DEFENCE

respective products, particu-
larly the PC-9/Hawk basic/
advanced trainer combina-
tion. Will the collaboration
continue should the PC-9 not
be selected for the RAF? "We
would have to discuss that,"
says Pilatus vice-president
of programmes Dietrich
Kloeckner.

Any modifications to the
PC-9 required to meet ASR
412 will probably be carried
out by BAe. These could
include strengthened wing
leading edges and a separate
windscreen to meet birdstrike
requirements. Pilatus main-
tains that the present one-
piece canopy should with-
stand a strike after the bird
had been shredded by the
propeller.

PC-9 performance appears
to meet AST.412 in all crite-
ria except stalling speed, the
target specifying a maximum
of 63kt against the PC-9's
69kt stall. This figure could
change with the issue of the
ASR, however. In return for
its slightly high stalling speed,
the PC-9 can cruise at 250kt
at low level and 280kt at alti-
tude. Time to 15,000ft is
4.3min, faster than the Jet
Provost. Initial rate of climb
is 4,000ft/min at sea level,
falling off to 3,000ft/min
above 9,000ft. Service ceiling
is 40,000ft.

According to Pilatus, the
RAF was only one of many
customers included in the
1982 market survey leading to
the launch of the PC-9
programme. With a flyaway
cost of $1-35 million at 1984
exchange rates, the company
anticipates no difficulties in-
reaching the 120-aircraft
break-even point. The PC-7,
of which more than 360 have
been sold, will continue in
production alongside the
PC-9.

Pilatus PC-9 weights and measures

Span
Length
Height
Wing area
Empty weight
Max take-off weight.
aerobatic
utility
Load factors

33 2ft
33ft
10 66ft
175 3ft2
3.5491b

4.8501b
7.0551b
+ 7/-3-5 g
Performance at 4,8501b AUW
Max operating speed/Mach

Manoeuvring speed
Cruise at 15.000 ft
Stalling speed
Take-off to 50ft
Landing from 50ft
Range at 10,000ft.
no reserves

320kt/0-68
210kt
282kt
69kt
410ft
475ft

660 n.m.

Endurance—two 1 hr sorties plus 20min
reserves

Although the PC-9 is of
similar appearance to the
PC-7, a look at the figures will
indicate that the PC-9 is more
than a revamped PC-7. "The
fins are of similar external
appearance, but that is all,
and that is the Pilatus
trademark", says Kloeckner.
The PC-7 does not have an
airbrake, undercarriage doors,
stepped ejection seats, a
modern panel, or the extra
300 s.h.p. of the PC-9. The
PC-9 is faster in the climb,
faster in straight and level
flight, and stalls some 5kt
slower than the PC-7 at
comparable weights. The
PC-9 is more agile and
has an enhanced aerobatic
performance with twice the
inverted flight capability of
the PC-7.

Pilatus PC-7 weights and measures

Span
Length
Height
Wing area
Empty weight

341f t
3207f t
10-53ft
178 6ft2
2,9321b
Max take-off weight,
aerobatic 4,1881b
with stores 5,9521b
Load factors +6/-3g
Performance at 4,188lb AUW
Max operating speed/Mach
270kt/0-55
Manoeuvring speed 175kt
Cruise at 20,000ft 222kt
Stalling speed (gear up/down)
71kt/64kt
Take-off to 50ft 787ft
Landing from 50ft 967ft
Range at 20,000ft
with reserves 730 n.m.

Endurance—with reserves at 20,000ft
respectively, power seat for max range
4hr 22min

The PC-9's first flight was made with a three-blade Hartzell propeller, the
second flight with the four-blade Hartzell shown here, and later flights will
check the Dowty four-blade unit. The final choice is yet to be made, but will
be a four-blader

FLIGHT International, 19 May 1984 1313