

# Sukhois present new strategic risk for Australia



A central concern for Australia's long-term air power strategy in the nearer and wider region is the large-scale proliferation of the most advanced Russian fighter and missile technology. Of particular strategic interest is the superb 750 nautical mile radius Sukhoi Su-30 'Flanker' fighter, Russia's equivalent to the Boeing F-15E. With buddy refuelling using the UPAZ pod, the Su-30 is capable of crossing the sea-air gap.



Sukhoi Su-30s now being sold in Asia are in technology terms more like Su-35+ and Su-37 fighters, some variants using 2D thrust-vectoring canards, phased array radars and Western avionics. Equipped with second generation variants of the Vypel R-27/AA-10 Alamo, R-73/AA-11 Archer, R-77/AA-12 Adder/AMRAAM-ski air-air missiles these aircraft outperform the F/A-18 family fighters across the board and are a genuine challenge both for the F-15 series and the new F-35 JSF.

Used as bombers, Flankers could be armed with AGM-142 equivalent standoff weapons such as the Raduga Kh-59M, GBU-15 equivalent TV guided bombs like the GNPP KAB-500/1500Kr. Flankers could also carry Harpoon-clone anti-ship missiles such as the Zvezda Kh-35U and unique weapons like the Zvezda Kh-31 Krypton family of long range ramjet anti-radiation missiles, or the massive supersonic sea-skimming Raduga Kh-41 Moskit/Sunburn and MBRPA Kh-61 Yakhont anti-shipping missiles. As such, the Su-30s provide robust precision strike, defence suppression and sea control capabilities.

China is building up a force of 350 – possibly up to 500, rivalling in size the US F-15 fleet. India has ordered close to 200, and both contracts involve local assembly. This year, the near region bought into the Su-30, with Malaysia ordering 18 Su-30MKMs and Indonesia 4 Su-30Kis as a lead-in batch for a planned block replacement of the TNI-AU fighter fleet with around 50 Sukhois. If the TNI-AU gets what it wants it will have the equivalent of 50 F-15E class fighters in service by the end of the decade. Russian sources also claim Jakarta is actively shopping for the S-300PMU/SA-10E/SA-20 Grumble, which is an issue in its own right.

From a strategic analysis perspective the acquisition of such advanced weapons by marginally stable nations such as Indonesia or other regional players should be of genuine concern – and this is aside from the staggering numbers being purchased by China. The threat equation (to Australia) is predicated on the presence of both capability and intent but, historically, the capability dimension has always been lacking - whatever regional intent toward Australia there may have been. However, this level of capability is changing with plans to buy advanced aircraft and weapons.

The arrival of long range weapons like the Sukhoi and its suite of modern missiles coincides with important and strategic economic developments in Australia's north - presenting an entirely new strategic context to consider.

The recent approval of the Barrow Island Gorgon gas processing plant in WA is another important step along Australia's path to becoming a major energy exporter in the region. With more capacity than the recently enlarged Burrup Peninsula LNG plant near Karratha, Gorgon more than doubles the economic output of the gas rich Pilbara region. Further to the North-East the Timor Sea also shows enormous long term promise as a source of hard export earnings, and proposals have been floated to run a gas line from the Northern Territory to feed the gas pipeline grid of the whole eastern seaboard. This developing economic bonanza is also a developing strategic vulnerability of major proportions.

The acquisition of modern Russian weapons such as the Su-30, and modern long range standoff missiles would provide Indonesia with the capability, perhaps as early as 2005, for long range strikes against targets such as the multi-billion dollar gas processing infrastructure and the offshore gas production platforms central to the north's gas industry.

From a weapon's standpoint, a single supersonic Raduga 3M-82/Kh-41 Sunburn, MBRPA 3M-55/Kh-61 Yakhont or subsonic Novator 3M-54E1 Alfa anti-shipping cruise missile could effectively cripple if not destroy any of these large facilities in a single strike. These missiles were designed to cut small warships in half and inflict critical damage on large warships – and the sad history of industrial accidents and fires in petrochemical plants and offshore rigs suggests that even a single hit would be likely to start uncontrollable fires. The Piper Alpha is a good example, but not the only one. The respective LNG tank farms at Burrup and Gorgon when full each store energy equivalent to a 1.3 Megaton nuclear warhead. The large size and enormous radar signature of such targets makes them nearly impossible to hide from the seekers of such missiles. With GPS aided inertial guidance, later models of these missiles do not need terminal homing.

Historically, Australia's north has not been regarded as particularly vulnerable. Key targets such as RAAF Learmonth, Tindal, Darwin and Curtin would require a decent pounding with concrete piercing bombs to destroy underground or revetted fuel tanks and close down runways. Many precision weapon hits or low level strafing would be needed to destroy the aircraft in situ and other infrastructure. A strike package with a dozen or more aircraft would be needed to deliver decisive damage against such sites, demanding high aircrew skills, good stocks of weapons, and a large number of servicable aircraft. While standoff missiles like the Novator 3M-14E, Raduga Kh-59D/M and land attack models of the MBRPA 3M-55/Kh-61 could do genuine damage, it would not be of the magnitude produced by precision bombs like the GNPP KAB-500 and KAB-1500 series. This game does however change if there are air refueling tankers and Wedgetail AEW&C aircraft parked on the apron, which are too large for revetments. Such assets are highly exposed to spall and shrapnel damage produced by a cruise missile warhead.

Unlike guided bombs that require good delivery technique, profiles for shooting Russian anti-ship and land attack cruise missiles are not that demanding: climb to cruise altitude, fly to a pre-planned IP,

program the missile with the known target position and hit the pickle button – and from distances up to 160+ nautical miles for current missiles. The attackers then fly home and watch CNN for Bomb Damage Assessment.

The notion that gas industry sites and facilities can be defended by the RAN using Aegis class warships belies several realities: the number of possible high value targets exceeds any reasonable number of hulls the RAN could operate, while the sea skimming profile of these weapons hides them under the radar horizon until the final 15 to 20 mile run to impact. With the 3M-82/Kh-41 and 3M-55/Kh-61 both flying Mach 2+ at sea level, they are challenging targets even for the best ASMD systems or land-based SAM.

Interceptors scrambled from Learmonth with tanker and Wedgetail support fare much better, but need to be launched very early on JORN track data to nail the bogie before it can get its shot off.

This presents an interesting future for Australia once the TNI-AU builds up its fleet of Sukhois and missiles. An Indonesian government at odds with Canberra would have the option of threatening significant economic damage and political embarrassment to Australia. Moreover, if Australia opted to confine its response to reactive air defence sorties to challenge intrusions, the geography would force the scrambling of fighters, Wedgetail and tankers to block every sortie tracked by JORN enroute to the North West Shelf or Timor Sea. Repeated probes and U-turns by Su-30 – a Cold War Russian tactic – could put an enormous strain on RAAF resources without the 'attacker' firing a single missile. All costing the TNI-AU only a few tonnes of aviation fuel.

In the event that Australia decides to retaliate against an attack there may or may not be the option of launching a counter-force strike to knock out the Sukhois and their operating bases because, like Australia's airfields, Indonesian bases would require a decent pounding to disable them. All will depend on what kind of assets the RAAF ends up with in the post 2005-2010 era - if the currently stated intention to aggressively downsize the RAAF is implemented then Australia may not have a viable counter-force card to play.

Arguments ad nauseum about the intentions of future Indonesian governments boil down ultimately to the fact that Indonesia's intent is unpredictable given the ongoing instability in Indonesia. What is clear is that post 2005 Indonesia's options for dealing with Australia broaden significantly.



Front and rear cockpit displays of the Su-33 'Flanker'.

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