

From July 24-August 6 2021: A Compendium of Recent Articles on Second Line of Defense and Defense Information



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An Update on 2nd Marine Air Wing: July 2021

07/29/2021

By Robbin Laird

The Marines are undergoing a change with a sense of urgency associated with the strategic shift from the Middle East land wars to being effective in strategic competition. The Marine Corps exists to provide a globally deployable Naval Expeditionary Force in readiness, this means preparing for initial engagements in contested areas of operation and working within the Joint Force and our alliances to support the high-end fight if called upon to do so.

This is a strategic shift, but in many ways, it is a strategic shock moving away from the combat conditions and training associated with the Middle East to a wider variety of mission engagements in the Pacific and North Atlantic areas of operation. One noticeable constant is II MEF never stopped training to fight in any clime and place, to include spending more time training in the Nordic region with the Nordic allies.

But the blunt fact is that this generation of Marines have been engaged in the Middle East in counterterror and related operations, not focused largely on operations in the littoral against strategic competitors. And to be clear, this requires crisis management skill sets specific to a wide diversity of situations which are likely to occur dealing with competitors in any region.

There have been new phrases coined suggesting how the Russians or Chinese operate in the new strategic environment such as hybrid war and operations in the gray zone. Clearly, the reset of the USMC involves being able to dominate in those situations as well as enabling the Joint Force and our allies to ramp up escalation capabilities as required.

During my July 2020 visit to 2nd MAW, I discussed this shift and its challenges with Marines, and with the CG of 2nd MAW, Maj. Gen. Cederholm. When I met with him last December, he highlighted the importance of increasing readiness for the force, and we started the July meeting by focusing on the Wing's success in readiness over the past few years.

According to Cederholm, "We are in the process of approaching readiness levels that have not been seen in decades. On some days, our readiness rate has approached 73% of all our assets being flown. Marines at all levels have contributed to this success, one which is critical to enable us to meet our mission of being able to fight today."

He then indicated that this was one of four key priorities being pursued by the Wing going forward. "Our first priority is to continue increasing our readiness rates by adding more combat depth through our formations. The second is to drive more lethality into our training and readiness (T&R) manuals. The third one is a combination of force preservation and force development, ensuring that we are training Marines, protecting Marines, and understanding risk, both organizational and institutional risk. The fourth is alignment to the future, or alignment to the 2030 force design effort."

2nd MAW is clearly focused on the training piece as a key part of the way ahead. Major General Cederholm highlighted the need to train to fight today but to find ways in reshaping training and the T&R manuals to better position the Wing for the future fight. What he argued is that even though the Marine Corps continues to clearly have capabilities to engage with peer competitors, the T&R manuals over the years of engagement in the Middle East appropriately focused largely on the operations in support of CENTCOM.

This clearly needs to change going forward. The Wing leadership is focused on finding ways to do this more effectively going into the future. "What types of missions do we need to do for the evolving peer fight? How can we write T&R manuals that train to those missions, and not just what we have done over the past twenty years?"

He argued that there is a clear need to shape an understanding of predictive readiness to be able to do the evolving missions which are required for the peer fight, something the Commandant of the Marine Corps and Chief of Staff of the Air Force have written about. "If we take our target as 2030, and we plan back from that, we can better inform our force design and development efforts."

"2D MAW currently has planners in the EUCOM AOR who are looking to smooth out any inhibitors or barriers that would hinder our ability to operate in and around the European continent, but they're also eyeballing the future to fall in alignment with our priorities, which is alignment to force design in the future."

"How do we plug into the 2030 operating concept, what tools do they need, and what missions do they need to train to? How do they integrate more effectively with the Joint Force and our alliances? How do they integrate into the kill web? We are working on that roadmap right now, and it will require a significant shift in how we educate and train our formations."

"We are retooling for the future fight. At the same time, we're prepared to answer the phone, time now, takeoff, and beat any and all potential adversaries out there."

Although F-35s are in 2^{nd} MAW, they are there as part of the training effort. 2^{nd} MAW will be receiving its F-35s over the next five years, and will see the CH-53K as the latest USMC aircraft come to 2^{nd} MAW prior to the rest of the USMC. Given that the VMX-1 detachment working the operational testing is actually at New River this makes a great deal of sense.

But given the approach which Maj. Gen. Cederholm outlined, he clearly thinks the Marines need to look at their new platforms in a specific way. That way was highlighted in a quote he cited from an individual he described as an "incredible defense leader" who asked him several years ago: "Why do we stuff the F-35 into our current operating concepts? Why don't we take our current operating concepts and revise them based on the capabilities which the F-35 brings?"

Ed Timperlake and I would certainly agree with this point as we have been arguing such a point for more than a decade. I would quickly add, that the ability of an 8-ship F-35 wolfpack to fight as one, is not appreciated for the impact it could have if multi-domain warfare con-ops change.

But the Wing is receiving a new aircraft soon into the operational force, namely, the CH-53K and the CG had recently flown on the aircraft. He underscored: "I was amazed at the automation that's built

into the aircraft. To be honest with you, I can't stop thinking about what the different possibilities are of how we can make this platform support our operating concept on the battlefield of today; but not just today, but on the battlefield of the future."

And that is the real advantage of the reset which Maj. Gen. Cederholm is highlighting and working with his team at 2nd MAW: focusing on evolving missions, leveraging new capabilities to expand their capabilities to execute those missions, and to build out the Marines so they continue to be able to be a highly-effective and lethal contributor to the defense wherever and whenever our Nation may need.

An Update on Dassault: July 2021

By Pierre Tran

Paris – Industry and government are still in contract talks for studies on a technology demonstrator for a European fighter jet, Dassault Aviation said in a July 22 statement on first-half financial results.

"The contract for phase 1B (under negotiation) is still to be signed," the company said.

"This will cover all the work carried out jointly between France, Germany and Spain until 2024."

The contract for phase 1B studies includes a demonstrator for a New Generation Fighter, a core element in the planned Future Combat Air System, backed by the three partner nations. Dassault is prime contractor on the planned fighter, which will effectively compete with the planned Tempest fighter jet, to be built by Britain, Italy and Sweden.

The companies on the Tempest project are in pursuit of a contract for concept and assessment work in the next few weeks, business daily *Financial Times* reported June 18, with a signing marking the first big step in launching the fighter, led by the UK and BAE Systems.

Meanwhile, talks "are being finalized" with the Direction Générale de l'Armement procurement office on intellectual property rights on FCAS, Dassault said.

The German parliamentary budget committee approved last month Berlin's share of an overall budget of €4.5 billion (US5.3 billion) for the phase 1B studies on the FCAS, just in time before the Bundestag closed for the summer recess and before general elections to be held in September.

The phase 1A studies on the FCAS demonstrators and the new fighter are continuing, Dassault said, with the focus on aerodynamics. The first wind tunnel tests are due to be held in September. The phase 1A studies began in February last year.

The joint concept study for FCAS, launched in January last year, is due to end soon, the company said.

Meanwhile, Airbus has negotiated a contract with the OCCAR European arms procurement office for a European medium-altitude, long-endurance drone, and that is due to be signed in the second half of

the year, Dassault said, with the French company leading work on flight controls and mission communications.

On an Egyptian order for a further 30 Rafale fighter jets, that deal was excluded from the first-half financial results as Cairo has yet to pay the down payment, the company said. That order, once confirmed, will bring the Rafale fleet to 54 units for the Egyptian air force.

Egypt is expected to pay a 15 percent down payment on the latest deal, worth €3.95 billion, website Disclose reported. That deal includes the fighters and weapons from MBDA and Safran Electronics and Defense.

Greece took delivery July 21 its first of an order for 18 Rafales, with the Greek defense minister, Nikolaos Panagiotopoulos, attending a ceremony at Istres flight test center, Dassault said in a statement. That was the first of 12 secondhand Rafales to be sent from the French air force, to be followed by six new units to be built by Dassault.

The company delivered 13 Rafales for export, split between Egypt and Qatar.

Dassault reported operating profit rising to €175 million from €55 million a year ago, boosted by lower spending of own funds on research and development and higher net sales. The Covid 19 pandemic hit profit and sales in the first half last year.

The margin of operating profit over sales rose to 5.6 percent from 2.1 percent.

Net profit rose to €265 million from €87 million, with the contribution from its stake in Thales rising to €146 million from €85 million. Dassault holds a 25 percent stake in the electronics company.

The net profit margin rose to 8.5 percent from 3.3 percent.

Sales rose to €3.1 billion from €2.6 billion, with exports accounting for 87 percent. Orders rose to €3.9 billion from €984 million, raising the order book to €16.7 billion from €15.9 billion. Exports accounted for 82 percent of orders.

Cash holdings rose to €3.5 billion from €3.4 billion.

Dassault has sought to protect its intellectual property rights on technology to develop the fighter demonstrator – the background – but is ready to share technology on building the fighter – the foreground.

The company maintained a forecast of delivery of 25 Rafales and 25 Falcon business jets for the full year. The R&D bill on development of the Falcon 6X and 10 X jets had weighed on the balance sheet.

VMFA-115 Trains with the Finnish Air Force

08/06/2021

By Robbin Laird

During my visit to 2nd Marine Aircraft Wing in July 2021, I had a chance to talk with MAG-31, notably the VMFA-115 Operations Officer, about their squadron's time in Finland training with the Finnish Air Force last month.

Because I was in MCAS Cherry Point, and not at MCAS Beaufort, we did the discussion from a conference room at MCAS Cherry Point. The MAG-31 operations officer, Lt. Col. Waller and the VMFA-115 Operations Officer, Maj. Simmermon discussed the training effort with me.

Originally, VMFA-115 was to participate in a multi-national exercise, Arctic Challenge 2021. But because of COVID-19 restrictions, their engagement became a bilateral exercise with the Finnish Air Force.

This provided an important window on how one might modify training going forward.

What VMFA-115 learned was how the Finns fight.

How they operate their air force in a truly distributed manner. How they use their roads for landing sites; distributed logistical support and work under the shadow of Russian long-range fires.

Clearly, Marines learning to fight as the Finns fight is a good thing, and part of the cross-learning process which is necessary for U.S. forces to be familiar with various concepts like distributed maritime operations, littoral operations in a contested environment, and expeditionary advanced base operations.

All concepts that provide an understanding of how to operate in the High North back to the Baltic Sea.

This is how Maj. Simmermon put the experience:

"A year ago, we were preparing for Arctic Challenge 21. If we had participated in an Arctic Challenge exercise, it would have been a big mission planning exercise and very scripted.

"We would have most likely used our own tactics and tried to incorporate into what the other countries were doing for their own tactics."

"But it became a bilateral exercise called ILVES. We were able to train with them in their tactics. A great tactic VMFA-115 was able to observe was the Finns diverting and spreading out to reduce the effects from a potential strike on their location. They showed us how they're able to set up expeditionary arresting gear, where they put their support and how they taxi the aircraft.

"We then had one of their instructor pilots get in their simulator with us, where we practiced road landings which was a relatively benign mission, really; just taking off and landing on small, short expeditionary runways.

"The whole system relies largely on the logistics support and the infrastructure for their road runways, which are already in place."

He added: "Doing the bilateral training that we did during ILVES, exposed us to smaller level tactics, techniques, and procedures, which I had never seen before.

"Those conversations and briefs would not have been available in a big exercise like "Arctic Challenge," but it was as you mentioned, a whole logistics and infrastructure aspect of aviation, as well as a unique divert strategy, and changing the way your force is employed by consolidating in the air and understanding their TTPs."

"It reminds you that even as a globally deployable force, it's important to see that there are a lot of different ways and different geographical locations, specifically Finland and their neighbors that change the way an aviation unit fights or how a conflict in general is executed."

"Seeing how other nations fight was very valuable.

"I would emphasize that going to any country that has a different defense strategy or offensive strategy for that matter is very eye opening, if they're willing to share with you some of their considerations and how they employ their forces."

When visiting Finland in 2018, I discussed with a senior Finnish defense officer, who was former head of the Finnish Air Force, the unique way the Finns use their air combat capabilities in the defense of Finland.

As <u>Lt. General Kim Jäämeri put it</u>: "It is becoming clear to our partners that you cannot run air operations in a legacy manner under the threat of missile barrages of long-range weapons.

"The legacy approach to operating from air bases just won't work in these conditions. For many of our partners, this is a revelation; for us it has been a fact of life for a long time, and we have operated with this threat in the forefront of operations for a long time."

I also discussed with Norwegian Air Force officers, their ramped up cooperation with the Finns and Swedes in airpower integration.

This is being done in part with their cross-border training,

As I noted in a <u>2018 interview</u>: "From 2015 on, the three air forces have shaped a regular training approach, which is very flexible and driven at the wing and squadron level.

Major Ertsgaard added that "We meet each November, and set the schedule for the next year, but in execution it is very, very flexible. It is about a bottom-up approach and initiative to generate the training regime."

"The impact on Sweden and Finland has been significant in terms of learning NATO standards and having an enhanced capability to cooperate with the air forces of NATO nations.

"And the air space being used is very significant as well. Europe as an operational military airspace training area is not loaded with good training ranges.

"The range being used for CBT is very large and is not a cluttered airspace, which allows for great training opportunities for the three nations, and those who fly to Arctic Challenge or other training events. And the range flies over land so there is an opportunity for multi-domain operational training as well."

Since 2018, the Marines have ramped up their efforts to train in the Nordic region and to operate in cold weather.

With the Nordics ramping up their defense capabilities and working greater integration with each other and with their North Atlantic partners, there are enhanced opportunities for Marines to work in the region as well.

I discussed the importance of Nordic defense and its impact on U.S. forces learning with VADM Lewis in my interview with him on July 16^{th} , the day after the ceremony launching the Allied Joint Forces Command Norfolk for full operational capability.

In the period in which <u>2nd Fleet</u> was re-established, the Nordic nations have clearly ramped up their defense efforts and cooperation with each other and with the United States and NATO.

This <u>learn from others approach</u> is a key part of how VADM Lewis has led his command.

As he commented: "That has been my mantra from day one here: learning from our regional operations. As we work how best to operate in the region, we are learning from our regional partners some of the best ways to do so."

And for the Carolina-based Marines, this means expanded opportunities to learn from our Nordic partners as well as they worked enhanced integration with the U.S. Navy.

Taiwan's Yun Feng Missile: Part of the Defense Against the PRC

08/03/2021

By Debalina Ghoshal

n March 2021, Taiwan's Ministry of National Defence released its Quadrennial Defence Review which focused on developing 'deep strike' capabilities.

There is little doubt that these capabilities are to deter China.

Deep strike capabilities and defence by denial mechanisms will form main components of Taiwan's "layered deterrence."

This layered deterrence is all the more crucial as China's conditional 'no-first use' nuclear doctrine does not apply to territories China considers its own among which Taiwan is one.

Land attack cruise missiles (LACMs) form crucial component on a state's "deep strike" capabilities.

There is little doubt that Taiwan would focus on asymmetric capabilities to counter China among which deep strike missile capabilities are one.

In August 2019, Taiwan cleared the production of its 1500km range high speed high altitude land attack cruise missile (LACM) called the Yun Feng or 'Cloud Peak'.

About twenty missiles were to be under production at the moment along with ten mobile missile platforms.

The missile was been developed by the National Chung-Shan Institute of Science and Technology (NCSIST).

The decision for mass production was a combined decision of the NCSIST and the Ministry of National Defence (MND) Taiwan.

Though the missile has a range of 1200km, its range could be extended to a range of 2000kms capable of reaching of China, in fact can target Beijing too.

These missiles have incorporated rocket propulsion technology, solid fuel boosters and also ramjet engine with supersonic speed.

Taiwan has also received two sets of Mk.41 vertical missile launchers that are capable of launching land attack cruise missiles.

Taiwan has also acquired license to locally produce the additional Mk.41 launchers capable of launching anti-air, anti-ship and LACMs.

Though the technological details regarding the missile system is limited, there is no doubt that Taiwan's indigenous missile development program has taken significant leap.

Cruise missiles are one of the best suited weapon systems for destruction of military airfields and supply depots, thereby could make it difficult for Chinese military to strengthen credible conventional

combat prowess in times of crisis. Chinese President Xi Jinping also pledged for complete 'reunification' with Taiwan causing more concerns in Taiwan.

In addition, tensions over Taiwan Strait are not new.

Possessing humble numbers of LACMs will put lesser burden on Taiwanese Air Force.

Not just this, Taiwan also has territorial claims in the South China Sea.

Taiwan's developments in the Taiping Islands would not be viewed by China in positive stead.

Taiwan also is in jurisdiction of the Pratas Islands in the South China Sea and many analysts fear that in times of crisis, China could resort to occupying such islands for a strategic victory rather than directly attacking Taiwan.

In fact, in October 2020, a Taiwanese airplane flying from Kaohsiung with supplies to Pratas Islands was warned by Hong Kong air traffic control to refrain from entering Hong Kong managed airspace.

In future, China could resort to 'denial mechanisms' to prevent Taiwan's influence in the Pratas Islands. In June this year, twenty eight Chinese warplanes like bombers, fighter jets, surveillance and reconnaissance aircraft performed sorties through the skies around Taiwan and some of them flew close to Pratas Islands.

Taiwan faces a threat from Chinese medium range missile capabilities, and while Taiwan has worked on defence by denial capabilities to strengthen its defensive capabilities vis-à-vis Chinese missile systems, they would also need offensive capabilities to strengthen their offensive deterrence should 'defence by denial' strategy fail.

Cruise missiles are the most cost effective options and are capable of evading enemy defence systems.

RAAF Wedgetails: Command Centre in the Sky

08/05/2021

According to the Australian Department of Defence:

"RAAF's six E-7A Wedgetails are best described as a command centre in the sky. Each is equipped with multiple radars and tech that allows it to scan and communicate with up to 80 aircraft and ground and sea units over an eye-popping distance of 4 million square kilometres during a single 10-hour mission. It's an extraordinary ability for an aircraft modified from a simple Boeing 737-700, with a 'hump' on top.

"Operated by No. 2 Squadron and based out of RAAF Base Williamtown, the Wedgetails' varied contribution includes fighting Daesh in Iraq, securing the Gold Coast Commonwealth Games as part of Operation Atlas and protecting world leaders at the APEC forum. Last year, the aircraft celebrated 10 years of RAAF service."

The Wedgetail story is still a largely untold one, which we will highlight in later articles.

RAF Crews Train on Aussie Wedgetails

08/05/2021

By Australian Defence Business Review

The UK's Royal Air Force has provided key crew members on exchange with the RAAF's 2SQN to operate the Boeing E-7A Wedgetail AERW&C aircraft.

During the recent Exercise Arnhem Thunder, RAF crew members included an aircraft captain and a senior surveillance and control officer – the two most senior roles on board the aircraft – for several missions, working with aircraft such as the F-35A, F/A-18F, and EA-18G.

The RAF has placed key personnel on exchange with the RAAF's E-7A fleet at Williamtown near Newcastle, as it prepares to take delivery of three planned Wedgetails AEW Mk.1s of its own to <u>replace the E-3D Sentry</u> from 2023. The first RAF aircraft is currently being modified from a 737-700 BBJ at Birmingham in the UK.

"It's a great opportunity to gain E-7 knowledge and experience with the ADF, which will prove invaluable to the introduction of the UK's E-7 and show the benefits of working closely with allies," RAF Flight Lieutenant Chris Tomlinson, a former E-3D Sentry pilot, said in a release.

"The aim of my Wedgetail exchange is to soak up as much E-7 pilot experience as possible, to gain knowledge on the platform to help facilitate decision-making for the program team back in the UK, and to gain experience to impart to Wedgetail pilots and crews on my return to the UK," he added. "I anticipate my role to include flying test and evaluation sorties during the E-7's introduction to service, instructing pilots on how to fly the UK variant, and providing advice to the program as it grows and develops."

"Newcastle is a great city with the most spectacular scenery and a lively yet relaxed atmosphere, and 2SQN has an innovative and enthusiastic feel with aviators and support crew who are passionate about what they do," he said.

"I've learnt so much and work alongside some of the most welcoming personnel I could wish to do so. I feel very grateful for the opportunity and for the efforts of the Australian E-7 community in teaching me all that is Wedgetail."

This article was published by ADBR on June 29, 2021.

Shaping a Way Ahead for the Assault Support Community: Visiting MAG-26

08/03/2021

By Robbin Laird

I first visited Marine Aircraft Group 26 (MAG-26) in 2007 when they were beginning the MV-22B Osprey transition.

Now, the Osprey is the backbone of the Marine Corps combat assault support community.

And with both heavy-lift and light-attack helicopter squadrons, the Second Marine Aircraft Wing (2D MAW) is the cornerstone of all rotorcraft support for North Carolina-based Marines.

During my recent visit, I had a chance to discuss the way ahead for combat assault support with three members of MAG-26. Maj. Mazzola is MAG-26 Operations Officer. Maj. Kevin O'Malley is assigned to Marine Medium Tiltrotor Squadron 263 (VMM-263), an operational MV-22 squadron, and Maj. Tom Gruber is a member of VMM-365. We focused on the challenges of transition from the Middle East land wars as well as the work on shaping a new way ahead for the assault force.

Up front, the shift was described by one participant as, "A total paradigm change."

MAW Marines will perhaps lessen expeditionary operations in Mesopotamia and increase engagements in the North Atlantic area operations.

In fact, the Marine Corps has already made gains towards this goal.

Since 2018, focus on specific challenges such as cold weather training and exercises have increased at a pace not witnessed since the Cold War.

Case in point, one interviewee noted that in March 2022, they would once again train with the Norwegians in the Cold Response—one of the largest Norwegian and Coalition exercise since the Cold War.

This is how that exercise is described by <u>one source</u>:

"About 40,000 soldiers will participate in Norway's Cold Response 2022 exercise next year, planned to take place in the Ofoten area with the country's navy and air force as the main players in the war game. "There is a significantly increased interest among our allies for the north and the Arctic," said General Eirik Kristoffersen, head of the Norwegian Armed Forces in a phone interview with the Barents Observer. In times of growing distrust between Russia and Europe, Norway seeks to build its security in partnership with NATO allies and Nordic neighbors.

"That includes more joint military training up north. Now, the Armed Forces are revealing more details about next year's planned large-scale winter exercise.

"As it seems today, we will have about 40,000 soldiers in exercise Cold Response," Kristoffersen said. "It will be the largest military exercise inside the Arctic Circle in Norway since the 1980s," the general added.

"Cold Response 2022 will train reinforcement of northern Norway, and the main action will be by navy and air force capacities in the Ofoten area. The region is near to the Army's northern brigade and training areas where U.S., British and Dutch soldiers frequently drill in Arctic warfare.

"Ofoten is also home to Evenes airport where Norway's new fleet of P8 Poseidon maritime surveillance planes will be based together with NATO's two northernmost Quick Reaction Alert F-35s fighter jets on standby to meet Russian military planes flying near Norwegian air space. For NATO and the Nordic countries' defense partnership, Ofoten is of core strategic importance in case of a larger global conflict involving Russia in the North-Atlantic. The area is about 600 kilometers from the Kola Peninsula where the Northern Fleet's nuclear submarines are based."

As the Marine Corps conducts force design, they must figure out how to supply that force.

For example, when operating in the Mediterranean, the Ospreys can fly to several support facilities.

This will not be the case when operating in an environment like the North Atlantic.

This means working the logistical support challenge with the Navy to provide for afloat support and to work on pre-positioning of supplies and work the arc from North America to the Baltics.

How will the supply chain to support North Atlantic operations be shaped going forward?

Clearly, the renewed focus on naval integration is part of the answer.

This will be a function of how the Navy reworks its own logistical support; this will be a function of how ashore support is built out in the region (the arc from North Carolina to the Baltics) and how the amphibious fleet is reshaped.

Clearly, the coming of maritime autonomous systems can be part of evolving support solution sets.

As one participant put it: "Perhaps the supply shortfall can be mitigated by logistical movers. Having unmanned aircraft or unmanned surface vessels will undoubtedly be able to contribute going forward."

There is clearly a shortage of amphibious shipping both in terms of combat ships and connectors for the North Atlantic mission against a peer competitor.

We did not discuss the broader challenge which can be referred as shaping a new family of systems to deliver the amphibious warfare capability to the extended littoral engagement in the North Atlantic, but this is a key challenge which must be met going forward.

Another aspect being worked is how to integrate the ARG-MEU in wider fleet operations.

The Marines and the Navy are working exercises in the North Atlantic to find ways to do so, and the recent <u>BALTOPS-50</u> did provide some insight with regard to this.

And the <u>evolving relationship</u> between 2nd Expeditionary Strike Group and II MEB will clearly focus on this challenge.

An aspect of the way ahead for the ARG-MEU is its participation in fleet defense and shaping ways the amphibious force can better defend itself afloat.

The F-35 has already demonstrated in the Pacific that it can contribute significantly in this role and with the F-35 coming to 2nd MAW's operational force, it can play a similar role in the Atlantic.

But given the nature of the arc from North Carolina to the Baltics, allied F-35s will play a key role in all of this, as has already been demonstrated in BALTOPS-50 with the role of Norwegian F-35s.

The participants indicate that indeed they are engaged in discussions with the Navy about how to better integrate capabilities for the extended littoral operational fight.

As one participant highlighted: "As the Navy focuses on integration of their fleet operations, they want to be able to use all of the assets available to them.

"And that is why the MEU is now part of the discussion."

One key question which is a shaping function moving ahead was posed by one participant this way: "How does the Air Combat Element (ACE) participate effectively in defense of the amphibious force?"

Deputy Commandant for Aviation, Lt. Gen. Mark Wise, is noted as saying that "the Marine Corps as an expeditionary force must be agile, mobile, and survivable. That means looking to, and building upon, current warfighting philosophy and our way of doing business.

"This vision is built around distributed maritime operations, littoral operations in a contested environment, and expeditionary advanced based operations: DMO, LOCE, and EABO.

"The Marine Corps will not abandon, but rather will refine and improve upon, these concepts for operational design for a littoral fight."

A final aspect of the potential evolution of assault support which we discussed briefly, is the potential contribution of roll-on roll-off systems onboard the Osprey.

This was demonstrated at last year's <u>Deep Water exercise</u> where MV-22 onboard capabilities allowed it to play a key role in providing C2 to a distributed force.

The Marines further contended that several pertinent future capabilities are being shaped for the Osprey.

I will focus on some of those paths of development in a future article.

All in all, this is a good news story.

Something that back in 2007, I did not even think was possible.

The MV-22 Osprey is not only leading the way in combat assault support, but is a center piece as the Marine Corps and 2d MAW trains for operations in any clime or place.

Ways Ahead for C-2 Enabled Marines in Distributed Operations for the Peer Fight

08/02/2021

By Robbin Laird

During my July 2021 visit to 2nd Marine Air Wing (2d MAW), I had a chance to visit again with Marine Air Control Group 28, the Marines who provide command and control (C2) and air defense for the distributed force. I met with the Commanding Officer Col. McCarthy, the Operations Officer Lt. Col. Mui, the Operations Chief Master Gunnery Sgt. Braxton, and with the Assistant Operations Officer Capt. Megliorino. MACG-28 deploys personnel around the world as part of II MEF.

MACG-28 consists of around 2,000 Marines who collectively enable 2d MAW to fight as a cohesive and highly lethal force via the establishment and employment of the Marine Air Command and Control System (MACCS). The MACCS, a collection of C2 agencies supporting the six functions of Marine Aviation, is often referred to as the Commanding General's weapon system because it provides him with the sensors, communications, and situational awareness necessary to employ aviation in support of II MEF in a decisive manner.

Col. McCarthy elaborated on this by stating "this is an incredibly exciting time to be a C2 professional, more than any other time in my career I'm seeing an appreciation across the Service for the capabilities MACCS Marines provide to the Marine Corps. When you look at the kill webs we are trying to establish, how we need to integrate long range fires, and how we are going to C2 in a degraded environment; these are the challenges we are currently getting after with a group of incredibly talented and innovative Marines."

Marine Corps C2 has historically been focused on the concept of centralized command and decentralized control; this philosophy nests perfectly with how the Marine Corps plans to fight in the future via distributed operations integrated around mission command.

They have a core template which they are building from as the Marines shift from the Middle East land wars to shaping a crisis management force which can fight as a globally deployable Naval Expeditionary Force in readiness against potential adversaries. With regard to naval integration, connecting Navy and Marine Corps C2 systems has historically been a challenge but that is being worked.

As one participant put it: "One of the key things that's happening right now is that all the L-class ships are being outfitted with the same C2 system that we use to do air command and control ashore. Our primary system for C2 is a system called CAC2S, the Common Aviation Command & Control System." Integrated operating concepts, capabilities, and training will ensure the naval team cannot be excluded from any region in a contested environment.

"Now the Navy is putting it on their L-class ships, and the program is called CAC2S Afloat. It's our program, but it's integrated with the ship. It's the blue side of the comm architecture and it's going into all the L-class ships. That's a big win for us in terms of Naval integration. We're excited to see that thing come online, and it's going to help us in the future."

And the Marines are working innovative new ways to work with the U.S. Navy. One example is an upcoming exercise off of the Atlantic Coast. The Marines are working a number of vignettes with the Navy to explore ways to integrate more effectively to deliver meaningful combat effects.

A key example is taking the core USMC sensors, and deploying it to an expeditionary base within contested maritime terrain in support of fleet operations to disrupt, deny, and deter aggressor actions. As one participant underscored: "We're going establish a sensor expeditionary advanced base. And we're going to control intercepts. We'll provide an air defense function in support of the fleet during this exercise. It's a good chance for us to work with the Navy in an integrated air missile defense role."

One of the participants I had met during a visit to MAWTS-1 in 2018. And during that visit, what was being addressed is how to deal with the challenge of working C2 in a degraded and disrupted environment.

As I wrote in that piece: The shift from counter-insurgency habits, equipment and operations is a significant one and is clearly a work in progress. It is about shedding some past learned behavior as well in terms of shaping more appropriate ways to operate as a force in a contested electronic warfare environment. The cracking of the Enigma code in World War II by the allies involved in part German soldiers and sailors using techniques which exposed the enigma system to intrusive learning from the British and the other allies working to break the Enigma Code.

"In today's situation, the Marines are facing a similar situation in which a combination of technology and appropriate combat techniques in handling data in a combat environment is a key element of the combat learning cycle as well. And disruptive technologies, which the adversary might use against the Marines, were being fielded to test the USMC approach."

Since that time, the Marines are working TTPs to deal with the reality of operating in the contested communications space. As one participant put it: "I was at WTI when we started to focus on contested communications. Since then, we have been working our TTPs and our understanding to deal with jamming and radio interference. And the Marine Information Groups are clearly helping in our learning process."

A final issue we discussed is how technology is shaping new capabilities to operate at the tactical edge and for C2 to shape force capabilities. The miniaturization of C2 technologies allows small groups of Marines to deploy in support of a distributed force and bring C2 capability that historically required large operational basing to deliver.

With an increasingly small footprint, how best to leverage this capability to support an integrated distributed force? And as the Navy and Marine Corps finds ways to integrate more effectively how can force distribution enable dynamic strike and targeting?

The question then remains: how best to operate the force to work organically or integrated with joint or coalition forces to deliver the desired crisis management or combat effect?

Answering this question will define the evolution of the USMC over the decades ahead.

Amphibiosity and Combined and Joint Battle Problem: August 2021

08/06/2021

The United States, Australia and Japan are working a modular task force built around what amphibious ships can bring to the fight.

Amphibious ships can contribute significantly to sea control and sea denial.

Two recent articles, one American and one Australian highlight the current effort.

In an <u>August 5, 2021</u> article by Lt. Cmdr. Sherrie A. Flippin, the engagement of the USS American Expeditionary Strike Group was highlighted.

CORAL SEA (Aug. 5, 2021) – USS America Expeditionary Strike Group (AMA ESG), along with the 31st Marine Expeditionary Unit (MEU), begin operations alongside Royal Australian Navy's HMAS Canberra (L 02) and HMAS Ballarat (FFH 155); and Japan Maritime Self-Defense Force JS Makinami (DD 115) in support of the Combined and Joint Battle Problem (CJBP), 5-8 August.

"It should come as no surprise that our blue-green team will continue to operate with like-minded nations in order to promote stability and the international rules-based order," said Rear Adm. Chris Engdahl, commander Expeditionary Strike Group 7. "Operations such as these ensure our forces can come together, if called upon, to defend shared interest in the region and respond to conventional or non-conventional threats."

CJBP is one of many operations nested under the U.S. Indo-Pacific Command's Large Scale Global Exercise (LSGE) 21. LSGE 21 is global command and control exercise, with a regional focus, to enhance integration of the U.S., allies and partners in the Indo-Pacific region.

The U.S. in conjunction with like-minded partners and allies will operate across several bases in the region and project sustained combat power. During CJBP, surface units will conduct complex maneuvering, refueling at sea, and integrate aviation assets through helicopter cross- deck opportunities.

Royal Australian Navy, Commodore Flotillas, Commodore Mick Harris highlighted the opportunities that LSGE 21 presents for Australia.

"Australia always looks forward to working and training with our like-minded partners and friends to address shared security challenges in our region," Commodore Harris said. "This exercise with the USS America Expeditionary Strike Group and JS Makinami represents an opportunity to enhance our ability to seamlessly integrate anywhere in the world."

Each training evolution was planned and coordinated among units and will be executed as multidomain operations in order to provide commanders with numerous options for executing processes and maneuvers. Events are based on a continuum of scenarios and designed to test operational concepts.

Together, the forward-deployed ships of ESG 7 and elements of the 31st MEU are operating in the U.S. 7th Fleet area of responsibility to enhance interoperability with allies and partners, and serve as a ready response force in support of peace and stability in the Indo-Pacific region.

And in an <u>August 6, 2021</u> story published by the Australian Department of Defence, the Australian engagement in the exercise was highlighted.

HMA Ships Canberra and Ballarat have arrived in the Western Pacific Ocean for the opening phase of the US-led Large Scale Global Exercise 21.

Chief of Joint Operations Lieutenant General Greg Bilton said Australia's participation in the first phase of the activity followed the success of Exercises Talisman Sabre and Pacific Vanguard.

"We have just completed some extraordinary training in and around Australia and now we have this exciting new opportunity to consolidate those gains," Lieutenant General Bilton said.

"We've got amphibious forces, including United States marines, embarked in Canberra, and a Royal Australian Air Force P-8A Poseidon maritime surveillance aircraft involved at various stages as well.

"Activities like this build strong operational relationships, which are the foundation for responding to shared security challenges."

Commanding Officer Canberra Captain Jace Hutchison said the exercise would prove invaluable for the crews of Canberra and Ballarat.

"Any opportunity for us to test our skills and processes with partner nations enhances our readiness and ability to respond as required," Captain Hutchison said.

The US and the UK Extend Their Carrier Cooperation Agreement

08/06/2021

In a <u>July 13, 2021</u> article on the UK Ministry of Defence website, the extension of the carrier cooperation agreement was highlighted.

Defence Secretary Ben Wallace and his US counterpart Lloyd Austin have extended an agreement to enhance cooperation on aircraft carrier operations as they met in Washington.

The two met in Washington DC for a day of high-level talks on a range of shared security challenges, discussing the UK-US defence partnership, NATO, Afghanistan and the Carrier Strike Group.

UK-US defence cooperation is the broadest, deepest and most advanced of any two countries in the world, combining the biggest defence budget in the world with the biggest in Europe, and the pair discussed opportunities to further deepen that partnership.

Mr Wallace and Mr Austin extended an existing agreement covering Enhanced Cooperation on Carrier Operations and Maritime Power Projection, due to expire in January 2022, by an additional year.

It comes as UK and US forces make their way 26,000 nautical miles around the world as part of the UK-led Carrier Strike Group (CSG21), projecting reach and influence and reassuring allies with a series of over 70 engagements, joint exercises and operations.

UK Defence Secretary Ben Wallace said:

"It was great to meet up with Lloyd Austin again after our meetings in London and Brussels.

"The US continues to be the UK's most important defence partner and we are working together, across all domains, to confront future threats. There is much to do but the extension we agreed will ensure that we can cooperate even more seamlessly with our forces across the globe."

The extended agreement lays down guidelines to ensure the generation, training and operation of both nations' carrier forces are harmonised and effective, maximising and maintaining interoperability as both forces evolve and modernise to meet the threats of the future.

The unique interoperability of the UK and US carrier forces is demonstrated by the key role US forces are playing in the UK's current Carrier Strike Group deployment, CSG21. Nine ships, 32 aircraft and 3,700 personnel set sail in May, led by the UK's new aircraft carrier HMS QUEEN ELIZABETH, on the Strike Group's seven-month maiden operational deployment around the world.

The integration of US destroyer USS The Sullivans and ten Marine Corps F-35B jets into CSG21 shows our intent to further improve interoperability between NATO Allies as we jointly develop 5th generation carrier strike capability. The deployment is emblematic of how the US and UK work together to defend our shared values, uphold the rules-based international order and tackle the threats of the future.

Re-Shaping the USMC as a Crisis Management Force: Working Naval Integration

07/30/2021

By Robbin Laird

The Marines are re-focusing their efforts from the Middle East land wars to shaping their way ahead to build a purpose-built force to facilitate sea denial and assured access in support of fleet and joint operations against potential adversaries.

One way they are doing this is working with the U.S. Navy in new ways to operate together.

Because the U.S. Navy is itself undergoing fundamental change as they return to a clear priority on blue water operations and littoral engagements, this means that the Marines are changing with a sense of urgency while the Navy is itself.

It is really an interactive engagement exploring ways to shape more effective crisis management and combat capabilities to deal with strategic competition.

During my visit to 2^{nd} Marine Air Wing in July 2021, I had a chance to discuss the evolving approach with the G-3 or operations team at 2^{nd} MAW.

I met with Col. Eilertson, the head of G-3, Maj. Barnes, the G-3 Future Operations Officer which involves the planning and engagement in exercises, and Col. (Ret.) Michael Watkins, the newly appointed senior civilian advisor in G-3.

We focused most of our discussion on the upcoming Naval exercise to be held in August.

This exercise will focus on a variety of operational vignettes testing out a variety of ways the Navy and the Marines can work together in enhance joint maritime littoral warfare capabilities.

Maritime power is an essential element of the National Defense Strategy, in light of increasingly capable maritime adversaries it is absolutely critical to the success of our nation.

During the past two years, I have asked a number of Naval officers what they considered to be contributions which the Marines might make to the maritime fight and one of the most often capabilities highlighted was the possibility of deploying sensors as part of an inside force to facilitate sea denial and sea control in support of fleet operations and the joint force.

And this is going to be done in the August exercise.

They referred to the Marine Corps side of this as training to deliver maritime capabilities "far from the sea."

A case in point is bringing the major sensor deployed by the Marines and setting up a sensor expeditionary base.

There they will be strategically postured to provide counter-air situational awareness for the Navy and operate from an expeditionary base within an enemy's Weapon Engagement Zone.

Another example is refueling Navy aircraft from Forward Aerial Refueling Points or FARPS or expeditionary refueling points.

But here they are testing the ability of Marine Corps AAVs to do refueling of rotorcraft for the Navy.

A third example is training with P-8s.

One clear trajectory of change I have seen over the past two years is the Navy realizing that the capabilities onboard the P-8 in terms of sensors can be used more broadly for the joint force.

In terms of works with the Marines, this means working ways for what have been different data management and communication systems to be worked to become more integrated.

In the exercise, the Marines will work with P-8s in a variety of ways, including FARP refueling that will optimize sustainment of land operations ashore.

This is about Marine-Navy cross training which has not been done with regard to the P-8.

As one participant put it: "It's a data sharing experiment.

"The Marines deploy in the littorals with our unique capabilities.

"And they integrate with the fleet in order to provide data which the fleet might not otherwise have access to.

"By so doing, we can paint a more accurate picture for the commander and joint force, so better targeting decisions can be made."

As one participant noted: "We will have 2 <u>TACRON</u> representatives onboard on a ship and two deployed to the expeditionary base."

As one participant noted: "The biggest thing with that exercise and that experimentation and training is working the targeting process.

"How do you speed up the process of target identification using machine aided decision making tools."

In short, as the Marines undergo modernization in preparation for strategic competition, a key part of the effort is working more effective integration with the Navy and leveraging innovation being generated within the joint force.

Setting Clear Priorities for the ADF

By Michael Shoebridge

Wargaming of US, Australian and other partner militaries in conflict with the People's Liberation Army after China attacks Taiwan shows the allied forces lose. That means our force structures need to change fast. Scenarios for that potential conflict seem to be showing just that.

This matters. Telling ourselves Taiwan doesn't matter is both wrong and dangerous—because Beijing successfully using force against Taiwan would mean seizure of a vibrant democratic population in the Indo-Pacific (like ours!) and would also enable China to project aggressive military power much more easily, and further, in Australia's region, licensed by its success with Taiwan. And the kinds of military conflict that would happen around and over Taiwan have plenty of parallels for other conflicts across the archipelagic and maritime region that is Southeast Asia and the Indo-Pacific.

The wargames show that the approach to building and using US, Australian and other partner forces that's central to Australia's \$270 billion integrated investment plan produces militaries that are more likely to lose than win against the PLA.

That is a nasty shock to planned defence investments here in Australia which shows they need to be revisited.

But it's not surprising, because the 'future' Australian Defence Force that's being bought with the government's \$270 billion is the same force that was laid out in the 2009 defence white paper, gloriously unaffected by changes in technology since then, and unaffected by the rise of China's military as the defining priority threat to Australia's security in the military realm.

The success of China's <u>anti-access/area-denial</u> strategy has produced a very dense missile threat around Taiwan and at increasing distances from the Chinese mainland that can target concentrations of allied ships, planes and bases. And naval taskforces including Australia's air warfare destroyers as part of larger Australian or combined Australian—US taskforces now look vulnerable. That's partly because of the platforms themselves, but also because the concept for using those platforms involves concentrating them into taskforces and groups that are then targets. That's what repeated wargaming shows no longer works.

Interestingly, the wargame outcomes fit with the much clearer priorities for Australia's military that are in the government's defence strategic update <u>released one year ago</u> by Prime Minister Scott Morrison. The update moved defence planning from having multiple equal priorities to making the dominant priority our region—the Indo Pacific—where, for Australia, all military threat roads lead to Beijing.

But the force structure plan released on the same day remained on autopilot, with a bit of this and a bit of that to give the government 'options' in an uncertain world. It was still based on responding to the previous multiple but equal priorities in the 2009 and 2013Defence White Papers.

So, the planned force structure Defence is building now is in direct tension with the ruthlessly clear priority the government gave Defence a year ago—and it sets Australia up to suffer large <u>combat losses</u> and perhaps be defeated as part of a US-led response to Chinese military operations in our region. Such a force is also unlikely to deter Chinese aggression and prevent conflict.

What should be done? Not a lengthy and ponderous new 'force structure review' that will take two years to do and one or two more to wend its way through Defence and government decision-making. That would be an effective bureaucratic response to delay change while current approaches proceed, as fans of Yes, Minister might know.

Instead, it's useful to think about what investment decisions are about to be made and revisit why they are being made.

That's because allocating just over 2% of GDP for our military doesn't buy all that much and every big choice rules out many other choices. So, any forthcoming big investments that don't align with the clear priority on deterring aggression in our region should be ended to make room for what can.

The next big decision Defence is going to offer up to the government out of the \$270 billion integrated investment program is the \$27 billion infantry fighting vehicle program, with government being asked to 'downselect' to either a Korean or German vehicle to be built here in Australia.

That mega-project will acquire up to 450 <u>large armoured vehicles</u> with tracks and a gun turret that most non-military observers would describe as tanks. The Koreans and Germans design and build large armoured vehicles because they have serious direct military threats for which these large, heavily protected vehicles may be decisive, with North Korea and Russia being the clear planning priorities.

But for Australia, the 450 infantry fighting vehicles look like the ghosts of Christmas past. T

hey would have been ideal in Afghanistan or Iraq, but it's hard to see them as a priority for deterring or opposing Chinese military power in the Indo-Pacific, unless we're planning to send the ADF to fight alongside the Indian Armed Forces on the high-altitude India—China border. And I don't think that's the plan.

Cancelling this shortly to be considered \$27 billion project won't leave our army personnel unprotected in unexpected stabilisation missions in places like Papua New Guinea, the South Pacific or elsewhere.

The army already has the world-class Bushmaster protected mobility vehicles that saved scores of lives in Afghanistan against lethal IEDs and stacked landmines, and it's already buying 200 <u>heavily armoured vehicles</u> that are infantry fighting vehicles by another name through the contract Rheinmetall won a few years ago. It's also buying the smaller Hawkei protected vehicle in numbers. So, for anyone saying the government still needs 'options', it has them. Just not the option to put a heavily armoured combat brigade into Mosul, Baghdad or Kabul.

Cancelling a \$27 billion project because it isn't relevant to the challenge of deterring China would send a surprising signal to Beijing—and that matters too.

Australia, our US ally and other deep partners like Japan, the Five Eyes partners and India as part of the Quad have all been comfortably predictable in Beijing's eyes.

The forces we are building fit a predictable pattern and develop slowly, and we're simply not showing the ability to embrace the obvious imperative to shift from large, expensive crewed systems that take years to build and can't be replaced if lost in conflict. That predictable pattern is a huge advantage to the Chinese strategists and technologists: they know what to plan around, and are doing it rather effectively.

But would an Australian decision matter much, given the weight of the US military's role in any conflict with China?

Yes. For a start, \$27 billion is enough to buy things that matter when it comes to deterring Beijing's military adventurism.

As an example, five new large uncrewed undersea vessels, such as the <u>Boeing Orca</u>, would cost around \$300 million and be delivered less than three years after they were ordered. New underwater weapon systems like these would make a direct contribution to changing the outcomes of wargames in which the US, Australia and others face the PLA.

As would fast-tracking plans to buy anti-ship and other missiles the army can operate from highly mobile, small-footprint forces.

For those yelling that buying things doesn't help without new concepts for how to use them, that's true.

But it's much easier to develop new concepts for how to use things you actually have than it is to do so for hypothetical things you might get your hands on at some hazy future time.

As an example, in World War I the development of concepts for airpower accelerated massively, far beyond the hypothetical thoughts of militaries, through operational use of planes.

In the US-Australia alliance relationship, the symbolism of Australia's government taking a big decision to redirect Defence's focus and funds to new capabilities that can contribute to deterring Beijing would inject much-needed momentum into our technological and capability cooperation.

It'd also inject urgency into the parallel force structure debates happening in the US: what proud American will enjoy Australia doing something they know they need to but can't bring themselves to do?

The sooner this happens, the more secure Australia and our region will be.

If we proceed on autopilot with the force we have in the works, we're living in the past and planning to fail—and that's no plan at all.

Michael Shoebridge is director of ASPI's defence, strategy and national security program.

This article was published by ASPI on August 5, 2021.

UK Space Command Launched

08/02/2021

By UK Ministry of Defence

A special ceremony held at Space Command Headquarters, RAF High Wycombe on July 29, 2021 marked the official opening of UK Space Command, with the first 'Space Operator' Badges presented to personnel.

Space plays a vital role in the Armed Forces ability to undertake the majority of defence tasks, with any disruption to the space domain leading to significant consequences on civilian, commercial, economic and military activity.

The stand-up of Space Command is a crucial step to ensure we protect UK interests in space and builds on the commitments outlined in the Defence Command Paper, to invest an additional £1.4 billion on space over the next 10 years. The ability to operate in Space is further enhanced by an increase in Defence funding of £24 billion over the next four years, as announced by the Prime Minister last year.

Minister for Defence Procurement Jeremy Quin said:

As our adversaries advance their space capabilities, it is vital we invest in space to ensure we maintain a battle-winning advantage across this fast-evolving operational domain.

The stand-up of Space Command is an exciting and important step in our commitment to operate in space effectively.

Under the leadership of Air Vice Marshal Paul Godfrey, the Joint Command will have oversight of all space capability development in the Ministry of Defence across three main areas; Space operations; Space workforce training and growth; and Space capability to develop and deliver space equipment programmes.

When at full operating capability, UK Space Command will provide command and control of all of Defence's space capabilities, including the UK's Space Operations Centre, RAF Fylingdales, SKYNET and other enabling capabilities.

After the newly refurbished headquarters were officially opened, the Chief of the Air Staff, Air Chief Marshal Sir Mike Wigston, presented the first eight personnel with the new 'Space Operator' badges, which signify the excellence of space professionals across defence. Six members of the Royal Air Force received the badge, as well as a British Army officer, and an exchange officer from the United States. The design is based upon the Airborne Specialist badge and features a single silver angled wing and a blue laurel surrounding a delta, an orbit ellipse and a constellation of stars representative of Aries, as UK Space Command was formed on 1 April which equates to Aries in the celestial calendar.

Commander of UK Space Command Air Vice Marshal Paul Godfrey said:

The space domain is vital, not just in enabling military operations across the world, but in the day to day lives of everyone across the nation.

With our new headquarters officially open, UK Space Command is now on the path to lead UK space operations to protect UK and allied interests in space.

UK Space Command will work with UK Strategic Command and the Defence Science and Technology Laboratory drawing on key expertise from across Defence to ensure multi domain integration across environments.

UK Space Command carries the UK's commitment in the Combined Space Operations initiative, which comprises of seven nations: Australia, Canada, France, Germany, New Zealand, UK and the US. The initiative seeks to improve cooperation, coordination, and interoperability opportunities in space, with main efforts focussed on ensuring a safe, secure and stable space domain.

This article was published by the UK Ministry of Defence on July 30, 2021.

Nigeria, the Super Tucano and the Cobra: A Tale of Two Aircraft

07/31/2021

By Defense.info Media Team

Nigeria is in a tough neighborhood and to assist the government in dealing with those challenges, the Trump Administration cleared the sale of Super Tucanos from the United States to Nigeria.

But now Democratic Senators are blocking the sale of Cobras to Nigeria.

It is a tale of two aircraft caught in the cross-winds of United States politics.

The situation with regard to both aircraft for Nigeria have been laid out by our colleague, Guy Martin, the editor of defenceWeb. a leading South African defence publication.

In an article published on July 23, 2021, Martin indicated that Nigeria had received its first six Super Tucanos.

The first Super Tucanos have arrived in Nigeria.

The Nigerian Air Force (NAF) on Thursday received its first six A-29 Super Tucano aircraft out of 12 on order, after a week-long journey from the United States.

The aircraft arrived in the northern city of Kano where they were received by defence minister Major General Bashir Magashi (Rtd), Chief of Army Staff, Lieutenant General Faruk Yahaya and Chief of Air Staff, Air Marshal Oladayo Amao.

The six aircraft, accompanied by a Dornier 328 support aircraft, left the United States on 14 July and transited through Canada, Spain, Greenland, Iceland and Algeria before arriving Nigeria. They will be officially commissioned into service in August.

The remaining six Super Tucanos will be delivered before the end of October 2021. The four-year period between order and delivery has been partly due to the challenges of configuring the aircraft to meet NAF specifications.

Two different types of camouflage are being used on the Super Tucanos – light desert camouflage and darker forest/jungle. Two of the six (19-2039 and 19-2040) have been delivered in jungle camouflage and the other four (19-2033, 19-2034, 19-2036 and 19-2038) in desert camouflage.

The United States under then-President Donald Trump agreed to sell the aircraft to Nigeria in 2017, resurrecting a deal frozen by the Barack Obama administration after the Nigerian Air Force bombed a refugee camp. On 28 November 2018 the United States Department of Defence placed the \$329 million contract with Sierra Nevada Corporation to manufacture the Nigerian Air Force's 12 Super Tucanos. The contract is worth \$329 076 750 for the aircraft, although the total not-to-exceed amount is approved at \$344 727 439 and is to include Forward Looking Infrared (FLIR) systems for six of the aircraft.

The first Nigerian Super Tucano flew in April 2020 and by the end of 2020, six Super Tucanos were being used for conversion training of NAF pilots at Moody Air Force Base in Georgia, who were there along with 26 engineers, technicians and logisticians. Another set of 35 personnel were also scheduled to join them early this year. In addition, a team from the USA is currently in Kainji overseeing the construction of critical infrastructure provided in the contract ahead of the delivery of the aircraft.

It is expected that Nigerian Super Tucano will be armed with Paveway II guided bombs and laser-guided rockets.

The new aircraft will help Nigeria battle rising insecurity, including mass school abductions in the northwest, Islamist insurgencies in the northeast and kidnappings for ransom and armed robberies nationwide.

Having received Super Tucanos, one has to wonder at the logic of Democratic Senators with regard to blocking the sale of Cobras.

With the Chinese engagement in Africa, a key concern, and with the Afghan legacy of American engagement where it can not win, one wonders why arms sales are not a key means of influencing states to work with the West. And with our closest European allies heavily engaged in the counter fight in Africa, this becomes even more puzzling.

Guy Martin in his July 30, 2021 article focused on the AH-1 Cobra issue.

Nigeria is attempting to acquire a dozen AH-1 Cobra attack helicopters from the United States, but the sale is being held back by US lawmakers over Nigeria's human rights record.

US officials and congressional aides told Foreign Policy that Nigeria is seeking to acquire 12 Bell AH-1 Cobra helicopters and associated equipment in a deal worth around \$875 million, but the Senate Foreign Relations Committee has delayed approving the sale. It is not known if the requested sale covers new-built AH-1Z Vipers or second-hand AH-1W Super Cobras.

With foreign military sales, the US State Department notifies Congress through the Senate Foreign Relations Committee and House Foreign Affairs Committee in advance of a formal notification. If committee members raise concerns about the proposed sale, the committees can freeze the sale until their concerns are addressed by the State Department.

According to Foreign Policy, the top Republican in the House Foreign Affairs Committee, Michael McCaul, has signed off on the Cobra sale, but Senator Bob Menendez, chairperson of the Senate Foreign Relations Committee, and Senator Jim Risch, the top Republican on the Senate Foreign Relations Committee, have apparently placed a hold on the proposed sale over concerns with Nigeria's human rights record.

Quoting anonymous officials, Foreign Policy reported that the US State Department informed Congress of the intended sale in January. The deal involves 28 GE Aviation engines, 14 Honeywell navigation systems and 2 000 Advanced Precision Kill Weapon Systems laser-guided rockets.

In June this year Menendez told the Senate Foreign Relations Committee that "coups in Mali and Chad have undermined international counterterrorism and development efforts, and Nigeria requires a fundamental rethink of the framework of our overall engagement."

In October last year he condemned the Nigerian government's crackdown on protestors calling for an end to police brutality, saying, "I condemn the shooting of innocent civilians in Nigeria, and call for an immediate transparent investigation into the alleged actions of the military. I stand in solidarity with Nigerians who are peacefully calling for police reforms and an end to government corruption, and call on President Buhari to ensure security forces cease their violent crackdown on demonstrators. Civilian control of the military is a hallmark of a true democracy and the eyes of the world are now on Nigeria and President Buhari."

Thousands of Nigerians protested nationwide for nearly two weeks last October, demanding an end to a police unit called the Special Anti-Robbery Squad (SARS), which they said was responsible for extortion and human rights abuses. The police disbanded SARS, but denied most accusations.

Nigeria has had a sometimes rocky road in acquiring military hardware from the United States. In 2014, the United States blocked any sale by Israel of surplus American-made weapon systems to Nigeria, nixing the proposed sale of ex-Israeli AH-1 Cobras after citing human rights concerns, saying Nigeria was not doing enough to avoid civilian casualties in the fight against Boko Haram. In 2014 the Nigerian Air Force expressed interest in acquiring a dozen Scorpion jets from Textron AirLand to fight Boko Haram insurgents, but nothing came of this.

Under former President Barack Obama's administration, arms sales to Nigeria were cut back, but when Donald Trump assumed power in 2016, his administration agreed to sell Nigeria 12 A-29 Super Tucano turboprops manufactured in the United States by Sierra Nevada Corporation. The first six arrived in Nigeria this month.

Nigeria continues to acquire military hardware, including from Russia, Pakistan and China, to fight the Islamic State-allied group Boko Haram in the northeast and armed bandits in the northwest of the country. Nigeria is also battling rising armed robberies and kidnappings for ransom where thinly deployed security forces have struggled to contain the influence of armed gangs.

Recent Nigerian Air Force acquisitions have come from Pakistan (three JF-17 Thunder fighter jets and ten MFI-17 trainers), Italy (six armed AW109M light helicopters), Russia (a dozen Mi-35M attack helicopters), and China (CH-3, CH-4 and Wing Loong II unmanned aerial vehicles). The Air Force is also overhauling its existing fleet and bringing grounded aircraft, such as Alpha Jets and L-39s, back into service.

Shaping a Way Ahead for the Australian Guided Weapons Industry: Next Steps

07/28/2021

By Australian Department of Defence

Two recent articles published by the Australian Department of Defence provided updates on the way ahead with regard to enhanced sovereignty in the production of guided weapons for the ADF.

The first was published on July 14, 2021, ironically on Bastille Day.

The 2020 Defence Strategic Update identified the need for Defence to act with greater independence in an increasingly contested strategic environment.

In March 2021, the Government announced the acceleration of a \$1 billion Sovereign Guided Weapons and Explosive Ordnance Enterprise (the Enterprise) to boost skilled jobs and help secure Australia's sovereign defence capabilities.

The Department of Defence has issued a Request for Information seeking input from industry and academia regarding capacity and interest in participating in the Enterprise. Feedback is also being sought on the potential roles that organisations could play to assist the Commonwealth and Department of Defence in the delivery of all or parts of the Enterprise.

The Enterprise provides significant opportunities in advanced manufacturing for Australian small to medium businesses. To achieve this, the Government will partner with Australian industry and deliver on the Government's commitment to growing Australian industry and securing jobs.

Building the Enterprise is a complex undertaking and Defence will work closely with Australian industry, including small and medium business, and academia in its design and development to deliver the required sovereign guided weapons capability.

The Enterprise will provide the enabling ecosystem to support Defence's inventory of guided weapons and explosive ordnance, and comprises multiple capability elements including manufacturing, research and development, education and training, test and evaluation, maintenance and repair, storage and distribution, and disposal. Balanced investment in each of the Enterprise capability elements is essential to create a sustainable and enduring enterprise.

Defence is in the planning phase of establishing the Enterprise, including defining key requirements, and is seeking industry input through this Request for Information (published on AusTender).

The second was published on July 21, 2021 and was entitled" "Firing up interest in guided weapons."

Defence this week held an information session to explain to industry representatives and academics how they could help progress the Federal Government's plan to establish a Sovereign Guided Weapons and Explosive Ordnance Enterprise.

Representatives from Defence's Joint Capabilities Group and Capability Acquisition and Sustainment Group (CASG) met virtually with about 350 representatives from across Defence industry, including manufacturers, small- and medium-sized businesses as well as researchers.

Head Land Systems – CASG Major General Andrew Bottrell said Defence was delighted with the high level of interest shown by the organisations that participated in the information session and the number that have downloaded the Request for Information from AusTender.

"Since becoming Head of Land Systems, I continue to be impressed by the capabilities and commitment of Australian industry, and the munitions and guided-weapons sector is no different," Major General Bottrell said.

"It is not too late to help shape the future and I encourage all companies who believe they have something to offer to respond to our Request For Information."

Given the scope of the planned enterprise, Defence is encouraging organisations not traditionally linked to the defence sector to consider how they could apply their skill base and capabilities to the initiative.

This initial phase is focused on defining what capabilities will be incorporated within the enterprise.

The Request for Information process closes on August 2.