DEFENCE

Gripen pilots say its stick is tiring to use

Saab considers JAS39

control stick changes

BY SIMON ELLIOTT

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aab's JAS39 Gripen proto-
types are flying with a re-
designed, less advanced control
stick than that planned initially
after the original system, which
featured advanced-technology
electric-torque motors, suffered
problems during early testing.
The Swedish company has
contacted foreign control-stick
manufacturers for price quotes
in case the new system is unsuc-
cessful.
Saab says: "The control stick,
centrally located in the cockpit,
has been subject to an elaborate
design and test phase before
flight testing started. That in-
cluded a range of standards,
from a totally undamped stick to
a design incorporating very ad-
vanced, and also complicated,
internal mechanisms, such as
torque motors."
The latter design is the one
understood to have been fa-
voured initially, but which has
been dropped because of prob-
lems which, industry sources
say, included jamming.
Saab, which developed the
original stick, says that from
"...extensive simulator studies
we have chosen the present stick
design with a fairly uncompli-
cated spring system".
While saying that, after more
than 200 test flights, no reason
has been found to change the

present system, the company
adds that "...we still have not
tested all flight conditions — for
example, we have not yet
reached the 9g acceleration level
in the test programme, and we
have not encountered either the
most adverse weather conditions
or the most demanding tactical
manoeuvres".
Saab adds that "...in order to
be prepared, • should a need for
changes arise, we continue to
develop both minor improve-
ments and more complicated so-
lutions". The recent report on
the Gripen flight-test pro-
gramme says of the control
stick: "The pilots have noticed a
tendency to get somewhat tired
in arm or hand after some time
in manoeuvring or formation
flying. We are keeping an eye on
this and have modifications to
the stick in store in case the
need should arise."

Meanwhile, Gripen prototype
JAS39-5, the nearest of the pro-
totypes to the production-
standard aircraft, made its first
flight on 23 October. The air-
craft will be used for testing
radar, weapon systems, commu-
nications, vibration, hydraulic
systems and reconnaissance and
warning systems.
Gripen test flights are now
being made with four prototype
aircraft and nine pilots, and the
first production Gripen is set to
fly in 1992. D

Soviet AF wanted Tupolev

prosecuted over Blackjack

BY ALEXANDER VELOVITCH
IN MOSCOW

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he new, no-nonsense Com-
mander-in-Chief of the So-
viet air force, Colonel General
Piotr Deinekin, tried to bring a
prosecution against. part of the
Tupolev aircraft empire two
years ago over concern at the
performance of its military air-
craft, it has just been revealed.
When he was commander of
the Long Range Aviation Force,
Deinekin and Naval Aviation
Force commander, Col Gen Vic-
tor Potapov applied to the State
prosecutor for a legal case to be
brought against the Tupolev
ANTK (Aircraft Scientific Indus-
trial Complex). Deinekin com-
plains: "Unfortunately, even
after this application to a prose-
cutor, nothing changed".
Deinekin says he is still un-
happy with the Tupolev Tu-160
Blackjack and Tu-22M Backfire
strategic bombers.
A former Blackjack pilot with
over 4,500h total time Deinekin
explains that the problem stems
from rushing aircraft into service
before they are ready. "Aircraft
known to be immature are intro-
duced to operational units. The
intention is to bring them up to
air force requirements in opera-
tional service. Industry has a
presence in operational units

with workforces of several dozen
people, each involved in endless
design refinements," he says.
"This process, for the Tu-160,
has taken more than three years.
Even after many years of opera-
tional service with the Tu-22M,
we discover design shortcomings
in the engine and airframe,"
adds Deinekin.
The Soviet air force has had
insufficient power over the air-
craft industry, a situation that
the hard-hitting Deinekin is
committed to change. Even now,
he reveals that 250 million rou-
bles assigned for research and
development to the now-abol-
ished Ministry of Aircraft Pro-
duction "...has leaked away in an
unknown direction". •

Deinikin tried to prosecute Tupolev

Germany issues solo tender for EFA Germany issued an invitation

to tender for a defensive
avionics suite for its European
Fighter Aircraft (EFA) on 25
October. The competition could
see Germany drop out of EFA's
common four-nation system.
The German decision to con-
sider alternatives to the, common
EFA Defensive Aids Subsystem
(DASS) being procured by Spain,
Italy and the UK was prompted
by concern over the cost;- ac-
cording to the German air force.
The tender covers only a-rnis-
sile-approach warner and radar-
warning receiver, rather than
including a laser warner, elec-
tronic countermeasures and

towed decoys. Electronic coun-
termeasures and decoys were
part of the four-nation require-
ment, while a laser warner was
specified by the UK and Spain.
The tender documents have
been distributed to around 15
firms, with final submissions
due by early January. A decision
on whether to opt for an inde-
pendent, and less capable, solu-
tion will be made by March.
The competition has placed
Telefunken Systemtechnik, the
German member of the EURO-
DASS consortium which is nego-
tiating with Eurofighter for the
common contract, in a difficult
position. •

FLIGHT INTERNATIONAL 6 - 12 November, 1991 21