

SUNDAY FEATURES

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2. F-16 Fighting Falcon multi-role jet fighter
3. P-3C Orion maritime patrol and anti-submarine warfare aircraft
4. Harpoon anti-ship missile system
5. PAC-3 anti-ballistic missile system

PHOTOS: BLOOMBERG AND COURTESY OF SIKORSKY AIRCRAFT

The ins and outs of the latest US arms package to Taiwan

BY J. MICHAEL COLE
STAFF REPORTER



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In late January, the US Department of Defense's Defense Security Cooperation Agency announced the approval of a major arms package to Taiwan. Included in the US\$6.4 billion deal were PAC-3 missile defense systems and associated equipment, UH-60M Blackhawk helicopters, Osprey-class mine-hunting ships, work on command-and-control systems, and Harpoon training missiles. Also in the pipeline are PC-3 Orion maritime patrol aircraft.

While Beijing has reacted with anger at news of the sale, threatening economic sanctions against the US defense companies involved, the *Taipei Times* takes a closer look at each item and its capabilities. To cap things off, we look at what's missing — and desirable.

APPROVED

PAC-3 (PATRIOT ADVANCED CAPABILITY)

QUANTITY: 114 missiles, firing units, training unit, three radar sets and other systems

ESTIMATED COST: US\$2.81 billion

CONTRACTORS: Raytheon Corp (systems), Lockheed Martin (missiles)

DESCRIPTION: PAC-3 missiles are high-velocity interceptors that destroy incoming targets by direct, body-to-body impact. In 2008, the US government authorized the sale of four PAC-3 fire units and 330 missiles (delivery scheduled for 2014). The PAC-3s are a significant addition to the PAC-2s already deployed by Taiwan, as 16 can be loaded on a Patriot launcher, compared with four on the legacy PAC-2. The PAC-3s are part of Taiwan's SAM network of area air defense systems, which include PAC-2s, the domestically made, long-range Tien Kung-I (天弓一, "Sky Bow"), Tien Kung-II (天弓二) and TK-III (天弓三, under development), and the medium-range Improved-Homing All-the-Way Killer (I-HAWK). The missiles will be deployed at key targets to ensure coverage against Chinese ballistic missiles, including the Dong Feng (東風, "East Wind").

UH-60 BLACKHAWK UTILITY HELICOPTERS

QUANTITY: 60, plus technical and logistics support

ESTIMATED COST: US\$3.1 billion

CONTRACTORS: Sikorsky Aircraft (United Technologies), General Electric

DESCRIPTION: A medium-lift utility helicopter, the Blackhawk can serve a number of functions, including air assault, air cavalry and evacuation. It can be configured to carry out medical evacuation, command-and-control, search-and-rescue, armed escort, electronic warfare and executive transport missions. The UH-60s will complement Taiwan's aging UH-1H Huey utility helicopters, which proved inadequate during Typhoon Morakot in August last year.

OSPREY-CLASS MINE-HUNTING PATROL BOATS

QUANTITY: Two, plus refurbishment upgrade and support, overhaul of AN/SQQ-32 sonar

ESTIMATED COST: US\$105 million

CONTRACTOR(S): Prime contractor to be determined

DESCRIPTION: Osprey-class ships were the first US Navy ships designed solely for mine-hunting operations. The ships locate mines using high-definition sonar and neutralize mines with a remote-controlled underwater vehicle. The platform has been designed with exceptionally low magnetic and acoustic signatures to protect against mine detonations during mine-hunting operations. The two ships are the *Oriole* (MHC-55) and the *Falcon* (MHC-59), both of which were decommissioned by the US Navy in June 2006. The Taiwanese Navy had been waiting for release of the ships since 2001. Once they enter service, the ships would play a key role in a scenario involving a naval blockade by China.

RTM-84L/ATM-84L HARPOON BLOCK II TELEMETRY MISSILES

QUANTITY: 10 RTMs and two ATMs

ESTIMATED COST: US\$37 million

CONTRACTOR: McDonnell Douglas (Boeing)

DESCRIPTION: The RTMs and ATMs are unarmed training versions of the air-launched (AGM) and ship-launched (RGM) anti-ship missiles, both of which are used by Taiwan.

PHASE TWO OF THE C4I/LINK 16 "PO SHENG" PROGRAM

QUANTITY: 35 Multifunctional Information Distribution Systems, Low Volume Terminals (MIDS/LVT-1) and 25 MIDS On Ships Terminals

ESTIMATED COST: US\$340 million

CONTRACTOR(S): To be determined

DESCRIPTION: MIDS is an advanced command, control, communications and intelligence (C3I) system that provides high-capacity, jam-resistant, electronic communications links for near-real-time tactical information-sharing for air, ground and sea elements. It is a main component supporting theater functions such as surveillance, identification, air control, weapons-engagement coordination and all-service direction. The Po Sheng (博勝, "Broad Victory") system is a main component of Taiwan's sophisticated command, control, communications, computers, intelligence, surveillance and reconnaissance (C4ISR) network. It enhances joint capability for the Air Force, the Navy, the Army, joint defense platforms and command and operations centers. The Link 16 capability is provided via the MIDS and is only compatible with US-made platforms such as the F-16, F-5, Hercules C-130 and E-2 Hawkeye aircraft, as well as Perry-class, Knox-class and Kidd-class warships. In 2003, senior Pentagon officials declared the "Po Sheng" program a foremost priority in the US-Taiwan defense program.

IN THE PIPELINE

P-3C ORION MARITIME PATROL AND ANTI-SUBMARINE WARFARE AIRCRAFT

QUANTITY: 12

ESTIMATED COST: US\$1.3 billion

CONTRACTOR: Lockheed Martin

DESCRIPTION: The Orions will significantly improve Taiwan's anti-submarine warfare (ASW) aircraft and replace its aging S-2Ts, developed by Northrop Grumman. Originally designed as a land-based, long-range, ASW patrol aircraft, the P-3C's mission has evolved to include battlespace surveillance at sea or over land. Its long range and long loiter time are invaluable assets. The P-3C has advanced submarine detection sensors and magnetic anomaly detection equipment. The People's Liberation Army Navy is believed to have as many as 70 submarines, 10 of which are nuclear-powered. In recent years, it has invested heavily in expanding and upgrading its fleet, and a large share of the PLA's annual defense budget has gone toward the navy. Given the growing PLA threat from undersea, the P-3Cs will be a welcome addition.

WHAT'S MISSING?

With finite defense budgets and US resistance to sell certain advanced hardware, Taiwan's shopping list faces constraints. Still, defense specialists told the *Taipei Times* that some items would be desirable. Among them are advanced F-16C/D aircraft, which Taiwan has been attempting to acquire for years. Diesel-electric submarines, Joint-Direct Attack Munitions (JDAM, a guidance kit that turns "dumb" bombs into all-weather missiles using an inertial guidance system and GPS) and advanced jet trainers (such as the South Korean T-50).

SOURCES: DEFENSE SECURITY COOPERATION AGENCY, DEFENSE NEWS, US NAVY, GLOBALSECURITY.ORG, C4ISR JOURNAL



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