PARIS NEWS

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Sukhoisfly in: two-seat Su-25 (above), and single and two-seat Su-27 (right)

Havoc 'years away'
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he Mil Mi-28 Havoc attack
helicopter displayed at Paris
is one of three development
aircraft, says Mil general designer
Marat Tishchenko. Begun in
1982, development is about 90
per cent complete, he says, but
the Mi-28 is still several years
from production.
The helicopter currently lacks
night-attack capability, although
television and infrared night
vision systems are under devel-
opment. "Our electro-optics
people have fallen behind sched-
ule," Tischenko admits.
The distinctive nose-mounted
radome houses a small radar,
used to guide beam-riding anti-
tank missiles. The undemose
daylight targeting turret also
houses a laser rangefinder and is
linked to the front gunner's cock-
pit by a periscope system.
The helicopter is flown from
the raised rear cockpit, which is
equipped with a headup display.
Flight controls are mechanical.
Under the nose is a 30mm
cannon, derived from a standard
Soviet Army weapon for
commonality which swivels
through +110° horizontally and
+13/-45° vertically and can be
fired by either pilot or weapon

system operator.
An unusual Mi-28 feature is a
small compartment in the left
rear of the fuselage for recovering
other crewmembers in an
emergency. "It has no seats,
windows, or other comforts,"
says Tischenko.
The Mi-28's five-blade articu-
lated main rotor system is built
around a titanium hub, with
elastomeric bearings designed
and built by Mil, "because there
are no manufacturing facilities for
elastomeric bearings in the Soviet
Union," says Tischenko.
Main and tail rotor blades
are filament-wound glassfibre-
reinforced plastic. The Mi-28 at
Paris has a "squashed-X" tail-
rotor, similar to that used by the
US AH-64 to reduce noise.
The main rotor blades have
upswept trim tabs to counter
what Tischenko calls an
"extremely powerful" pitching
movement caused by the highly
cambered, high-lift blade aerofoil
used.

Mi-28 take-off weight is
10,400kg—about 1,000kg more
than the Apache. Power comes
from two 2,200 s.h.p. IsotovTV3
turboshafts, uprated from those
in the Mi-24 Hind. •

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Mil's unlovely Mi-28 puts on a lively display

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