

# MAGNA MODELS

RESIN CONVERSION KIT Kit No 4072 Page 1  
 Donor kit required:- Airfix Bristol Mk32  
 Superfreighter, Kit No 05002

BRISTOL FREIGHTER 170 Mk 21 © 1996

## BRIEF HISTORY

An improved version of the Mk 1/11, the Mk21 featured rounded wing tips, more powerful engines and increased fuel capacity compared to the earlier marks. A total of 92 aircraft of this mark were produced before it was superseded by the Mk31. Two crashes were found to have been caused by a stress fracture of the fin which resulted in the fitting of a dorsal fin fillet to the Mk31. Other modifications included rounded tips to the tailplanes and the repositioning of the oil coolers to the wing leading edges, many Mk21's were retro fitted with these modifications. Operators of the Mk21 included Silver City, Cie Air Transport, Air Outremer, Autair, Australian National, Saudi Arabian, Central African, Air Kruiise, BEA, Eagle, Air Vietnam, Channel, RAAF, RAF, LTU, Aviacion Y Comerico and Ste Indochinoise de Transports.

## TECHNICAL DATA

Span 108' Length 68'4" Height 21'8" Weight empty 26,484lbs Loaded 40'000lbs Max speed 193mph Ceiling 21,000ft Powerplants 2 x Bristol Hercules 672 14 cylinder two row radial piston engines of 1,690hp

## REFERENCES

Scale Aircraft Modelling Vol 14 No 4 contains colour details of most military schemes.  
 Scale Aircraft Modelling Vol 13 No 12 includes a selection of civil schemes.  
 Scale Models International November 1991. British Civil Aircraft Vol 1, A J Jackson, Putnam.

## ADHESIVE NOTES

For plastic to plastic joints use Liquid Poly or similar. For resin to resin and resin to plastic use Super Glue (Note that Super Glue bonds resin very strongly, tack joints with a very small amount and check alignment before applying sufficient for a permanent joint) Use PVA (white) glue to attach canopy, super glue will cloud transparencies. For glazing cabin windows and nose door apertures, if required, use Krystal Kleer or similar. Use cellulose stopper/putty to fill joint lines, it dries quickly and is softer to rub down than resin or polystyrene and thus will cause less damage to the surrounding areas.

## PAINTING NOTES

Clean model thoroughly with a luke warm solution of washing up liquid and water before applying primer. White or light grey cellulose primer will adhere well to plastic and resin and will rub down to a "feather" edge if any faults show up after priming. Apply several very light coats until coverage results, too heavy an application could damage the polystyrene parts. This primer will accept any type of top coat paint.

## DECAL NOTES

Most of the air force markings applicable to the Mk 21 are available on specialist sheets obtainable from some model shops. Messrs Hannants catalogue includes listings of numerous sheets from several manufacturers. Unfortunately there are very few decals of suitable airline markings available although some lettering and numbers may be gleaned from the alphabet and number sheets produced. Letraset rub down sheets are a useful source of lettering and numerals in several colours and styles, these are available from specialist stationary shops. The Hannants Xtra Decal range includes sheets of striping in several colours and widths which could be used for cheat lines.

## PREPARATION OF PARTS

Cut casting lug from resin fin with a razor saw and sand edges square to guide line. Gently rub down flash on nose mouldings with wet or dry paper attached to a flat surface until any flash just disappears. Cut canopy from backing sheet approx 2mm outside of guide lines with a small, sharp pair of scissors and then carefully cut along guide lines. It is easier to do it this way than try to do it in one go. Modify Airfix kit parts as illustrated in diagrams, take extreme care to ensure all cuts are square and straight or excessive filling will be required after assembly. Note that resin is toxic and take care not to inhale dust when cutting etc. Magna Models reserve the right to alter the specification of this kit without notice.

## BREAKDOWN OF PARTS

Nose, port & starboard

Engines x 2

Fin/Rudder

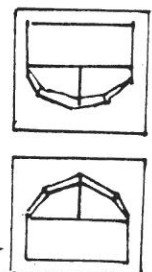
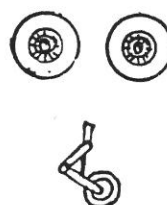
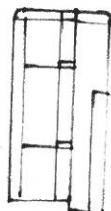
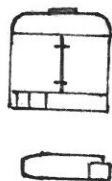
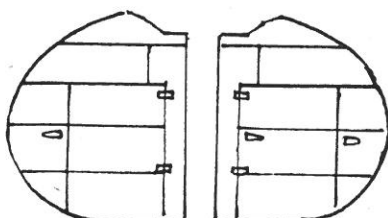
Main uc wheels

Canopies

Coolers x 2

T'planes x 2

& tailwheel



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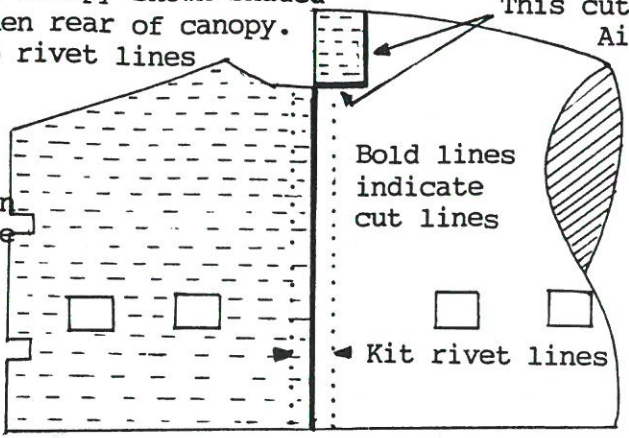
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BRISTOL 170 FREIGHTER Mk 21

Diagrams of modifications to Airfix parts

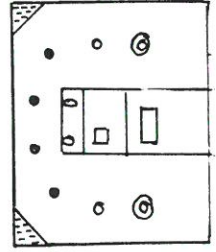
Cut off nose and rear canopy shown shaded  
Cut off nose first, then rear of canopy.  
Keep cuts parallel to rivet lines

This cut follows scribed window line on  
Airfix fuselage

To fit resin nose  
halves tape fuselage  
halves (joint face down  
to a dead flat surface  
and glue resin parts  
on, ensuring that they  
lay flat against the  
flat surface as well.



Trim off areas shown shaded  
on cockpit floor.



Locate cockpit floor into rear  
halves of locating slots which  
remain after cutting fuselage.

Just tack nose halves  
and then check match  
with opposite fuselage half before gluing permanently

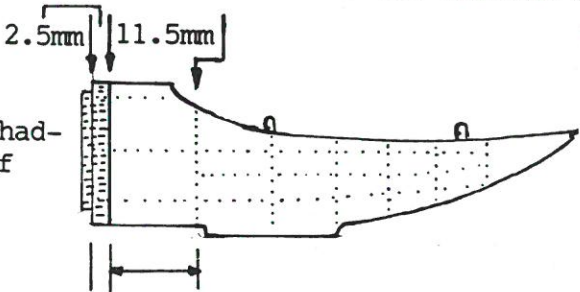
Resin main uc wheels. Drill holes in plain, leg side of hubs slightly deeper to accept the  
Airfix kit stub axles.

## Engine nacelles modification

When fitting resin engines note that shallow slots at rear  
fit beneath air intakes on top of nacelles.

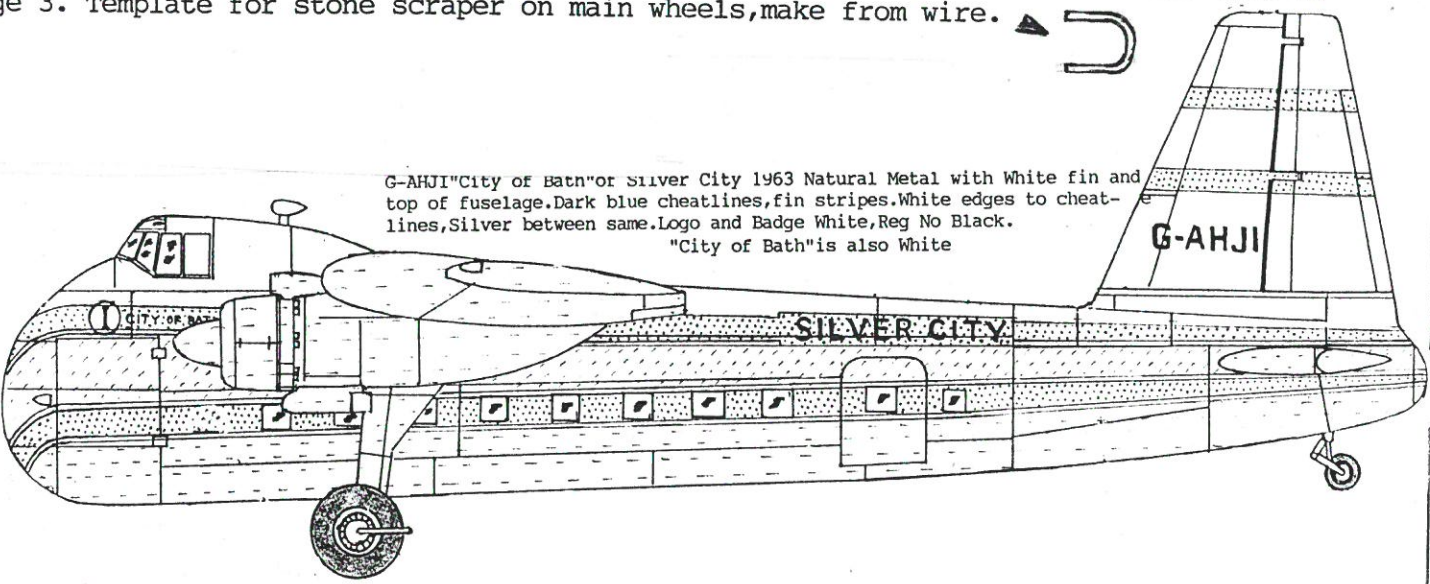
MADE IN SPAIN by Magna Models, Apt de Correos 27,  
Trapiche 29719, Malaga. Tel/Fax 0034 952 030 962.

Cut off shaded  
part of  
nacelles.



After fitting resin engines cut 1.5mm lengths  
from plastic rod for exhausts. Fit in  
positions shown on side view drawing on page 3

**GENERAL NOTES** The Airfix kit has rivet detail and shaded areas for cheat lines which are best removed by rubbing down with 1000-1200 wet or dry paper and panel lines then scribed. The trailing edges of the flying surfaces are much too thick and need rubbing down to a more scale thickness. Note that the number of windows varied on certain aircraft so check photos of particular machine you are modelling and modify as required. DF loops and antenna also varied considerably as did cockpit glazing, so, again check references. Some machines had transparent panels at the bottom front of the cargo doors, these can be drilled and filed out, or, alternatively painted black and given a coat of gloss clear varnish. Cabin windows in the Airfix kit are very thick and a more realistic effect can be achieved by using Krystal Kleer or a similar "glazing" agent. Excepting modifications aforementioned build the kit as per the Airfix instructions. Note that props will not need rotating spindle, glue spinners to props and super glue to front of resin engines. Fit oil coolers in position shown on side view on page 3. Template for stone scraper on main wheels, make from wire.



G-AHJI "City of Bath" or Silver City 1963 Natural Metal with White fin and top of fuselage. Dark blue cheatlines, fin stripes. White edges to cheatlines, Silver between same. Logo and Badge White, Reg No Black. "City of Bath" is also White

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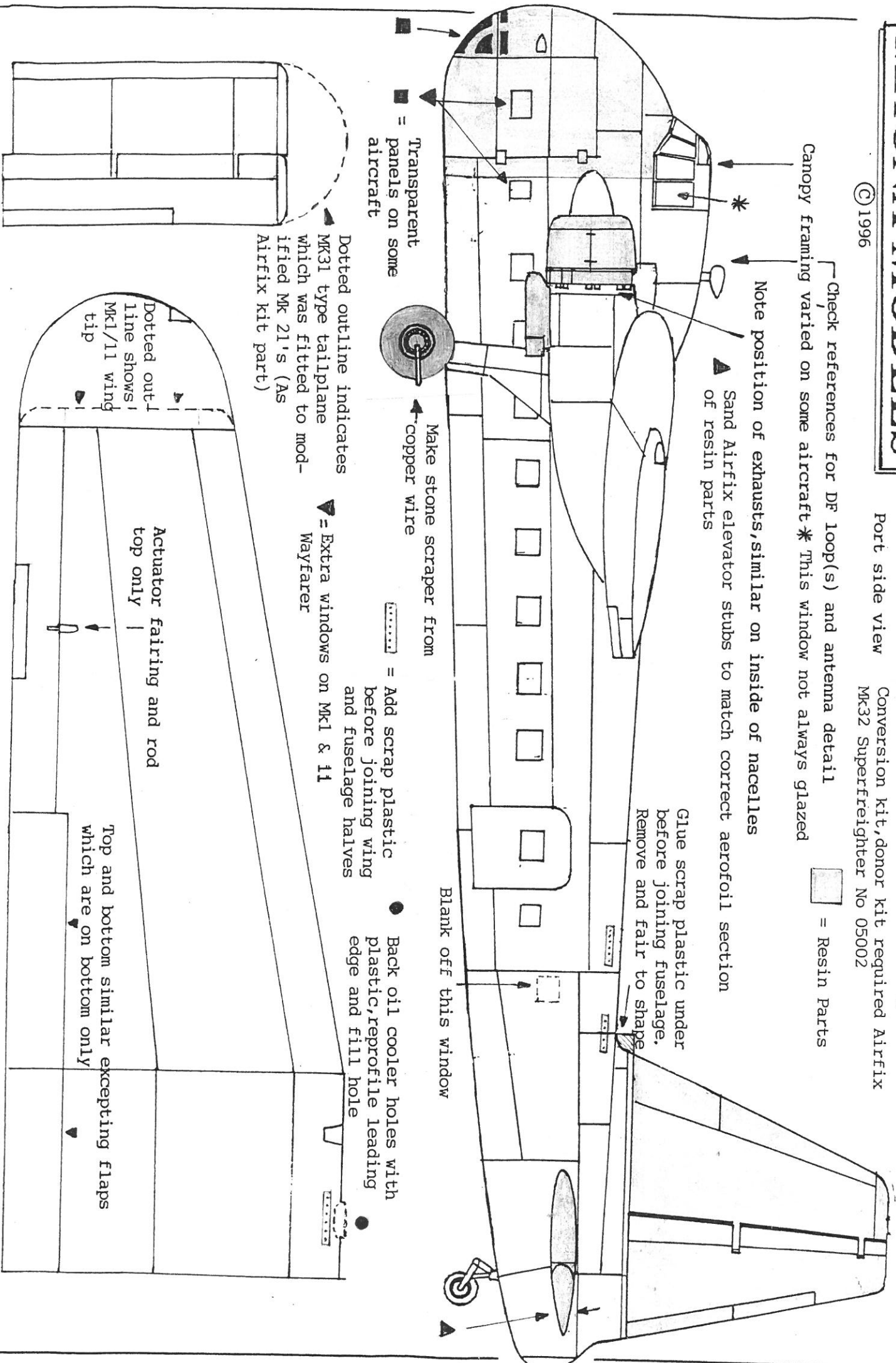
BRISTOL 170 FREIGHTER Mk 21 Kit No 4072

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Port side view

Conversion kit, donor kit required Airfix Mk32 Superfreighter No 05002

© 1996



Check references for DF loop(s) and antenna detail  
 Canopy framing varied on some aircraft \* This window not always glazed

Note position of exhausts, similar on inside of nacelles  
 Sand Airfix elevator stubs to match correct aerofoil section  
 Glue scrap plastic under before joining fuselage. Remove and fair to shape

Transparent panels on some aircraft

Make stone scraper from copper wire

Blank off this window

..... = Add scrap plastic before joining wing and fuselage halves

● Back oil cooler holes with plastic, reprofile leading edge and fill hole

Dotted outline indicates MK31 type tailplane which was fitted to modified Mk 21's (As Airfix kit part)

▼ = Extra windows on Mk1 & 11 Mayfarer

Actuator fairing and rod top only

Top and bottom similar excepting flaps which are on bottom only

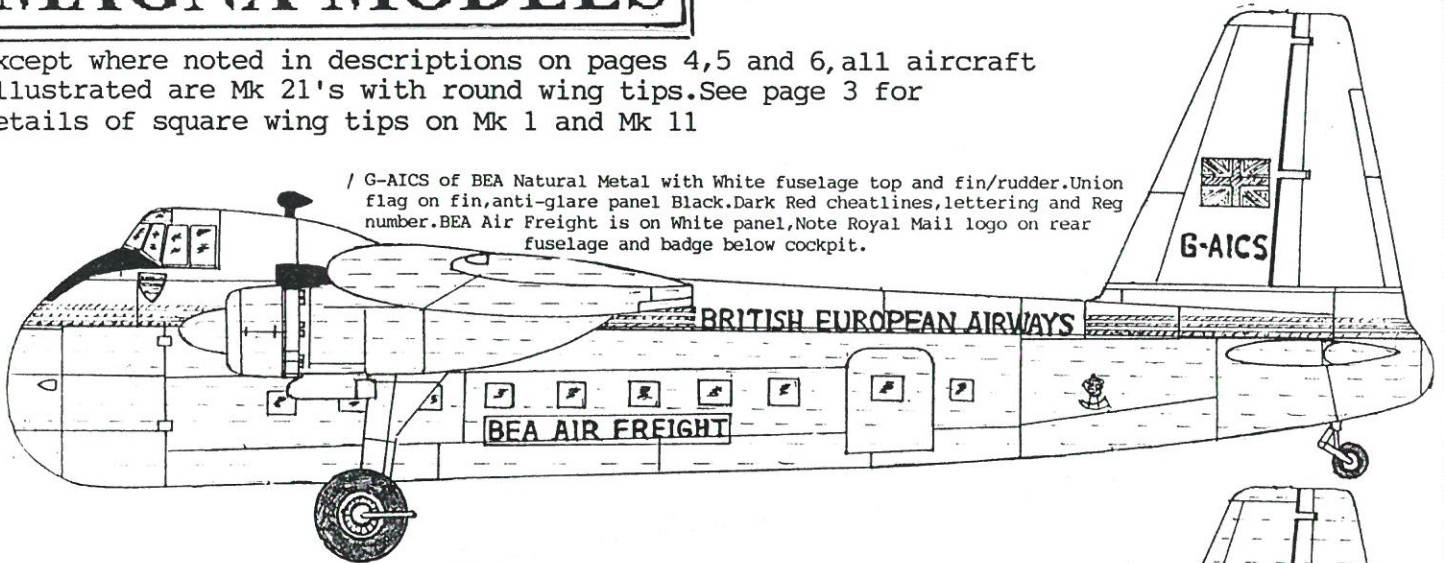
Dotted outline shows Mk1/11 wing tip

□ = Resin Parts

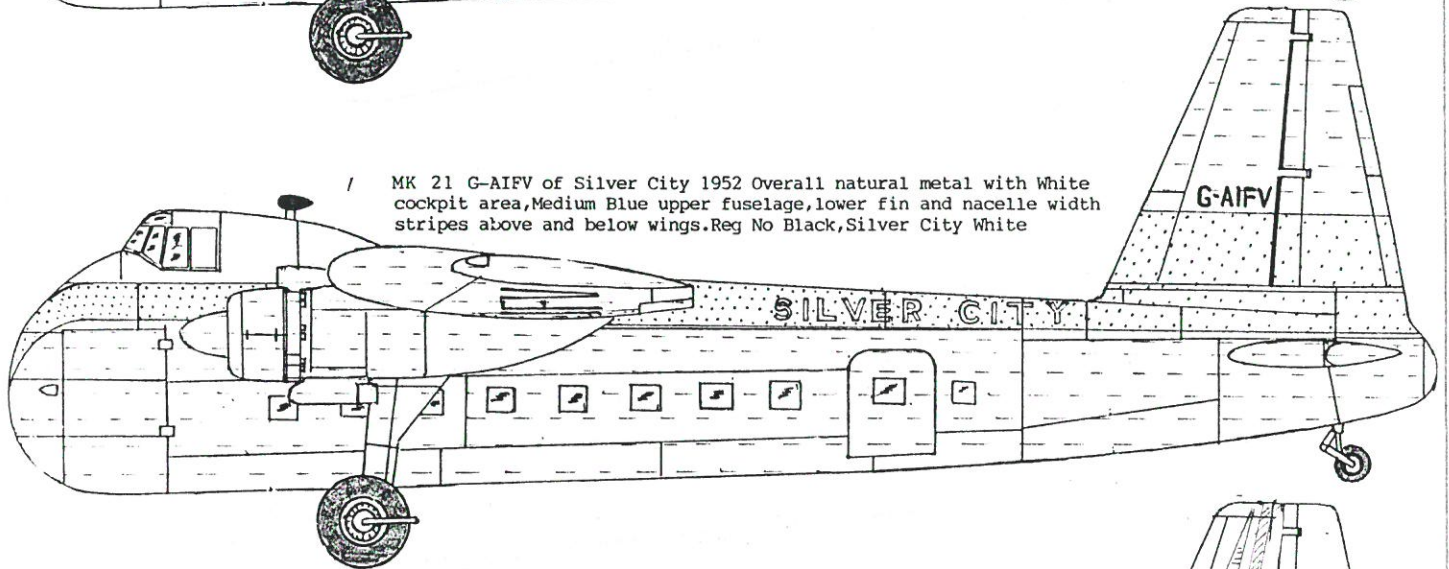
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Except where noted in descriptions on pages 4,5 and 6, all aircraft illustrated are Mk 21's with round wing tips. See page 3 for details of square wing tips on Mk 1 and Mk 11

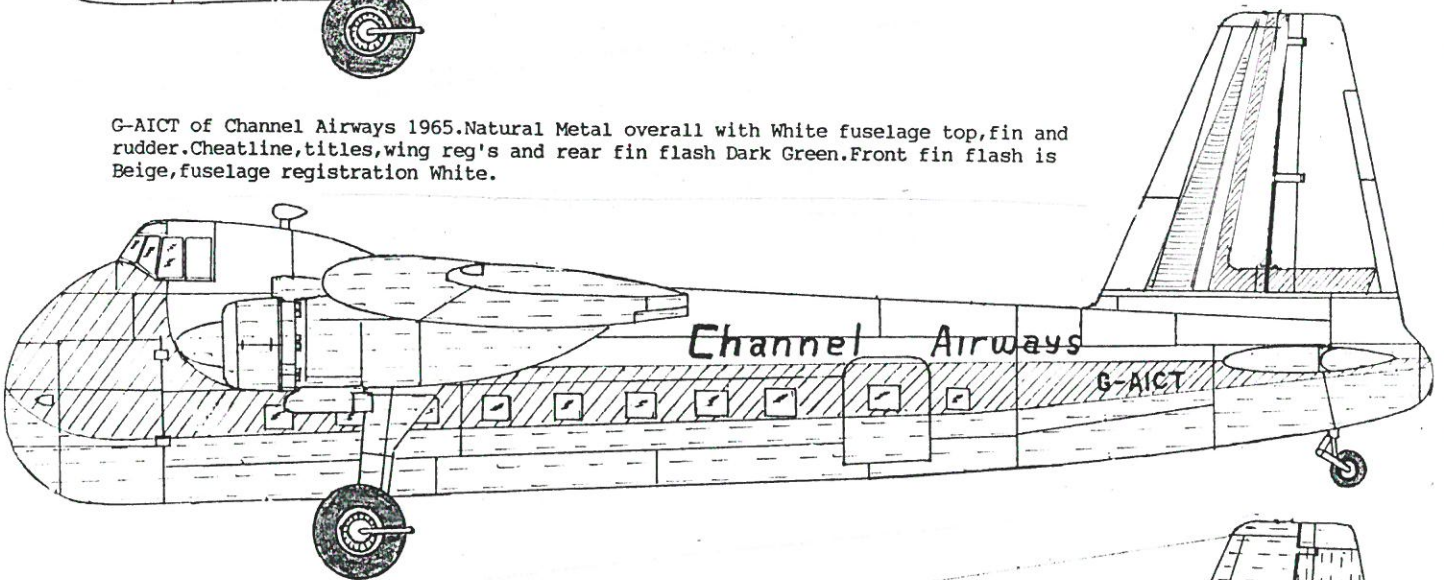
/ G-AICS of BEA Natural Metal with White fuselage top and fin/rudder. Union flag on fin, anti-glare panel Black. Dark Red cheatlines, lettering and Reg number. BEA Air Freight is on White panel, Note Royal Mail logo on rear fuselage and badge below cockpit.



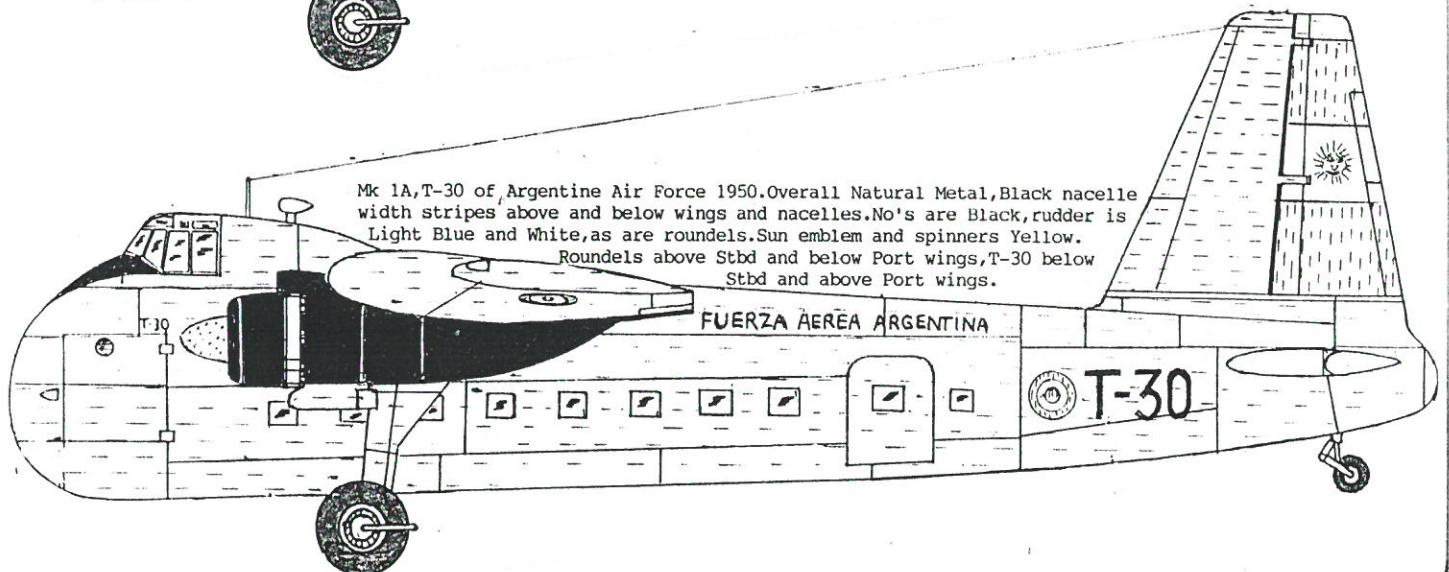
/ MK 21 G-AIFV of Silver City 1952 Overall natural metal with White cockpit area, Medium Blue upper fuselage, lower fin and nacelle width stripes above and below wings. Reg No Black, Silver City White



G-AICT of Channel Airways 1965. Natural Metal overall with White fuselage top, fin and rudder. Cheatline, titles, wing reg's and rear fin flash Dark Green. Front fin flash is Beige, fuselage registration White.

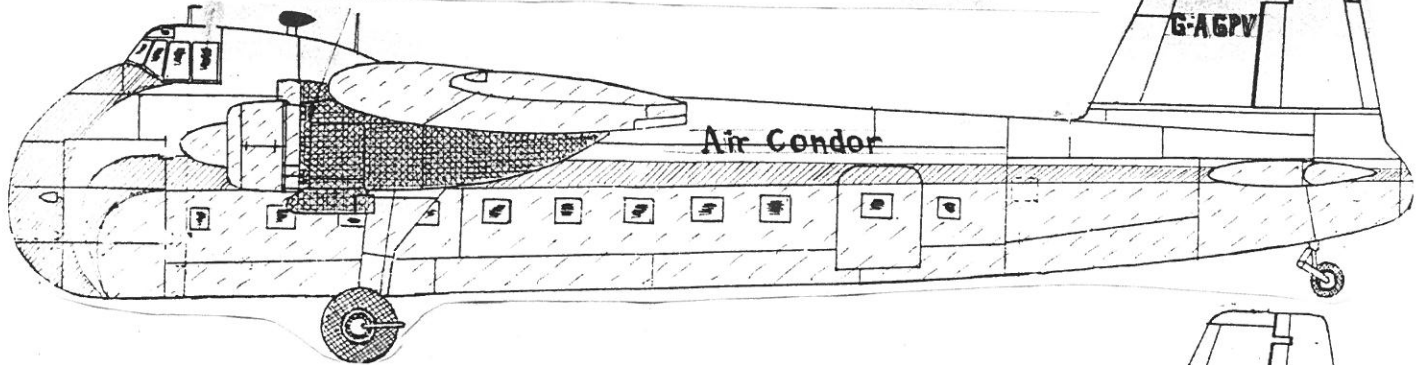


Mk 1A, T-30 of Argentine Air Force 1950. Overall Natural Metal, Black nacelle width stripes above and below wings and nacelles. No's are Black, rudder is Light Blue and White, as are roundels. Sun emblem and spinners Yellow. Roundels above Stbd and below Port wings, T-30 below Stbd and above Port wings.

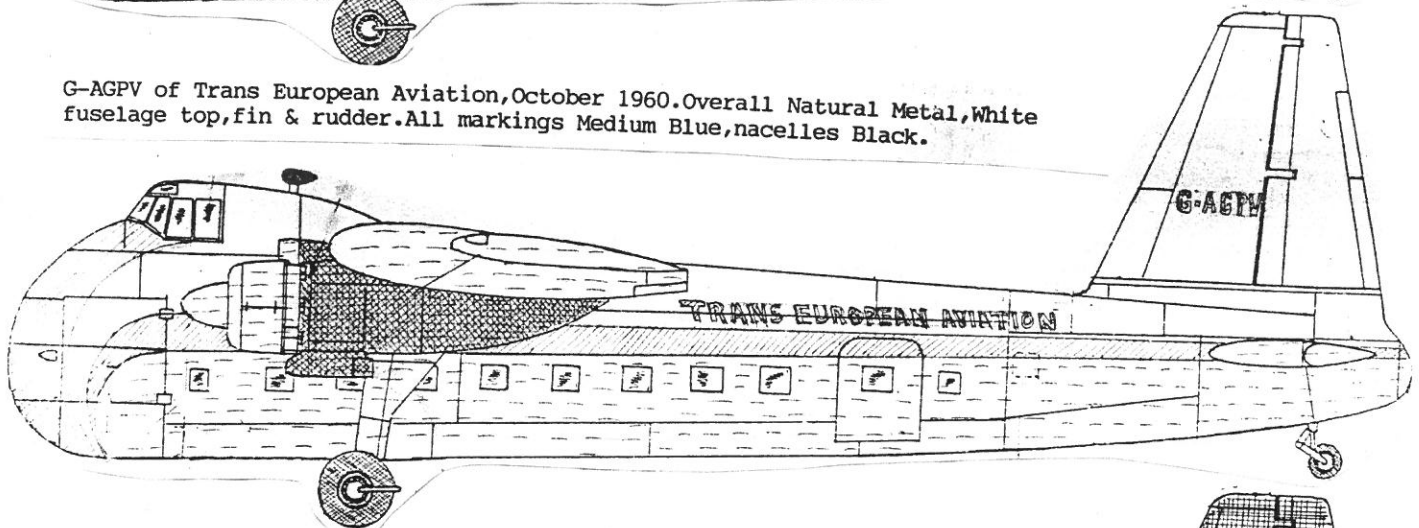


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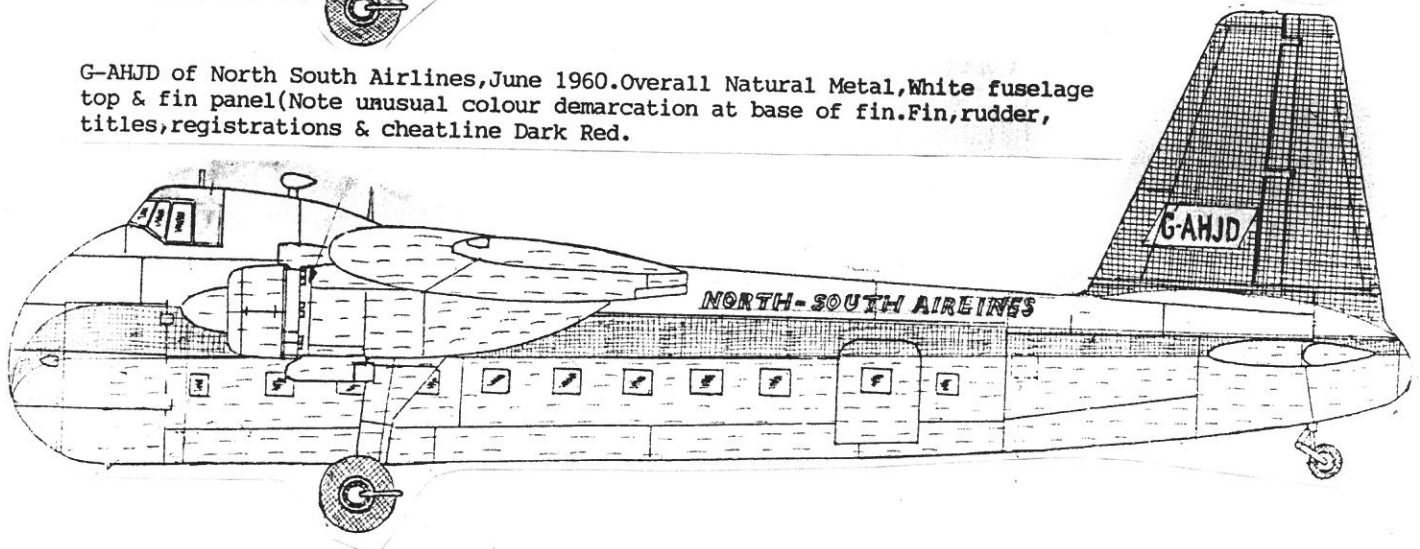
G-AGPV of Air Condor. Overall Natural Metal, Black nacelles, White fuselage top, fin & rudder. Cheatlines, registrations & titles Medium Blue. Circa March 1960, aircraft operated by Trans European from October 1960.



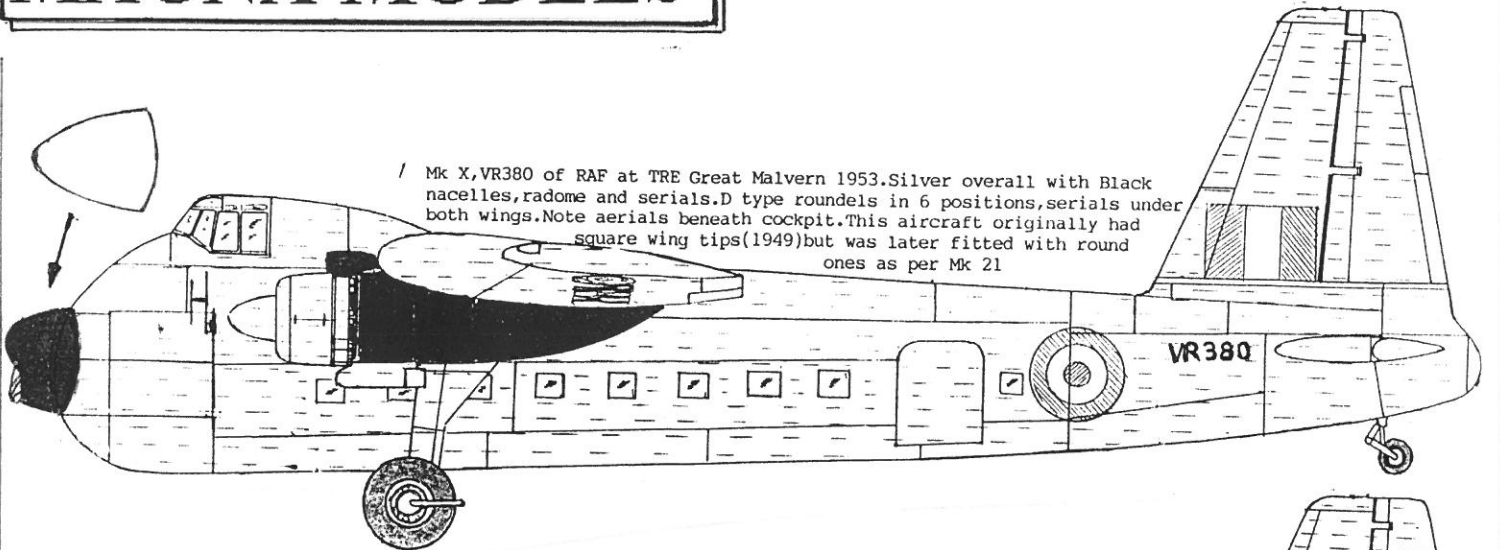
G-AGPV of Trans European Aviation, October 1960. Overall Natural Metal, White fuselage top, fin & rudder. All markings Medium Blue, nacelles Black.



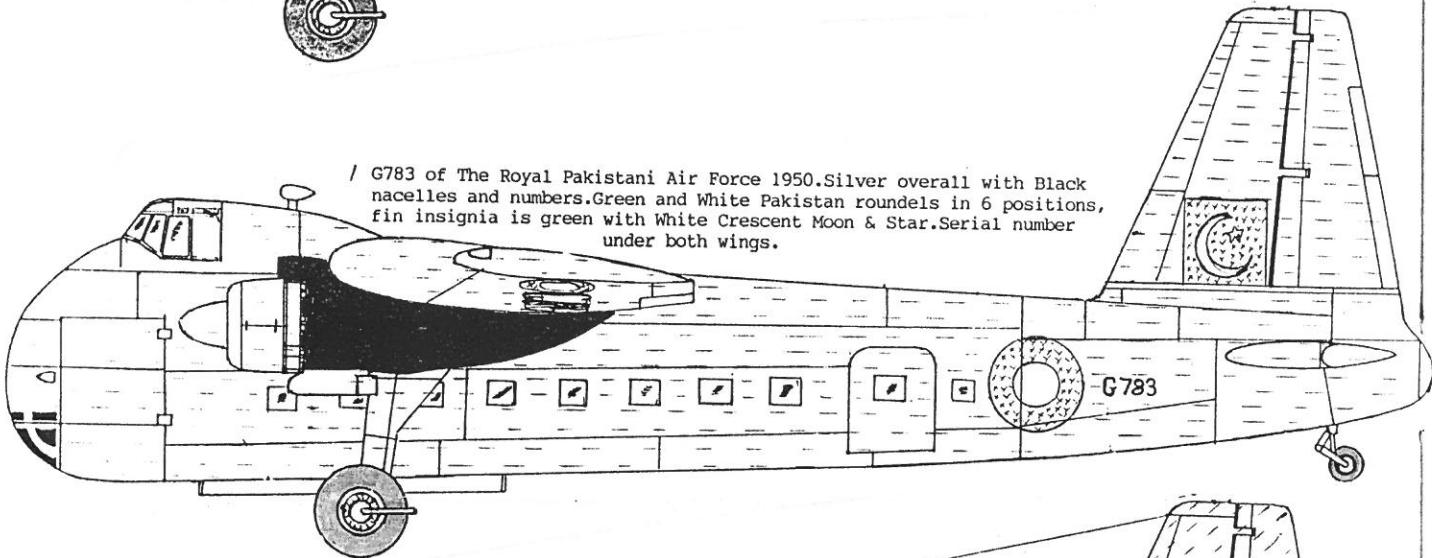
G-AHJD of North South Airlines, June 1960. Overall Natural Metal, White fuselage top & fin panel (Note unusual colour demarcation at base of fin. Fin, rudder, titles, registrations & cheatline Dark Red.



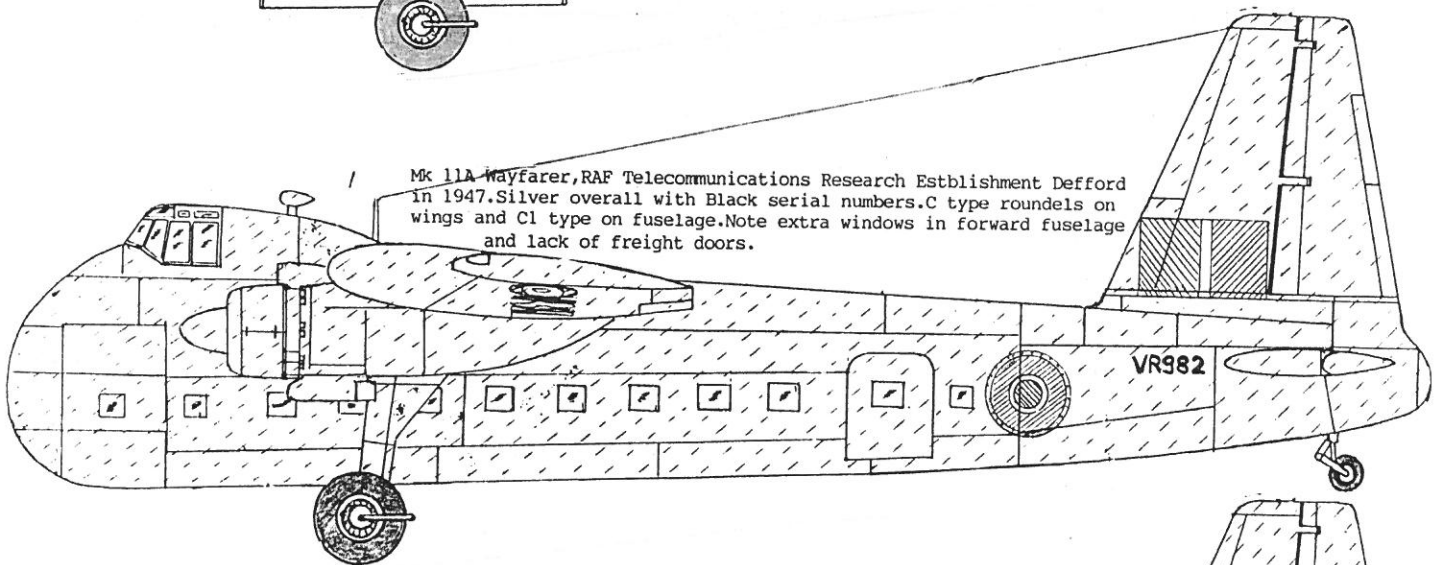




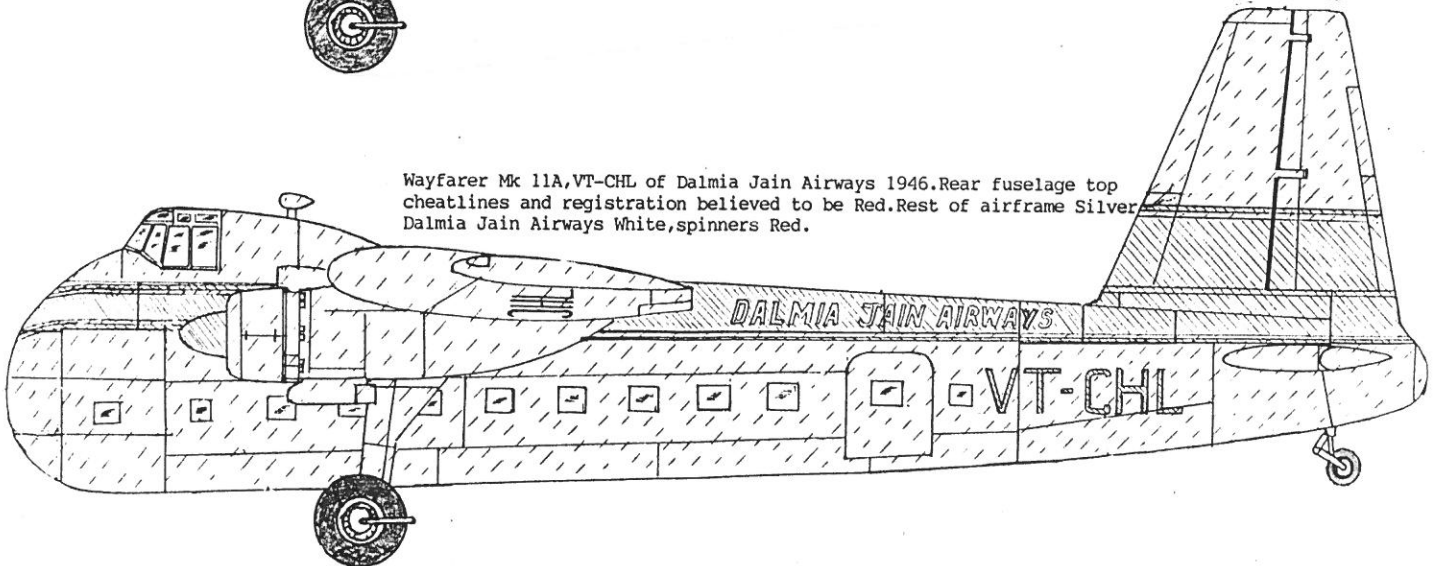
/ Mk X, VR380 of RAF at TRE Great Malvern 1953. Silver overall with Black nacelles, radome and serials. D type roundels in 6 positions, serials under both wings. Note aeriels beneath cockpit. This aircraft originally had square wing tips (1949) but was later fitted with round ones as per Mk 21



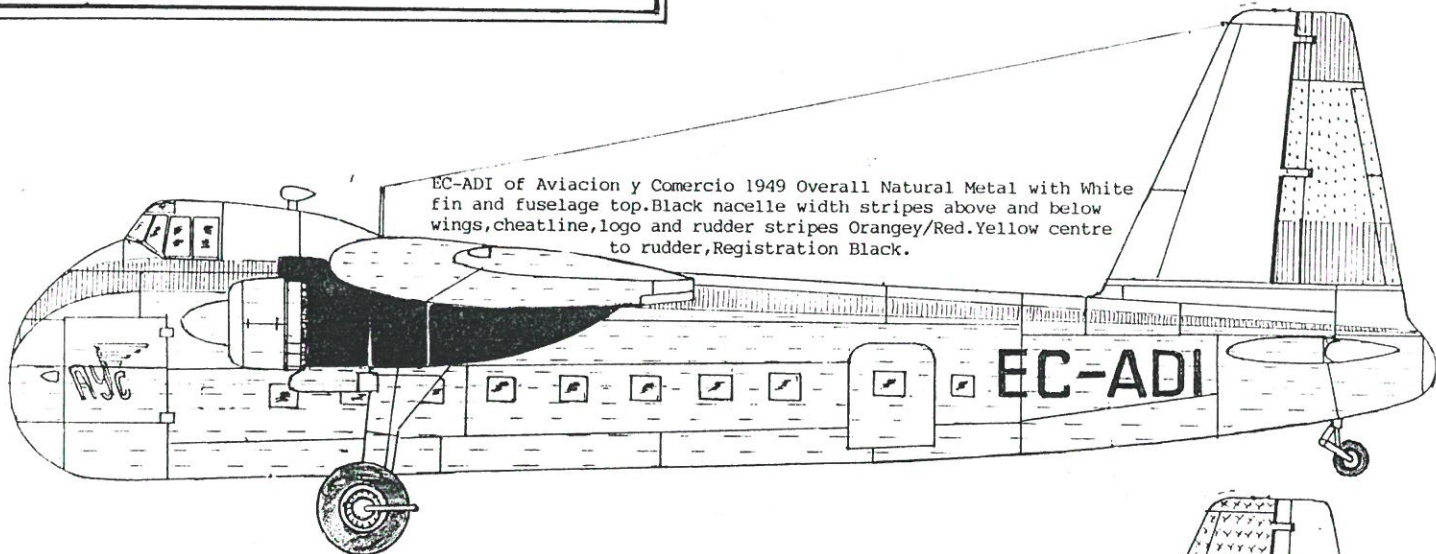
/ G783 of The Royal Pakistani Air Force 1950. Silver overall with Black nacelles and numbers. Green and White Pakistan roundels in 6 positions, fin insignia is green with White Crescent Moon & Star. Serial number under both wings.



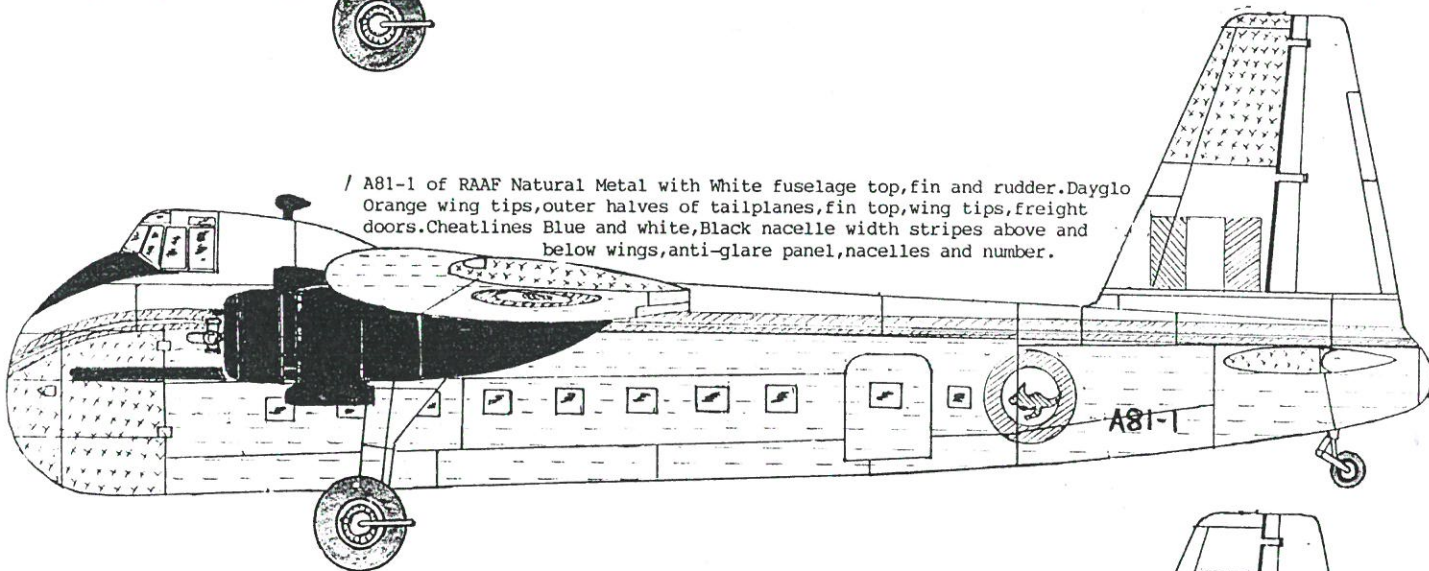
/ Mk 11A Wayfarer, RAF Telecommunications Research Establishment Defford in 1947. Silver overall with Black serial numbers. C type roundels on wings and C1 type on fuselage. Note extra windows in forward fuselage and lack of freight doors.



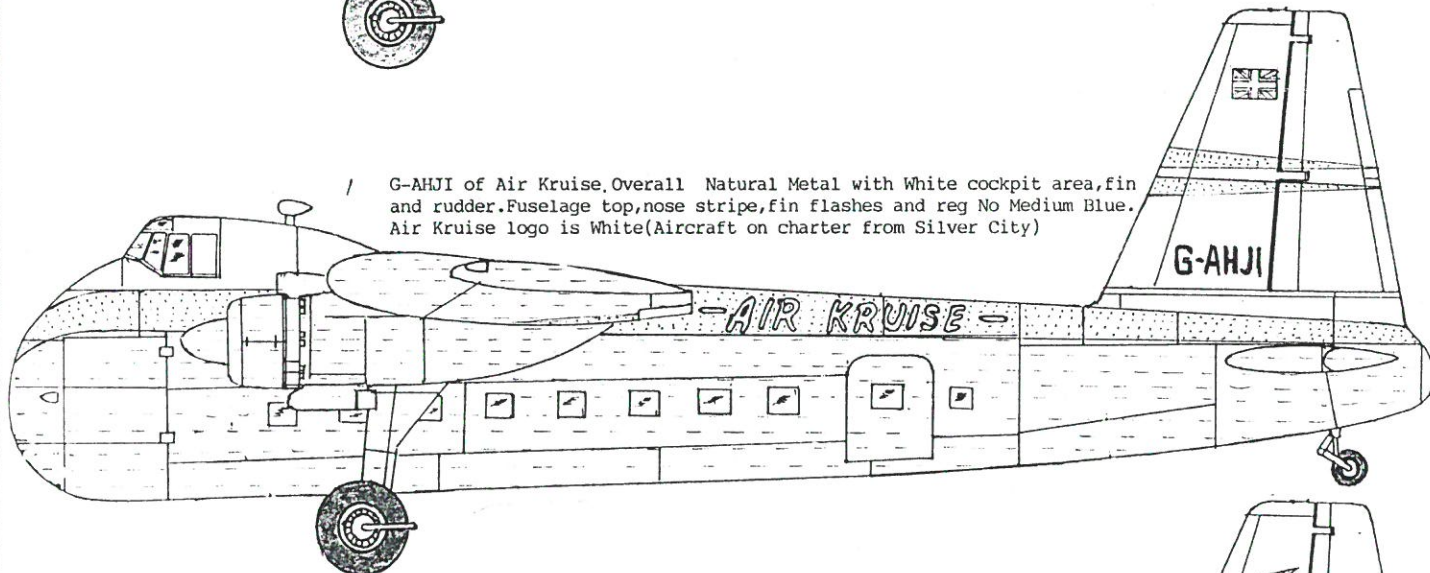
Wayfarer Mk 11A, VT-CHL of Dalmia Jain Airways 1946. Rear fuselage top cheatlines and registration believed to be Red. Rest of airframe Silver. Dalmia Jain Airways White, spinners Red.



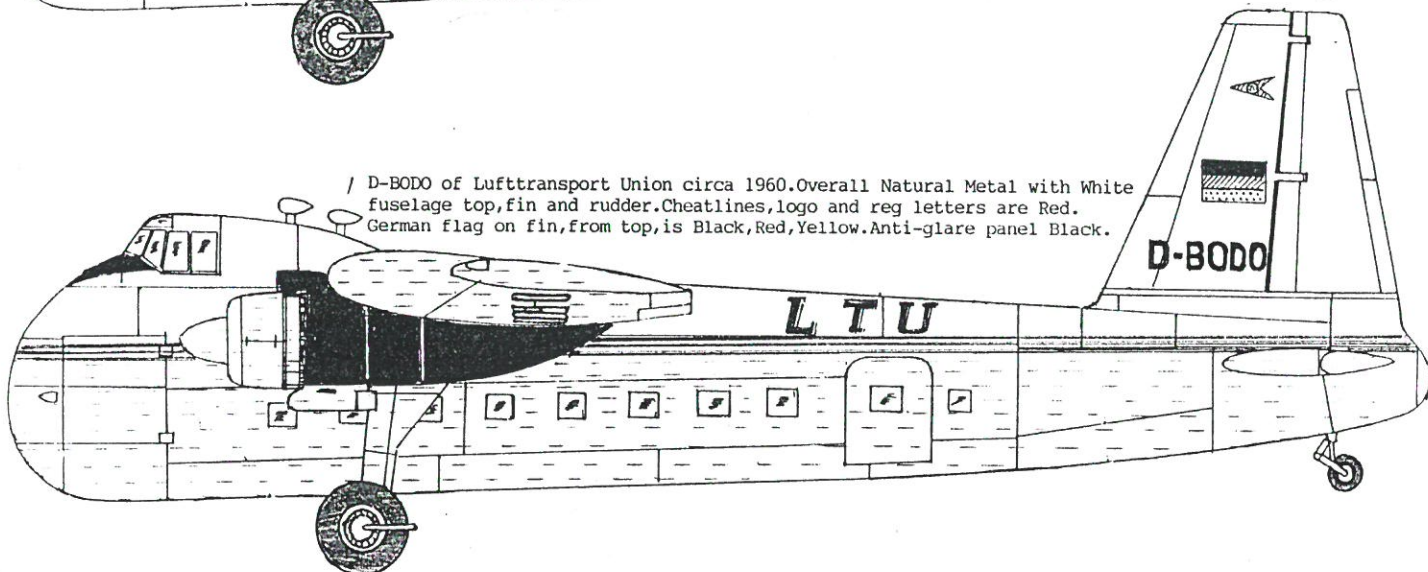
EC-ADI of Aviacion y Comercio 1949 Overall Natural Metal with White fin and fuselage top. Black nacelle width stripes above and below wings, cheatline, logo and rudder stripes Orange/Red. Yellow centre to rudder, Registration Black.



A81-1 of RAAF Natural Metal with White fuselage top, fin and rudder. Dayglo Orange wing tips, outer halves of tailplanes, fin top, wing tips, freight doors. Cheatlines Blue and white, Black nacelle width stripes above and below wings, anti-glare panel, nacelles and number.



G-AHJI of Air Kruse. Overall Natural Metal with White cockpit area, fin and rudder. Fuselage top, nose stripe, fin flashes and reg No Medium Blue. Air Kruse logo is White (Aircraft on charter from Silver City)



D-BODO of Lufttransport Union circa 1960. Overall Natural Metal with White fuselage top, fin and rudder. Cheatlines, logo and reg letters are Red. German flag on fin, from top, is Black, Red, Yellow. Anti-glare panel Black.