AIR TRANSPORT

An advanced BAe wing for Airbus Industrie is tested in the tunnel at Hatfield, where the whole British contribution has been managed.

New role for Yun-10?

Flight-testing of the Yun-10, China's Boeing 707 look-alike, was completed last year. The aircraft, China's first indigenously-designed and built airliner, is now being studied for use in the airborne early warning role, apparently re-engined with CFM56-2 turbofans.

British Airbus

moves to Bristol

BRISTOL

The centre of British Aero-
space work on Airbus,
hitherto at Hatfield, is being
moved to Filton, Bristol, so
that the Hertfordshire site
can concentrate on its expan-
ding 146 and 125 work.
BAe has been responsible
for the design and construc-
tion of Airbus A300 and A310
wings, and on the A320 it has
been given an increased share
of work. All BAe A320 design,
manufacturing, and project
management will now be
centred on Bristol. This will
include co-ordinating the
German, Belgian, and Austra-
lian contributions to the
wings, final assembly of which
will be at Bristol.

Bristol Aircraft and
Warton Division together
have about 50 per cent of
A320 production work. Other
BAe sites sharing the work
are (with rough percentages)
Chester (19), Chadderton
(five), Weybridge (four),
Hatfield (two), and Brough
(over one).
BAe remains responsible
for the basic wing box and the
fuel system of the earlier
Airbus versions; on the A320
BAe takes design and manu-
facturing responsibility for
much of the rest of the wing.
The double-curvature design
wing represents about 20 per
cent of the airframe and is
the most technologically
advanced part of it. The first
£2 million 7y-ton wing-set has
to be delivered to Airbus
Industrie in Toulouse in May
1986 to meet the first-flight
date of March 1987.

BAe's partners in the
Airbus Industrie consortium,
MBB and Belairbus (the
Belgian associate), will con-
tribute 16-3 per cent of the
A320 wing with the manu-
facture of the flaps and one of
the flap tracks and slats.
The BAe Airbus team is led
by Robert McKinlay, aircraft
group director (Filton) and
recently appointed to the
executive committee and
supervisory Board of Airbus,
and Ray Haddow, civil
division executive director
(Airbus). A number of staff
are moving from Hatfield and
Weybridge to join the team.

By 1991 35-40 per cent of
Bristol's work will be on
Airbus, and about a third of
the 1,500-strong production
workforce will be engaged
on it. This is particularly
important to BAe technically
because the A320 is intro-
ducing fly-by-wire, or elec- .
tronic flight control, to the
civil aircraft market. BAe^
engineers will also be involved
in the integration of the new
V.2500 engine into the A320.
The first V.2500-powered
A320 is expected to fly in late
1988.

In the final assembly of the
A320 wing, Bristol will install
the components and system

coming from other sites andwill carry out the final checks
and undercarriage tests. The
complete wings will be flown ;
from the site to Toulouse by
AI's Super Guppy.
With 29-5 per cent of the
A320 wing work, Warton
Division and its three plants'
will be responsible for the
design and manufacture of the
leading and trailing edges and
flap tracks and carriages as
well as about 50 per cent of
the carbon-fibre composite
components.
Warton will also be
responsible for roughly half
the titanium items being
made by the superplastic
forming and diffusion bond-
ing techniques pioneered by
BAe. The manufacture of
access doors and track cans b
this method is being shared
with Bristol.
Chester's unique experience
in Europe of machining and
assembling large wing skins
and building structural wing
boxes is being extended from
the A300 and A310 to the
A320.

Weybridge, which pion-
eered the development and
manufacture of composite
components—for example, fin
skins for the VC10 and
RB.211 engine cowlings—will
be responsible for 50 per cent
of composite work on the
A320 wing. Weybridge is also
involved in A320 design and
windtunnel research.
McKinley confirms that the
UK Government is advancing
£250 million to the A320
project.
FLIGHT International, 12 January