GENERAL AVIATION

Piasecki seeks

helicopter partners
ATLANTIC CITY

Frank Piasecki, president of
the Piasecki Aircraft Corpor-
ation, is attempting to find
manufacturing and market-
ing partners for a new
compound helicopter
designed to take business
from the corporate and
commuter aircraft.
Piasecki, who has been in
the business since 1940 when
he founded Piasecki Helicop-
ter (now part of Boeing Heli-
copter), released details of his
company's design at a rotor-
craft technology meeting in
Atlantic City, New Jersey,
organised by the US Federal
Aviation Administration. He
is seeking partners in the USA
and abroad.

Piasecki predicts that a
number of unconventional
features will ensure that the
compound helicopter, desig-
nated the 16H-3, would
undercut the operating cost
per passenger-mile of other
helicopters by 20 per cent.
This is enough to make the
16H-3 compare on cost with
commuter aircraft on 100-
mile-plus sectors, he believes.

The compound helicopter's
design features a wing which
would unload the main rotor
in the cruise, as well as
allegedly "eliminating" rotor
blade stalling and a sudden
drag rise at high speed—
phenomena which hinder
higher speeds by conventional

An unloaded rotor is claimed to
yield significant cost savings,
claims Piasecki

helicopters.
Other advantages of the
unloaded rotor, according
to Piasecki, are reduced
vibration (with a consequent
improvement in component
life), and increased passenger
comfort and confidence.

Cruise propulsion would be
provided by a pusher
propeller, which is shrouded,
so noise disturbance on the
ground should be reduced,
says Piasecki. The propeller's
thrust would be vectored to
counter rotor torque and give
yaw control at low speed and
in the hover.

Two turbines each deliv-
ering a continuous 960 s.h.p.
would power the compound
helicopter. Several units are
suitable, including a Pratt &
Whitney Canada PT6 model,
says Piasecki.
Nasa is to test the shrouded
propeller in a Langley wind-
tunnel, under a US Army
contract.

Bond

expansion
continues
ABERDEEN

Bond Helicopters has put its
recently acquired Sikorsky
S-76A into oil-support service
and virtually completed
moving its company head-
quarters from Bourn, near
Cambridge, to Aberdeen.
The new aircraft is an ex-
KLM Helikopters machine
purchased from Sikorsky to
meet an increase in offshore
demand. It is claimed by Bond
to be the first helicopter of
any type to be bought by the
north-west European offshore
support industry since the oil
price collapse. It takes the
company's fleet to seven
AS.332L Super Pumas, six
Sikorsky S-76As, 14

SA.365C/N Dauphin 2s, and
eight MBB BO.105Ds. Bond,
with some 500 employees, is
now the North Sea's third-
largest support operator.
The company also has

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Dimensions
Rctcr oiamerer
Overall height

: Wwgspart
Tad rotor shroud diameter

Weights
Gross
Useful load
Payload, one p !o! plus luel for 230 miles

Performance
Wax cruise, 5 OOOf;
Ma* rate of climb, man climb
Rate of climb, one engine out
Maximum range, no reserves

power
3.000ft

44ft 2 8.M
12ft 3 C-in
42ft 9 6in
20ft
6 * 4 3in

Vertical take-off
! 0.4001b
4.4451b
3.2001b

212 mp h
2.35 0 ft/mm

-."fteiffttfto'v^::-
480 miles

Short take-o*f
10.7001b
4 ?45i;>
3 5O0lb

204 m.p h
1.885 ft/mm
V'.--,: •:•' :"'.-'

480 miles

aircraft working on a variety
of lighthouse support, Minis-
try of Defence, and emergency
medical service contracts.

Partial financing of the
headquarters move, which
created 50 new jobs at Aber-
deen Airport, was provided by
the Scottish Development
Agency in its first support
helicopter-related project.
Bond is considering the pur-
chase of additional aircraft,
and further diversifying its
activities.

An initial supporter of the
Turbomeca Arriel 1A re-
engined S-76A project, Bond
currently feels that the idea is
attractive, but now offers only
marginal economic advan-
tages.
Managing director Stephen
Bond tells Flight that the
company's pilot force has
grown from 100 to 140 during
the past 12 months, and by
July he expects to have a full
complement of 150. He says,
however, that helicopter air-
crew are leaving the industry
to join the airlines, and
suggests that the coming
summer months could see oil
companies having difficulty
in obtaining short-term
capacity.

McAlpine
Aviation

for sale

LUTON

McAlpine Aviation, a leading
UK operator with diverse
activities and an all-jet fleet,
is being offered for sale by its
parent company, construction
group Sir Robert McAlpine.
The parent company
refuses to comment, but
Flight understands that
several firms have expressed
interest in buying the busi-
ness.

McAlpine Aviation, which
is based at Luton Airport,
operates a fleet of eight Brit-
ish Aerospace 125 and two
British Aerospace One-
Eleven aircraft. The work-
force stands at 250.

McAlpine Aviation was
chosen by the Ministry of
Defence to operate a general-
aviation centre being devel-
oped at Farnborough airfield.
Sir Robert McAlpine says
that it intends to retain and
expand its helicopter sub-
sidiary McAlpine Helicopters.

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