# The Captain's Log

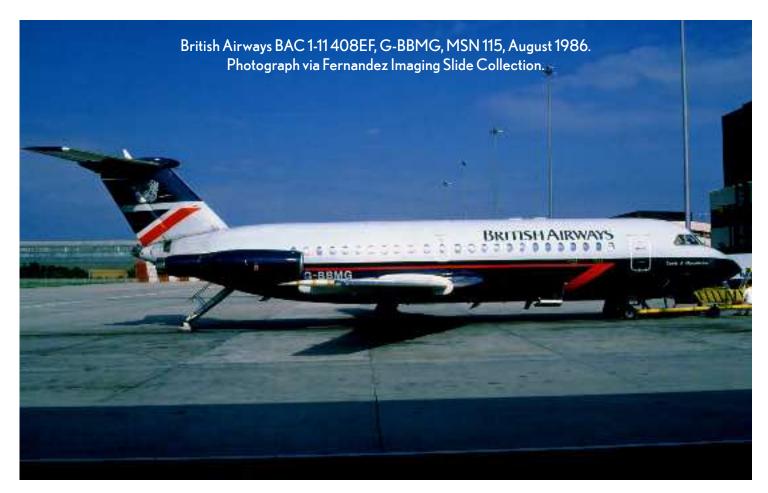
The Journal of the Airliners International Association

# Britain's Twin Jet - The BAC 1-11

Airline Collectibles and History for the Aviation Enthusiast







On the front cover: Braniff International Airways BAC 1-11 203AE, N1548, MSN 020, Dallas Love Field, February 19, 1972. Photograph courtesy of Bruce Drum/ Airliners Gallery.com

### Flight Manifest

From the Flight Deck	3
The BAC One-Eleven Fons Schaefers	4
Aircraft Models Ken Miller	8
Airline Timetables David Keller	1C
By The Numbers Nelson Hoffman	18
Playing Cards Fred Chan	2
Dining Service Dick Wallin	22
Postcard Corner Marvin G. Goldman	24
Tickets and Ticket Jackets Tom Doak-Dunelly	30
Flying Stamps Jim Edwards	33
Wings Charles F. Dolan	34
Jr. Wings Lane Kranz	37
What Is It? Ken & Beth Taylor	38
Book Review Shea Oakley	39
Major New Exhibit Opens at Beechcraft Museum	40
Beer, Sun, Sea, Sand and Aviation? Roger May	4
Flight Exchange	42
Upcoming Airline Collectible Shows	43

### Captain's Log Editorial Team

WILLIAM M. DEMAREST

P.O. Box 489, Ocoee, FL 34761

P.O. Box 30, Fishkill, NY 12524

1965 Danelle Drive, Florissant, MO 63031

P.O. Box 2744, Sequim, WA 98382-2774

P.O. Box 22, Rochester, IL 62563-0022

19836 SW 118 Ct, S. Miami Hts, FL 33177

1757 Landrum Lane, The Villages, FL 32162

P.O. Box 100221, Palm Bay, FL 32910-0221

81 South 1790 West Circle, St. George, UT 84770

142 West End Ave Apt 29P, New York, NY 10023

153 Benziger Avenue, Staten Island, NY 10301

990 Springfield Drive, Campbell, CA 95008

Verloreneind 3, 1464 GC Westbeemster, NETHERLANDS

Archimedeslaan 12, 4904 HK Oosterhout, NETHERLANDS

P.O. Box 275, Sointula, British Columbia, VON 3EO, CANADA

#19 Strathmore, Lakes Bay, Strathmore Alberta T1P 1L8 CANADA

563 Ansley Circle, Atlanta, GA 30324

53-G Beacon Hill Rd, West Milford, NJ 07480

**Contributing Editors** 

**Timetables** 

**DAVID KELLER Playing Cards** 

FRED CHAN

**Air Etiquettes** ARTHUR H. GROTEN, M.D.

**Dining Service** 

RICHARD R. WALLIN

**Book Reviews** SHEA OAKLEY Cocktail Items

ALS. TASCA

Wings

CHARLES F. DOLAN

Jr. Wings LANE KRANZ

Postage Stamps JIM EDWARDS

What Is It?

KEN & BETH TAYLOR

Airline Minis

**GEORGE SHANNON** 

**Postcards** 

MARVIN G. GOLDMAN

**Labels & Stickers** DANIEL KUSROW

Aircraft Models **KEN MILLER** 

Safety Cards **FONS SCHAEFERS** 

Airline Flags HENK HEIDEN

**Ticket Jackets** TOM DOAK-DUNELLY

**Photography** JOE FERNANDEZ

**Contributing Photographers** 

Joe Fernandez Bruce Drum

**Layout Artist** 

Toni Gerlina

All members of the editorial staff are members of the World Airline Historical Society and volunteer their editorial time. Material for possible publication is always welcome and should be sent to the Editor-in-Chief or the appropriate section editor. No remuneration can be made for such material, and no responsibility for

it is accepted, although every effort will be made for its safe handling. All contributions are subject to editing.

P.O. Box 2650, Kyle, TX 78640

Opinions expressed and claims made in signed articles and advertisements published in The Captain's Log are strictly those of the authors and advertisers and do not necessarily reflect the views of the WAHS and The Captain's Log. The WAHS and The Captain's Log are not responsible for any claims (legal, monetary or otherwise) that may arise from statements made in signed articles and/or advertisements. It is the responsibility of advertisers to check their advertisements upon receiving the magazine and to notify the Editor of The Captain's Log of any errors.

© 2013. All contents of The Captain's Log are strictly copyrighted. © Copyright of all original material in The Captain's Log remains with the creator(s) and owner(s) of said material. Reproduction of said material in The Captain's Log is strictly for illustrative purposes and does not constitute endorsement by The Captain's Log and WAHS of the product(s) mentioned.

### **WORLD AIRLINE HISTORICAL** SOCIETY, INC.

dba Airliners International Association

P.O. Box 489 Ocoee, FL 34761 USA

www.WAHSOnline.com Email: Information@WAHSOnline.com Fax: +1.407.522.9352

The mission of the World Airline Historical Society is to encourage and facilitate through private and public collections the preservation of memorabilia representing the world's commercial airlines. The Society also helps document the histories of aircraft, airports, and air carriers.

Membership in the Society includes a free subscription to The Captain's Log (the Society's educational journal published in July, October, January and April), priority vendor table selection at the Society's annual Airliners International Collectibles Show and Convention, and other benefits as announced in The Captain's Log.

The World Airline Historical Society also endorses and supports a number of regional aviation-related collectibles shows held throughout the year.

The Membership year begins July 1. New members joining at other times during the year will pay a full year's membership, and will receive all copies of The Captain's Log from the previous July 1 through the following June 30th. Annual dues are based on your mailing preference for receiving your free subscription to The Captain's Log:

USA \$30 Permit Mail; \$40 First Class Mail \$35 Air Mail Canada \$45 Air Mail International

The World Airline Historical Society is incorporated in Florida, and has been declared a 501(c)(3) not-for-profit corporation.



### From the Flight Deck

By Duane L. Young • President@WAHSOnline.com P.O. Box 101, Covington, LA 70434

Welcome Aboard!

It's hard to believe another year has passed as we soar into our thirty—eighth year! Without a doubt, we are the finest airliner enthusiast organization on this planet. The Captain's Log has become a fabulous, well written, and attractive publication. Our editorial staff receives notes of appreciation regularly. Also, do not forget to check out our website: www.wahsonline.com, and our Facebook page WAHS/Airliners International. Send us a tweet on Twitter at WorldAirSociety or browse the photos on FLIKR. We are well represented across all social media these days. For the photographers among us, you can have your photos included as background on our website. Please let me or our senior editor know. We will make it happen and give credit for all photos to the rightful owner(s).

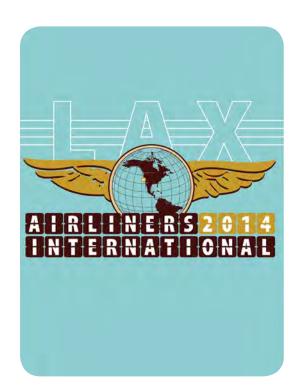
Our convention next summer in Los Angeles is well on track to being sold out. See <a href="www.ai2014lax.com">www.ai2014lax.com</a> for more details and updates. Less than 20 vendor tables remain for sale in the ballroom, and the Sheraton Gateway LAX already has over 200 rooms reserved by convention attendees. In fact, on the Tuesday and Wednesday of

the convention week, rooms left under our special price block are down to single digits. Hopefully, we will be able to obtain more rooms at the special rate if the need arises. Numerous folks have offered their opinions on possible tours. A fan favorite seems to be running a shuttle bus to the In-N-Out Burger location on the north side of LAX in Westchester. I have also been told of a very nice restaurant and biz jet spotting location at the Santa Monica airport. Both locations will be considered for transportation and tours. We will announce all possible tours available to convention registrants by April, 2014.

During this time of thanks, I want to personally thank each of you for your continued support of our organization. We need each and every one of you to continue talking the Society up and showing our publication to others. Please direct folks to our social media sites, and encourage them to donate. We can as always provide donation acknowledgement letters for tax purposes. And by the way, donations need not be only money, collectibles are happily accepted as well.

I wish our membership, volunteer staff and Board of Directors a very joyous holiday season and a Happy New Year!

Duane



#### Flying Ahead....With The Captain's Log

Issue 38-4 – Air France

Issue 39-1 – The Airlines of the Golden State

Issue 39-2 – U.S. Charter Airlines

Issue 39-3 – The Boeing 747



### The BAC One-Eleven

By Fons Schaefers • f.schaefers@planet.nl



British Air Ferries BAC 1-11, G-DBAF, September 1990, Munich, Germany. Photograph by Schneider Herwart via Fernandez Imaging.

Many aviation magazines dedicate this year an article on the BAC One-Eleven. The reason? The prototype made its first flight 50 years ago. Your favorite magazine joins the celebration.

#### Britain's golden decade of aircraft design

So, let's rewind 50 years, or a little bit more, to the days of the first sketches that would become the BAC One-Eleven. In the 1950s, Britain was in its golden decade of aircraft design and manufacturing. There were many different companies engaged in designing and building civil aircraft: Airspeed, Armstrong Whitworth, Avro, Blackburn, Bristol, De Havilland, English Electric, Fairey, Handley Page, Hawker Siddeley, Hunting, Scottish Aviation, Shorts and Vickers and even this list is incomplete. Of course, this was too many and in 1959 a process of rationalisation started with the formation of British Aircraft Corporation (BAC), in which Hunting, English Electric and Vickers were united. Later, when Hawker Siddeley and Scottish Aviation joined in 1977 and the rest had receded from the market, only one major aircraft manufacturer remained: British Aerospace.

#### **Hunting P107**

The One-Eleven started its life in 1955 on the drawing boards of

Luton-based Hunting Aircraft as the Hunting P107. At the same time, Vickers was developing the VC-11, a scaled down version of the VC-10, which incidentally, became history last September with the last ever flight by an RAF VC-10. The Hunting P107 was developed as a jet replacement of the Vickers Viscount, which then was in mass production at two facilities in the United Kingdom. The P in the project name was reminiscent of the earlier name of Hunting Aircraft, which was Percival. The P107 was designed as a four-abreast thirty-seater with engines at the tail and the horizontal tailplane positioned about halfway up the vertical.

When Hunting was amalgamated in 1959 into British Aircraft Corporation, the 107 design was favoured over the VC-11 and developed into the BAC-107. The fuselage was lengthened to sit 59, still at 4 abreast. The engines (Bristol Siddely BS75) were still tail-mounted, but the horizontal stabilizer was raised to the top so as to produce a true T-tail. In 1961, it was decided to use the Rolls-Royce Spey engine and the model was widened to sit 5-abreast, an APU was added and so were powered airstairs. At the same time, development of the VC-11 was stopped. Public launch, now under the banner of BAC One-Eleven (abbreviated as 1-11, but never as 111), was in May 1961.

#### **US** interest

Marketing trips to the USA revealed a strong interest amongst some airlines and indeed, the type was sold to Braniff, Mohawk and American Airlines. Ozark and Frontier also wanted to order the type, but were stopped by the Civil Aeronautics Board (CAB) in an apparent attempt to protect the emerging Douglas DC-9.

#### First order

But the first true order came from British United Airways (BUA), which, much like its manufacturing counterpart, was a product of late 1950s British aviation rationalisation, but then on the airline side. BUA, at the time, was led by Freddy Laker who later started the first low cost carrier ever: Laker Airways. His deal with BAC was for 10 aircraft.

#### **Prototypes**

On 20 August, 1963, the first prototype (G-ASHG) took to the air from Hurn airport near Bournemouth, along the south coast of England. It started a flight test programme that suffered a dramatic setback when only 2 months later, on its 53rd test flight, it crashed, killing all 7 on board. The cause turned out to be deep stall, a phenomenon that was little known at the time and unique to T-tail aircraft with tail-mounted engines.

One of the remedies, at least for the prototypes, was adding a parachute. Wing leading edges were redesigned and fully powered elevator controls replaced servo-tab controls. Also, a stick shaker and stick pusher were added to series production aircraft.

With the loss of the prototype, early production aircraft took over the test programme but two of these also suffered unfortunate landings, luckily survived by all. Aircraft #3, G-ASJB, had a heavy landing in March 1964 and was written off, whereas aircraft #5, G-ASJD, landed in a field following what was perceived a deep stall by the pilot, but actually wasn't. This aircraft could be repaired and was delivered later to BUA.

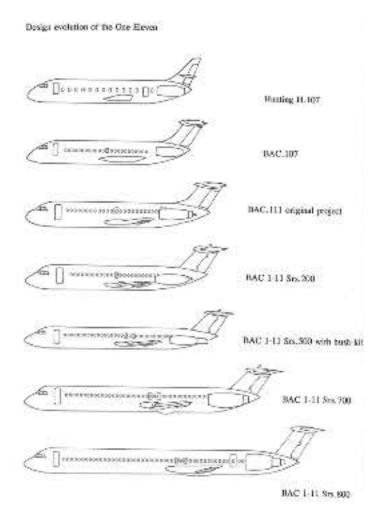
The test programme delayed significantly and only on April 5, 1965, the first BUA aircraft received a Certificate of Airworthiness from the UK civil aviation authority, allowing commercial air transport operations to start. The FAA followed suit with a Type Certificate on 15 April, allowing deliveries to, initially, Braniff and Mohawk.



Pacific American Airlines N5016 at Hollywood-Burbank, May 1977

#### Characteristics

Distinctive features of the One-Eleven were the T-tail and the engine pods. Combined with the ventral entrance this provided embarking passengers a characteristic view such as in the adjacent picture. This particular aircraft (N5016) was a former American Airlines aircraft and operated by Pacific American Airlines at the time. The One-Eleven also had powered stairs at the forward entrance door. The combination of two stairs allowed quick and simultaneous disembarkation and embarkation of passengers. Mohawk Airlines achieved turnaround times with high passenger loads of as little as 6 minutes at through stops and 10 minutes at terminal stops. These amazing times were also made possible by a unique interior layout with alternating 4 and 5 abreast seating along the cabin's length. Not all airlines had these stairs. Braniff did not order the ventral stairs and BEA did not order the forward stairs.



One-Eleven Design Development

#### Versions and developments

The initial version of the One-Eleven was the Series 200, with accommodation for a maximum of 89 passengers in a 5-abreast layout. The Series 300 had uprated engines and was offered from the start as well, as was the Series 400 which was based on the -300 but configured for the American market. Build numbers were 58, 9 and 70 respectively.

In 1968, a stretched version first flew, called the Series 500, seating 119 maximum. The launch customer was British European Airlines



Aer Lingus EI-ANE at Amsterdam, 1973

(BEA, which amalgamated into British Airways when joined with BOAC in 1974), which ordered 18 -500s and called it the Super One-Eleven. This version was the most prolific with 95 built in total.

The final version that saw production was the Series 475, which used the short fuselage of the -200/-300/-400 combined with the engine and wings of the -500 and a rough field landing gear. This 'hot rod' version was particularly suitable for mountain operations such as in the Andes as by Faucett of Peru. Only 12 were built. The -670 was a version offered in 1977 with a wing span increase and Spey ejector silencers. One aircraft was converted as such, but no sales were made.

BAC used the two last digits of the version number to identify customers. So, BUA's aircraft were -201; American Airlines had -401, etc. In addition, two-letter codes were used to identify specific cabin configuration. E.g. BEA's -500s were identified as -510ED.

BAC developed further stretches, with more powerful engines, but these never materialized. The -700 would have been a stretched -500 seating up to 134. A further stretch was drawn and dubbed the -800, which would be CFM 56 equipped and seating up to 161 passengers. The relaunch in 1978 of the BAe-146 (initially developed by Hawker Siddeley as HS-146 but shelved in 1974 due to the oil crisis) however put an end to these developments.

#### **Production**

Production geared up quickly at the start and in 1965 already 34 One-Elevens were delivered. This number was surpassed the next year, with 46 ships delivered. However, that was the top year and in subsequent years fewer numbers were achieved. From 1972 production was significantly reduced with delivery numbers dwindling to 7 and less for another 12 years or so, when production finally stopped, at least in Britain.

The main production site for the BAC One-Eleven was at the Vickers plant in Hurn, where 222 units were built. Another 13 were built in Weybridge, a Vickers plant lying southwest of London. The airfield is no longer there, but it is now the site of the Brooklands Museum, housing the most converted 1-11 sample (G-ASYD). This unit was built as a -400, then converted into the

prototype -500, then into a -475 and finally into the -670.

Tarom, the airline of Romania, was a significant customer of the One-Eleven. The Romanian government set up a production line to licence build the type in Bucharest. At the start of the project in 1980 ambitions were high, projecting totals of up to 80, but eventually production came to an end 10 years later, after the fall of the Iron curtain, with just 9 units built and 2 more left incomplete. These 11 ships were in fact not locally built, but just assembled using ship sets ferried from Hurn.

#### Flying in all continents

In the United Kingdom, the country of birth, the One-Eleven was used extensively by many airlines. The launch customer, British United Airways, used both the initial version and the -500. When it was taken over by Scotland-based Caledonian Airways to form British Caledonian, the -500 was its primary aircraft type for intra-European operations. BEA became a major operator of the -500 as well, albeit with some political pressure to buy British. It used it mainly from London Heathrow and Manchester, but also for the Internal German Service (IGS) radiating from Berlin Tempelhof. As Air France's Caravelles were unable for performance reasons to use Tempelhof, which was closer to the centre of West Berlin than Tegel, it teamed up with BEA to use its One-Elevens in a codeshare fashion. The livery of the aircraft was toned down so as not to display the carrier's identification, apparently to not embarrass too much the French passengers. Other British airlines that flew the One-Eleven included Autair (later Court Line), British Eagle, Channel Airways, Dan-Air, Laker, and many others.

In nearby Ireland, Aer Lingus flew the One-Eleven for many years. Ryanair, the other Irish airline which is now one of the biggest international airlines in the world, used a few BAC 1-11-500s in its early years when still being quite insignificant. In Germany, many second tier airlines used the type as well, such as Bavaria, Germanair and Panair. Other European users included TAE in Spain and TAROM in Romania.

The United States was the second continent where the One-Eleven extensively operated. Between 1965 and 1989, Braniff, American Airlines, Mohawk, Aloha and Allegheny (later USAir) all operated the type at some time. Aloha managed to operate the aircraft on up to 20 sectors daily. Many of American's fleet of 30 aircraft went to private or corporate operators in 1972. Other second hand One-



Bahamasair C6-BDP at Miami, May 1977

Elevens came to work for such US airlines as Florida Express, Pacific Express, Cascade Airways, Air Wisconsin and Air Illinois. In Canada, only Quebecair used the type. Bahamasair operated One-Elevens for many years into Miami.



LACSA TI-LRK at Miami, May 1977

Further down, in Central America, LACSA of Costa Rica, Aviateca of Guatemala, TACA of El Salvador, and Lanica of Nicaragua all operated the type, as did airlines in Argentina (Austral and ALA), Brazil (Transbrasil and VASP), Chile (LAN Chile) and Peru (Faucett) in South America, and in the case of Brazil, also the air force.



Map of Pasay City, 2012

A major operator in Asia was Philippine Airlines, which operated both the -400s and the -500s between 1966 and 1992. One of PAL's aircraft was twice the victim of a bomb explosion, both in the same toilet, but 2.5 years apart. In both cases the aircraft was repaired again. Close to runway 12 of Manila airport there is a street called BAC-1-11 (see upper left corner of map). Is this a token of appreciation for the good services by the aircraft type to the Filipinos or perhaps where a One-Eleven overshooting the runway on 21 July 1998 came to an end?

Early users in Africa were Zambia Airlines and Air Malawi. Later Nigerian airlines such as Kabo Air and Okada Air bought surplus One-Elevens and flew them for the rest of their life. Following an accident, the type was grounded in Nigeria in 2002.

The only airline using the type in Oceania was Air Pacific of Fiji. In Australia, the air force used two samples between 1968 and 1990.

#### Commercial success?

As the DC-9, the One-Eleven was in the same league as the Caravelle and the Fokker F.28. All were aircraft types with tail-mounted engines and, thus, clean wings and with seating capacities in the 79 to 139 bracket. Except for the Caravelle, all had a T-tail. Now, 50 years later we can determine which was the most successful type. Clearly this is the DC-9, which had an end order tally of over 1,132, excluding the MD80 and MD90 derivatives . Second in line is the Fokker F.28 (including Fokker 100 and Fokker 70) with 571 units. The Caravelle was third with 250 built and the BAC One-Eleven last with 244.

#### The end

Support to airlines is guaranteed as long as there is a valid Type Certificate. Initially, BAC was the holder of the Type Certificate, but that changed into British Aerospace and later Airbus. When the number of aircraft in service, especially in Europe, dwindled, Airbus surrendered the Type Certificate in Feburary 2010. This made all One-Elevens registered in Europe (if there were any left) unairworthy. However, the US Type Certificate is still in place, allowing the type to continue to fly on the US register. The last reports are that only two BAC 1-11s are still airworthy - N162W and N164W which both are with Northrop. The Dallas Love Fieldbased N999BW was recently withdrawn from service.

Currently, about 68 BAC 1-11s are stored at airfields around the world, of which 30 in Nigeria, and a further 9 are preserved - in Great Britain, Argentina, Chile and one in Gilberts, IL, USA.

### Aircraft Models

#### Pacific Express BAC 1-11

#### By Ken Miller • ozmiller@sbcglobal.net



Pacific Express BAC 1-11, N107EX.
Photograph courtesy of Richard Silagi via Airliners.net

I haven't yet built a BAC 1-11 model but when I do I know for certain it will be in Pacific Express markings. My family moved to San Jose in 1979 from the Midwest. I've always been a fan of airplanes and airliners but became more of an airliner enthusiast when I attended the Seattle Airliners International Show in 1998. I learned that I missed out seeing PSA and AirCal BAe 146's, Airborne Express Caravelles, United DC-8's and DC-10s, and Pacific Express BAC 1-11's all flying in and out of San Jose between 1979 and 1998.

Pacific Express was formed in 1981 and planned to operate high frequency, low-fare service in the Los Angeles-San Francisco corridor competing against PSA airlines. Pacific Express planned to operate the BAe 146 having the type on order with a 1984 delivery date. In the meantime the airline started service with seven refurbished ex-British Caledonian BAC 1-11 200s leased at low rates from British Aerospace. Even before Pacific Express began service PSA offered a 40% discount fare. Pacific Express had difficulty getting landing slots at busy airports as well because of the PATCO strike. Pacific Express also had to get an exemption to allow the non-Stage 2 noise compliant 1-11 into San Francisco Airport.

Flights began on January 27, 1982 with Chico-Oakland-San Jose-Palm Springs, Chico-San Francisco-Portland, Boise-Portland-Medford, and San Francisco-Palm Springs routes. Pacific Express was profitable for only one month of its short history. The airline filed for bankruptcy on February 2, 1984 and suspended operations on its 22-city route system. A week later the airline began charters for a short time using two 737-200's leased from Aloha Airlines. Most of the Pacific Express network ended up being operated by PSA using the BAe 146's that Pacific Express originally had ordered.

There have been quite a few BAC 1-11 model kits produced through

the years. I read mention of an Aircraft in Miniature vacuform 1/72 scale BAC 1-11 as well as another no-name vacuform kit. Good luck finding either of them. I did find mention that Westway Models was working on a 1/72 pre-built BAC 1-11 back in 2008. There are no prices listed on their website so I would assume the saying "If you have to ask the price.....don't". Kit selection is quite a bit easier in 1/144 scale. Welsh Models makes a vacuform 1-11 dash 500 and Authentic Airliners made a short run resin 1-11 dash 500 which is listed as unavailable on their website. Authentic Airliners does seem to be the gold standard for short run resin kits. Gatwick Miniatures also made a long body kit and correction nose. The most common kit and only injection molded BAC 1-11 would be by Airfix. The model is based on a pre-production plane so the nose does need to be a little pointier, an APU exhaust added, and wing fences moved. The Airfix kit is still quite common and most definitely the most inexpensive kit that I've mentioned. I'll be building the Airfix kit.

Clint Groves from ATP produced Pacific Express decals for the Airfix kit. The sheets are old so I will definitely overcoat them before use so they do not shatter when placed into water. The back page of the instructions gives information on moving the stall fences, adding the APU exhaust, making the nose a little pointier, and some specific instructions on decal placement. I find the colors and decal interesting in that other than the red Pacific Express titles everything is either black or gray. A neat touch on the decal instructions is that Clint thanks Mr. Robert W. Deuel, marketing promotions coordinator at Pacific Express, for his assistance in producing the decal. Being curious I Googled Robert W. Deuel to see what he ended up doing after Pacific Express had shut down. Interestingly enough he went on to AirCal managing public relations and then to MGM Grand Air also managing public relations. He is now listed as a Director of Public Relations for Disney. I suspect he doesn't remember helping with the ATP Pacific Express decal though I appreciate his work. ATP also produced window decals for BAC 1-11, VC-10, and F-28 which I have set aside for the project.

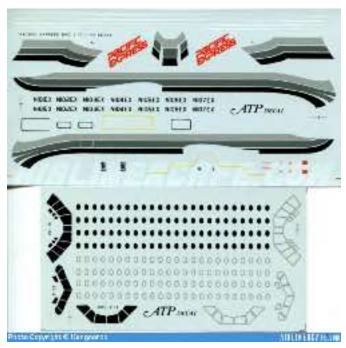
The BAC 1-11 is a pretty neat aircraft. I never flew on one but was able to walk inside two of them at both the Duxford and Bournemouth Aviation Museums in England. Sadly the Bournemouth museum was forced to move a number of years ago and the BAC 1-11 wasn't able to go to the new location. There's also a "derelict" BAC 1-11 parked a few hours away at the Castle Airport in Atwater, California next to the Castle Air Museum.

Initially I thought the BAC 1-11 was just another small short range jet. From a BAC 1-11 website I learned that ten times more 1-11s were sold than Concorde, four times more than the VC10, twice as many as the Trident or Comet, and the plane managed to crack the US market before the DC-9 came into service. Over half its sales at launch were to the largest and most lucrative market, the United States. American Airlines eventually bought a total of 30

of the 400-series, making the airline the largest ever customer of One-Elevens. The One-Eleven was one of the most successful British airliner designs and served until its widespread retirement in the 1990s due to noise restrictions. The BAC 1-11 was quite the little airliner that could. If and when I build my model it will be of a Pacific Express plane using the Airfix kit.



Airfix BAC 1-11 kit instructions. Photograph courtesy of AirlinerCafe.com



ATP BAC 1-11 decals.

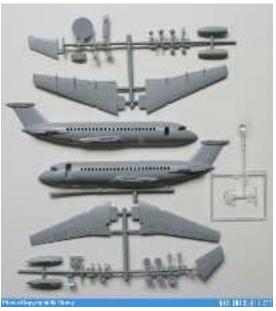
Photograph courtesy of AirlinerCafe.com



Airfix BAC 1-11 model kit.
Photograph courtesy of AirlinerCafe.com



Airfix BAC 1-11 kit instructions. Photograph courtesy of AirlinerCafe.com



Airfix BAC 1-11 model kit.
Photograph courtesy of AirlinerCafe.com

### **Airline Timetables**

#### The British Aircraft Corporation One-Eleven

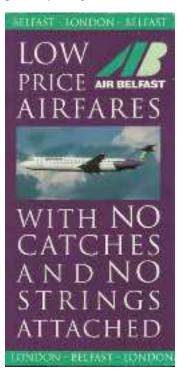
Despite the startling revelation that the de Havilland Comet's design was not able to withstand the rigors of repeated pressurization cycles, aircraft manufacturers were convinced that the higher speeds offered by jet-powered aircraft were the way of the future. British manufacturers in particular proposed a number of designs, some of which evolved into production aircraft such as the Vickers VC-10 and Hawker Siddeley Trident.

One such design was the Hunting 107, which was enlarged and developed into the BAC 107 when Hunting and several other aviation-related firms were merged to form British Aircraft Corporation in 1960. Further development finally resulted in the BAC 1-11, a rear engine design similar to that of the Sud Aviation Caravelle.

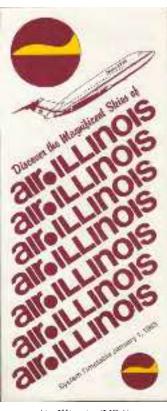
The type first flew in 1963, and despite a fatal crash of the prototype, entered service with British United Airways in April of 1965. While the 1-11 was a short-range aircraft, and was used primarily for domestic and European services by British carriers, the BUA timetable dated April 1, 1968 shows the type being used on a weekly multi-stop service from London to Accra, with an overnight stopover in Las Palmas.

Unlike airlines in Continental Europe, carriers in the UK had eschewed the Caravelle, leaving the market a virtual monopoly

Note: Images of timetables are generally in alphabetical order.



Air Belfast (UK), 1995



Air Illinois (USA), January 1, 1983

#### By David Keller • dkeller@airlinetimetables.com

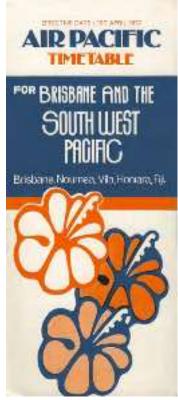
for the BAC 1-11. Government-owned British European Airways (which had traditionally operated an almost exclusively Britishbuilt fleet), was a prime candidate. However, the first production aircraft being offered didn't attract any orders from BEA (possibly as a result of being too close in size to the airline's large Viscount fleet). The introduction of the BAC 1-11-500, ("Super BAC 1-11") piqued BEA's interest, and the timetable dated November 1, 1970 shows 18 ships in a fleet that included Tridents, Comet 4B's, Vanguards, Viscounts, and Herons.

1-11's were ordered by a number of British operators, including British Eagle International Airlines. A small image of the type graces the cover of the carrier's May 1, 1967, apparently departing from a vacation destination such as Djerba in Tunisia.



Western Tr.	PATRICK!	133,000	
SSAM:			- description
200			Sec.
MITTE	Marie .	-30	-
KOM.	10,511,711	100,000,00	S=0
of letter	28586F	a Section 1	Safesia:
10	30000	PASSAX	HOHERY
Fill.	100	300	922
THEY'VE THE	199.	18%	100
manifest of	140.		10K
Spontoreal	Philippe To	with the same	
100 TOWN	SMCHCIEF SMCHCIEF	SAME TO	MATTER
partition.	1495/56		documents.

Air Malawi (Malawi), July 1, 1978



FROM BR		NE I	0		
112	dist	32	200	ALC: N	
57	田	22	320	動	2
91110	111189	inti		H	-
	125	#	760	1	1
12.11	12	H	*	-	
56.4	100	STATE OF	125	製	

Air Pacific (Fiji), April 1, 1977

British Midland Airways also purchased the twinjet from BAC, and featured a nice cover photo of one of their smartly-painted aircraft on the timetable dated April 1, 1970. The jets were used on several routes from BMA's base at East Midlands, including 2 weekday flights to Glasgow.

A number of British carriers acquired 1-11's on the secondhand market (some of which were only a few years old), as the type became as ubiquitous at UK airports as the Viscount. Cambrian Airlines assembled a small fleet in this manner during the late 60's and early 70's, and the timetable dated November 1, 1972 shows the jets in service from London to Liverpool, Cork and Isle of Man. Cambrian and its aircraft became part of British Airways just a few years later.

Dan-Air Services also built a fleet of nearly-new 1-11's, which served the airline for a number of years. The timetable dated October 26, 1980 shows international jet service from London to destinations in France, Germany and Norway, while most domestic services were handled by Viscounts and HS 748's.

In the case of airlines such as British Caledonian Airways, the 1-11's would come as part of mergers between predecessor airlines. In particular, British Caledonian was created through the merger of Caledonian Airways and British United Airways, with the latter's 1-11's entering the merged fleet. Seemingly one of the few UK airlines of the time not to operate Viscounts, BCal's 1-11's were the workhouse of the domestic and shorter international services in the timetable dated April 1, 1974.

In the 1990's, the 1-11's were popular with some of the low fare carriers that were springing up. An Air Belfast timetable from

1995 shows a hush-kitted 1-11 that was operated between Belfast and London-Stansted. Interestingly, this same photograph appears on later timetables with the titles changed to "Shannon" (after Belfast was dropped in favor of Shannon), and later "AB Airlines".

One of the world's largest low fare carriers is Ireland's Ryanair. The carrier's timetable for Summer, 1996 shows its network comprising of just over a dozen destinations. 1-11's were the front-line aircraft for Ryanair, prior to amassing the current huge fleet of 737's.

One of the most notable aspects of the BAC 1-11 was its ability to attract interest in the United States, where other European jets had largely (or entirely) failed to do so. Only weeks after the 1-11's service introduction in the UK, Braniff International Airways inaugurated service in the US. The timetable dated April 25, 1965 contains a full-page ad touting the new aircraft. Braniff would later decide to standardize on fewer types, with most of the 1-11's ending up with Allegheny Airlines.

In July of 1965, Mohawk Airlines became the first local service airline to operate pure-jet equipment. Mohawk also used a full page promo for the new type, which initially operated routes from New York City to destinations in upstate New York. Mohawk would eventually receive nearly 20 aircraft from BAC, which would become part of the Allegheny Airlines fleet following their 1972 merger.

American Airlines opted for the more powerful series 400, with increased payload and range. The carrier inaugurated 1-11 service on March 6, 1966 between Kennedy Airport in New York and Toronto. American had placed orders for 30 aircraft, all of

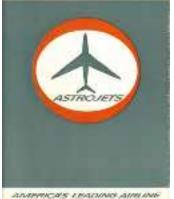




(Left and above) Aloha Airlines (USA), September 3, 1968
(Right and below) American Airlines (USA), March 6, 1966







which were delivered by the end of 1966. But the 1-11 fell out of favor with the airline rather quickly, with all aircraft having been removed from service by 1972.

Aloha Airlines chose the 1-11 as its first pure jet type, as depicted on the cover of the carrier's September 3, 1968 timetable. (Interestingly, Viscounts were the other type in service, making Aloha's fleet similar to that of many UK carriers at the time.) Aloha later decided to go with 737's, also sending the British aircraft to work with Allegheny.

Deregulation spawned a number of new airlines, which increased the demand for used aircraft. In 1982, Pacific Express began operations in the Western US with 1-11's, attempting to compete with PSA and Air Cal. As was usually the case in such situations, a fare war erupted, and Pacific Express ceased operations after only about 2 years.

Almost simultaneously with the bankruptcy of Pacific Express was the inaugural service of Florida Express. This Orlando-based airline utilized 1-11's (some of which were ex-Pacific Express) to destinations in the Eastern US and South Florida. In 1988, Florida Express was acquired by the resurrected Braniff Airways, including some 1-11's operated by the original Braniff, some 2 decades earlier!

As some of the commuter airlines in the US began receiving certification to operate jet service, several opted for the 1-11, which generally was less expensive than used DC-9's or 737's. The Air Illinois timetable dated January 1, 1983 depicts a 1-11 on the cover, although the timetable does not identify the flights it was featured on. Following Air Illinois' bankruptcy in 1984, its assets were merged into Atlantic Gulf Airlines, which operated one of the 1-11's with only a change of titles.



Bahamas Airways (Bahamas), October 25, 1970



BEA British European Airways (UK), November 1, 1970

Britt Airways also acquired several BAC 1-11 jets, and color photos of the type were prominently displayed on the covers for several years, as evidenced by the April 1, 1985 issue. Like Air Illinois, Britt did not identify aircraft types in its timetable, although I do believe that both carriers operated them on the Chicago – Evansville route, which Delta had recently discontinued.

Canada's Quebecair became a 1-11 operator through the purchase of secondhand aircraft. The timetable dated June 12, 1972 depicts the type on the cover, which was operating in a fleet that also consisted of F27's.

A number of carriers in the Caribbean and Latin America operated small 1-11 fleets. Bahamas Airways operated the type primarily between Florida, Freeport and Nassau. However, the timetable dated October 25, 1970 shows a daily service between Nassau and New York. The airline would cease operations shortly thereafter.

The 1-11 was a popular aircraft in the Bahamas. In their August 27, 1971 timetable, Flamingo Airlines was operating a leased machine, primarily on the half-hour hop between Freeport and Nassau. Bahamasair, which was created after the failure of Bahamas Airways, would also operate the twinjet during the 1970's.

Another airline in the region operating leased 1-11's was LIAT (Leeward Islands Air Transport). The carrier had been purchased by the UK charter carrier Court Line, which subsequently leased aircraft to LIAT. The timetable dated December 1, 1971 has a photo of the jet in basic Court Line colors. LIAT was rescued from Court Line's bankruptcy a few years later and reverted to a propdriven fleet for their short island hops.

El Salvador's TACA operated the 1-11, as depicted on the cover of the carrier's timetable dated December 4, 1971. This timetable





Braniff International (USA), April 25, 1965

shows TACA operating the ever-popular fleet mix of 1-11's and Viscounts to regional destinations in the US and Central America.

Lanica used a small fleet of 1-11's similarly, connecting Central American destinations to Mexico City and Miami. Like many BAC 1-11 operators, Lanica proudly displayed an image of the aircraft on the cover of its October 26, 1969 timetable.

South America also saw several BAC 1-11 operators. In the December 15, 1977 Faucett Peruvian Airlines timetable, 1-11's were operating the bulk of the airline's services to and from Lima. Faucett ceased operations in 1997, after almost 70 years of service.

BAC's successes with the 1-11 in the US and the Americas were not duplicated in other areas of the world. Operators in Continental Europe, Africa, Asia and the South Pacific were relatively few and far between.

The 1-11 did find work in the South Pacific with Fiji-based Air Pacific. The timetable dated April 1, 1977 shows 6 weekly services between Fiji and Brisbane, Australia, some days stopping at Honiara, Vila and/or Noumea en route.

Philippine Airlines also used the 1-11's to connect the many islands within its territory. The aircraft was used as the primary domestic type for a number of years and, as the timetable dated March 30, 1986 indicates, was also utilized on shorter international segments to Indonesia.

A small number of African Airlines operated 1-11's during the 1960's and 70's, although most were relatively short-lived, as carriers ceased operations or aircraft leases expired. Air Malawi

BRITISH CALEDONIAN System timetable DARREUNTILSTOCTORER ROAL CALEDONIAN CALED

British Caledonian (UK), April 1, 1974



did operate the 1-11 for a number of years, and the timetable dated July 1, 1978 finds it part of an all British fleet that included the VC-10. HS 748 and Britten Norman Islander.

Gulf Air also operated 1-11's alongside VC-10's, and the broadsheet timetable dated October 24, 1976 shows the VC-10's (and newly acquired L1011's) operating long-hauls to Europe while the twinjets handled most of the regional connections in the Gulf region. Gulf Air would quickly replace the VC-10's with additional TriStars, and the 1-11's with 737's.

The BAC offering was largely ignored by scheduled airlines in Continental Europe, many of which already had fleets of Frenchbuilt Caravelles (which itself had not garnered orders from the UK). An exception to this was Tarom, the flag-carrier of Romania. Tarom received several factory-fresh 1-11's in the late 1960's, then additional "Super" series aircraft in the 70's. The Romanian government became interested in producing 1-11's in Romania under a license agreement with British Aerospace (which resulted from the merger of BAC and Hawker Siddeley several years prior).

The Romanian-built aircraft were designated "Rombac" 1-11's, although the anticipated sales were not realized, and only 9 aircraft were assembled in Romania, most of which went to Tarom. The carrier's timetable dated March 25, 1984 shows both -400 and -500 series aircraft in service, but despite the fact that several Romanian ships should have been in service by this point, none were identified as Rombac.

The 1-11 proved to be a versatile aircraft, with some remaining in service until forced into retirement by noise regulations in Europe and elsewhere. It was also the first non-US jet design to find its way into the fleets of multiple US airlines. A tribute to the popularity and longevity of the aircraft is that it's tough to believe total production was less than 250 airframes!



British Eagle (UK), May 1, 1965



British Midland (UK), April 1, 1970



British Midland (UK), April 1, 1970



American	C8 + (in	145		11706
Ameridan	10,03314	50	4000	38/69
September	Market .	34	28	12.00
Dissery	\$8.6.29Us	30	4006	1514
to lead	III (ISSO)	56	HH.	42.00
Plate New Jee			45.701	. U.19
Accessive:			3.0	YES
Dis .			X	BE
Day of Director	-	34	065,0	1.4
Yeyara Net	ermed .	Sec 1.	11.21	36.35
COMPONIO	MINIOR	See -	12.00	W.A.
NAME:		E.	11.11	
LAS WANTED	iX	-	unio	24
		Ph	New	
BRIHLEGET		50.	this .	
HELTOWN		50	1500	13.20
ecce.		430	16.60	

British United (UK), April 1, 1968



Dan-Air (UK), October 26, 1980



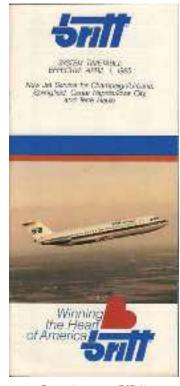
Dan-Air (UK), October 26, 1980



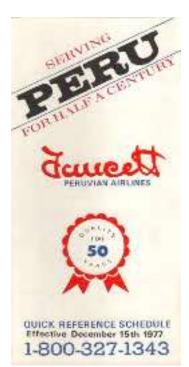


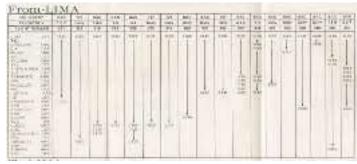
-	4	200	100	1004	4	Part .
400 F 200	188	Atlant	200	7981	7801	1.00
4	1444	Old berry	_	SARY	199	3.80
With Land Co.	264	180 works		10980	1997	200
Heroe-William	195	Philippine.		200	1971	200
MERCHA,	1.30	100 100 100		mana.	40.11	-
Photo:	121	100,1000		1000	200	7
beliets.	h 11	-	-711	-111		
DWDDN-C	ann.					
Mark	14	Carlotte .	790	Me.	200	Seed.
DESCRIPTION OF THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TWO IS NAMED IN COLUMN TW	200	88	-	her:	12.11	-
AT PACE.	2.8	96		STATE OF	10010	100
100	100	14	-	100	William .	1.00
bell- Place for		-154		-	-	1-0-7
RPIEZE	20					
ONDON-IS	ut or	MAN.				- 5
01000 - IS	-	MAN.	-	Fig.	200	fail.
01000-15	LE OF		5	res :	b.	Dis.
0100W-15	1	70	C. C.	Tree Control	1	P
ONDOR-IS	-	V	THE STATE OF	Part Part Part Part Part Part Part Part	1	MA I
ONDOR-IS	1	70	100	Fig. 1	100	1111
ONDON-15	1	V	THE REAL	1 100 100	1	
ONDON IS	1	74 68 mm	AME 技術	1 25 10	100	

Cambrian Airways (UK), November 1, 1972

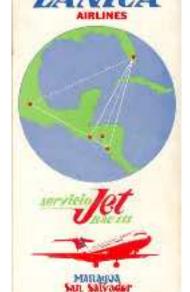


Britt Airways (USA), April 1, 1985



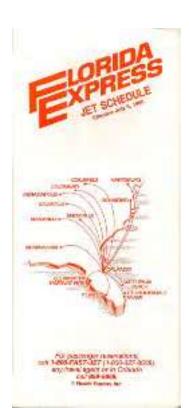


(Left and above) Faucett (Peru), December 15, 1977



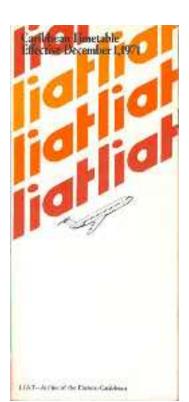
(Right and below) Lanica (Nicaragua), October 26, 1969

411 BAC - 111 S MAR JUE SAS	416 BAC - 111 S MAR JUE SAR	415 BAC - 111 S LUN MIER VIER	++++	PURIO NUMBIO EQUIPO CLASE FRECIENCIA	++++
07:00		08:00	SA.	IMAIM	LL
	09:00		SA	MANAGUA	LL
		09:00	LL SA	SAN PEDRO *	SA
	10:00	09:50 10:10	SA	SAN	SA
08:20		10.50	LL	MANAGUA	SA
a-Swaran	12:00	25002	LL	MEXICO	5.4



| Section | Sect

Florida Express (USA), July 9, 1986





LIAT (Antigua), December 1, 1971



Mohawk Airlines (USA), July 15, 1965



Philippine Airlines (Philippines), March 30, 1986

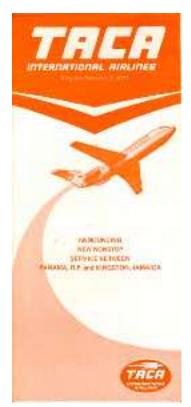




16 • Winter 2013/2014 • Airliners International Association



Pacific Express (USA), February 1, 1983



	UNION TRACK	1	SER. N.	1-
BECY 100-4-2	14 816	120	-2.	_
PAATRIKK COURT	ARTHORES.	1700	Tax .	-
	PARKETSET.	701	SHE	241
arrive arrive	NAME OF THE PARTY	111	200	946
MINER FUR.	MATERIAL VIOLENCE			400
BOTH COLUMN 14.	miles by	0.000		1500
Minimum stary with	B 107 FV	1000	346	
BURNING STREET	MOTION	1.4	200	
BOLITE STEE, S.L.	Kellinh .	- 2.0	100	10.00
	SOUTH !	19.6	4.0	14
British Blad A, 1977, bullet	100 FLAN	75/6/	1.00	-
	ROBERS	1920	446	15, 14
		- 23	-	1.4
THE STEDOMORY ILLIAN	Add 65	1976	3.4 (0)	14
		wite-	90.3	or date
DESCRIPTIONS IN THE	remuy	17.500	1.00	17.16
HARLING HE.	MALTINA	10000	- N'50	2013
	10000100	a tates.	4.490	0.040
145-000, 116	RESERVED TO	141	7.76	110
CALL ALL	ICPTO IN	100	D-2 mm	01/
DOODNER PLY S.F.	SETTI SECTION	E1121	7.6	1777
		1242598	100	-190

TACA (El Salvador), December 4, 1971

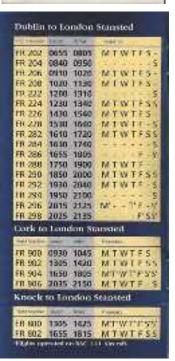




MARIONEN WINE
MARINE STATE
THE PART OF THE PA
THE PARTY IN THE P
W. No. 23 NO. 100
100 N.W. 100
CHARLET CONTRACTOR STATES AND CONTRACTOR CON
NE 00 TON HOTEL 1 H
GASSON NO.89
THE DE ROOM SECTION I SELECT
ON NO TROOP NO
HANDE SELECTION OF THE ACT
NEW OF SECURE MOTHER TON
NO DE SERO DE LE LE
Management Committee
241 Mr. 27 147 147 14 14 14
温 市ち 2 11
190 PM NO NO BARL
810 90 NO 50 Pr NO
100 MR M2 MA
100 AO
Mar Alle Me No.

Quebecair (Canada), June 12, 1972

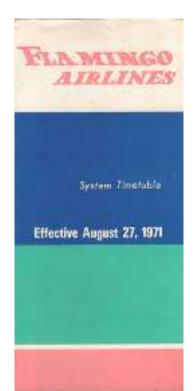




Ryanair (Ireland), Summer 1996



TAROM (Romania), March 25, 1984



Flamingo Airways (Bahamas), August 27, 1971

## By The Numbers

#### By Nelson Hoffman

Numbers play an important role in everyday life. We take for granted the specificity a number provides over the written word. For example, three bananas is specific where a bunch of bananas is somewhat vague. We use numbers for a variety of reasons such as identifying a range (zero to sixty in 4.9 seconds), measuring a value (the dew point is at 43), or applying a unique identity to something (vehicle license plates).

Decades ago, when United's Viscounts were abundant, and my interest in aviation was en route but not yet on approach, a schoolmate and I would spend a portion of our cherished summer afternoons sitting on the front lawn and recording the license plates of passing cars along the residential street where we grew up. With our then perfect vision, we would call out the letter plate combinations, record them on three by five index cards that were cut in half to fit neatly into the color tinted yet translucent plastic Fannie Farmer cigarette case that previously held chocolate cigarettes (I know we were not alone in this endeavor). An early form of what the Brits refer to as 'spotting'. Some of the cars became 'regulars' each day, their owners no doubt returning home from work, and if we identified a plate seen previously, we would

put a hash mark next to the plate number on the card. Today, our grandkids, if the mood struck them, would take a photo of the passing car with their ipad, and then file the picture into a folder, perhaps taking the time to enter the data in an Excel spreadsheet. After about the third car they would move onto surfing the net. But I digress.

Eventually, as the aviation interest arrived and I ventured to my childhood airport (CLE), the process of learning about the airlines, aircraft, radio transmissions etc. continued. Back then, a variety of airlines along with their printed timetables and no airport security contributed to making photography and the overall airport experience fun and interesting. More than once I was successful in obtaining a visit to the cockpit simply by asking a flight crew member or ticket agent at the gate (thank you American, Allegheny, North Central, Air Canada, Eastern and United). Ten scheduled carriers served CLE back then of which only three of those names remain today. And the timetables! Out there on the counter, just waiting to be picked up and taken home to be sought after by collectors decades later. If only I had a tenth of all the ones I had taken back then.



United Airlines B737-222 N9002U "Mainliner Quad Cities"

No.	Regis. No.	Model	Serial No.	Date mid.	Acquired
Conv	air 580	\$	11.00		
501	N90862	35	22	17 Oct 52	Continental
502	N90854	35	49	1 Mar 53	
503	N90865	35	50		Continental
504	N90867	35	82	21 May 53	
506	N9087R	54	160	23 Feb 54	LACSA
507	N4810C	38	100	24 Jul 53	Delta
508	N4805C	36	60	6 Jun 53	Delta
509	N4801C	38	30	18 Nov 52	Delta
510	N4611C	36	101	28 Jul 53	
511	N4803C	38	39	24 Dec 52	Delta
512	N4802C	38	28	21 Dec 52	Delta
1514	N4804C	38	51	3 Feb 53	Detta
515	N46348	54	1.78	20 Apr 54	LACSA
516	N2728FI	35	67	31 Mar 83	3M Company
517	N2729R	54	150	19 Jan 54	3M Company
518	N3430	42	54	19 Feb 53	Alaska Airlings
519	N7517L	34	13	20 Sep 52	Texaco of Conada
520	N7528U	54	137	27 Nov 53	LAN-Chile Airlines
521	N7530U	47	116	16 Sep 53	LAN-Chile Airlines
022	N3429	32	109	21 Aug 53	Braniff
523	N3418	32	61	10 Mar 53	Braniff
524	N3423	32	77	30 Apr 53	Braniff
541	N2041	47F	334	1 Jun 56	National
642	N2042	47F	347	7 Jun 58	National
543	N2044	470	280	6 Jul   58	National
545	N2046	47F	370	10 Oct 58	National
546	N4822C	360	377	5 Nov 56	Della
547	N7743U	82	890	20 Dec 55	Shell Oil of Canada
548	NB44431	11A	327A		Union Od Producing Co
549	N4825C	36D	380	14 Nov 86	Delta
550	N4824C	360	378	12 Nov 56	Della
551	NSSSN	-	462	5 Sep 57	RCAF
552	NEGEN	15	475	18 Oct 57	RCAP

North Central 580 listing

As the study of aircraft types came into play (thank you Len Morgan for that \$1.95 gem - Airliners of the World published in December 1966), I started paying more attention to the registration numbers, as a way of understanding the fleet size they represented. This was long before I first saw a JP Fleet's and such information was not readily available to a casual observer of the time. My first recollection of any type of fleet data came from a December 1969 copy of Air Transport World that I purchased at one of the two newspaper/gift shops in the main lobby at CLE. The cover was a photo of Tom Grace, then president of Ozark Air Lines (which was not flying into CLE at that time) and inside was a fleet listing of major airlines. Now I had some idea of the quantity of a particular type of aircraft operated by a specific airline.

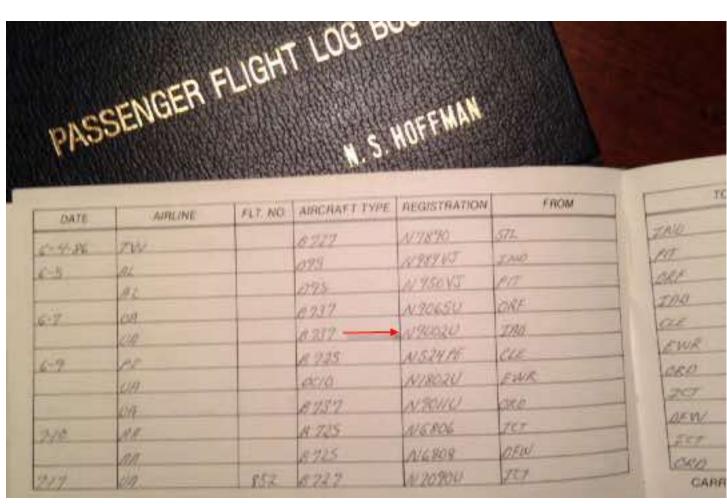
I found interesting the numerical ranges as well as out of sequence numbers that were applied to various fleets over time. In the mid sixties, United, who then had a significant presence in CLE, ordered seventy-five 737s, which back then was a very large order for one type by one carrier. The registration range was a block from N9001U – N9075U (the excellent Aurora model box art incorrectly displayed N7371U and the delightful AeroMini references N8000U). And to add a bit more distinction (and class) each was assigned a name of a city served by United. With many visits to CLE in my youth, not to mention other airports over time in my working career, a few aircraft seem to re-appear more frequently than others. N9002U (Mainliner City of Akron) is one along with N9053U (Mainliner City of Rochester). At different airports, over a number of years, our paths have crossed multiple times.

Eclectic registration ranges were more common in fleet types of second hand aircraft that were acquired by a carrier which had previously been operated by a different airline. North Central's Convairs came from a variety of previous owners. In some cases three or four aircraft were sourced from one airline, one or two from others and some were previously operated as corporate executive aircraft. This gave a rather chopped up listing and although the airline back then could have probably re-registered these planes sequentially, they were obtained at different times and finding a block of numbers may have been more difficult, especially if the carrier was unsure exactly how many aircraft it would source from the second hand market. The North Central DC9 fleet however was different. A block of numbers was reserved for the fleet as these aircraft were delivered new.

The benefit of not re-registering aircraft N numbers as mergers occurred was that those of us knowledgeable in this obscure area of study could quickly point out the origin and history of an aircraft. Frequently connecting through MEM in the 80/90's, Northwest DC9s clearly indicated previous affiliation with other operators. Some followed the Delta/Southern/Republic/Northwest route, others the path of Hughes Airwest/Republic/Northwest, or the North Central/Republic/Northwest trail and some were purchased from overseas operators. N776NC, delivered to North Central on 04/27/79 is as of this writing being operated by Delta, the result of one of the recent mega mergers.

It is also interesting to note the alpha designators in the registrations of the 70's and 80's. The "U" at the end of many of United's numbers. The "N" on North Central DC9s and the "NC" on their DC9-50s. The "VJ" for Vista Jet reserved for the initial Allegheny DC9s. The "NE" for the Northeast DC9 Yellowbirds and the "L" used by Delta are just a few. And then there are some that I have not been able to make sense of such as the "J" on the Mohawk Bac 1-11s (J for Jet?). And there were some fleets or batches delivered at different times that were numeric only, such as the initial order of American B727-223 (non advanced series) aircraft N6800-N6842. With fleet renewals and the merger consolidations, there is a hodgepodge of registrations today which brings me to my old friend N9002U. When I first saw this N number it was on a blue and white United 737-222 in the crisp and classic Mainliner colors. Although the United paint scheme changed a number of times over the years and the Mainliner titles departed along with the Mainliner colors, the registration number lived on with that carrier until September of 1998. This plane flew many years on the United network until the economics of technological improvements cast a shadow on its remaining work life. Inevitably, like the aircraft it replaced, this seven three would be retired, sold to another carrier, eventually removed from service altogether and scrapped becoming nothing more than an entry in the log book, supported by pictures and memories.

Not that long ago I was heading to CLE (I have lived in Dallas for over twenty years) and knew that American's recently delivered A319s were now assigned to that route, having replaced the venerable MD80. Although I could have looked up the fleets on line, I chose not to do so and let chance see what registrations come my way. Our aircraft was N93003. At the next gate was another brand spanking new A319, N9006. I can already see that it is unlikely there will be much sequential registration of this fleet. We push from the gate and soon are making our way towards the departure runway. As we approach the hold for 18R,



N9002U Log book entry.

another A319 pulls up alongside. The registration number makes me smile; N9002U. I think for a moment how ironic this is, the Boeing 737 and the A319. Similar in outward appearance to the untrained eye, just another single aisle, wing mounted twinjet. But the aircraft themselves are quite different from the avionics and the construction materials to the increased capacity. And even more interesting is this same registration number is now associated with the major competitor of the original operator. Both United and American had/have the same registration on an aircraft delivered to them new - one from Boeing and now one from Airbus a mere 46 years apart.

Although I try, I don't think I embrace change as well today as I did years ago. Certainly the changes in the airline industry have impacted airline employees and passengers alike and it is debatable if these changes have been for the better. However, N9002U is again flying although as a different aircraft type, operated by a different carrier, built by a different manufacturer in a different time period. The N9002U of today has little in common with its retired predecessor and operates in a much different airline environment. Even with these changes, I'm glad N9002U is back and I'm fairly certain that it will be in service long after I'm retired.

On Order:	// APKKY	D707 2200	4
DC-9-30	(2)	B707-320C	(2)
		B727-100	(1)
United		Beaver	(1)
B729	(29)	Bristol 170	(4)
B727-100	(86)	DC-6B	(1)
	(37)	Otter	(2)
B727-100QC	(28)	Twin Otter	(2)
B727-200	(62)	THILL STORY	-4-3
B737-200		Western	
Carav 6R	(20)	B707-320C	(5)
DC-6A	(3)	B720	(3)
DC-6B	(2)	B720B	(27)
DC-8-20	(28)	The state of the s	(6)
DC-8-30	(13)	B727-200*	(30)
DC-8-50	(18)	B737-200	(12)
DC-8-50F	(15)	L-188C	(12)
DC-8-61	(30)	On Order:	(5)
V 700	(3)	B707-320C	(10)
On Order:	0220	B727-200	(3)
B737-200	(13)	B747	601
B747	(18)	100 mm 100 mm	had
DC-8-62	(10)	Wien Consolida	(3)
DC-8-63F	(3)	B737-200C	(4)
DC-10	(30)	Beaver	(2)
On Option:		Cessna 180	(1)
Concorde	(6)	C-46	(2)
DC-10	(30)	DC-3	/21

Excerpt of fleet listing from ATW

## **Playing Cards**

#### **BAC 1-11 Playing Cards**

By Fred Chan • topflite@olympus.net

Unfortunately, the BAC1-11 was not a strong competitor against the Douglas DC-9 and the Boeing 737. Consequently, only three of the few airlines that had chosen to fly it have issued cards that featured the 1-11. The cards from Aer Lingus, Mohawk Airlines, and British Island Airways are shown in Figures 1-3, respectively. I will use the remainder of my allotted space to comment about some of the pitfalls in card collecting.

Beware of cards not officially issued by the real airlines !!! These are cards that show the name, logo or aircraft of a real commercial airline but they have been produced and are being sold for a profit by individual sellers to unsuspecting buyers. I am not referring to cards that have been issued by airports, joint advertisers, and organizations which are trying to restore historical aircraft (such a Save-A-Connie). Also, I am not referring to those cards that are clearly identified as from fictitious airlines issued as tourist souvenirs or by hobbyists or used as movie props.

There have been a number of non-airline issues that have been offered in on-line auctions. I myself was taken for \$50 by one of the fake Aeroflot decks 8 years ago. Although Aeroflot had issued three decks when it was in operation from 1932 to 1993, they were quite plain and staid. Then in 2005, five colorful "Aeroflot" decks appeared (see Figure 4 as an example) but it later became apparent that these decks were fakes for two reasons: the old Soviet Aeroflot's name had always been shown as A3poφλoT ("Aeroflot" in Cyrillic) and not "A3poφλoT Soviet airlines" as shown in these cards.

Then there was a seller in Hong Kong who tried to sell a series of 14 decks showing pictures of aircraft from real commercial airlines. Some of these reproductions are hilariously funny because the pictures had been shrunken disproportionally to fit the dimensions of a card, so that the aircraft looks very stubby. An example is shown in Figure 5.

Similarly, an on-line seller in Australia has been trying to sell playing cards patterned after airline posters from the 1930s and 1940s. Although she has been honest enough to note that these

cards are poster reproductions, the images are also distorted from her efforts in trying to fit the dimensions of a poster into those of a playing card.

There was also a series of 22 decks offered on eBay which showed old logos and destination posters from Continental Airlines. These were hard to be taken seriously because most airlines are reluctant to issue one deck of cards, let alone 22 decks at the same time. The decks were advertised as having been produced for a "fundraiser," but I suspect that the only funds being raised were for the sole benefit of the seller.

All this has been made possible because there are manufacturers that will make any deck of cards of any design for a little as \$8. Also, good quality single cards of rare issues can easily be reproduced on a personal computer.

So, be careful! That rare-looking deck you have always wanted may not be real. Keep in mind the old adage: If it looks too good to be true, it is too good to be true.





Figure 4

Figure 5







Figure 1 Figure 2 Figure 3

### **Dining Service**

#### **BAC 1-11 Dinnerware**

#### By Richard R. Wallin • rrwallin@aol.com

This time let's look at a sampling of dinnerware used by a variety of BAC 1-11 operators.



This attractive Aer Lingus pattern featured the shamrock and pin stripes in gold.



This Allegheny milk glass mug was probably a promo item; name & logo is red & blue, along with the slogan "Number One In The Sky Wherever We Fly".



Here's another milk glass mug, from Aviateca; name, logo and the airline of Guatemala (en Espanol), with all markings in orange.



Small round ceramic container from British Airways.



A BEA (British European Airways) cup and saucer with a small blue and white dish.



Two Cyprus Airways cup and saucer sets; on left, marking is blue, on right, yellow and blue.



An attractive red and gold ashtray from TAROM - Romania.



US Air's first china pattern, with their "semi-script" logo and name in gold. Mayer China Co.



Brazil's VASP issued this dainty demitasse set; name in blue, striping in gold.



Africa's Zambia Airways used this attractive orange and blue china, made by Wedgewood.

### **Postcard Corner**

#### The BAC 1-11 on Postcards

By Marvin G. Goldman • marvilynn@gmail.com

The British Aircraft Corporation ('BAC') One-Eleven is a very popular subject for airline postcards. Over 500 different BAC 1-11 cards are known to exist. Impressively, they are listed in detail, and many illustrated in color, in 'The BAC One-Eleven Postcard Catalogue', produced by The Aviation Postcard Club International. The Catalogue is compiled by the head of the Club, Doug Bastin of Chester, U.K., with the assistance of Tony Edwards and several other prominent airline postcard collectors.

You may obtain a copy of this BAC 1-11 Catalogue from Doug, who advises "I now distribute this by e-mail in pdf form if anybody requests it. Since the first issue in 2001 I have tried to update the listings with any newly discovered cards but have chosen not to include new retrospective cards from current publishers. As there is no print or mail cost there would be no charge. Requests to aviapc@aol.com please".

The year 2013 marks the 50th anniversary of the first test flight by the initial BAC 1-11 prototype. The base version of this pure jet aircraft, Series '200', was designed for short-haul routes with heavy traffic, quick turnarounds and high utilization. The aircraft became popular, and 244 of all Series were built. However, it proved to be the last all-British airliner.

Let's start our postcard tour with the launch customer for the BAC 1-11 -- British United Airways, whose managing director at the time was Freddy Laker.



British United Airways BAC 1-11-200 model. Issued jointly by British United and BAC prior to the 1965 delivery to British United of the first 1-11 to enter revenue service. The card is in the style of BAC-produced 1-11 postcards. Oversize.

BAC extensively publicized its new 1-11 aircraft and, according to Doug Bastin, BAC issued at least 50 different postcards featuring the 1-11. The back varies between an ordinary postcard back, preprinted text in the message area, a wholly text back, and a plain back. Their sizes differ slightly, but all are oversize, about 5-1/2 x

8-1/2 inches (13.7x21.5 cms.). Doug adds that some were issued for airlines with airline contact details instead of the typical BAC headquarters address (as is the case with the above British United card).



British United BAC 1-11-200 G-ASJJ at Genoa, Italy. Issued by Genoa Chamber of Commerce, probably in 1965, as part of a set showing two more airliners and an inner view of the temporary terminal. This great card shows British United's first BAC 1-11-200 and was submitted by Leonardo Pinzauti of Florence, Italy. Leonardo writes: "British United Airways started flying schedules from London-Gatwick airport to Genoa-Sestri airport in January 1964". He adds that the pictured aircraft, G-ASJJ, set a record by operating the first revenue service of the BAC 1-11 -- on 9 April 1965 to Genoa. He believes that the picture in this postcard may have been taken on the first day of operation.

Braniff International Airways became the launch customer for the BAC 1-11 in the U.S., operating its first revenue service with the type just 16 days after that of British United in the U.K.



Braniff BAC 1-11-200 N1541 (its first aircraft of the type), in original livery. Airline Issue ('A/I'). John Danner Collection.

Braniff eventually operated over a dozen BAC 1-11 aircraft from 1965 through 1969.

The first regional airline to operate BAC 1-11s in the U.S. was Mohawk Airlines which introduced them one month after Braniff and eventually operated at least 20 of the type. Mohawk is the favorite carrier of airline postcard collector John Danner of New Jersey, and he kindly submitted several of his favorite Mohawk BAC 1-11 postcards for this article, of which I show two rare ones here.



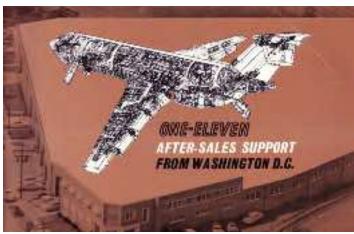
Mohawk BAC 1-11-200. British Aircraft Corporation issue publicizing Mohawk's initial order of the type. 12.4x22 cms. John Danner Collection.



Mohawk BAC 1-11-200. British Aircraft Corporation issue publicizing Mohawk's increasing its order from four to five BAC 1-11 aircraft. 13.7x20.8 cms. John Danner Collection.

John enthusiastically writes: "I had the opportunity to fly on the BAC 1-11 quite a few times.... What was fun was to be at an airport when a one eleven was taking off and listening to the rumbling roar of those two Rolls-Royce RB 163 Spey [Mk. 506] stage I engines (before hushkits beame necessary). That's how the plane got its nickname as 'The Rocket'. Those engines were on all Series 200 BAC 1-11s."

Naturally, all these BAC 1-11s in the U.S. would eventually need spare parts, so BAC set up a North America After-Sales Support Center in Washington DC and even issued a rare postcard promoting this service.



BAC 1-11 Cutaway Postcard issued by British Aircraft Corporation, publicizing its North America After-Sales Support Center. 13.7x20.8 cms. Tony Edwards Collection. According to Doug Bastin, this is the only BAC-issued 1-11 card that lists BAC's U.S. office rather than its home office in the U.K.



British Air Ferries BAC 1-11-200 Interior View. Enlarged from a five-view oversize card. A/I. This shows the typical five-abreast seating.

Airlines in several other countries purchased new BAC 1-11 200 Series aircraft. Here are a couple examples:



Aer Lingus Irish International BAC 1-11-200. A/I. Printer: Ormond Printing, Dublin.



Zambia Airways BAC 1-11-200, 9J-RCI. A/I.

BAC then developed the One-Eleven Series 300 and Series 400. These two new versions featured the more powerful Rolls-Royce RB 163 Spey Mk. 511 engine, a larger center section fuel tank and structural modifications, permitting greater fuel upload and longer range. The two Series differed from one another only in equipment and avionics, as the 400 was intended for sales in the U.S. and featured a U.S.-sourced avionics suite.



British Eagle BAC 1-11-300, G-ATPJ (the Series 300 prototype), at Liverpool, England. J. Salmon Ltd., Sevenoaks, England, no. 1-06-02-11/4314c. Doug Bastin Collection. British Eagle was the first operator of the Series 300, taking delivery in June 1966 and operating five aircraft of the type until the carrier ceased operations in November 1968. After British Eagle failed, this postcard was reissued with the Eagle fuselage titles removed, the card number lacking the '4314c' designation. The postcard shown above is the less common version.



Bahamas Airways BAC 1-11-300, VP-BCP 'Flamingo Jet' at Nassau, Bahamas, operated by that airline during March-October 1970. Calypso Distributors, Nassau, no. 10x110898.

Production of the Series 300 covered just nine airframes, as the simultaneously developed Series 400 proved much more popular, with 70 built.



American Airlines BAC 1-11-400 'Astrojet', N5039, at New York LaGuardia Airport, 14 November 1971. Photograph by Bruce Drum. AeroGem Postcards, no. 0202. American Airlines eventually purchased 30 of the Series 400, thereby becoming the largest operator of BAC 1-11s. It utilized the type during 1966-1972.



Court Line BAC 1-11-400, G-AWBL, at Luton Airport, U.K. Pub'r: Charles Skilton no. 05732. Doug Bastin Collection. This particular aircraft really got around. Delivered in 1968 to Autair (which changed its name to Court Line in 1969), it then served with Cambrian which was absorbed into British Airways, and finally operated with Birmingham European and its successors. Doug says that he flew on this very aircraft 17 times with Cambrian and BA.



Compañía de Aviación Faucett, Perú BAC 1-11-475, OB-R-953, at Tarapoto, San Martín Province, Perú. Doug Bastin Collection. The pictured aircraft was the first of thirteen Series 475 variants built. The '475' was a Series 400 aircraft modified for operations from unprepared airstrips. It featured a new undercarriage with larger, low pressure tires and was fitted with the larger wing and more powerful engines of the Series 500, improving operational performance. One -475 model was retained by BAC and is now on display at Brooklands Museum, England.

The most popular variant of the BAC 1-11 proved to be the Series 500, with 86 built. It was launched in 1967 to meet the fleet renewal requirements of British European Airways. The Series 500 was nearly 13.6 feet (4.11m) longer than its predecessors, enabling it to carry 100 passengers.



British European Airways ('BEA') BAC 'Super' 1-11-500s, G-AVMR and G-AVMY, in the blue tail scheme used on German services, at Berlin Tempelhof Airport. BEA Germany Office Issue. BEA's Series 500 aircraft were known as '510EDs' and varied from the standard 500s by having a modified cockpit, including different instrumentation and avionics, to increase commonality with BEA's Trident aircraft.



British Airways BAC 1-11-500, G-AVMW, at Ringway Airport, Manchester, U.K. Doug Bastin Collection. Doug writes that this rare postcard was issued as part of a set of member photos by the local Cheshire branch of the Womens Institute, a British social and volunteer organization. The pictured aircraft had been with BEA and was acquired by British Airways as part of the reorganization of BEA and BOAC into BA on 31 March 1974. As the pictured aircraft still has a BEA livery, but with BA titles, the photo probably was taken in 1974. Doug adds that between 1968 and 1988 he was on 204 BAC 1-11 flights (!), of which over 100 were on BEA/BA and six were on the very aircraft pictured, G-AVMW -- "still, and likely now to ever remain, my most flown-in type".



British Caledonian BAC 1-11-500, G-AXYD, loading mail at Gatwick Airport, London. Pub'r: Murray King Studio Casa Mia, St. Ives.



Dan-Air BAC 1-11-500, G-BCWA. A/I. Pub'r: Charles Skilton & Fry Ltd., no. 0280. My card is postmarked 10 Nov. 1982 with a handwritten message from Dan-Air.

Now let's take a tour of some of the other airlines that operated the popular Series 400 and 500 models, starting with Latin American carriers.



TACA International BAC 1-11-400, YS-17C, at Toncontín Airport, Tegucigalpa, Honduras. Pub'r: Kruger no. 1424/25. Dist'r: Librería Evangelica, San Pedro Sula, no. 491 333. TACA operated three of these during 1966-88.



Aviateca BAC 1-11-500, TG-AZA 'Quetzal' at Guatemala City, with Agua Volcano in the background. Dukane Press, Hollywood, Florida, no. R24623.



LACSA BAC 1-11-500, TI-LRK, landing at Bogotá, Colombia. Pub'r: Movifoto, no. TI-LRK.



TransBrasil BAC 1-11-500, PP-SDS, in 'Sun' livery, at Vitória, Espiritu Santo State, Brazil. Pub'r: Parana. A great rare card from the leading airport postcard collection of Chris Slimmer of Lawrence, Kansas. TransBrasil operated 10 BAC 1-11-500s (including those under its prior name, Sadia). Seven are illustrated by Mike Machat in Ron Davies' book on TransBrasil, each aircraft in a different beautiful two-tone color scheme.



TAROM ROMBAC 1-11-500, YR-BRA. A/I. Artist M. Andrei. Romania became a big customer for the BAC 1-11, as an exception to its use of Soviet-built aircraft. At first the Romanian airline TAROM purchased 1-11s directly from BAC. Then in 1979 British Aerospace (BAC's successor) licensed Romania to build or assemble BAC 1-11s in Bucharest, for use by TAROM and for possible leasing to other airlines. These were called ROMBAC 1-11s. Nine were produced and delivered, in the -500 Series, during 1982-89.



TAROM ROMBAC 1-11-500 Cockpit at Bucharest Airport. A/I. Formerly in the collection of Allan Van Wickler.



Arkia Israeli Airlines BAC 1-11-500, 4X-BAR. A/I. Pub'r: Palphot, Herzliya, Israel, no. 12733. Arkia operated two of these aircraft during 1977-80.



Air Malawi BAC 1-11-475, 7Q-YKF, and -500, 7Q-YKK, at Blantyre, Malawi. Joint issue by Air Malawi and the Malawi Dep't of Tourism. This rare card is from the collection of Doug Bastin.



Philippine Airlines BAC 1-11-500, RP-C1186, at Manila, July 1980. Photo by Pierre-Alain Petit. Pub'r: j.j.postcards, Switzerland, no. 91. Philippine Airlines was the main operator of the 1-11 in Asia, with a total of 12 BAC 1-11-500s.

#### Notes:

The original postcards of all those shown are in color and, except as noted, are published in standard or continental size and are from the author's collection. I estimate their rarity as -- Rare: the British United Genoa card, the two BAC-issued Mohawk cards, the BAC After-Sales Support card, and the Air Malawi, British Airways, Faucett and TransBrasil cards; Uncommon: the Arkia, Aviateca, Bahamas, Braniff, British Caledonian, British Eagle (with title), BEA, TACA, TAROM cockpit, and Zambia cards. The rest are fairly common.

#### References:

- Aviation Postcard Club International, 'The BAC One-Eleven Postcard Catalogue', Doug Bastin, Compiler, aviapc@aol. com (September 2001 and updated electronically).
- 'BAC One-Eleven -- The Pocket Rocket at 50', Airliner World (August 2013, pp. 32-41).
- www.bac1-11jet.co.uk.
- Airline and Wikipedia websites on the BAC 1-11 and the individual airlines.

Many thanks to Doug Bastin, John Danner, Leonardo Pinzauti and Chris Slimmer for their contributions to this article.

Until next time, Happy Collecting, Marvin



US Airways BAC1-11 at Manchester, NH. Date unknown. Photograph by Jeff Magnet.

### **Tickets and Ticket Jackets**

#### The British Short - Medium Haul Specialist

By Tom Doak-Dunelly • eaglesteadlanding@cablerocket.com

I'll begin this article by committing the ultimate literary sin by recommending another text for readers to curl up by the fire with and read this winter. Malcolm L. Hill's "BAC One-Eleven" (The Crowood Press Ltd., 1999) is a superb read dedicated to this specific aircraft. I suspect I will not be the only editor in this issue to draw your attention to this worthy book and use it as a reference. The One-Eleven was the first aircraft produced by the fledgling British Aircraft Corporation (BAC). Formed in 1960, BAC was one key attempt to bring size, scale and focus to be able to compete globally against US competitors in particular as well as those in continental Europe and the Soviet Union. The other amalgamation of the day was Hawker Siddeley taking over De Havilland and Blackburn.

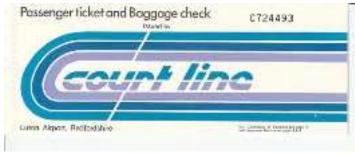
Through its formation, BAC assumed the portfolios of English Electric, Bristol and Vickers-Armstrong. The company of interest here to the One-Eleven story is the purchase in May 1960 of a majority shareholding in Hunting Aircraft Ltd. In Hunting's stable was a design for the 48 seat Hunting 107 jet with a design which, on the surface, resembled the French Caravelle. In the reviews of the BAC portfolio of prospects to work with from the legacy manufacturers, the Hunting 107 caught interest as it fit "below" the long range "1st generation" jets into what was envisioned as the "2nd generation" of efficient short to medium haul jets.



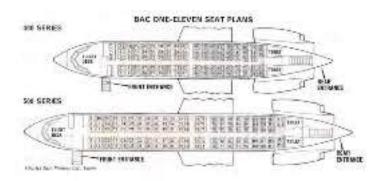
(Fig. 1) BUA British United Airways (UK)



(Fig. 2) British Caledonian (UK)



(Fig. 3) Court Line (UK)



(Fig. 4) Court Line (UK)

Post-merger, the evolution of the now BAC 107 design was shaped by both the new designers and by market research to include the T-tail and an enlarged fuselage to 5 seat width with up to 80 seat capacity. Features aimed at supporting quick-turnaround such as forward and under tail air-stairs were added. To this day, it is amazing how the efficiency of tail air-stairs, indeed aft boarding in general, has been lost in the "jet bridge" and post DB Cooper era. One overall characteristic was how low the fuselage was to the ramp such that baggage could be easily moved in and out of the hold without having to have costly conveyor equipment tied up at out-stations. With these changes, the renamed BAC 1-11 was then taken to market.

It is fitting that the launch order originated with British United Airways (BUA). BUA was a freshly formed entity consisting of Airwork, Hunting-Clan and other companies with its Managing Director none other than Freddie Laker who would go on to fame of course with his namesake carrier Laker Airways. Figure 1 illustrates a Domestic style example from 1972.

While Dan-Air and BEA were also notable operator "home court" operators, for our second example we'll highlight British Caledonian, who took over BUA, and went on to operate a number of 200 and 500 series aircraft. Figure 2 presents another Domestic style ticket example from 1973.

Before we leave "home court" we would of course be remiss without providing examples from the noted tourist carrier Court Line (Figures 3 & 4). Figure 4 is the rear of the ticket which

provides very clear Seat Plans for both their 400 and 500 series aircraft.

The use of the World Tour to demonstrate the One Eleven to prospective customers is a classic example of the era. As Hill has documented, the tour had three phases with the first (November 1965 – January 1966) focusing on the United States and Central America. If one airline went "all in" on the One Eleven in this part of the world it was Mohawk. Proud and prolific are two appropriate descriptors for their promotional materials for the aircraft as its 200 series aircraft entered their service (see Figures 5 & 6 for examples). As to Central America one later adopter of the 500 series was Aviateca of Guatemala (Figure 7).

Phase II of the World Tour (early 1966) saw the One Eleven travel through the Middle East, Far East, Australasia and northwards to Japan. The Philippines segment saw four city stops, with Philippine Airlines (Figure 8) becoming a 400 and 500 series customer. Staying in the Pacific, Fiji's Air Pacific (Figure 9) was a 475 series customer.

Phase III, the final phase of the tour, revisited the US and extensively covered South America. The venerable Peruvian carrier Faucett (Figure 10) was the launch customer for the 475 series while Austral of Argentina introduced the 400 series (Figure 11).

Africa did not feature in the original demonstration tours. However, an early sale of 200 series was made to Central African Airways (CAA). These aircraft were not delivered to CAA due to the Rhodesian unilateral declaration of independence in 1965 and its subsequent division into Rhodesia, Malawi and Zambia carriers. Zambia assumed the two One Eleven's, though it initially placed them with British Eagle before they came home to Zambia. Figure 12 illustrates a ticket example from the 1969 period.

In more recent times Africa, particularly Nigeria, became the final resting place for many a One Eleven. I'm sure at least one of you readers has done the actual mathematics. In approximate terms, it appears that the last Nigerian carriers accumulated around five air frames on the ground for every one they were trying to keep in the air at the time the government finally brought in restrictions in 2002 on the operation of old aircraft. The last spotter reports I reviewed showed Mali as also being a popular "final" destination. Many of the last operating examples of the One Eleven where those born through the co-operation agreement with Romania. This agreement saw production under license begin in the late 1970's. These 500 series ROMBAC 1-11's initially went to TAROM (ticket example - Figure 13) and then spread throughout the world in subsequent sales and leases.

One of the last major operators of these Romanian models in particular was Aero Asia of Pakistan. Formed in 1993, Aero Asia took on examples from both TAROM and Romavia (VIP fleet affiliated with the Romanian Air Force). Figure 14 presents a Domestic ticket example from 1998. It is rather fitting that this Pakistani carrier became one of the last major One Eleven operators from the standpoint that the marketers had promoted it extensively in India on the 1966 World Tour. They almost got it right, just one country over and thirty odd years later!



(Figs. 5 & 6) Mohawk Airlines (USA)



(Fig. 9) Air Pacific (Fiji)



(Fig. 7) Aviateca (Guatemala)



(Fig. 12) Zambia Airways (Zambia)



(Fig. 8) Philippine Airlines (Philippines)



(Fig. 11) Austral (Argentina)



(Fig. 10) Faucett (Peru)



(Fig. 14) Aero Asia (Pakistan)

### Bilet de călătorie și buletin de bagaj / Passenger ticket and baggage check



(Fig. 13) TAROM (Romania)

### Flying Stamps

#### The BAC 1-11 on Postal Stamps

By Jim Edwards •

Surprisingly, the British BAC 1-11 has been featured on several postal issues over the years. The countries producing these stamps are or were part of the British Commonwealth. Here are a few examples for your review.



The LIAT BAC 1-11 was printed on this stamp issued in 1976 by the Caribbean nation of Grenada to honor air transportation.



From Africa, an Air Malawi BAC 1-11 was included on this Malawi issue to celebrate the tercentenary of Lloyd's of London.



Gibraltar issued this 20 pence postal issue in 1982 featuring a British Caledonian Airways BAC 1-11.



As part of the celebration of the 100th anniversary of the Universal Postal Union in 1974, Jersey issued this 20 pence stamp with a British Airways BAC 1-11 and the Steamer 'Aquila.'





From the Cayman Islands, we have these two issues with Cayman Airways BAC 1-11's from 1979 to celebrate the 25th anniversary of Owen Roberts Field.





Another issue from Jersey in 2003 celebrated the 20th Century Aviation achievements. The set included a British United BAC 1-11.

### Wings

#### The BAC 1-11

I'm pretty sure that I rode on several BAC 1-11s during my college years (Sep 1963 – Jun 1967) when I was studying in Buffalo, NY but returning to Long Island, NY during breaks. I couldn't afford to fly each trip and on occasion used Mohawk Airlines, but I'm sure that my tush was planted on the seat flown by an American Airlines "400 jet" on several occasions. It is even remotely possible that I might have been flown by Dick Koran, from whom I took over this column' on one of those legs. He began his American Airlines career as a first officer on the "pocket rocket" from the United Kingdom.

While working for U.S. Customs at Montreal's Dorval Airport (CYUL), we coined a new phrase to describe the Rolls-Royce Spey-engined aircraft. After listening to many early morning starts, we dubbed the aircraft "The most efficient means devised by man to convert fossil fuel to noise". The sound coming from the BAC 1-11 was unmistakable. To those of us within earshot, it seemed that the turbines were spooled up to many more revolutions per minute before the ignition was lit and the engine then spooled down to operating speed. I came close to feeling pity for the vanes and stators.

Married, with children (where have I heard that before?), the family and I had the chance to fly on Allegheny and later U S Air-operated BAC 1-11s on flights between Montreal (CYUL) and Buffalo, NY (KBUF). Karen's family is from Buffalo and daughter, Julia, was born there. Anyone who has lived in the Buffalo area knows that there is no place in the U.S.A. that has better Polish sausage than that town. The local pizza also ran rings around anything purporting to be pizza that was offered in Montreal.

It was on trips back to Montreal from Buffalo that we discovered that the baggage compartment was not fully sealed from the passenger cabin. Other passenger wondered what the wonderful smells, which wafted through the cabin could be, but we knew. It was a blend of fresh and smoked Polish sausage and really good half-baked pizza and, of course, Buffalo chicken wings. I'm hungry all over again. As a professional courtesy, I shared some of the care packages with Canada Customs.

In the mid-1980s, Quebecair sold three BAC1-11s to Nigeria's Okada Air. These were Serial #s 094 – C-FQBR, 122-C-GQBP and 123- C-GQBV. I watched as the last Quebecair livery of deep blue with white accents was replaced with the Okada Air white fuselage with blue accents and the blue tail with the head of "Okada" were applied. Their odyssey from Canada's Quebec to Africa's Nigeria must have been one or three for the books.

If one wishes to become depressed, go to your computer and query Okada Air BAC 1-11s derelict. The images of the seventeen BAC 1-11 aircraft and a single Boeing 727, parked at a hangar in Benin City, Nigeria (BNI / DNBE) will hurt your eyes. I don't know what causes the grey pall to develop on aircraft stored on Nigeria's

#### By Charlie Dolan • wingcobda@yahoo.com

hardstands. Perhaps it is residue from factories or household cooking, but the image is that of dreariness which is appropriate for the condition of these former "pocket rockets".

Enjoy the images of several operators of this fine aircraft.

#### BAC 1-11 Insignia



Air Congo • QC • 1961 – 1971

This wing is of gold bullion thread on a black fabric backing. It has light blue satin fabric behind the gold star in the center. The wing is sewn on to the uniform jacket. There is no indication of the maker. I would really like to find the Air Congo cap badge to match this wing. It would help me complete my full size reproduction of the 1965 Boeing Aircraft advertisement.



Air Malta • KM AMC • 1973 – present

Both wing and cap badge are sewn on to the uniform. The wing is made up of gold and silver bullion thread on padded black fabric. The Maltese Cross is of silver thread. Black thread helps define to wing's feathers.



The cap badge is also on padded black fabric and shows the wings and castle turret in gold bullion thread with black thread defining the feathers and bricks. The square in the center is red fabric with a bleu flash at the lower left. The Maltese Cross is in silver bullion thread.



Aloha Airlines • AQ • AAH • 1946 – 2008

Both wing and cap badge are of gold color metal with dark blue enamel. The lower portions of the center discs are textured and the feathers of both items have a satin finish. The higher surfaces are polished. The wing is clutch back with no hallmark. The cap badge has a single screw post and two positioning pins. There is no hallmark.



Channel Airways • CW • 1946 – 1972

Both wing and cap badge are sewn on to the uniform jacket and cap. They are composed of gold bullion thread on black fabric backing. The letters "C" and "A" are of green thread on yellow fabric. There are no indications of maker.





Cyprus Airways • CY • CYP • 1947 – present

Both wing and cap badge are of the sew on variety with gold bullion thread on black fabric backing. The design, which represents a galloping Cypriot mouflon sheep, is made up of white thread on blue fabric. As usual, no evidence of maker.



LANICA Lineas Aereas de Nicaragua • NI • 1946 – 1981

Both wing and cap badge are of gold color metal with dark blue enamel. The design is reflective of the influence Pan American World Airways had on the development of this carrier.

The wing is pin back and had a hallmark which was double struck making it hard to read. It looks to be the Balfour shield and "10k GF". There is damage around the single star with missing enamel at the top.

The cap badge has a single screw post and is hallmarked "LGB  $1/10\ 10$ k"





Philippine Air Lines • PR • PAL • 1941 – present

The earlier cap badge is attached to a fabric band, which goes around the cap's headband. The insignia is based on a stiff cardboard or plastic square covered in black fabric. The design is of gold bullion and blue thread. There is a cloth label on the back of the insignia "Almar's Mfg and Supply, Inc. Metro Manila"



The upper wing shown is of pewter color metal with dark blue enamel. It is clutch back and lacks a hallmark.

The lower wing is of silver metal with white, light blue and dark blue enamel. It is pin back and hallmarked "LGB STERLING".



The later style cap badge also has the same construction as the former device The gold bullion thread is much shinier than the previous issue.



The wings featuring the two "tails" are of highly polished gold color metal with red, white, blue and black enamel. All of the wings are clutch back. Only the flight engineer wing displays a hallmark, "SUAREZ BROS".





The captain's wing which shows the two "tails", with the gold "sunburst" is of highly polished gold color metal. It is clutch back and also hallmarked "SUAREZ BROS".



The last style wing is smaller than the others and shows much smaller red and blue "tails" at the base. The leaves in the wreath are accented with white enamel. It is clutch back and hallmarked "SUAREZ BROS CEBU CITY".



TAROM – Transporturi Aeriene Romane • RO ROT 1954 - present

The wing is gold color metal and has a pin back. There is a plastic coating over the light blue/green and medium blue design. There is no hallmark.

The cap badge is of the same color and material which includes the plastic coating over the entire front surfaces. The cap badge attaches to the hat by three long tabs which pierce the fabric and then are bent over to hold the badge to the fabric. There is no hallmark.

# **Junior Wings**

### Junior Wings of Airlines Operating the BAC 1-11

The BAC 1-11 was flown by dozens of airlines that issued Junior Wings. Among these are California low-cost start-up carrier (and now defunct) Pacific Express. Pacific Express issued a single junior wing (PEA-01) that is among the hardest to find.



Pacific Express BAC 1-11. Airline issued postcard.



Pacific Express



Pacific Express

Allegheny, and later its merger partner USAir, operated the BAC 1-11 and issued this junior wing (AAA-01) as well.



Allegheny Airlines

Next is BAC 1-11 operator American Airlines "Miss Stewardess", a light tin junior wing (AAL-11).



American Airlines

### By Lane Kranz • lanekranz@msn.com

Sir Freddy Laker's Laker Airways issued one of the smallest junior wings, a plastic wing with a sticky-back. This wing is gold in color with the logo in red (no number designated). Laker went bankrupt in 1982.



Laker Airways



Laker Airways

Finally, Central American operator, TACA, flew the BAC 1-11 during the 1970s and early 1980s. TACA has issued several junior wings, including (TAI-01) this beautiful version, a white, plastic wing with the company's colorful logo.







TACA (El Salvador)

# What Is It?

# By Ken & Beth Taylor • keebeetay@telus.net

Here are our mystery items for this issue.



Stan Baumwald asks, "What is "AN"?, as it is not Air North.



Next is "C A T", is it "Catalina Air Transport", of California? Or is this "Civil Air Transport" of Taiwan, or some other another airline with the same name?



This is from "Best Airlines". From where and when?



From where and when is "Central Airways"?



Could anyone identify "AJ", or "NJ"?



"HILTON, We Care". We assume this is from Hilton Hotels, but why, where and when?



A winged letter "W". Any identification?



Where is this Elephant with wings from ? Nigeria Airways, perhaps?



This wire and cloth "HUB" wing, where and when?



On going through my wings I found this metal wing also "HUB", same colouring. This is from Fort Wayne, Indiana, dated 1966.



A letter from Hector Cabezas writes that this badge is from the Turkish Air Force, 70 to 80 years ago.

Another year has gone by quickly. I haven't collected very much in the way of badges in 2013. Guess that is what happens when we miss the big show! Hopefully we will be able to make it to LAX next summer for AI 2014.

Have a good Christmas and winter! Ken and Beth

# **Book Review**

# BACONE-ELEVEN THE WHOLE STORY STEPHEN SKINNER A highly recommended tribute to a splendid airliner Mike Hock, Aeroplane

BAC One-Eleven: The Whole Story By Stephen Skinner The History Press, 2002, 2013 ISBN 978 0 7524 9699 3

My knowledge of the One-Eleven (apparently never properly referred to as a "1-11") going into reading Mr. Skinner's book was considerably less than that of the two American twin-jets with which it competed for most of its career: the Douglas DC-9 and the Boeing 737. That can be partly blamed on my being a U.S. citizen of a certain age. While American and Braniff International bought fleets of this airplane, as did a number of U.S. local service carriers, the One-Eleven was largely out of service in the country of my birth by the time I reached adulthood. My primary memories of it date back to my teen years (in the mid-1980's) as a volunteer with the Port Authority of NY and NJ's JFK Operations Unit. At that time, USAir still had a considerable number of ex-Mohawk and Allegheny One-Elevens serving Kennedy. My most vivid memory of them was the substantial level of noise generated by their Spey turbo-fans!

BAC One-Eleven: The Whole Story brought me thoroughly "up to speed" on a jetliner that had great potential at its birth but was hindered by an engine that could not be easily upgraded to the

### By Shea Oakley • ancientskies1@safeaccess.com

kind of power output and efficiency which would have matched its American counterparts. Its struggles only worsened with ineffectual management at British Aircraft Corporation which consistently lagged in addressing this and other problems (such as the lack of increased capacity offered beyond a single, one-time stretch of the airframe). While well over 200 One-Elevens were built by BAC and, later, their Romanian "ROMBAC" partners, this aircraft never came close to competing effectively with the DC-9 and 737 which, together, have sold in the thousands. However, these impediments to the success of the One-Eleven in no way dull the enthusiasm brought by the author to telling its story.

Skinner grew up on the outskirts of the BAC Hurn production facility where the majority of the type was built. His memories of prototype tests and airline delivery flights are wreathed in the kind of passion that develops in the heart of a young airliner enthusiast and often remains for a lifetime. It is no surprise that his 2002 "fantrip" in the cockpit jump-seat of a European Aviation Series 530, G-AZMF (just before the end of One-Eleven service in Europe) scores a whole chapter in this volume's extensive appendices. Skinner's book, in fact, was first published during that year, but 2013 has seen an expanded edition published which brings the "whole story" up-to-date.

I was surprised and a bit saddened, to learn that out of 235 constructed, apparently only three One-Elevens now grace 21st Century skies: two flying for Northrop-Grumman as test aircraft and one as an executive jet out of Dallas Love Field. It seems a bit ironic that the last One-Elevens are all U.S.-based, considering that it was American aircraft that ultimately eclipsed the breed in sales.

Well-illustrated, BAC One-Eleven: The Whole Story includes an eight-page color section and the aforementioned nine appendices which cover everything from a production list to short bios of the major BAC test-pilots involved in the two-decade program. Accuracy is generally quite good with a couple of notable exceptions. At one point the book states that Frontier Airlines became a DC-9 customer after considering the One-Eleven. In actuality, Frontier purchased 737's. Sir Freddie Laker, who was Managing Director of launch customer British United and who later started his own namesake airline, is described as "only ever in business to operate IT (inclusive tours) and charter flights." Actually, Laker Airways-famed low-fare transatlantic DC-10 "Sky-Train" service was scheduled and is probably the biggest thing for which the man is remembered.

But these are, essentially, quibbles in an otherwise excellent history, one which will likely never be bettered in telling the tale of the only British-built twin-jet airliner.

Availability: New copies of the second edition are available on Alibris.com starting at just over \$20.

# Major New Exhibit Opens at Beechcraft Museum



A brand new exhibit featuring "Beech Aircraft in Airline Service" has debuted at the Beechcraft Heritage Museum outside Nashville, TN. Jay E Prall, curator for the display, spent four months resourcing material from around the world including an array of photos and memorabilia celebrating Beech Aircraft's global contribution to commercial aviation. The history spans the days from the Beech 18 to the 1900D with lavish use of timetables, postcards, seat-pocket safety cards, and other collectibles related specifically to commercial aviation. In addition, aviation historian Roger Bentley donated his entire library of nearly 500 Beechcraft airliner slides.

The centerpiece of the exhibit is a Prairie Airways' Beech 18, a major piece in the museum's 27 aircraft inventory. One of the new display cases focuses on the history of the carrier, one of ten bush airlines that formed the original Canadian Pacific Air Lines. Prairie flew two Beech 18s, the second of which has survived and is part of the Pima Air & Space Museum (AZ) collection.

"Our archives telling the story of Beech in airline operations has been one of our weak spots," explains Wade D. McNabb, museum director. "The addition of a major exhibit to fill that need, and at no cost to the Beechcraft Heritage Museum is something we never dreamed of."

In its entirety, the memorabilia fills six oversize display cases. Society-sponsored exhibits have been established in other museums, but the Beech one is the most extensive collection placed in a single museum where it will remain on semi-permanent loan.



British Caledonian BAC 1-11 Series 500 Postcard and Stamp. Courtesy of Henk Heiden Collection

# Beer, Sun, Sea, Sand ... and Aviation?

By Roger May • rpmay 29@gmail.com

For those of you who have travelled the World in search of such a utopia; is there such a place? Yes, there is!

The Country: Spain. The City: Malaga. The Airport: AGP

The Place: "The National Museum of Airports and Transportation".

"So", you might say; what's there and is it worth the time and effort of travelling to this so called, "aviation utopia"?

The Museum itself is based in the original and superbly restored 1930s Hacienda Style Airport Terminal. The facility is supported by the Spanish Airports Authority and is dedicated to education and shows the history of aviation in Malaga and Spain as a whole.

There are many displays of airline and airport memorabilia, airline uniforms, aircraft models and interactive displays of how aircraft and airports work, there are many larger displays of airport equipment and vehicles.

There are 12 aircraft in the collection. They include a Beech E18S in the colors of "Spantax S.A." Spain, a superbly restored Convair CV-440 in the colors of "Kar Air" Finland, De Havilland DH104 Dove with "Martin's Air Charter", Holland colors, a DC-3 (C-47B) in "Iberia" colors and last but by no means least the front fuselage section of a former Aviaco / Iberia DC-9-32 built into one of the display buildings.

Entrance to the museum is free. The staff is welcoming and friendly, and provided they are not busy with an extensive schools and colleges program, they will give guided tours. The museum has its own viewing area so there is a good view over the extensive General aviation ramp with many corporate aircraft and business jets on show, with a runway and taxiways clearly seen beyond.



The Museum's AVIACO / IBERIA Douglas DC-9-32 EC-CGO (cn 47640).

It is a short walk to the current modern AGP terminal with many cafés and restaurants, and for those with a hire car it is a 10 minute drive to a dedicated and officially sanctioned viewing place where great photos of aircraft can be taken with the sun behind you. The museum staff will be delighted to give you directions.

Oh yes, I nearly forgot. The Beer: The brewery is right next door, (tours are available, booked in advance). The Sun, Sea & Sand: The "Costa Del Sol" is famous the World over.

Your aviation utopia awaits you. Enjoy!

Museum Information:

Open: Tuesday to Sunday 10am to 2pm with an extra opening of 5pm to 8pm on Tuesdays, closed on Mondays.

Website: www.aeroplaza.org. Email: agpmuseo@aena.es.



1930s style Terminal and Control tower.



Convair 440 in the colors of "KAR AIR" Finland. OH-VKN. (cn 503).



The leading edge all-color international monthly magazine devoted to airlines, airliners, and the air transport Industry. Truly 'A Global Review Commercial of Flight', Airways offers an unparalleled contemporary collection of reports, entertaining columns, and a healthy dose of nostalgia.



# Subscribe

direct from the publisher and

save

up to

50%!

See our secure website for worldwide delivery rates.



# www.airwaysmag.com

airways@airwaysmag.com

# Flight Exchange

Our Member Forum for buying, selling and swapping airline memorabilia Send your advertisement to Editor@WAHSOnline.com or to our Post Office Box

Looking for all things Beechcraft in airline service. The Beechcraft Heritage Museum in Tennessee with its extensive collection of aircraft has asked the World Airline Historical Society (WAHS) to create a major, permanent exhibit of Beech aircraft in airline service. WAHS is looking for donations of post cards, timetables, safety cards, photos, models, and anything else. Please contact Jay Prall (jayeprall@msn.com or 503-799-3003 Central Time) to discuss what you have. A charitable donation letter will be cheerfully sent upon request.

FOR SALE: World's Largest Airline Sliding Puzzle Collection. This collection consists of 98 plastic sliding puzzles (all different) plus 30 duplicates. Also included are pictures of 43 other sliding puzzles which are known to exist, so you know what else to look for. Asking Price: \$500. For pictures of the collection, contact Fred Chan, topflite@olympus.net.



Framable Color Prints and Posters.

Digital Sharp Images. Large Photo Library.

# Airliners Gallery.com

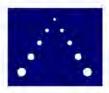
Daily airline news from around the world with the latest photos:

WorldAirlineNews.com

Historic Airline Classic Color Photos:

AirlinersfromthePast.wordpress.com

**World Airline News** 



# **UPCOMING AIRLINE COLLECTIBLE SHOWS!!**

The World Airline Historical Society is not responsible for the accuracy of the following show listings. See WAHSOnline.com for a complete show listing.

Always check with the individual show promoter to ensure the event is still scheduled as stated before making your travel plans.

Please send your show listing to editor@wahsonline.com or to WAHS headquarters.

### LOS ANGELES AIRLINE MEMORABILIA SHOW • Saturday, January 19, 2014

Embassy Suites LAX/South, 1440 E. Imperial Ave, El Segundo, CA 90245. Contact: David Cherkis (deeceeflyer@cox.net) via phone (702) 360-3615 or Marshall Pumphrey (mpumphr@aol.com) via phone at (562) 987-1904. Special room rate available by calling 1-800-362-2779 and mention the LAX AIRLINER EXPO group.

### SAN FRANCISCO AIRLINE COLLECTIBLE SHOW • Saturday, March 8, 2014

SFO Grosvenor Best Western SFO airport, Mike Chew Box 25494, San Mateo, CA 94402 or Tom Vance (408) 504-8345. Show hours: 9am until 3pm. Admission: \$5, 12 and under are free. SFOairlineshow@juno.com; www. SFOairlineshow.com

### CHICAGOLAND AIRLINE COLLECTIBLE SHOW • Saturday, April 12, 2014

Holiday Inn-Elk Grove Village, 1000 Busse Road. Show hours: 9am until 3pm. Free shuttle to/from O'Hare Airport. Admission: \$5, children under 12 free. For more information, please call Steve Mazanek (773) 909-5623. Call the Holiday Inn at (847) 437-6010 for special show rates.

# DALLAS AIRLINE COLLECTIBLE SHOW • Saturday, April 26, 2014

Hilton Garden Inn, DFW Airport/South, 2001 Valley View Lane, Irving, TX 75061. Contact Duane Young for more information via email at: jetduane@att.net or by calling (504) 458-7106.

# LGW2014 GATWICK AVIATION ENTHUSIASTS FAIR • Sunday, April 27, 2014

Sponsored by the Gatwick Aviation Society. LGW2014 ~ International Aircraft Enthusiasts Fair. K2 Crawley, Pease Pottage Hill, Crawley, RH11 9BQ, West Sussex. Admission: £4. Free car parking. For more information and booth availability, contact Tom Singfield, Gatwick Aviation Society, 25 Chennells Way, Horsham, West Sussex, RH12 5TW. England. Telephone 01403-252628. E-mail LGW2014@gatwickaviationsociety.org.uk www.GatwickAviationSociety. org.uk

# AIRLINERS INTERNATIONAL 2014 • Thursday - Saturday, July 10 -12, 2014

Los Angeles, CA. Sheraton Gateway LAX Hotel. "The World's Largest Airline Collectible Event!". For more information, see www.AI2014LAX.com. Phone: 504-458-7106 (USA Central Time), via Email: info@ai2014LAX.com or Snail Mail: AI 2014 LAX, PO Box 101, Covington, LA 70434, USA.

### CLEVELAND AIRLINE COLLECTIBLE SHOW • Saturday, August 16, 2014

Sheraton Cleveland-Hopkins Airport Hotel (site of AI 2013). 5300 Riverside Drive. Cleveland, Ohio 44135. Show hours: 9am until 3pm. For additional information, please contact: Bob Palermo. Phone: 216-551-4549, Email: rpalermo@msn.com.

### SAN FRANCISCO AIRLINE COLLECTIBLE SHOW • Saturday, September 27, 2014

SFO Grosvenor Best Western SFO airport, Mike Chew Box 25494, San Mateo, CA 94402 or Tom Vance (408) 504-8345. Show hours: 9am until 3pm. SFOairlineshow@juno.com; www.SFOairlineshow.com

### CHICAGOLAND AIRLINE COLLECTIBLE SHOW • Saturday, October 25, 2014

Holiday Inn-Elk Grove Village, 1000 Busse Road. Show hours: 9am until 3pm. Free shuttle to/from O'Hare Airport. Admission: \$5, children under 12 free. For more information, please call Steve Mazanek (773) 909-5623. Call the Holiday Inn at (847) 437-6010 for special show rates.

Thank you for your continued support of our hobby and WAHS/AIA by attending these shows!







