BNAPS have a thriving community on our Facebook Group page ([www.facebook.com/groups/BNAPS](http://www.facebook.com/groups/BNAPS)) - if not a member, we encourage you to join!



**5th November** - Jim Matthews posted a picture of the 1000th BN-2 delivery which took place at Bembridge on 7 May 1982 when G-MICV (c/n 2106) was handed over to the Cyprus Ministry of Interior. This prompted a further post on 8th November of G-MICV in 2000 when it returned to Bembridge for a major refurbishment and overhaul.



Arthur Bridle, the ferry pilot, remembered it well! "The route was Paphos-Rhodes-Corfu-Rome Ciampino-Cannes-Clermont Ferrand-Bembridge. If I remember correctly we counted 26 minor fuel leaks and a rough running right engine! That's why so many stops home."

It returned to service in February 2002.

**9th November** - Howard Marsh posted this picture of Air Mahe's first two Islanders VQ-SAC (c/n 287) and VQ-SAH (c/n 384) taken in June 1975. As BNAPS members will know we have the front fuselage of VQ-SAC at the WM&H Museum being restored as an "Islander experience" simulator.



A further post was an interesting story told by John Upton-Desobry "I remember a story concerning Roy Marsh and an Islander that needed to go to Kenya for some reason. Perhaps someone could

confirm it or otherwise? A direct flight Seychelles - Mombasa, 950nm, would be too far for a BN-2 so Roy's plan was to fly SW to land on one of the Seychelles Outer Islands to refuel - could have been Astove which is about 560nm from Mahé. Unfortunately the weather wasn't good and he couldn't find the island in these days before GPS. He continued towards Madagascar with fuel getting low and suddenly spotted another coral island with an airstrip. Upon landing Roy noticed a Tricolore flying and a detachment of French soldiers lined up to greet him. I think this island could be Grande Glorieuse - I recently met a French guy who did 6 months in the small garrison there when he was in the army - the ownership of the island group is disputed between Madagascar, Comoros and France. The soldiers had apparently thought it was their Commander flying in from Mayotte. Roy, who always looked very 'British', had to enquire where he was. Anyway, they let him refuel and off he went. This is a great story, but, was there fuel on Astove (or Grande Glorieuse) in those days? Astove to Mombasa is 600nm so, if not, Roy would have had to carry about 100 imp gallons with him, plus a ladder and a pump?"

Howard Marsh replied with: "Yes that was an amazing story. His guardian angels were working overtime. Due to circumstances, he reckoned if he flew half way he could leave 88gals on the island and fill up with the other two drums from within the fuselage, none connected to the aircraft fuel system, reach Kenya, return to the same island and refuel with the 88gals left behind earlier to take him back to Mahé. Weather was bad and now flying



below the clouds the compass had been replaced the day before. He was well and truly lost, he put his life jacket on and the dinghy ready when the tanks read empty and called a mayday. That call was picked up by the French who vectored him to their island. He never tried that again, so lucky, all ended well.”

**4th November** - Peter Chick posted two pictures from the early days of John Britten and Desmond Norman partnership to convert ex-service Tiger Moths for aerial crop spraying. In The Early 1950s Bembridge Removals firm, Lacey’s, loading Tiger Moth G-ANRH into their lorry. The pictures are from Lacey’s IOW Removals & Storage’s Facebook site. These photographs record their removals vehicle parked up in George Street, Ryde, close by the old Commodore Cinema premises where De Havilland DH.82A Tiger Moth G-ANRH had been converted for crop spraying and on this occasion was being moved to Bembridge airfield. Unfortunately the Aircraft was lost when it crashed in the South Camerons in November 1957. Pictured on the lorry’s tailboard is Peter Gatrell.

Peregrine Fitzgerald added this footnote: “Colonel Forester Britten owned the Commodore in Ryde and indeed another

picture house in Newport along with a number along the south coast. Forester was John Britten’s father, he was a tremendous character as was John’s mother Zoe. The Tiger’s were converted in an unused church hall next to the Commodore and then taken to Bembridge. Some work was done at the shed opposite the stables at St Denis, the Britten’s house at Bembridge where some of the BN-1F was built, mainly by Peter Gatrell who was employee number one of B-N. He is a tremendous chap, like many IoW folk, a fantastic artisan able to turn a hand to anything, he stuck with Jim and Frank when Crop Culture and B-N was split up, I think. Famous story of Dad taxing a Tiger without wings from St Denis down to the field under own power!!

Small interesting side story, one of the old man’s favourite movies was *The English Patient* as you might recall a Tiger moth and a Boeing Stearman featured prominently therein. Ma was of the view that the actress Kristin Scott Thomas (daughter of a pilot incidentally) was really the attraction and she may well of have been right! The point of my story was that the Director of the movie was Anthony Minghella (other movies include *Truly Madly Deeply*, *The Talented Mr Ripley* and a fair few others, all rather good in my view!) Anthony’s Ma and Pa had a cafe in Ryde and went into the ice cream business on the island and Forester stocked their products at all his venues. Anthony had a summer job at the Commodore and I assume would have of seen the Tigers coming and going (don’t know if the time line stacks up, but we always liked to think so!) Anthony’s younger brother is also in the TV movie game, he was heavily involved in the TV series *Merlin* and used Island place names for many of the villages and towns in it, which always made me smile. Anthony sadly died far too young in 2008 - great guy from a great family. Interesting spot in many ways is the Isle of Wight!!



**6th November** - Gabriel Pinto Villalobos posted these interesting pictures from Chile. There are two Islanders currently use din Chile - CC-AXS (c/n 2248) and CC-PAC (c/n 2166) operated by Archipiélagos Servicios Aereos from Ayacara Airport in Southern Chile.

**5th November** - Steve Allen submitted this picture of G-SURV (the Defender 4000 prototype) at the 1995 International Air Tattoo, Fairford. This prompted the question of how many Defender 4000s had been built. The answer is 17 - c/ns 4001 to 4020. Of these 4007, 4013 and 4020 were not completed.



G-SURV is currently being refurbished ready for delivery to Xen Aviation, Georgetown, Guyana. (See picture on page 29)

**30th August** - Jay Aileron posted this picture of 5 Trislanders lined on the south grass park (now the main terminal car park) at Guernsey, reminding us of the “good old days” of Aurigny Air Services operations.



## The Moose Jaw Glider by Yannick Therien - Facebook 22nd November

Yannick posted on Facebook a “long-ish” snapshot on the life (and fate) of c/n 616, N616GL:

In September 2000, I picked up N616GL from Global Aviation in Villeneuve, Alberta, Canada and flew it to Tortola Beef Island, British Virgin Islands as my first mission for a new employer, Fly BVI Ltd who had just purchased the aircraft.

I had never flown an Islander before, but it is a very forgiving machine. My wife was onboard, as we were relocating to the BVI for a year. Also on board was an AME [Aircraft Maintenance Engineer] contracted for the ferry flight, along with his wife (I am no mechanic other than some puttering on small engines).

The original plan was to fly the 3,100nm distance in 6 to 8 legs. It turned out to be more than twice that (16 legs). For those familiar with the Islander’s fuel system management, you will know that the main tanks are used first (2.5hrs), and then when the props start hunting, it is time to switch to the outer tanks which hold 2hrs of juice. Therefore, on a VFR flight the endurance is 4hrs with the required 30min reserve.

For the first 2hrs of the flight, everything went smoothly. Our route took us about 12nm south of Moose Jaw AFB on the way to Minot International, North Dakota to clear US Customs. At the time (September 2000), Moose Jaw was where NATO was doing its flight training in the CT-155 Hawk (BAE Hawk T2).

Exactly 2.5hrs into the first leg, as if on cue, the props started hunting and I switched the fuel selectors to the outer tanks. Then both engines started sputtering and quit at the same time. Instinctively I switched the selectors back to the main tanks which brought the engines back to life, but only momentarily because those tanks only had fumes left. Then they quit completely, regardless of the fuel selectors’ position. This being my first time in this aircraft type, I thought I did something wrong (my flight experience was only 1,500hrs, mostly on PA-31 Navajo/Chieftain).

I immediately hit the “Nearest APT” button on my borrowed handheld GPS (this was in 2000, no such things as dash-mounted electronics), and Moose Jaw AFB was highlighted on the screen 12nm behind me at my 8 o’clock position. So I feathered the props, executed the turn whilst pegging 65kts on the Airspeed Indicator (those who flew it know that 65kts is the ONLY number worth remembering), and contacted MJW Tower to declare Mayday and advise them I’d try to make the field. I was at 9,500ft ASL and the airport sits at 1,900ft; so I had 7,500ft to glide 12nm in an unpowered metal brick.

The AME, sitting in the co-pilot seat, knew exactly what situation we were in, but our spouses in the back rows were oblivious to our predicament. I instructed them to adopt the brace position using all the pillows we had on board. At first they thought I was joking, but when I turned around and they saw my face, they knew it was the real deal. For context, it was the first time I took my wife up in an airplane...

I was scanning the fields and roads up ahead in case we didn’t make it to the airport. It was not a reassuring sight because of all the power lines along the roads. I somehow made powerless glide to the short straight-in runway, with only a few feet to spare clearing the perimeter fence.

After stopping on the short perpendicular runway between the two long parallel ones, a dozen of NATO Hawk jets came in to land. It was an eerie scene. I was met by the military emergency vehicles and eventually towed to a remote corner of the Air Force Base.

Once the aircraft towed, the Base Supervisor (I assumed) asked me how long before I could depart again, Moose Jaw CFB not being a civilian/commercial airport. I told him that we’d try to be quick assessing the problem and if he would be so kind as to send the fuel truck over. He looked at me like I was from another planet and said: “We don’t do AvGas here, only Jet Fuel”. I then asked him if we could borrow a step-ladder, and perhaps a jerrycan and a hose to climb onto the wing and transfer fuel from the Outers (we knew they were full) to the mains. His answer was: “No we can’t, it’s a liability issue”. Damn!

So we took a taxi to the nearest hardware store to purchase a small ladder, a 5 gal jerrycan, and a shower hose. Upon our return we opened up the wing inspection panels to try and locate where the problem was, without success. Anyone who's ever done work on an Islander will know that an electric piston arm moves a rotary fuel cock back and forth between the main's and the outer's ports. That seemed to work as designed. The "Feeding from Outer" light in the cockpit indicated the extended state of that piston arm as expected. Since we felt we were overstaying our welcome, we proceeded to transfer enough fuel from the outers to the mains in order to take-off and fly to the nearby civilian airport (Moose Jaw Muni, about 10nm northeast) to fill up the tanks and continue our troubleshooting. I can still taste the AvGas in my mouth.

We were not able to find the cause of fuel starvation and decided to continue on our way with 2hr legs (+30min reserve). What was most puzzling was that when performing a 2,000rpm run-up and switch tanks back and forth, the engines ran fine and the "Feeding from Outer" light came on as expected.

It wasn't until St-Louis, Missouri that we attempted some more troubleshooting. We had some AMEs from an Aviation Missionary Fellowship hangar look at it but they were also stumped. It was then that I thought of calling an AME at my previous employer in Victoria BC, who operated one Islander (C-GILS c/n 416) to shuttle prisoners from Vancouver Island to Vancouver, to see if he could find a diagram of the fuel system and fax it to me in St-Louis.

As soon as the drawing came out of the fax machine, I saw it! Next to the piston arm symbol were two distinct part numbers, let's call them A and B. And next to that, two different anchor points matching those letters. That was it. A short arm and a long one. So we had the short one, but erroneously attached at the long anchor. So when the piston extended fully, triggering the "Feeding from Outer" proximity switch, the fuel cock only moved a fraction of the intended travel, thus still feeding from the mains fuel port. BINGO! This is why the engines ran fine while doing a run up on all tanks. We thought we were testing the outers, but it was still drawing fuel from the mains.

So, I thought our 2hr legs odyssey had finally come to an end, but alas, no. Neither the Canadian AME travelling with me, nor the FAA AME's in St-Louis were willing to unscrew 4 bolts and reposition the piston arms to their proper anchor points. This liability thing again.

To give a bit of background on c/n 616, I was told it had been ferried to Canada from Israel [in 1998] with belly tanks installed. So I assume the fuel system hardware wasn't re-installed properly once in Canada. *[It remained US registered]*.

Skipping ahead several more 2hr legs and many days, with more fuel siphoning in the southern Bahamas before the jump to Turks and Caicos, we ended up in Tortola in the BVI without further incidents, other than having to pay off Customs Officers in Punta Cana, Dominican Republic so they wouldn't take the aircraft apart for a "customary inspection".

A day after we arrived at Beef Island, Fly BVI's AME opened up the wing inspection panels to switch the piston anchors, and found corrosion on the wing-spar caps. He then immediately grounded the aircraft. For a few months, my employer looked for a replacement parts, but later abandoned the idea, and instead we ended up having some AME's come from Israel and proceed to repair the corroded parts. It took several months.

Toward the end of Summer 2001, the aircraft was deemed airworthy again and I flew it a few times with some apprehension - after all, the aircraft had tried to kill me and my wife. I even carried members of Sir Richard Branson's family around when our more luxurious twins were not available.

I left the Islands a few months later and soon learned that one of my colleagues had ditched N616GL in the sea after running out of fuel. He and his passengers were able to swim to shore with only minor injuries. According to my friend, he had taken the completely fuelled up aircraft on a sightseeing charter around Tortola (luckily) with a few passengers. After 2.5hrs, when he switched to the outer tanks, both engines quit and the rest is history. Sounds familiar? The reason the outer tanks' contents were unavailable is because a

company AME had started some work the night before and had either wired the outer tanks lines shut, or disconnected the piston arms, and failed to leave a placard in the cockpit. So unbeknownst to him, the pilot took off thinking he had an endurance of 4.5hrs, but really only had 2.5hrs.

After a few months, they fished N616GL off the shallow bottom and dumped it in the mangroves near the runway at Beef Island. The wreck was subsequently destroyed by fire.

I know this was a long winded story, but I hope perhaps some of you found it interesting.

I am now an A330/321 Commander and Line Check Airman with a Canadian carrier and this adventure still features as one of my most exciting. Cheers!

**History of c/n 616:** Registered G-AYBA 6.4.70; first flew 23.7.70 as a BN-2A at Baneasa , Romania; to UK 28.8.70. Registered 4X-AYN 2.71. Re-registered G-51-616 for test flying 3.71, and reverted to 4X-AYN for delivery to Nativ Air Services, Israel 26.3.71. Transferred to Kanaf-Arkia 1.74. Leased to Olympic Airways, Greece as SX-BBY 4.74, returned 10.74 and leased again to Olympic as SX-BBY 4.75 to 10.75. Remained in Israel until sold to Global Aircraft Industries, Alberta, Canada as N616GL in 1998. Sold to Air BVI 9.00 and written off 18.1.02.



C/n 616 as SX-BBY at Athens with SX-BBS (c/n 621) (BNH Collection)



In Israel as 4X-AYN (BNH Collection)



N616GL during inspection after ditching. (BNH Collection)



Dumped at the end of the runway at Beef Island, Antigua. (BNH Collection)

## Britten-Norman appoints Richard Milne as Chief Operating Officer and Max Levy as Production Director to drive Islander and Defender production growth



Britten-Norman has appointed Richard Milne as its new Chief Operating Officer (COO), a role created to drive efficient aircraft delivery, support the company's growth plans and scale engineering operations. Milne brings over 30 years of aerospace experience, including senior leadership roles across design, maintenance, and manufacturing, most recently as Manufacturing Engineering Director at GKN Aerospace. As COO, he will lead the day-to-day engineering functions, design, manufacturing, supply chain and aircraft maintenance, focusing on improving efficiency, ensuring on time delivery and upholding the Islander's world-renowned safety, quality and durability.

Britten-Norman has also appointed Max Levy as Production Director. Max brings over 30 years of international experience in aerospace, automotive and engineering, including senior roles at

General Motors, Cobham Engineering, AIM Aviation, Beagle Aerospace and Tods Aerospace Group, with expertise in lean manufacturing, assembly and composite fabrication.



### Major milestone reached in UK-built Islander production

Britten-Norman has passed a key milestone in restoring full Islander aircraft production to its Bembridge facility on the Isle of Wight. Over half of the first UK-built Islander is now assembled, supported by new investment, facility upgrades and a growing workforce. The shift marks the return of complete Islander manufacturing to the UK, as major structures were previously built overseas. Wing assembly is due for completion later this year, with final assembly for early 2026 and first delivery in spring 2026. Since reshoring in 2023, Britten-Norman has invested in advanced manufacturing technology and expanded its workforce by more than 40%. The company is also enhancing operator support to improve parts availability and service. Demand for the Islander remains strong, with firm orders and multiple Letters of Intent.



### Relaunch of the Britten-Norman newsletter

In November, Britten-Norman relaunched its external newsletter, marking an important step in strengthening communication with customers and building confidence in the positive changes



underway at the company. Since Ben Smith, Head of Aftermarket, joined the team, Britten-Norman has focused on investing more time and effort into keeping customers informed, engaged, and assured of the company's progress. The newsletter has been fully redesigned with a modern, informative format, and each edition will share key updates and news from the previous quarter. This provides customers with clear insight into ongoing improvements and developments across Britten-Norman. The refreshed newsletter reflects the company's wider commitment to proactive communication, helping to build trust, reinforce confidence, and strengthen customer relationships. Sign up to receive the newsletter using the QR code:



### **Britten-Norman and World Mobile Stratospheric Partner to Demonstrate Airborne 5G connectivity**

World Mobile Stratospheric (WMS) has partnered with Britten-Norman to demonstrate a pioneering airborne 5G system using a BN2T-4S Islander. The collaboration aims to show how high-altitude telecom networks can connect the unconnected, providing resilient 5G coverage to remote and disaster affected regions. WMS, a joint venture between World Mobile Group and Indonesia's Protelindo, is developing a stratospheric connectivity platform to deliver affordable, global communications. The demonstration with Britten-Norman will test how aircraft-based systems can extend mobile coverage and restore communications rapidly after natural or man-made disasters. As part of the project, WMS has acquired a Britten-Norman Islander equipped with an advanced phased array antenna to support real-time 5G over a 15-kilometre radius, building on over a decade of pioneering work by the former Stratospheric Platforms Ltd.



*Artists impression*

### **Britten-Norman launches OEM-Backed aircraft brokerage and trade-in service**

A new Aircraft Brokerage and Trade-In Service has been launched to support Islander operators through the full fleet lifecycle. The programme manages the sale, trade-in, or refurbishment of existing aircraft, allowing operators to transition to new Islanders without disrupting operations. The service is already active, with Britten-Norman marketing two BN2A-21 Islanders for CAE Aviation. Previously operated in surveillance roles, both aircraft can now be reconfigured for commuter or cargo use.



Leveraging OEM expertise and comprehensive records, Britten-Norman manages remarketing, import/export procedures and engagement with buyers worldwide. Aircraft can remain in service until replacements are delivered. With increased UK production of new Islanders, the service offers operators a streamlined, OEM-managed path to fleet renewal, covering everything from legacy aircraft to new aircraft delivery.

### **Rt Hon Michael Portillo and TV crew visit Britten-Norman in Bembridge to film new show**

Monday 18th August was an exciting day at Bembridge as Britten-Norman welcomed the Rt Hon Michael Portillo and his crew while filming Great British Railway Journeys on the Isle of

Wight. The team visited to feature the company's new build production line, and the weather held long enough to capture footage of Michael Portillo with William Hynett OBE at the airfield and inside Hangar 2. During the visit, Michael explored the training aircraft and interviewed William about Britten-Norman's history, its roots at Bembridge and the global impact of the Islander. The crew also spoke with New Build Production Manager Pete Dowers about his long service, his upcoming 500th aircraft milestone, and his role in developing the new production line. The day concluded with an interview with apprentice Ellie Bayne, who shared insights into her training and the skills involved in aircraft building. It was a fantastic opportunity to showcase the work happening at Britten-Norman. The episode will air on the BBC, although it may be up to a year before broadcast.



### **Britten-Norman features in The New York Times**

Britten-Norman has been highlighted in the New York Times in a feature about the Isle of Wight's local economy, showcasing the company's new-build production line following a visit to the Bembridge facility by a journalist, along with a separate photography and videography teams. Earlier this year, journalist Peter Eavis visited Bembridge and met with members of the production team before renowned photographer Catherine Hyland visited to capture the company's site and team in photos and video. The article explores the challenges and successes of the Isle of Wight as an island economy with a rich manufacturing heritage. It highlights the Islander's production journey, which moved to Romania in the late 1960s before recently returning to the island. The piece also includes insights from long-serving team member Pete Dowers, who joined Britten-Norman in 1978 and shared his strong belief in the Island's enduring role in manufacturing.



### **Late News: Britten-Norman BN-2T-4S approved by TCCA in Canada**

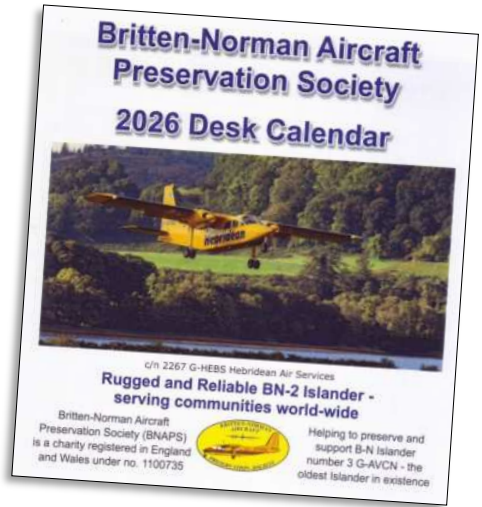
B-N has received Transport Canada Civil Aviation (TCCA) type certification for the BN2T-4S.

The BN-2T-4S, certified under TCCA Type Certificate A-92, also includes a series of additional enhancements that further elevate its operational effectiveness, including an increased Maximum Take-Off Weight of 8,925 lbs.

# 2026 BNAPS Desk Calendar

The 2026 BNAPS Desk Calendar consists of a series of selected images of the rugged and reliable BN-2 Islander that has been serving communities all over the world since 1967 when Islander G-AVKC was delivered to Loganair for its Highlands and Islands passenger, freight and medical evacuation operations in Scotland – services that are still operated by Islanders today, in Scotland and world-wide. Calendars are in a CD style case with separate pages for each month.

Price is **£8** plus £2UK carriage; overseas carriage at cost. To place your order please contact: [sales@bnaps.org.uk](mailto:sales@bnaps.org.uk)



## Supporting BNAPS to preserve B-N Islander G-AVCN

### BNAPS News Review (BNR)

We are always looking for news and feature articles for inclusion in BNR. If you would like to submit anything regarding B-N aircraft, past or present please contact the Editor. We'd really like to see pictures of BN aircraft from where you are, or where you travel to!

## Latest BNAPS Postcard



The latest BNAPS postcard depicts prototype Islander c/n 1 G-ATCT on the beach at Bembridge Harbour, on 26 September 1966, after its flight from

Bembridge School with a full load of young children on board. Photo courtesy of Tony Sawkins who happened to be on the beach and was able to take this remarkable photo of G-ATCT.

*This postcard is now available at £1.50 plus postage at cost.*

We are able to publish bespoke aircraft postcards, from your own image if required. Minimum quantity is 5 postcards with text and logo at no extra charge.

**For postcard enquiries and orders, please email: [norman@bnaps.org.uk](mailto:norman@bnaps.org.uk)**

## B-N Beanie Hats

Beanie hats are French Navy Blue and carry original style B-N logo in yellow.

Hats are priced at £15, including UK carriage of £5. Overseas carriage will be quoted at cost.

To order email [sales@bnaps.org.uk](mailto:sales@bnaps.org.uk)



## 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 at [membership@bnaps.org.uk](mailto:membership@bnaps.org.uk)

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.**

## Viewing G-AVCN

If you are planning to visit the Wight Military & Heritage Museum, there should be BNAPS people present every Thursday from 10am until 2pm. For Museum details see [wmahm.org.uk](http://wmahm.org.uk)

## BNAPS



BNAPS has a very active Facebook group page. We encourage you join - search for “Britten-Norman Aircraft Preservation Society”.

BNAPS is represented on line at: **[bnaps.org.uk](http://bnaps.org.uk)** (an updated web site *is in our future plans*).

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: 7, William Close, Fareham, Hampshire. PO14 2PQ

Trustees: Bob Wealthy (Chairman), Bob Wilson, Guy Palmer, and Allan Wright.

### **Please note:**

*Whilst BNAPS has contact with Britten-Norman from time to time, as a charitable trust BNAPS is an independent organisation.*

## BN-2 Production History

BN Historians produce a “printed to order” version of the BN-2 Production History in loose-leaf A4 format. With full indexes this will be the most up to date data available - direct from the BNH Database.

**Price** - printed version **£45.00** plus carriage, or you can order as a PDF file for only **£40** - no carriage necessary and will be emailed after confirmed payment.

You can also chose your own cover picture - let BNH know which BN-2 you would like and, if possible, it will be your cover picture.

Email BNH for more information: **[enquiries@bnhistorians.co.uk](mailto:enquiries@bnhistorians.co.uk)**

