Counter-Insurgency Urgency?

Development of sensor packages could aid Pentagon's plans for dedicated COIN air fleet

MICHAEL FABEY/WASHINGTON

A shift in Defense Dept. focus and the development of advanced airborne sensor packages just might provide the U.S. military with a platform that has eluded the Pentagon for decades—a dedicated aircraft fleet mix especially designed and deployed for counter-insurgency operations.

Terrorist attacks on U.S. soil and insurgent battles abroad have reawakened Pentagon interest in developing a dedicated counter-insurgency operations (COIN) fleet and capability. Aviation

Stavatti Aerospace says its Machete concept, which resembles a black shortened F-15, can handle strike, intelligence, surveillance and reconnaissance, and other missions important to the COIN initiative.

counter-insurgency experts and would-be COIN contractors have been gravitating to the Pentagon to brief officers of the need, capabilities and potential requirements for such aircraft.

The Rand Corp. recently completed an unclassified report, "COIN Aircraft Systems for the USAF and Friendly States Facing Insurgencies," this summer as part of the organization's Project Air Force. Rand notes that there will be a need for such a capability for some time to come. "Insurgencies are likely to be an enduring feature of the international security environment."

Rand also says USAF is using aircraft designed for other needs for COIN missions, but that aircraft specifically geared for such needs would be better.

The Air Force historically has modified high-tech jet fighters or bombers for COIN operations instead of investing in a counter-insurgency fleet, which would consist mostly of transport planes or lower, slower-flying turboprop aircraft for fixed-wing needs. Jets can be used for limited COIN work, while it would be difficult if not impossible to do the reverse.

The Air Force also has been loath to rob its fighter or bomber accounts for what it considers "fringe" work, such as counter-insurgency operations.

Now, some say the anticipated need for COIN fleets is greater.

And growing capability of precision munitions and other sensor packages is making it possible to develop more-effective COIN fleets.

"With sensor packages, that's where we could be able to do it," said Wray Johnson, a former Air Force special forces colonel who helped develop counter-insurgency operations. Johnson teaches at the U.S. Marine Corps College in Quantico, Va.

He also is the co-author of the 2003 book *Air Power in Small Wars, Fighting Insurgents and Terrorists*, which is on the USMC commandant's supplemental reading list, intended for majors and lieutenant colonels deploying to Iraq and Afghanistan.

High-flying, fast jets would be at a disadvantage for COIN work, which requires more loiter time, often closer to the ground. Jets are also expensive to operate and maintain, and the Pentagon and Congress are looking for ways to cut costs.

A turbofan light attack-trainer such as Argentina's AT-63 Pampa would have a flyaway cost of about $11 million, the Rand report says; a utility plane, even less. Utility planes could provide more cost-effective transportation than other airlifters such as C-130Js, according to Rand.

"Many in Congress may question the wisdom of future Air Force budgets unless they include investments that clearly contribute to fighting non-state actors," says Christopher Bolkcom, aviation expert for the Congressional Research Service.

To prove they're not simply modifying legacy platforms, the services are jointly developing programs for new aircraft to meet needs they say reflect the growing counter-insurgency requirements. One of these is the Joint Cargo Aircraft (JCA), a tactical airlifter meant for austere environments that can't be accommodated by current fleets.

But some of those programs have failed to get off the ground.

"In the case of the Army, the JCA program will probably falter for lack of money early in its execution, especially given Air Force resistance to buying anything other than C-130s," the Lexington Institute's Loren Thompson says. He notes that other COIN aircraft could meet similar fates.

"In the case of the Special Ops Command, it's hard to understand why an organization already buying the C-130, the V-22 tiltrotor and the next-generation combat search-and-rescue helicopter also needs a twin-engine turboprop. It sounds like special operators are 'overkilling' the short-hop airlift mission while neglecting more pressing needs."

Others disagree, saying the current aircraft don't meet COIN needs.

Johnson says, "What we need is something rugged, reliable, survivable and multi-dimensional."

While the Air Force has often directed its focus and funding on fighters and strike aircraft, COIN operations take on more indirect roles—intelligence, surveillance, reconnaissance (ISR), transportation, air ambulance, psychological operations, communications and providing cover for convoys and other ground operations.

Some COIN-type aircraft and missions include propeller-driven or jet trainers for light attack, helicopters, utility and armed unmanned aerial vehicles, Rand notes.

Aircraft that have proven effective in COIN operations include OV-10s, A-37s, T-37s, AC-47 gunships, UH-60s, C-123 transports and such newer entries as Embraer Tucanos.

EVEN SUCH SMALL planes as turboprop civilian transports, including the Spanish CASA C-212, Pilatus Porter, Cessna 17 or Piper Arrow, have proved useful.

Many of these are analyzed in the Rand report, which also notes conceptual designs, like that of Idaho-based Stavatti Aerospace Machete.

Resembling a black shortened F-15, the Machete will be able to handle strike, ISR and other missions, says Stavatti Aerospace Chairman/CEO Christopher Beskar.

The plan is to build on many of the capabilities of the A-10 or even the old A-1 Skyraiders, Beskar said on Aug. 16. But the aircraft also is incorporating modern sensor packages and construction standards. The plane is made of only about 12% traditional aluminum, while a third of it is titanium, Beskar said. "It's built to have a lot more survivability."

After two years of briefings with Pentagon, Air Force and Rand officials, Beskar has altered the Machete design to better address COIN requirements for more cannon firepower, ISR capability and a more rugged aircraft.

Another indication of what the Air Force may require was the proposal requests issued this spring for an Iraqi counter-insurgency ISR aircraft that can also be tasked for communications work.

WHILE KEEPING an eye on the possible U.S. or American-backed markets, Stavatti has its sights elsewhere.

"[We're] export oriented," Beskar said, noting Colombia, Chile and other Latin American countries, which are looking to replace aging A-37s or OV-10s, are promising.

Latin America, with its history of insurgencies and drug-trafficking battles, provides the perfect backdrop for COIN airframes. The same type of aircraft that's been successful for battling drug traffickers—mobile, quick, persistent—would be effective against insurgents.

Johnson agrees the Latin American market would be a target-rich environment for COIN aircraft. But he argues the only way U.S. allies will buy into COIN fleets is if the Pentagon does first.