TECHNICAL: AI R TRANSPOR T

Lockheed eyes L-100 freighter
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ockheed has developed a
commercial version of the
C-130 with a side loading door
to improve productivity.
Dubbed the L-100F, it was
shown in model form at Farn-
borough and could be launched
at next year's Paris Air Show.
Current L-100-30s carry five
96in (2.43m) x 96in (2.43m) x
125in (3.17m) Ml pallets fore
and aft. Introduction of the
138in (3.5m) x 108in (2.74m)
side door permits three Mis to
be loaded laterally ahead of the
wing spar/landing gear struc-
ture, which restricts loading
from the rear, allowing a sixth
pallet to be carried. Since cargo
aircraft run out of space before
reaching their load limit (they
"cube out" before they "weigh
out"), increasing volume im-
proves L-100 productivity.
To obtain sufficient width,
Lockheed has raised the forward
floor by 4in (10cm) to provide
a 126in (3.2m) wide x 103in
(2.6m) cross-section. A seventh
Ml pallet could be accommo-
dated if the fuselage was
stretched by 3.04m (10ft).
Existing L-lOOs could be
modified, giving operators 20%
revenue increase, according to
Lockheed. Gross payload is
given as 45,4551b (20,600kg)
palletised cargo over a range of
more than 1,200 nm (2,220km).
The L-100F will cost about
$30 million. Lockheed is con-
sidering more powerful Allison

Freight carrier success lifts side-loading L-lOOF's chances

T56 Series IV engines, already
flying in Lockheed's high-
technology testbed, and new
Hamilton Standard five-blade or
Dowty six-blade propellers,
which should offer 13% better
specific fuel consumption. The
L-100F is expected to cruise at
365kt (670km/h) compared
with the -30's 300kt, the wing
accommodating the extra power
without modification.
Electronic flight instrumenta-
tion is being considered to per-
mit use of a two-man crew,
although Roger Shaar, the com-
mercial marketing operations
manager, concedes that opera-
tors like to carry a third crew-
man as loadmaster.
Shaar says that the "phenom-
enal growth" enjoyed by dedi-
cated carriers such as United
Parcel Services, Federal Express

ISOTOV TURBOPROP TESTED

Ilyushin's IL-76T engine testbed, seen recently at the Zhukovsky test centre with an Isotov TV7-117 turboprop mounted on the No.2 pylon. The six-bladed l,760kW (2,350hp) turboprop powers the Ilyushin 11-114 regional airliner. Additional side mounted air intakes provide cooling for test equipment.

and Emery Air Freight, and the
number of Boeing 747 freighters
flying with major airlines, con-
vinced Lockheed that there is a
new scheduled, disciplined mar-
ket for the L-100 (which has
traditionally sold to ad hoc op-
erators), particularly as a feeder
for major carriers such as KLM
and Air France.
Lockheed is talking to Ameri-
can Airlines and Mexicana and
sees United and Northwest as
candidates, although Shaar ac-
knowledges that "there is no
stated need for the aircraft".

Shaar says that the market is
growing at 10% annually, while
passenger traffic is increasing by
6-7% alongside economi c
growth of only 2-3%. Lockheed
expects the 130-odd 747Fs to
grow to 350 in the next ten
years, with particular growth in
the Pacific region. All-passenger
or mixed-traffic "combi" ver-
sions will be pursued only when
the cargo market is well de-
fined. Shaar is confident that
the project will go ahead: "We
are sitting on a gold mine." •

P&WC turboprops

set for growth

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ratt & Whitney Canada
(P&WC) is studying further
growth versions of its PW100
and PT6 turboprops for the
regional-airliner and general-
aviation markets, respectively. It
sees little interest in a turbo-
prop variant of the new PW300
turbofan, however.
The manufacturer is talking
to original equipment suppliers
about the PW130 — A PW100
variant with 30% more power
than the PW124 series used on
the Fokker 50, British Aero-
space ATP and Aerospatiale/
Aeritalia ATR72. Engineering
work is under way to permit
P&W C to deliver engines
within four years of a go-ahead-
not expected before 1991.
The new variant would pro-
vide improved hot-and-high
performance and higher speed
for any new generation of tur-
boprop regional airliners or de-
velopments of current designs.
A major consideration for
airframe manufacturers who
might adopt the more powerful
engine is its greater size. Senior
P&W C vice-president Dick
McLachlan says that it will have
to be heavier and larger to
"...pump more air". Accord-
ingly, any existing airframe ap-
plication will need new mount-
ings and a new nacelle.
The PW127, a 10% higher-
power growth variant of the
PW124 was announced at the
Farnborough Air Show. (Flight,
12-18 September).
P&WC is working on devel-
opment of the PT6A-70, which
could offer as much as 15%
more power than the current
- 67, largest version of the ubiq-
uitous turboprop engine. •

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COLLINS GPS DEAL

Collins has signed a market-
ing deal with Teldix of West
Germany over its Global Po-
sitioning System (GPS)
equipment. The agreement
focuses on Collins' minia-
ture airborne GPS unit, Re-
ceiver 3m, which is to be
marketed by Teldix.

MONARCH PICKS TCAS

Honeywell's Air Transport
Systems division has been
selected by Monarch Airlines
to supply traffic alert and
collision avoidance systems
for the British carrier's fleet
of Boeing 757 and 767 and
Airbus Industrie A300-600
aircraft.