



May 25, 2015

EUROPE



Fighting the Traffickers

An EU effort to halt human smuggling from Libya to Europe is hindered by vague rules of engagement. *Page 4*

6 Finland: New interest shown in NATO.

NORTH AMERICA

Terrorist Evolution

Special operators face varied threats spreading throughout the globe. *Page 16*

ASIA & PACIFIC RIM

Complex Relationship

While positive signs in China-US relations were seen at IMDEX, US aircraft were warned flying in the South China Sea. *Page 17*

MIDDLE EAST

Security Aid Boost?

Israel has begun talks with the US administration on a long-term package to boost grant aid. *Page 14*

INTERVIEW Tom Kennedy

Raytheon's chairman and CEO discusses the company's cyber strategy, tactics for successful investment and Raytheon's future market plans. *Page 22*

McCain Makes Move To Shift Defense Acquisition Authorities

STAFF REPORT

WASHINGTON — A new push by US Senate Armed Services Committee Chairman Sen. John McCain to increase the armed services' authorities to manage major weapon programs could weaken the power of the Pentagon's top acquisition office.

The move comes as Frank Kendall, undersecretary of defense for acquisition, technology and logistics (AT&L), is in the midst of a series of Better Buying Power initiatives to reshape the Pentagon's sprawling acquisition system.

The upper chamber's version of the 2016 defense policy bill, the first under the Arizona Republican's control, contains language that would shift to the service chiefs, secretaries and acquisition executives program management

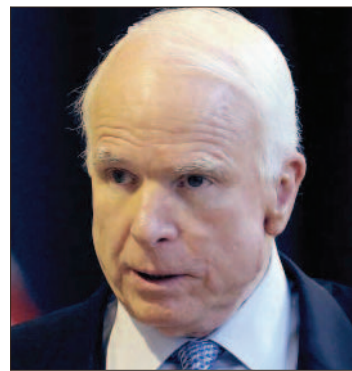


JIM WATSON/ AFP/GETTY IMAGES

DoD Acquisition Chief Frank Kendall

authorities now held by the AT&L.

The biggest changes McCain is proposing — with the SASC's overwhelming backing — would make the service acquisition executives the milestone decision authority for non-joint weapon programs transferred to or started under ser-



MATT YORK AP

Sen. John McCain

vice control.

While there could be negative impact on Kendall's authority, Mackenzie Eaglen, an analyst with the American Enterprise Institute, notes that may not be a bad thing.

"I would argue the undersecretary would argue the undersecretary." *See US ACQUISITION, Page 6*

China's Navy Makes Strides, But Work Remains To Be Done

By CHRISTOPHER P. CAVAS

NEWPORT, R.I. — It's no secret that China has embarked on a major modernization and expansion plan for its Navy, and its aggressive building program, coupled with the placing in service of more modern submarines, an aircraft carrier, destroyers with ever-sophisticated sensors and a large number of long-range surface-to-surface missiles, is altering politics and strategies throughout the Asian theater.

What is not so clear is what sort of fleet the Chinese are building toward, and how far their industrial capability can take them.

That was the theme last week at a two-day conference here to discuss China's naval shipbuilding progress and challenges. Presenters at the event, sponsored by the US Naval War College's China Maritime Studies Institute, were in general agreement on several major themes — that China's Navy will continue to grow and field

ever-more capable systems, and that it remains a work in progress.

"That's a good way to put it," Andrew Erickson, a leading expert at the college on the People's Liberation Army (Navy) — or PLAN — and one of the event's organizers, said shortly after the conference ended.

"A lot of activity is occurring, there's a lot of effort, they're making achievements, but in this complex and difficult field it takes a lot of achievement to be accrued before that translates to a major increase in actual capability," Erickson said. "They are far from hopeless, they are moving ahead, but it is a long and rocky road."

There was general agreement at the conference that the PLAN fleet will continue to grow and field

See CHINA'S NAVY, Page 7

New European UAV Effort Raises Hopes

By TOM KINGTON and PIERRE TRAN

ROME and PARIS — After years of false starts, Europe is once again planning a joint UAV with a view to gaining sovereignty in the sector and staying off US and Israeli imports. And this time officials are convinced it is not all talk.

Defense ministers of Italy, France and Germany signed a declaration of intent May 18 in Brussels to launch the two-year, €60 million (US \$66.7 million) definition study for a future European medium-altitude, long-endurance UAV.

That signing signals long-awaited political support as Airbus Defence and Space, Dassault Aviation and Finmeccanica have lobbied under a flag of sovereignty for governments to select a European UAV.

"This time the stars are well aligned," said François Lureau of consultancy EuroFLConsult and former head of the French procurement office.

"It's a very important step for European cooperation, a critical cooperation which we must have at our disposal in many theaters of operation," said French Defense Minister Jean-Yves Le Drian.

For Bernhard Gerwert, chief executive of Airbus Defence and Space, the signing "clearly recognizes that sovereignty in development of new systems, and specifically in military reconnaissance and unmanned aviation, is of strategic importance for European security."

Previous European efforts have failed. France, Germany and Spain *See EUROPEAN MALE, Page 11*

Stronger together.

Five companies. 7,000 employees. One vision. Learn more at FinmeccanicaNA.com

FINMECCANICA

EUROPEAN MALE

From Page 1

signed for a risk reduction study in 2007 and Airbus invested at least €250 million to design a European MALE UAV.

But the company closed its Talarion project in the absence of government orders.

One Italian analyst saw two reasons why this time it was different.

“Before Monday the partners had not all committed funding,” said Michele Nones, head of the security and defense department at the Istituto Affari Internazionali, a Rome think tank.

“Sixty million euros is a small amount, but it sets the ball rolling after years of talk. The political alignment is also favorable, linked to the growing awareness that UAVs are an essential tool for territorial control. Europe has seen how having fewer UAVs has affected control over the Mediterranean and the Middle East, where we must rely on piloted aircraft.”

A US analyst was ambivalent about whether Europe could pull it off.

“If this is an old fashioned transnational cooperation development with modest technical ambition and a more economic motivation, meaning the sharing of production costs, then it does not sound promising,” said Steven Grundman, a Lund fellow at the Atlantic Council in Washington.

“But if it’s not a pan-European Reaper but a breakthrough product that leaves the Reaper in the dust, and if they use different nations for their expertise while workshare is based on comparative technical advantage, not just retour, then that’s different.”

The European partners will effectively compete with US specialists General Atomics and Northrop Grumman, and Israeli producers Elbit and Israel Aircraft Industries (IAI). France, Italy and the UK operate General Atomics UAVs; Germany leases the IAI Heron.

The three European firms estimate the development costs will be around €1 billion (US \$1.1 billion), an Italian industrial source said. “That is a rough estimate and depends on requirements,” he added. The estimated cost of the definition phase is €60 million.

That €1 billion is a conservative estimate and the real figure will probably be much higher, a French Air Force officer said.

German industry has learned its lessons from the downed Talarion project, which bore an estimated program cost of €2.9 billion and is now seen to have been a “best of the best,” the UAV equivalent of a Mercedes or Rolls Royce, an executive said.

The new UAV is expected to fly in 2025, Le Drian said in March.

Along with sovereignty, key fac-

tors in the study are certification for flying in civil airspace over Europe, civilian missions and cost cutting, two executives said. The UAV would also fly with weapons. The maneuverability of General Atomics’ drones is seen as a benchmark to beat.

European rules governing UAV flights in civil airspace are being drawn up, and the Italian source said one advantage the European firms have is that they are helping to write the rules.

“We are working with the European Aviation Safety Agency on this subject to give the view of industry and to give advice on directions to take,” he said.

The development of a European MALE design will likely have minimal impact on sales of drones from the US or Israel, which have dominated the unmanned system marketplace, said Michael Blades, an analyst with Frost & Sullivan.

“The sales will likely be localized and probably more in the civil and law enforcement arenas rather than military, since the program aims to design a system able to fly in the European civil airspace.

“Bottom line: They are scrambling to get some sort of market share while they can but are very late to the party.”

Michael Horowitz, an associate professor of political science at the University of Pennsylvania who has studied unmanned systems, said it’s not surprising that the three European nations would look to develop an indigenous system in the face of US restrictions on armed drone exports.

“While both Italy and France purchased the MQ-9 Reaper from the United States, neither was able to purchase an armed version,” Horowitz pointed out. “For a capability such as UAVs, where the underlying technology is increasingly available in the commercial sector, it is also natural to expect advanced industrialized countries to have at least some interest in building their own platforms.”

Horowitz has been sounding the alarm over the last year that the development of indigenous drones, combined with a US government reluctance to export unmanned technology, could limit the ability of the US to set crucial standards for use of the technology.

And while a new US unmanned system export policy announced in February has opened the door for potential sales, the European strategy creates a limited timetable for the US to use its UAV exports to help shape decision-making in Europe.

“The announcement by Italy, France and Germany provides additional evidence that advanced UAV proliferation is likely inevitable even if the US continues restricting UAV exports to its closest allies and partners,” Horowitz said. Without additional exports, “it



FRENCH MINISTRY OF DEFENSE

African Duty: French Harfangs have been used in operations in the Sahel.

could further incentivize other close US allies and partners to strike out on their own and build their own advanced UAVs or import them from others.”

Operational Details

The French Air Force is interested in arming the UAV with the Brimstone air-to-ground precision missile, and have it carry sensors for large-scale surveillance and moving target indicators, a second French Air Force officer said.

The moving target indicators on Harfang UAVs flying in Mali work on the flat terrain, allowing operators to track sparse road traffic, but the Air Force seeks imagery which works in mountains, the officer said. That requires development of new sensors, driving up costs, which the three partner countries would share.

The German Air Force focuses on high altitude and long endurance, as can be seen in renewed interest in the Euro Hawk, which is being brought out of storage, the first officer said. That contrasts with the French requirement, which can be summed up as a “Reaper plus.”

French and German units have both flown their UAVs in coordination with ground forces. The former flew 2,000 flight hours a year on two Harfangs in mountainous northern Afghanistan, while the four or five Herons of the latter flew some 5,000 hours a year in the same region, the officer said. Italy has flown Reaper UAVs in Iraq and Afghanistan.

The Belfort squadron at Cognac airbase, southwest France, flies the Reaper MQ-9 and Harfang, coordinating the drones with Mirage and Rafale fighters over Mali.

The design study will help industrial partners uncover the operational needs. “Industry does not know the requirements,” an executive said. The study will help decide turboprop or jet, twin or single jet, low or high wings.

“The definition is key,” the executive said. The air forces’ concept of operations will help industry see what will be needed in the next 20 to 30 years.

A turboprop is low cost but the relatively slow speed makes the UAV more vulnerable to being shot

down. The Reaper is a first-generation turboprop, while General Atomics is working on the next generation jet-engined Predator C, the Avenger.

The definition phase will cover “key issues such as competitiveness, sovereignty, growth potential, compliance with joint requirements or certification,” Airbus, Dassault and Finmeccanica said in a joint statement.

The program, named MALE 2020, would “take into account the need to optimize the difficult budgetary situation through pooling of research and development funding ... the certification of drones is inherently built into the program from the onset,” the firms said.

Sovereignty is an issue because acquiring a drone off the shelf often requires the foreign government to allow its use in a given region, and there is suspicion the sealed boxes carrying the mission systems might allow the foreign authorities to read the data.

IAI may have supplied the Harfang airframe but the sensors are French-built so there is a confidentiality of content, an industry source said.

System Design Key

The systems outweigh the importance of the platform, an analyst said.

The task is essentially to field “an intelligence, surveillance and reconnaissance, and command-and-control asset which happens to fly,” said Robbin Laird of consultancy ICSA, based in Washington and Paris. The system is agnostic as to the platform on which it flies. That focus on systems puts Thales UK at an advantage. An increasing sophistication of airborne systems means aircraft will be flying a distributed datalink, or a honeycomb, he said.

French Air Chief Denis Mercier told a May 4 conference on drones that the cloud computing system is key in strategic thinking, with issues such as security of the datalink and the handling of “big data” by automation and artificial intelligence, TTTU newsletter reported May 13. Such concerns now supercede selection of the platform.

The need is for more personnel as the sensors gather so much data

on a mission, an officer said.

Firms are also interested in drones in the stratosphere, able to stay aloft for weeks and equipped with large sensors that would deliver reconnaissance as well as surveillance, the report said.

Airbus has been working on its Zephyr, a high-altitude pseudo-satellite (HAPS) that flew in 2013. This system flies at 75,000 feet for up to 14 days. The Zephyr, built like a huge glider and drawing energy from solar panels on wings, would overfly regions where there is little satellite coverage or where enemies would shoot down a UAV.

After the two-year definition phase, development work would start, with first flights following four-and-a-half years later, the Italian source said.

“We have agreed that during the definition phase, everyone will participate in all areas of work,” he said. “Everyone sees everything and the workshare is equally balanced. Then, during the development phase, different firms may take the lead in different areas.”

An engine supplier has yet to be decided.

Retired Lt. Gen. Dave Deptula, the former head of the US Air Force’s ISR efforts, sees potential benefits to the European design — as long as it is not just a copy of existing US capabilities.

“If it seeks to achieve substantial capability advancement such as modular, multipurpose design with large payload, survivability that will enable use in contested/denied airspace, and persistence that greatly exceeds current capability, then it would be a worthwhile effort.”

The contract for the definition study will be signed later this year, with OCCAR, the European armament cooperation office, acting as program manager, and the European Defence Agency will give support on certification for flying in civil airspace, the joint French, German and Italian statement said. Other European countries could join in the development stage, with support from EDA.

The European plan is “very positive because it shows the willingness of the political authorities to develop a European capability,” said Bruno Even, chairman of Safran’s Sagem. That is welcome after France ordered US MALE UAVs when European industry could have supplied such aircraft.

Sagem can offer technical know-how gained on its Patroller and Sperwer tactical UAV systems, Even said. “My view is to take a system approach,” Even said. “In the system, the platform has a significant role as the platform is at the heart of the system but it is important to be vigilant and take a system approach.” □

Aaron Mehta in Washington contributed to this report.