**India will buy Israeli AWACs**

**NEW DELHI** – Israel and India are likely to sign a billion-dollar deal for three Phalcon AWACS radar systems within weeks, as a result of Israeli Prime Minister Ariel Sharon’s curtailed visit to India. The deal is likely to include transfer of source code for the system.

The Phalcon is an Israeli-developed long-range radar warning and control system that was first displayed in Russia’s IL-76 cargo plane.

The United States, which had been blocking the sale of Phalcons to both India and China, gave Israel the go-ahead last month.

The Israeli leader arrived in India with a delegation including chief executives of major Israeli armaments firms.

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**Australia’s vulnerable bonanza, part 1**

**By Dr Carlo Kopp**

The Barrow Island Gorgon gas processing plant will more than double the economic output of the gas-rich Pilbara region. To the northeast the Timor Sea also shows enormous promise for exports.

This developing economic bonanza also creates a strategic vulnerability for major proportions.

In doing so, Australia’s acquisition of modern Russian weapons such as the 750nm-radius Sukhoi Su-30 fighter with long-range, stand off missiles, will provide the capability, per haps as early as 2005, to attack the gas-processing infrastructure and offshore platforms.

A single, subsonic Raduga 3M-82/Kh-41 Sunburn, MBRLA 3M-55/Kh-61 Yakhont or subsonic Novator 3M-54E1 Alfa anti-ship cruise missile could cripple – if not destroy – any of these large facilities in a single strike.

These missiles were designed to cut small warships in half. A single hit could start uncontrollable fires in petrochemical plants and offshore rigs.

Each of the LNG tank farms at Burrup and Gorgon, when full, stores energy equivalent to a 1.3-megaton nuclear warhead. The size and enormous radar signature of such targets makes them hugely vulnerable to such missiles.

Historically Australia’s north has not been regarded as vulnerable. Key targets such as RAAF Learmonth, Tindal, Darwin and Woodside would require a pounding with concrete-piercing bombs to destroy underlying or revetted fuel tanks and close down runways, or many precision weapon hits or low level strafing to destroy protected air craft and other infrastructure. A strike package with a dozen or more air craft would be needed to deliver decisive damage.

However, standoff missiles could do serious damage if there are tankers and Wedgetail AEW&C aircraft on the apron. They are too large for revetments and exposed to spall and shrapnel damage.

Unlike guided bombs which require good delivery technique, profiles for shooting Russian anti-ship and land attack cruise missiles are undemanding. Climb to cruise altitude, fly to a pre-planned IP, program the missile with the target position and hit the pickle button up to 160 nautical miles away. Then fly home and watch CNN for bomb damage assessment.

Continued next page
North Korea rattles new rocket

WASHINGTON – The US has confirmed that North Korea has a new intermediate-range missile capable of striking neighbouring countries, but not the United States – and by inference Australia.

The new weapon is an advance from Scud and No Dong-type missiles, which are based on Soviet-era technology and lack accuracy.

A missile is classified as intermediate if it has a range of between 500km and 5500km. The source would not confirm the weapon is based on an old Soviet submarine-launched missile, the SSN-6 Sawfly. The Seoul newspaper Chosun Ilbo reported that the new missile had a range of up to 4000km.

The Scud-type missiles have a range of about 1300km.

In 1998, the Taepo Dong-1, fitted with a solid-propellant third stage, was able to deliver a satellite into an elliptical orbit.

The notion that the RAN is using Aegis class warships can defend gas industry sites belies several realities – the number of possible high-value targets gets exceds any reasonable number of hulls the RAN could operate. Then the sea-skimming profile hides them under the radar horizon until the final 15- to 20-mile run to impact. The 3M-82/Kh-41 and 3M-55/Kh-61 flying mach 2+ at sea level are challenging targets.

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 bogey before it can get its shot off.

This presents a hypothetical for Australia. Once the TNI-AU builds up its fleet of Sukhois and missiles, an Indonesian at odds with Canberra would have the option of posing significant economic damage and political embarrassment.

If Australia confined its response to sorties challenging in transit, the RAAF would have to scramble fighters, Wedgetail and tankers to block every sortie tracked by JORN. Repeated probes and U-turns by Su-30 – a Cold War Russian tactic – could put an enormous strain on the RAAF without firing a single missile.

Australia may or may not have the option of launching a counter force strike to knock out the Sukhois and their operating bases – like Australia’s airfields. Indonesia’s options for striking it to a decent pounding is to disable.

We could argue ad nauseum about the intentions of a future Indonesian government – ultimately intent is unknowable, given the ongoing instability in Indonesia. But post-2005, Indonesia’s options for striking it to a recalcitrant Canberra broaden.

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John Stackhouse, Killara
September 2003