GENERAL AVIATION

Star of Phoenix plans 100 Fivers a month
BY GRAHAM WARWICK
IN ATLANTA

A

US company has revealed
plans to build up to 100
light aircraft a month at a new
factory in Casa Grande, Ari-
zona. Star of Phoenix Aircraft
(StarPAC) has launched pro-
duction of the Phoenix Flyer
two-seat trainer ~~
and is planning to
build three other
aircraft types.
The Phoeni x
Flyer is an updated
version of the all-
aluminium Thorp
T-211. The T-211
(based on the I'-
ll, which first flew
in 1946) was certif-
icated in the USA Throp T-211:
in 1964. Rights to
the aircraft were acquired by
Thorp Aero in 1985 and pro-
duction restarted in 1990, but
the company went bankrupt.
StarPAC has acquired the
assets of Kentucky-based
Thorp, including $1.6 million

in parts, says chief executive
Charles Kallmann. Five Thorp-
built T-221s are flying and
StarPAC has almost completed
its first two aircraft, with ten
more in production and parts
for some 40 in hand, he says.
The Phoenix Flyer will be
available in three versions: a

$60,000 trainer powered by a

75kW (lOOhp) Teledyne Con-
tinental O-200, giving a 105kt
(195km/h) cruise speed; a
$65,000 AeroSPORT variant;
and an AeroSPORT-XL with
uprated engine, 117kt cruise
speed and price tag of around

$70,000, with an optional Bal-
listic Recovery Systems emer-
gency-descent parachute.
The aircraft is constructed
from Specul-Air, a "mirror-
finish" Alcoa aluminium which
does not require painting.
Equipment providers include
Hamilton Standard for the pro-
peller and Terra and Allied-
Signal for the avionics.
StarPAC will begin accepting
$3,000 refundable deposits on
the first 300 aircraft in April/
May, says Kallmann. The com-
pany will sell or lease the
aircraft and will provide financ-
ing and insurance. The price
includes 4h training and Star-
PAC is negotiating
to equip its regional
marketing and de-
livery centres with
Frasca simulators.

Kallmann says
that StarPAC has
raised $6 million
from private share-
holders to fund the
acquisition of
Thorp's assets and
to establish the Casa
Grande factory. De-
liveries begin in July. Pro-
duction is planned to reach 20
a month by 1994.
StarPACs plans include ship-
ping US-made parts to assembly
centres abroad and developing
a floatplane variant. •

the Phoenix Flyer

IAC backs low-cost aerobatic kitplane

Allison to power
Bell's Model 430

B

ell Helicopter has selected
Allison's Model 250-C40
engine to power its Model 430
intermediate twin-turbine heli-
copter. The "Series IV" Model
250 is a commercial version of
the improved T703-700 turbos-
haft Allison is developing to
power US Army Bell OH-58D
scout helicopters.
The 580kW (780hp) -C40
will feature the Chandler Evans
EMC-35 single-channel full-
authority digital engine control
now under test on the "Series
II" Model 250-C20R/9. The
335kW -C20R/9 has been se-
lected by Agusta to power the
A. 109 and Allison will begin
flight-testing in June.
The Bell 430 is a stretched,
four-bladed derivative of the
Model 230 and Allison's -C40
is a development of the Model
250-C30G/2 which powers the
Bell 230. The engine will incor-
porate compressor and turbine
improvements developed for
the T703 under the US Army's
reliability and maintainability
enhancement programme.
The commercial 250-C40
will feature an increased-flow
compressor, brush seals in the
compressor and the turbine,
and an air-cooled first-stage
trubine nozzle, which permits
a 16°C increase in turbine inlet
temperature.
The -C40 improvements re-
sult in a 10% increase in power
over the -C30G/2. Turbine
overhaul life is increased and
observable emissions halved,
says Allison. Certification of
the Model 250-C40 is sched-
uled for May 1995. •

NEWS IN BRIEF

NASA BUSINESS
NASA and Learjet have an-
nounced a co-operative pro-
gramme of research into
more-economical business
jets, covering new aerofoil
designs, minimum-weight
structures and friction-drag
reduction. Starting next Jan-
uary, NASA Ames will con-
duct 480h testing of a
windtunnel model produced
by Learjet.

T

he International Air Club
(IAC) is supporting devel-
opment of an affordable aero-
batic aircraft which it hopes
could be used in one-class
competitions.
The home-built One Design
would cost $20,000-$30,000.
"There is an obvious heed for
an aircraft that's a good per-
former and is affordable by
most pilots," the IAC says.
A prototype ol the One De-
sign is under construction and
is expected to fly by August.
The IAC hopes to have plans
available later this year and
home-built specialist Aircraft
Spruce & Speciality is expected
to offer the materials packages
needed to build the aircraft.

The One Design was con-
ceived by Dan Rihn as an
entry-level aerobatic aircraft

which would be easy and inex-
pensive to contract from raw
materials, using basic tools.
The fuselage has a welded

steel-tube truss structure, the
all-wood wing is stressed to
+10g, while the wire-braced tail
surfaces use steel tubing and
sheet-metal ribs.
The aircraft is a single-seater
and can accept engines ranging
from a 75kW (lOOhp) Tele-
dyne Continental O-200 to a
135kW Textron Lycoming IO-
360. The prototype will be
powered by a HOkW Lycom-
ing. The O-200-powered One
Design weighs 270kg and has
a cruise speed of 140kt
(260km/h); the IO-360-pow-
ered version weighs 320kg and
has a 175kt cruise.

The IAC is forming a com-
pany to sell the plans and to
issue licences to build the One
Design, with the aim of getting
enough aircraft flying to allow
one-class competitions. •

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