

and (7) changes in doctrine (as seen in manuals and exercises) that clearly and increasingly stress pre-emptive attacks. In particular, the pace and character of Soviet conventional weapon system programmes and the progressive iterations of conventional military doctrine can both be cast in a threatening light.

An exhaustive summary of recent Soviet conventional weapon system advances is beyond the scope of the present study. A brief survey of some particularly impressive developments, however, should illustrate how Eurocentric Soviet conventional force improvements can look very threatening, especially when combined with a conventional doctrine that stresses the merit of rapid, pre-emptive armoured thrusts and counter-air operations.

The recent deployment of three new and very sophisticated tactical aircraft and the impending deployment of a fourth provide a striking illustration of the tremendous improvement in Soviet conventional military power. The MiG-29 *Fulcrum*, MiG-31 *Foxhound*, Su-25 *Frogfoot*, and Su-27 *Flanker* all represent significant advances in comparison with earlier Soviet tactical aircraft. The addition of AA-XP-1, AA-XP-2 and AA-10 air-to-air missiles to the capable existing arsenal of AA-7, AA-8 and AA-9 air-to-air missiles will further improve the combat capabilities of these fighter aircraft. These four Soviet combat aircraft symbolize in stark terms the unexpected and troubling capacity of the Soviet Union to produce very advanced weapon systems that appear to approach Western systems in terms of quality and performance. The giant new Antonov 400 *Condor* military transport and the II-76-based *Mainstay* AWACS also illustrate this capacity to design and build very sophisticated military aircraft in surprisingly short time periods.⁷⁶

Technical sophistication and new models are only part of the story. At least as important is the fact that the Soviet Union is currently producing interceptor and ground-attack aircraft at the rate of approximately 1,000 a year (the 1983

rate of 950 is down from the preceding four-year average of 1,300) compared with American figures slightly lower than 400. The period 1974-1983 has seen a total production of 8,400 interceptor and attack aircraft in the Soviet Union compared with 3,500 in the United States.⁷⁷ If NATO production figures are added, of course, the numbers are much closer. The official American publication *Soviet Military Power* (1983) uses an estimate of 900 (NATO including the US) versus 1,350 (Soviet Union) aircraft produced in 1981. Nevertheless, existing force ratios remain skewed strongly in favour of the Warsaw Treaty Organization. The sophistication and number of new aircraft entering the Soviet inventory are certainly impressive as are indications that yet another generation of MiG and Sukhoi fighter aircraft is now beginning development. Add to this the continuing development and deployment of quite capable existing aircraft like the MiG-23/27, the Su-24 *Fencer* and the Tu-22M *Backfire*. Consider, as well, the continued production of extremely effective combat helicopters (the Mi-6, Mi-8 and, especially, the Mi-24 and Mi-26) in concert with the development of newer versions of the Mi-24 *Hind*, the impending deployment of the Mi-28 *Havoc* and a new, smaller more manoeuvrable attack helicopter (the Mi-29) and the picture of Soviet tactical air power is impressive indeed. Advances made in Soviet air-to-air and air-to-ground ordnance (new cluster bombs, fuel-air explosives, electro-optical and laser-guided air-to-surface missiles, *Hellfire*-like anti-tank and anti-helicopter missiles, and electro-optically guided glide bombs) further illustrate the increased lethality of Soviet air power. The relative improvement over existing Soviet aircraft and their weapons and the rapid closing of the "technological gap" previously thought to separate Western and Soviet combat aircraft, when combined with admittedly crude quantitative advantages of up to six-to-one in favour of the Soviet Union and its WTO allies, cannot help but generate serious concern.

100

⁷⁶ See the 28 November 1983 issue of *Aviation Week and Space Technology*, "Soviets Deploying New Fighters", pp. 18-20 and the 12 March 1984 issue with its "Specifications", pp. 135-173. The various editions of *Soviet Military Power* (Washington: USGPO) also contain fairly detailed information about new Soviet tactical aircraft.

⁷⁷ See *Air Force Magazine*, April 1984, p. 38.

