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International Fighter
Conference 2020: And
Future Amphibious
Forces 2020



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Overview

This report highlights recent reporting on two of the most recent Defence iQ conferences. I start with my interview with Alexander Stephenson who highlighted how the company was addressing the challenge of holding conferences in a virtual environment due to the COVID-19 pandemic.

I then move to the International Fighter Conference, 2020, held on November 18 and 19, 2020. Finally, my report on the Future of Amphibious Forces conference held on December 1, 2020 is provided as well,

The work done by Defence iQ is first rate and encourage any of our readers to sign up for future conferences relevant to their interests.

Navigating the COVID-19 World: Shaping a Way Ahead for the International Fighter Conference 2020

July 27, 2020

I have attended the International Fighter Conference for the past two years in Berlin. I provided several analytical pieces on presentations and discussions at those two events as well as reports covering the events as well.

I was certainly looking forward to coming to Berlin and seeing my German friends and colleagues in the air combat community this Fall when the conference is scheduled to be held. But having left Australia prematurely in March and having returned to the United States in the world of COVID-19 that will not be.

But thankfully, the hosts for the conference, Defence iQ, have been working a way ahead for the conference which holds promise for providing an interesting venue for the conference which be held from the 18th through the 19th of November.

It will be a virtual conference but one which the Defence iQ team has come up with a way ahead which can make it more valuable than what many of us have experienced while living in the Zoom world. To get a sense of how Defence iQ is working to provide a more innovative framework than has been delivered with the broad scale zoom experience, I had a chance to talk with Alexander Stephenson, Deputy Director, Defence iQ.

We discussed the approach being shaped for the event. As Stephenson explained it, the digital side of the company has been active for many years and has provided core competencies which have been leveraged as the company faced the challenges of holding conferences in the virtual world.

As Stephenson explained it. the conference will host a number of panels through the more traditional virtual presentation methods but will embed this approach within an innovative networking platform

which allows the participants to interact with one another and to do so in way to set up chat rooms around topics of interest among the participants themselves.

They are using a networking platform called Brella which can able the participants to engage in interactive conversations around the conference framework.

According to Stephenson: “We have found at all of these official events, that the networking component is the hardest to replicate and lots of platforms don’t try to.

“Many will now be familiar with the lonely experience of attending a webinar purportedly attended by hundreds.

“With Brella, you’ll login to that web platform and you’ll answer a few questions about yourself and then it will suggest people on the delegate list you might like to meet.

“You can click on a page and set up a little private meeting room and invite people to join you as a sidebar. You can click on the conference room and look at the presentation itself, and ask questions.

“You can go to the list of event partners and next to each one, it has all their documents, PDF’s, videos and also the names of everyone from that company who are there.

“So you can click on them and reach out for a personal video chat. We all are trying to replicate as much networking, minus the beer and the whiskey as possible, but we’re also playing to some of the other strengths of the internet. You can see the full delegate list and you can request meetings with anyone on the delegate list and schedule them in.”

He noted that there are some advantages to the virtual conference when enabled with such networking software. They are able to have a wider range of moderators; they can invite a wider range of experts to present at the virtual event, and they can allow the military which comes free to their events to bring a larger delegation of participants to the conference as well.”

This approach allows for questions to be generated, and cross linked and answered, as well as much wider engagement than would happen in a live Q and A session as well. Stephenson highlighted: “It really shows us what questions people have. And that will obviously feed into the online discussion.”

In short, Defence iQ is providing an innovative answer to a key question: “How do we present a large event, like the Fighter Conference and make it attractive to people, but also replicate in some way that personalized experience that you get when you go to a conference?”

I am looking forward to the November event and providing my third year of coverage and analysis.

The International Fighter Conference 2020: The Evolution of Airpower in the High-End Fight

November 21, 2020

I have attended and reported on the last two International Fighter Conferences, both held in Berlin, in 2018 and 2019. Unfortunately, this one was held on a Zoom stage due to the COVID-19 world.

This year I was especially looking forward to coming to Berlin, because my daughter was coming to study in Berlin as part of her graduate studies. Neither she nor I made it.

The conference provided a wide range of first-rate experts for discussion. But the limitations of zoom are clearly that the presentations are set pieces which provide more limited cross learning than one would get with a live conference.

This means for an analyst like myself, I will write about the conference in a series of articles stimulated by one or two of the presentations and to discuss those subjects separately and then link them to what I believe is the larger topic, namely, the evolution of airpower in the high-end fight.

And for me, this is about shaping a kill web enabled integrated distributed force.

The conference provided a rich tapestry of presentations and topics, which evidenced different approaches, and different starting points to the quest for shaping a more integrated combat force, one which would tap into communications systems and sensor networks, to deliver the desired combat or crisis management effect.

The conference addressed a number of new or evolving approaches to shaping combat air platforms, from the Australian loyal wingman program, to the USAF Skyborg program, to the Franco-German-Spanish FCAS program, to the Italian-Swedish-UK Tempest program, to the USAF's next generation air dominance platform, and to the evolution of U.S. and allied naval aviation.

In addition to, or in parallel to or crossing to the platform discussions was the focus on the changing eco system for integrating platforms and capabilities across an extended battlespace in which peer competitors would contest U.S. and allied operations.

These discussions embraced topics like, human-machine teaming and enabling technologies, combat cloud teaming, the USAF and its JADC2 programmatic efforts, the role of space-based assets in empowering the force, and how to connect the force to prevail in the multi-domain fight and meeting the challenge of countering A2AD in today's fight.

As one can easily see, this is a rich tapestry of subjects which I will deal with in some detail in future articles. My own work intersects with this conference quite nicely.

For several years I have worked on the impact of fifth generation aircraft on the "renorming of operations."

I have just published a book with my coauthor, Murielle Delaporte, on the return of direct defense of Europe and how to deal with the challenge of the 21st century authoritarian powers. I will shortly publish a book about the evolution of the Australian strategic approach which I call "Joint by Design." And then in the first quarter of next year a book on the training side of the challenge, a subject discussed throughout several presentations as well. That book is entitled "Training for the High-End Fight: The Strategic Shift of the 2020s." And in 2022 will deliver a book with Ed Timperlake for publication by USNI press entitled "Maritime Kill Webs: 21st Century Warfighting and Deterrence." As one can readily see, unpacking the thoughts of the speakers of this conference will be of central importance to my work.

And without any doubt, to other authors, analysts, policymakers, warfighters and defense industrialists. Again, thanks to the efforts of the Defence iQ and their sponsors for prevailing in the difficult conditions of COVID-19 and taking forward serious thinking about the challenging times in which our forces operate and will need to operate in dealing with the challenges of the 21st century authoritarian powers.

The International Fighter Conference 2020: Enablers, Effectors, and Evolving Capabilities

December 15, 2020

The last two International Fighter Conferences, 2018 and 2019, were very different from this one. And I am not just referring to the virtual nature of the conference. This fighter conference was less about fighters than about the changing context of airpower in terms of what enables it, how effectors are being delivered and the multi-domain capabilities to which the fighter forces are expected to deliver.

The enablers were a dominant theme in the conference which focused a great deal of attention on the ISR, and C2 systems within which the fighters operate and how a multi-domain force operates and will operate as those systems evolve over time. C2 for many of the presenters really stood for Combat Cloud, and for the U.S. speakers the focus was on the USAF led multi-domain C2 efforts.

The effectors really revolved around how fighters and the evolving machine enabled ISR and C2 capabilities would change the battlespace and how fighter engagements would change over the decade ahead.

And evolving capabilities were discussed largely in terms of the impact of the F-35 on the maritime force and upon the legacy combat force and in terms of shaping new ways for European nations to collaborate to deliver either a Tempest system of systems or an FCAS system of systems

At last year's conference several speakers from states facing front line threats from either Russia or China addressed the key issues of how to ramp up their capabilities to defend themselves in the world as it is now, rather than speculating on the future air systems of 2040.

This was largely absent this year, but that does raise a fundamental question from my standpoint. My travels over the past two years to European, Australian and American air and naval forces have underscored how rapidly capabilities are changing. And they are changing in a way that speculating about a long-range future in ways that might not happen at all. What I have seen is that operations, training and development are increasingly being shaped by a cycle of change, notably with regard to the coming of software-enabled aircraft, such as the P-8 or the F-35.

As the systems envisaged in both Tempest and FCAS are clearly projected to be such aircraft, one can certainly pose the question of how innovations with today's forces will significantly reshape how the future force will be built and what it would look like.

And combat drives significant change. It is difficult to believe that in the near or medium term that the air forces of the 21st century authoritarians and of the liberal democracies will not directly engage in

combat. Even if the full spectrum crisis management they engage in might well be contained below the threshold of general war, those engagements will lead to lessons learned and reshaping of capabilities. And those conflicts do not need to be directly between them but through partners or allies using their equipment. Operations will drive training and training will drive development, a point which is at the center of my forthcoming book on Training for the *High End Fight: The Strategic Shift of the 2020s*.

As before the DefenceIQ fighter conference provided a wide range of insights on the way ahead for airpower, and I will address each of these three elements, enablers, effectors and projected capabilities in separate articles.

With the nature of the virtual conference, the organizers were able to draw in a wide range of speakers and broaden the audience as was forecast by Alexander Stephenson when we spoke earlier this year about the Conference. I think his projections were definitely realized,

Enablers and the Evolution of Airpower

December 16, 2020

The former head of Airbus, Tom Enders, had a clear approach to restructuring the defense sector of his company.

As Kevin Murray put it in his book on *People with a Purpose*: “To my mind, the ideal example of a mission statement comes from the Airbus group, whose chief executive Tom Enders is divesting parts of the business based on a simple thought: ‘We make it fly.’ The company, a European-based multinational aerospace and defence corporation, headquartered in Toulouse, is planning to sell off those parts of the business that do not design, make and sell things that fly, and will concentrate on its vast operations on aeronautical solutions, whether it be commercial aircraft, satellites, helicopters, missiles, gliders or drones.”¹

But if you attended this year’s Fighter Conference or listened to the recent presentations at the Airbus Trade Media day, it would be hard to miss that the focus of Airbus Defence and Space is now on the enablers for making those things that fly more effective, more lethal and more survivable in the 21st century battlespace.

Their approach to what they call the Future Combat Air System or FCAS is built around enablers. And a major focus of the two days for this year’s International Fighter Conference focused on enablers. This is not surprising because the C2/ISR revolution which is sweeping military and security forces certainly affects the fighters as well. Indeed, the growing impact of sensor networks, tactical decision making at the edge, the impact of F-35s on the reworking of C2/ISR in those forces operating it, all are reshaping concepts of operations.

Nonetheless, there is a significant difference on whether one is focused on the end-to-end capabilities of a combat cloud with the processing power in the cloud and distribution to nodes in the distributed force or whether one focuses on the kill web where a task force aggregates its information and processing power and decision making at the tactical edge.

¹ Kevin Murray, *People with a Purpose* (Kogan Page, 2017), 126.

Low latency communication is a key element of working a distributed integrated force and within fighter forces this means highlighting fifth generation aircraft and how they work. Only one presentation focused on this aspect and the argument there was that the impact of the F-35 was driving changes associated with the new approach to multi-domain decision making.

With the building of the [CNI and the integrated systems onboard](#) of the F-35, the fifth-generation aircraft is clearly playing a forcing function for reshaping C2/ISR into what can be considered a fifth gen C2/ISR system.

With the [MADL wave form](#) and the ability of a four-ship formation of F-35s to integrate as a combat unit at new levels with the 360-degree sensors, sensor fusion and CNI integrability, the four-ship formation of F-35s delivers new capabilities in air combat.

And the operational experience of the F-35 fleet and its impact on the legacy force, lays down the foundation for father transition in multi-domain combat.

It is forging a path to shaping an integrated distributed force which will be built out through new C2/ISR capabilities able to direct the operations of platforms and payloads in an integrated battlespace.

But the tool sets or foundation built to deliver CNI to the fifth gen platform can be considered as key tools sets, or foundational elements which can be leveraged in the build out of an advancing C2/ISR system.

And this advancing system can be seen as enabling the operations of a distributed integrated force.

The distribution of combat power which can be combined through C2/ISR integration allows for a significant transition from a fifth generation enabled legacy force to a force able to be tailored to global crisis management, and to do so as a scalable force.

A key enabler in this evolution will be the proliferation of C2 hubs able to empower distributed force combinations yet able to provide for scalability and integrability to deliver the combat power of a larger combat force.

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Of course, there is another key driver for low latency communication and that is 5G. A combat cloud to operate in contested air space must be a low latency system; the 5G will build out low latency systems in the commercial space.

One of the presentations by a senior USAF official provided a detailed look at how the USAF is leveraging 5G and how they would do so going forward to deal with the kind of C2/ISR systems which the force required to operate against information savvy competitors.

The USAF presentation on JAADC2, the next generation air dominance program which was more about the ecosystem being developed now and being taken forward to shape new combat capabilities, to the aforementioned USAF presentation on Skyborg and 5G, to the enabling systems for the FCAS system of systems or the Tempest system systems, all rested I large part on discussions about the evolving C2/ISR ecosystem within which modern fighter and other air combat elements are operating and will operate in the future.

But we are not talking about the future, for in many ways with MADL and 5G, key elements of the future are already here. And the operational experiences with the evolving C2/ISR systems will drive further innovations as new technological capabilities emerge, but those capabilities will only be used if the transition already underway is fully embraced.

And a major challenge of course is working ways to bring together allies and partners approaches to working C2/ISR systems for their operations, and ensuring that there are ways to integrate forces, as interoperability might well be too hard to bring together the variant approaches to C2/ISR driven and enabled fighter combat capabilities.

Effectors and the Evolution of Airpower

December 17, 2020

The second strand of the International Fighter Conference 2020 was the question of the effectors which could be delivered by the evolution of air combat power, notably by leveraging multi-domain ISR and combat capabilities. This strand was woven throughout the day and could be seen in a variety of ways, in a diversity of presentations.

When one focuses on effectors and is discussing fighter aircraft, the first thing that comes into mind are the weapons carried by that fighter and how they are used, for which targets and at which range. One might also focus on the non-kinetic effects if one is highlighting the domain of the “Old Crows,” namely electronic warfare. But most assuredly the focus is upon what is being carried on those fighters and how those fighters might work with other airborne assets to deliver a combat effect.

But the fighter conference shifted the focus of attention on how fighters can deliver a combat effect within a broader set of interactive combat relationships, which in my mind, constitute a kill web. The first allied force, which actually discussed the kill web concept, was the RAAF. And it appeared in an interview I did with Air Commodore Robertson now Air Vice-Marshal Steven Robertson which I had prior to a 2017 Williams Foundation seminar in his office at Williamtown Airbase with as he discussed what he called a three-phase process underway and “we are only at the first step.”

“We need to be in the position where our maritime surface combatants are able to receive the information that we’ve got airborne in the RAAF assets. Once they’ve got that, they’re going to actually be trying to be able to do something with it. That is the second level, namely, where they can integrate with the C2 and ISR flowing from our air fleet. But we need to get to the third level, where they too can provide information and weapons for us in the air domain. That is how you will turn a kill chain into a kill web. That’s something that we want in our fifth-generation integrated force. And in a fifth-generation world, it’s less about who is the trigger shooter, but actually making sure that everybody’s contributing effectively to the right decisions made as soon as possible at the lowest possible level. And that is why I see the F-35 as an information age aircraft.”

This year’s Fighter Conference clearly was operating within this frame of reference somewhat like the famous Moliere’s gentlemen who was speaking prose without knowing it.

There were a number of ways the changing nature of effectors was discussed.

The first was with regard to the changing machine to machine relationships among the ISR collectors and how those collectors would gain more utility to fighting at the speed of light with artificial intelligence decision tools managing the data worked among the ISR machines.

The second was how then machines could work more effectively with humans, cognitively and interactively. But as a senior USAF scientist put it, the key effort needs to be to integrate any innovations in the man-machine working relationships into evolving concepts of operations, otherwise innovations in these domains would not be realized.

The machine dynamic was discussed in part in terms of remotes working with manned aircraft. A very insightful presentation was with regard to the loyal wingman program in Australia. Here Boeing Australia is working with the RAAF to shape a remote system with different payloads which could work with a manned aircraft to shape a wolfpack operationally.

Getting to the point where this would work is challenging for a number of tasks need to be met and resolved in order for remotes to fly effectively with a manned asset to deliver the effects which a wolfpack could deliver. These challenges include but are not limited to integrating into future battle space management frameworks, communications, and cyber standards, and the development of trusted AI algorithms, as these elements are critical to ensure that the RAAF would be able to trust the Loyal Wingman on combat operations.

The FCAS presentation highlighted the coming of remote carriers and their potential role in providing for combat effects and is seen as a major aspect of shaping the design and configuration of the new combat aircraft envisaged to replace Rafale and Eurofighter. Similarly, the Tempest program has similar aspirations, and notably MBDA is in both programs, and as they already build loitering munitions, it is not surprising that they would be on ground floor for smaller remote carriers as well.

Clearly, the first strand of the conference – the enablers – was highly interactive with this second strand focusing on effectors. For example, with regard to third party targeting, a key element of any kill web approach, the question is how to have trustworthy is the ISR determination and verification of where and when one wants the combat effect, and to then to be able to order and direct the means to the area of interest, and to be able to do so without a kinetic or non-kinetic effector necessarily operating directing from a particular fighter.

Many of the discussions of the conference were abstract, conceptual and futuristic but I recently went to Naval Air Station Fallon and observed a future is now event. The new exercise is called Resolute Hunter which is being designed to shape a new paradigm for how 21st century ISR capabilities can be worked to provide for enhanced mission execution.

Much like how NAWDC has added two new warfighting competencies to its program, namely, dynamic targeting and Maritime ISR or MISR officers, Resolute Hunter is complementing Red Flag, but in some important ways launching a new paradigm for the ISR forces to provide a more significant and leading role for the combat forces.

With the significant upsurge in the capabilities of sensor networks, and the importance of shaping better capabilities to leverage those networks to shape an effective mission, the role of the ISR platforms and integratable forces are of greater significance going forward in force development.

Rather than being the collectors of data and providing that data to the C2 decision makers, or to specific shooters, the ISR force is becoming the fusers of information to provide for decisions distributed in the battlespace to deliver the right combat effect in a timely manner.

When I returned to the East Coast, I had a chance to discuss with Rear Admiral Meier, Naval Air Force Atlantic, how Resolute Hunter was different from Red Flag. “The origins of Red Flag and of TOP GUN were largely tactically focused. Resolute Hunter is focused on shaping an evolving operational approach leveraging the sensor networks in order to best shape and determine the operational employment of our forces and the delivery of the desired combat effect.”

The reshaping of enablers, and recrafting of effectors and their delivery is part of the redesign of capabilities and the question of what kinds of concepts of operations are entailed in these changes is the subject of my next article.

Capabilities and Focus

December 18, 2020

The International Fighter Conference 2020 provided insights with regard to the evolution of combat airpower, notably with regard to enablers and effectors, and pathways to shaping greater force integration and multi-domain warfighting capabilities.

But to do what exactly? And how best to do it?

The clear assumption of most of the presentations was that the conflict for which the fighter force was preparing was for the high-end fight against peer competitors or cutting through the ambiguity, China and Russia.

As these are nuclear powers, the question is and remains, how does the nuclear dimension weave itself into a major conventional war?

The only mention of the nuclear dimension was during a discussion about the French aircraft carrier Charles De Gaulle and its approach to operations. Here the readiness in being during deployment to deliver nuclear strike by onboard Rafales was discussed.

The French indeed have been the clearest among of the Western nuclear powers on the need for tactical air delivered strike and have continued their work, including modernization of weapons to indeed deliver this capability in their neighborhood as part of their deterrent posture.

As Pierre Tran has put it with regard to the most recent French defense budget: “The draft budget includes €1 billion of studies to develop the nuclear ballistic missile submarine, and a fourth generation nuclear-tipped, air-to-ground missile, the air-sol nucléaire 4ème génération (ASN4G) to replace the present nuclear-armed cruise missile, dubbed air-sol moyenne portée amélioré (ASMPA).”²

The training to execute an air delivered tactical nuclear mission pilots provided for overall understanding of a complex strike mission which then carried over into the capabilities to excel at non-nuclear strikes as well.

This was evident when the French Air Force participated in the 2018 strike against Syrian chemical weapons sites. As Murielle Delaporte put it: “Achieving all this synchronicity, C2 integration, redundancy, target selection and precision strike require in other words a very high level of technicity, which tends to stem in France from the fact it has been a nuclear power for more than five decades. In fact the whole French armed forces model is built around deterrence. France’s quick reaction force is defined upon the rigor, reactivity 24/7, safety and ability to penetrate a theater first, far away and in depth.

“French Air Force Base 113 in Saint-Dizier is one of the historic fighter base and nuclear base and it is from there that long-range raids can be performed, such as the 10-hour flight that was performed from the mainland to Syria this month over a distance of 7,000 kilometers (which required a total of five air refuelings).”³

² Pierre Tran, “An Update on the French Nuclear Deterrent: The 2021 Budget,” *Second Line of Defense* (October 14, 2020), <https://sldinfo.com/2020/10/an-update-on-the-french-nuclear-deterrent-the-2021-budget/>.

³ Murielle Delaporte, “French Quick Reaction Force Key to Syrian Missile Strikes,” *Breaking Defense* (May 2, 2018), <https://breakingdefense.com/2018/05/french-quick-reaction-force-key-to-syrian-missile-strikes/>.

In addition to the core point, often forgotten or deliberately ignored, there will never a major conventional contingency against China or Russia that will not involve the nuclear dimension, certainly in terms of understanding how a campaign would be conducted.

There is also the critical issue that the attrition of the adversary's ISR and C2 systems will inevitably affect those systems which are part of the nuclear warfighting system as well. And when there is a focus, as the conference did, upon enhanced machine-to-machine and man-machine interactions to speed up the ability to kill adversary forces, the question of which targets with which significance are we talking about?

This is especially important when considering one of the most challenging of the warfighting issues – how to deal with heavily fortified areas from which either China or Russia would project force and how best to go after those forces.

For the Russians, we are talking about Kaliningrad and the Kola Peninsula. With regard to the direct threat against the Baltic states, Russia would project power from their territory against these states under the assumption that they have a sanctuary and given the proximity to St. Petersburg, which certainly is protected in part by Russian tactical nuclear weapons, complicates the picture. This is why the United States for one is working on longer range strike conventional weapons to ensure that the Russians don't believe their own thinking too much about an ability to push a conventional force from their territory as if that territory is a sanctuary.

And with regard to the Chinese, one presentation did raise the new USMC Commandant's focus upon Marines building an Inside Force that would operate inside the First Island Chain as envisaged by the Chinese but that does raise questions of how the operations of such a force would affect Chinese nuclear as well as conventional calculations.

As Paul Bracken, the author of the second nuclear age, has put it: "The first thing is to realize it is woven into the entire fabric of a Pacific strategy. You don't have to fire a nuclear weapon to use it. The existence of nuclear weapons, by itself, profoundly shapes conventional options. The nuclear dimension changes the definition of what a reasonable war plan is for the U.S. military. And a reasonable war plan can be defined as follows: when you brief it to the president, he doesn't throw you out of the office, because you're triggering World War III."⁴

You can have have all of the Future Force Design 2030s or Future Combat Systems or Tempest discussions you want, but you have to be able to fight tonight, and that imperative is crucial for operational Air Forces, and any future capabilities take a back seat to that requirement.

Which raises the broader question: How do innovations being driven now shape how the future force will emerge? This certainly impacts on discussions about artificial intelligence and remotes or UAVs and what their role will actually be in the next decade as opposed to 2040 or 2050, which is long after I am dead.

⁴ Robbin Laird, "Reshaping China Strategy: Reconsidering the Role and Place of the Military Dimension," *Second Line of Defense* (April 14, 2020), <https://sldinfo.com/2020/04/reshaping-china-strategy-reconsidering-the-role-and-place-of-the-military-dimension/>.

The need to drive greater capability to make decisions more rapidly using ISR data and finding ways to execute decisions at the edge but ensure that the evolving strategic decisions are effective is a clear one.

Many of the presentations at the conference were indeed focused on technologies and approaches which were being shaped to ensure that the United States and its allies could operate their forces more effectively in a contested environment and to do so with the ability to draw upon the range of combat assets available now and in the future. That is the real meaning of shaping multi-domain capabilities, for objectives are set by domain but the kill web approach looks to leverage combat assets in several domains to achieve those domain specific objectives.

The role of maritime air forces was discussed at the Conference as well. The role of sea-basing in generating capabilities which can be leveraged for full spectrum crisis management is expanding for sure. The impact of technologies and training are leading to ways to reimagine the role of amphibious and large deck carrier forces, and some of those changes were discussed at the conference.

In short, the International Fighter Conference 2020 although virtual was not simply that. It had some important impacts on the continuing process of rethinking the way ahead with the evolution of airpower in the reset of military strategy.

Future Amphibious Forces, 2020: What War Are You Preparing For?

December 15, 2020

Recently, [DefenceIQ](#) held its Future Amphibious Forces conference.

It had been postponed earlier this year and was held as a virtual conference on December 1, 2020. As the moderator of the day, a noted former British General, highlighted at the end of the day, “We have had a very good conversation throughout the day about the future of amphibious forces.”

But as he also noted, the key challenge really was to sort through where one wanted to take those forces in terms of “what kinds of wars or conflicts were being prepared for or prioritized.”

His question underscored the core challenge facing any discussion of the way ahead for Maritime special forces or amphibious forces: What is their role in the high-end fight?

What is their role in crisis management?

And how related are the answers to these two questions?

Put another way, focusing on amphibious forces and their future quickly takes one into the realm of warfighting capabilities now, the next five years and the decade ahead.

In turn, the question is posed as well with regard to what capabilities are desired and for which concepts of operations to shape what kind of warfighting outcome?

In other words, there is no single force design which will easily embrace the range of options or be able to answer the question of prioritization for the warfighting approaches for the high-end fight.

And this was clearly evident in the discussions during the day.

There was a discussion throughout the day of the advantages of shaping an Inside Force projected from the sea base to support operations in a denied environment.

But it was clear for most presenters that the Inside Force was inserted to support an overall campaign effort, but it was important that the Inside Force did not compromise the capabilities of the overall conventional forces or the overall campaign.

As the moderator closed the conference, he highlighted the challenge of dealing with such a risk calculus.

How much effort is required from the overall conventional force for Maritime Special Forces or an Inside Force to succeed?

And in making that effort, how much do you drain from those conventional forces and with what effect with regard to its ability to operate and succeed?

The entire point of discussing the future of amphibious forces from the standpoint of the new strategic environment is the flexibility which sea-bassing provides.

Several of the presentations highlighted the flexibility which projecting special operations forces from the sea can provide for crisis management and hybrid warfare operations.

With regard to peer competitors, the challenge is harder in terms of being able to insert force, and to ensure that it can survive and fight for another day.

Much of the discussion during the day was with regard to the ecosystem which inserting an inside force to work with the outside larger conventional force would require.

How to disaggregate for survival but be able to aggregate for combat effect?

This requires the right kind of C2, ISR accessibility, strike support, logistical support and an ability to be extracted.

None of this is easy and one should assume that the period where an Inside Force would be unobservable would be very limited indeed.

Signature and sustainability would always be flashpoints for the Inside Force.

Much of the discussion during the day was upon special force applications for the maritime force.

Also addressed was the challenge of the blending of those missions with overall fleet operations. It was projected that the projection of this hybrid mix will be increasingly important in the thresholds below widespread conventional war.

Hence, the key question posed by the moderator: What kind of war are you preparing for?

The assertion was that there would be more interest in shaping different types of Inside Forces, but the ecosystem to support a wide use of such forces is simply not there.

But for now, reorganizations are under way to shape new templates to use Special Forces and shape variant types of Inside Forces and to shape new templates for operations. New technologies would be inserted over time to enhance the ability to project robotic power forward to build out an Inside Force.

A key challenge is working through information sharing among coalition partners and working ways that force insertion by a key nation was supportable by nations in the area of interest.

How do you choose the area in which project force?

And how best to do so with regard to coalition or partner support?

For those working on force design for an Inside Force, they face a significant challenge with regard to understanding how the overall conventional force capabilities will evolve, how the capabilities of the air, ground, sea, space and cyber components will intersect and how the Inside Force will fit into the overall redesign of the nuclear and conventional forces which nuclear countries like the United States deploy.

As a senior RAAF officer put it in a presentation made at a different DefenceIQ conference: “the detailed elements of force design can be extremely challenging as we can’t predict the frameworks that future capabilities will be built around.”

This officer added an additional point facing the challenge of designing an Inside Force or a new combat capability more generally with regard to the evolution of an integrated force, namely, anticipating and knowing “the framework and environment these futures will nest within.”

With the design of an Inside Force, the question is not simply reconfiguration for force insertion, but understanding the entire combat cycle envisaged whereby that force reinforces a conventional campaign rather than degrades it by putting hostages into the denied area with the commander’s task being reset to save the Inside Force from destruction.

It is a question of how to sustain the force forward, and how to provide ways to extract the force back into the ramp up of the conventional campaign.

The presentations generated some very helpful insights for those thinking through force development and operational re-designs.

Presentations were made by British, Brazilian, Swedish, Dutch Naval Special Forces or Marines as well as by a USMC officer and U.S. think tank members.