, FARNBOROUGH REPORT-

Airbus studies A320

production rate problems

Airbus Industrie A320s are at a
premium. An airline submitting
an order for A320s today would
be told that it had to wait until
1995, or alternatively arrrange
a deal with the leasing com-
panies {Flight, September 3,
page 95).
The A320's phenomenal
sales success has forced Airbus
to study seriously the prospect
of setting up another pro-
duction line for the type. This
would be extremely costly, and
defer the date by which the
A320 would start returning
pure profit to a controversially
debt-laden consortium—even
though the longer-term pros-
pects for higher profit might be
improved.
When asked how much is lost
on each A320 today, Airbus
president Jean Pierson replies:
"Airbus Industries is not going
to make a loss on the A320
programme. We have around
630 commitments on this
aircraft. There is no chance we
will lose money on this
programme." He gave 1995 as
the year in which Airbus will be
in pure profit as an entire oper-
ation.

Several important interlinked
Airbus decisions will be
announced by December. As far
as the A320 is concerned, one
will be the production rate deci-
sion, and the other will concern
launch of the stretched A320.
Th e basic decision concerns
the production rate required to
meet actual and predicted
demand, and when that will be
sufficiently in excess of current
production line capacity to pay
back the additional investment
in new production facilities.
Today Toulouse is accelerating
through an A320 production
rate of four per month towards a
1990 monthly target of eight
and the theoretical maximum of
ten. It has also to chase cost-
cutting targets, and try to main-
tain engineering quality which
has been known to fall in other
companies under production-
rate pressure.

If the board comes up with a
figure which justifies the
second line, then, as Pierson
puts it, the decisions have to be
made "when, with whom,
where, and how". Given that
the A320 already has six years of
guaranteed production, surely

the decision could be made
sooner than December? "No",
Pierson tells Flight, "the board
will not be ready to make a deci-
sion before then." Not only
have the figures to be studied
(Airbus would not need govern-
ment backing for production
line investment, Pierson says),
but talks with McDonnell
Douglas and Lockheed con-
cerning possible joint ventures
have to be finalised. December,
therefore, will mark either the
birth of such a venture, or its
death-knell.

0 Making its Farnborough
debut, the A320 is on show in
both CFM56- and V.2500-
powered forms—the latter
engine/airframe combination
making its international debut.
The V.2500-powered A320
flew less than six weeks before
the show, and received entry-
into-service powerplants on
August 29. The aircraft is
already 40 per cent of the way
through its 240hr certification
programme, and a second
V.2500-powered-A320 will fly
in December to complete 300hr
of mainly route-proving oper-
ations.

Rolls-Royce's family gathering
The Rolls-Royce
family of civil
engines extends
through the thrust
spectrum from the
Tay {12,4201b to
15,100lbJ, which
powers the
Gulfstream IV and
Fokker 100, to the
newly launched
RB.211-524L, rated
at 65,000lb thrust
and with growth
potential to more
than 70,000lb

A340

engine on
target

CFM International claims that
its CFM56-5C2 engine for the
A340 is scheduled to start test-
ing in the last quarter of 1989.
CFMI maintains that, with an
initial thrust rating of 31,2001b,
the engine will be capable of
thrust levels "sufficiently
beyond this rating", to accom-
modate any potential growth
requirements imposed.

Th e first flight-test of the
CFM56-5C2 is planned for May
1990, in a modified Boeing 707
engine testbed. The first flight
under the wing of an Airbus
A340 is scheduled for April
1991, 13 months before its plan-
ned service entry on the Euro-
pean airliner.
The -5C2 is derived from the
family of CFM56 engines
which has together accumu-
lated more than 9 • 1 million
flight-hours. According to
CFM, it will "enable an airline
to maintain a significant degree
of commonality of its engines
for both the A320 and A340".
This commonality will, accord-
ing to CFM executive vice-
president Frank Homan, be
continued with the -5B, which
is being offered to Airbus Indus-
tries for the A320 stretch by
incorporation of the core of the
- 5C2.

The CFM56-5A1, which
powers approximately 85 per
cent of all Airbus A320 aircraft,
has achieved sales worth $2-6
billion. CFM points out that it
has a 100 per cent record of
sales of A320s to leasing
companies—namely GATX,
GPA, ILFC, and Ansett. It has
also formed a 50/50 joint
venture company with GPA to
supply spare engines to any
potential customer. CFM main-
tains that its only competitor in
the A320 market, the Inter-
national Aero Engines V.2500,
is in a "sales decline".

Th e CFM56-3 has passed the
milestone of 1,000 sales on the
Boeing 737 family of twinjets.
Its next milestone should be
passed in mid-September, with
the delivery of the first Boeing
737-400 to Piedmont Airlines
in the USA.
CFMI's market base cur-
rently includes 67 countries and
2,262 engines in worldwide
service.

18 FLIGHT INTERNATIONAL, 17 September 1988