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## **An Update from MAWTS-1: April 2022**



By Robbin F. Laird

May 27, 2022

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# Training for Enhanced Lethality and Survivability

05/10/2022

I recently finished my latest report for The Williams Foundation on their [March 24, 2022, seminar](#) which focused on shaping a way ahead for the integrated networked force. The moderator for the seminar was John Conway, a noted Australian defense analyst and former RAF officer.

In his comments during an interview which I did with him he underscored the growing importance of training to enhance the capability of the ADF in the art of warfare. [This is how he put it:](#)

““And we’ve now got an adversary, who is making us spend more and more money on survivability. We’d rather spend money on lethality, but they’re making us spend money on survivability because they’re becoming increasingly sophisticated, because it’s coming harder and harder to survive. And this is driving up the cost of survivability. But one way of mitigating that risk is getting your training systems right. And being able to fight the best fight with what you’ve got and invest in warfare rather than just war fighting.”

My recent visit to MAWTS-1 in Yuma Arizona reinforced Conway’s point. Here the Marines are focused on shaping ways ahead for their networked integrated but distributed force to enhance survivability and lethality. I have been posting a number of videos and slideshows from the most recent WTI or weapons and tactics instructor course which certainly underscore the focus on force distribution for survivability and force integration for lethality.

In my follow up interview with the outgoing CO of MAWTS-1, Colonel Gillette, he underscored their core focus on enhanced lethality. This is how Colonel Gillette put it:

“The Commandant has issued guidance with regard to the direction he would like to move the USMC from an operational point of view. Over the course of the last two years, I would say, that there’s been a iterative processes that have been generated on not only to enhance what do we want to do today with the equipment and with the capabilities that we have, but that also better informs what we want for tomorrow and then, goes back into the feedback loop to CD&I, and the different organizations under that deputy commandant to determine what we need, two, three, four years from now, to better implement new operational concepts.”

“When I say iterative, I am also referring to the relationships that we have with all the different organizations, whether it’s the Marine Corps War Fighting Lab with different technologies, CDD for different operational concepts and equipment and technology that support those concepts, trying them in the environment at WTI, given the assets and the expertise that we have at MAWTS-1, and then, providing feedback as to how either pieces of this puzzle work, or in the grander operational environment, how we need to do things differently.

"I think that feedback loop is hugely important because it's informed by doing, instead of the theory of the case on PowerPoint or in war games. I think that you have to go out and actually try it, create a contested environment as much as you can in training, and then, try these concepts and then provide that feedback, which inevitably makes the outcome two or three or four years more realistic, as opposed to just the theory of the case."

For Gillette, any focus on force design needs to be driving the enhanced lethality of the USMC in operations. "I think that the underlying focus that we must never forget is that we're out there for one reason and one reason only, and that's for lethality when our country asks us to deploy on their behalf. How you do so and how do you survive and continue to be lethal in any combat environment? How do you best disperse, what types of command and control do you need from ship to land, land to ship, island, and these capabilities facilitate you being more lethal and effective.

"At WTI we have been and continue to be focused on enhanced lethality. We just need to figure out how to do that in this new environment that's not what we've lived for the last 20 years in Iraq and Afghanistan."

Col. Gillette has been intimately involved in the introduction of the F-35 into the USMC and has worked closely in the joint force through those efforts as well. I asked him to look back at that experience and what conclusions he draws from that experience for the joint force going forward.

He started by discussing the early days of operating the F-35 and the relevance of that experience to bringing the latest aviation platform to the USMC, the CH-53K.

"For the initial guys that started flying the F-35, you would think that we were just flying a better upgraded F18. Why? Because that's what they had experienced. What wasn't considered initially, was all of the new operational concepts and differences that, that airplane brought to the force. And it took us, several years of talking with the Air Force, talking with other agencies, and individuals to figure out how to best operate the airplane and to leverage what makes it most lethal.

"And I think that we'll see the same evolution with the Kilo. The initial reaction will be to say, "it looks just like an Echo. So why don't we just fly it and employ it like an Echo?" It will take time of people getting their hands on it, seeing the capabilities, and then leverage it as part of USMC transformation. The key is to ensure that we don't let the inertia of what one knows so well in the past and impede the ability to use the new platform differently."

We then discussed how the Marines operating the F-35 opened new joint and coalition integration capabilities.

Col. Gillette: "When we flew common platforms in the past, we wrote our own tactics manuals. We set up our data links differently. We called the same thing different names.

"But as we introduced the F35, very quickly we realized how important it would be for us to come together and understand common tactics for this airplane, based on its strengths, and how we would employ the airplane.

"You can see this kind of integration when we go to different exercises, whether it's up on the Nellis range, whether we go up to Alaska, whether we participate in other exercises, but the reality is that whether the plane has Air Force, Navy, or Marine Corps markings on the side, it really doesn't matter. We all speak the same language, the data that's going across the airplanes is exactly the same and so I think from a Joint Force perspective, has wildly increased our lethality. Because when you take that interoperability into an operational context or environment, airplanes can come from wherever and they show up to do a mission together. It's just like you're flying with your squadron mate. There's no difference.

"And now, if you take that same concept and scale it across a coalition with our allies and partners that have that same technical and aircraft capability, you can see how quickly that becomes very significant and I think that, that idea of not only how do we fight the airplane in an integrated way and in a common way, but now, you take that to supply parts or parts in the supply system.

"You can take that capability to enhance integration on ships. It applies as well to integration with regard to base operations where we have common requirements to service an airplane.

"Very quickly you can see that the F-35 global enterprise is a quite the force multiplier. And I think that, to use your words, we're just scratching the surface on that. And I think that over the next five to 10 years, we will see that aspect of it become extremely important when we start talking, again, about these operational vignettes or these operational areas of where it's going to take a combined and joint effort to achieve our national objectives, as opposed to a service inside the United States or a country outside the United States.

"It's one thing to just profess the theory of the case, but when you have these different venues of joint or integrated exercises, combined exercises, you can actually experience a new level of integration. What we did on the Queen Elizabeth is another great example that you have to go out and do it in order to have a reasonable assurance that if you need to do it, operationally, it will work.

"That needs to be the fundamental question that each service asks, what is your contribution to the Joint Force? And if it's a contribution of the Joint Force, how does that piece fit into the larger picture? And then, how do you integrate with it?

"Services tend to look inward as to how to do that inside of their own service. Countries look inward on how they operate inside of your own country, but if we're truly going to realize the benefit of what we're talking about, it's A, it's very hard and B, you have to practice it. If you don't, on game day it's not going to work.

"Any weapon system that you bring online, whether it's the Kilo, whether it's the continued acquisition of F35, command and control systems, whatever the fact may be, you have to look at it in that light. How does it fit into the larger piece of the puzzle and then, how do you contribute and not only pull information, but push it out so that you are benefiting the entire team as opposed to your own little niche piece of it."

And to conclude, what I have seen over the past few years at MAWTS-1 is a clear focus on what Col. Gillette emphasized in his interview. And this is really the function and key role of advanced training as opposed to war games, and death by briefing charts.

## The Role of Heavy Lift in USMC Support for the Maritime Fight

09/21/2020

During my discussions earlier this year with a number of MAWTS-1 officers, we focused on the thinking and training of the USMC to further enhance their [capabilities for mobile and expeditionary basing](#).

Obviously, the insertion of force into a flexible basing environment requires lift capabilities, and with rapid insertion, movement and withdrawal of force being a key enabler for able to work an effective basing chessboard, heavy lift is a key enabler.

And heavy lift really comes in two forms: fixed wing aircraft, and rotorcraft. My guide in the discussion of the lift-basing dynamic earlier this year was Major James Everett, head of the Assault Support Department at MAWTS-1. In that discussion, we focused on the importance of the CH-53E and the new aircraft, the CH-53K in enabling mobile and expeditionary basing.

In September 2020, we met at MAWTS-1 to continue our discussion.

**But the focus of my visit was on addressing the challenges the Marines face in supporting the US Navy in terms of the maritime fight.**

In particular, my discussions with Colonel Gillette, the CO of MAWTS-1 focused on two key questions: "How is the Marine Corps going to contribute most effectively to the Pacific mission in terms of Sea Control and Sea Denial? And how to best contribute to the defensive and offensive operations affecting the SLOCs?

We addressed how to answer these questions from the standpoint of the assault support force.

As Major Everett put it: "a key focus of effort for the assault support community is upon how we can best assist through expeditionary basing to provide for sea control.

"We're trying to get away from any permanent type of land basing in a maritime contested environment."

A key enabler for flexible basing inserts or operations from the maritime fleet, inclusive of the amphibious ships, are the capabilities which the Marine Corps has with its tiltrotor and rotorcraft community, This community provides an ability to insert a sizable force without the need for airstrips of the size which a KC-130J would need.

Or put in another way, the Marines can look at basing options and sustainability via air either in terms of basing options where a fixed wing aircraft must operate, or, in a much wider set of cases, where vertical lift assets can operate.

The third is obviously by sea, which depends on support by a mother ship or a Military Sealift Command (MSC) ship, but the challenge for the Marines is that moving bases deeper into the maritime area of operations creates enhanced challenges for the MSC and raises questions about viable sustainable options.

We have already seen this challenge with regard to the littoral combat ship fleet, where the MSC is not eager to move into the littorals to supply a smaller ship, but it is much more willing to take its ships into a task force environment with significant maritime strike capability to give it protection.

**The most flexibility for the mobile or expeditionary basing options clearly comes from vertical lift support aircraft.**

The challenge is that the current CH-53E fleet has been heavily tasked by the more than a decade of significant engagement in the Middle East.

The Marines unlike the US Army did not bring back their heavy lift helicopters for deep maintenance but focused on remaining engaged in the fight by doing the just enough maintenance to continue safe and effective flight operations in theater.

As Major Everett put it: "The Army brought their helicopters back from Afghanistan and they'd strip them down to the frame and they'd rebuild them basically. We just didn't do that."

This means that the heavy lift operational force inventory is relatively low compared to the required capabilities.

And as the focus shifts to the Pacific, with its tyranny of distance and the brutal operating conditions often seen in the maritime domain, having a very robust airlift fleet becomes not a nice to have, but a foundational element.

**The replacement for the E, the CH-53K, will provide a significant enhancement to the lift capability, and sustainability in operations as well.**

It is also a question of being able to deliver **combat support speed** or CSS to the mobile or expeditionary base, and clearly the combination of tiltrotor and heavy lift can do that.

But the challenge will be having adequate numbers of such assets, notably, because the nature of the environment is very challenging, and the operational demand will go up significantly if one wants to operate a distributed force but one which is sustained and protected by an integrated force.

As Major Everett put it: “There’s no way with the types of shipping and numbers of shipping we have, that we could possibly carry enough aircraft on that shipping to enable any type of land control without 53s.”

An aspect that makes the upgraded heavy lift fleet a key enabler for expeditionary basing will be the installation of a mesh network manager into the digital cockpit of the CH-53K, and its build into the legacy aircraft as well. This makes it part of an integratable force, not just an island presence force.

As Major Everett put it: “The core kind of skills that 53 pilots train to, are not going to change.

“But obviously the physicality of the new helicopter is very different.

“It can lift more relevant materials or assets and in larger numbers.

“It holds the 463L pallets that allow for rapid off and on-loads from the fixed wing aircraft which could provide distribution points for the heavy lift fleet.

“Additionally, the impact of the CH-53K’s integrated digital interoperability and its integration into the kill web will be significant.”

**In short, the desire to have a Marine Corps enhanced role in sea control and sea denial with an island strategy really enhances the importance of heavy lift helicopters.**

## **FARPs, Fuel and Expeditionary Basing**

05/09/2022

During my recent visit to MAWTS-1 in April 2022, I had a chance to talk with SSgt Kyle Coutts, a specialist on fuels and providing fuel to an expeditionary force. As the Marines focus on expanding and extending their capabilities to distribute their forces to operate from a variety of basing options, at sea and from land, the question of how to sustain such a distributed force obviously becomes a growing challenge and concern.

My discussion with SSgt Coutts highlighted how the fuel side of the USMC is working ways ahead to ensure that the core capabilities to deliver energy to the force can be effectively maintained in austere conditions.

During my last visit to MAWTS-1 in 2020, I spent a good deal of time talking with MARPs about mobile basing and forward armed refueling points. And in those discussions, the recognition of the challenge of dealing with peer competitors was highlighted in terms of the needs to distribute the force, and move with speed throughout the battlespace.

My discussion with Coutts highlighted some additional insight into how they were working this challenge. One way has been based on his training with the U.S. Army to be able to work with



fuel worldwide and to ensure that fuel held by allied nations can be ensured to work within the specific USMC platforms.

A second way is to prepare for the coming of the CH-53K which can lift significant amounts of fuel and move those to distributed locations even before Marines have arrived at a proactive FARP from the standpoint of the emplacement of refueling points in advance of the force.

A third way was to look at new ways to use JPADS or Joint Precision Airdrop Systems to support forward movement of a distributed force as that force moves towards an objective area.

And this would then combine perspectives on how to shape various logistical fuel support alternatives ranging from seabase support to CH-53K support, to [JPAD support](#).

Put in other terms, the Marines are looking at shaping a range of fuel support options for a distributed force working on mobile and expeditionary bases throughout an extended battlespace.

As the U.S. Navy works a new class of sea-basing ships, these ships can work as “mother ships” as well from which the Marines can fly fuel to austere locations. And the Pentagon has funded an autonomous sea barge to provide [a sea-based FARP](#) to support rotorcraft which could be part of the Navy-USMC future as well.

We discussed this development in terms of a focus on Resilient Expeditionary Agile Littoral Logistics or REALL. Here the effort is upon working through a variety of ways to leverage a range of shipping to deliver the kinds of “FARP” support that the Marines need when aviation is supporting basing in austere locations. One way to do so is to use commercial shipping containers but configured to handle USMC supplies and then be able to move those containers from the ship, in effect, as a mother logistics ship, to the area of interest.

In short, the Marines at MAWTS-1 are working innovative ways to support the USMC as a distributed but integrated force.

**Editor’s Note: This [July 20, 2020](#) article published by the U.S. Navy highlighted REALL technology.**

*Naval Facilities (NAVFAC) Engineering and Expeditionary Warfare Center (EXWC), U.S. Army Engineer Research and Development Center (ERDC), U.S. Central Command (CENTCOM), and the U.S. Transportation Command (TRANSCOM) successfully demonstrated a joint capability vertical take-off and landing (VTOL) technology to refuel from a forward-deployed barge as part of the Resilient Expeditionary Agile Littoral Logistics (REALL) Joint Capability Technology Demonstration (JCTD) at the Joint Expeditionary Base Little Creek – Fort Story on 13 July 2020. Funded by OSD Research & Engineering, the JCTD Program addresses Combatant Command (CCMD) and Joint warfighting gaps through prototyping and demonstration of innovative and game-changing technologies.*

*The REALL JCTD Team completed its first successful technical demonstration, with NAVFAC EXWC at the helm as the demonstration technical lead; USCENTCOM, USTRANSOM and USMC War Fighting Lab (MCWL) serving as the operational leads providing operational and development inputs.*

*The VTOL demonstration determined whether a VTOL aircraft can land and refuel from a forward-deployed barge. The demonstration also determined if REALL could provide a low-cost logistics solution for the Department of Defense (DOD), as an alternative to placing high-value logistics supply platforms in contested environments. This successful demonstration marks the first of numerous planned technology and operational demonstrations aimed at eventually arriving at an end state where a military utility determination can be established, with the goal of transitioning REALL capability technology sets to the warfighter*

*“This demonstration is another example of what the great people of NAVFAC EXWC provides for our American warfighters,” said Mr. Kail Macias, NAVFAC EXWC Technical Director. “Speed and agility enable our forces to win the fight. The success of REALL is a tribute to the hard work and collaboration across DOD.”*

*The VTOL demonstration consisted of one MH-60M Blackhawk helicopter—provided by the U.S. Special Operations Aviation Command, Systems Integration Management Office—which landed on the Improved Navy Lighterage System (INLS). The INLS is designed to simulate a refueling evolution; INLS systems were provided by Amphibious Construction Battalion Two.*

*The INLS Roll-on/Roll-off Discharge Facility (RRDF) is a modular system and is traditionally designed to facilitate movement of rolling stock from ship to shore platforms,” said Lt. Cmdr. Robert Leftwich, Bravo Company Commander, Amphibious Construction Battalion 2. “It is a robust and highly capable platform suitable for other uses. Incorporating this legacy system into emergent needs enables more resiliency and responsiveness.”*

*“As the lead Combatant Command sponsor and warfighter representative for the REALL project, USCENTCOM’s goal was to demonstrate a littoral logistics sustainment capability for fuel distribution and logistics nodes in support of emerging operational concepts,” said Thomas Smith, CENTCOM J8-ST Chief Science Advisor for Advanced Concepts.” He added, “This Technical Demonstration was a success and advances the National Defense Strategy’s modernization priority on forward force maneuver and posture resilience.”*

*Looking onward, REALL will be further vetted, with the end goal of providing fuel, water, food and other supplies to vertical take-off and landing aircraft and seaborne vessels for logistics operations required by the Naval Concept of Expeditionary Base Operations.*

## **Fires in the Joint Distributed Battlespace**

05/03/2022

In my recent visit to MAWTS-1, I had a chance to talk with a seasoned USMC artillery officer who is now part of the Ground Combat Department at MAWTS-1.

The GCD deals with the entire integration focus of the marines from sea, land, to air, and in the case of fires, the challenge of fires integration for the organic USMC as well as the evolving challenge of working fires integration with the joint force deployed at distance in the Pacific.

In my discussion with Major Dossetto, we discussed the enhanced importance of the ground-based artillery with the elimination of the tanks within the USMC for the ground maneuver forces. He noted that for II MEF, based in North Carolina, and engaged in European and Middle Eastern defense engagements, ground-based artillery pieces are a primary source to provide effects for the integrated ground maneuver force.

He then noted that with III MEF engaged in significant change associated with Force Design 2030 and focused on the evolving scheme of maneuver for Pacific operations, the question of distances posed several challenges different from working fires integration in either the European or Middle Eastern areas of operation.

First, the challenge of distance means that the fires solution set revolve around missile batteries and as I discussed when in Hawaii with the MARFORPAC Marines, the USMC is working new ways for the Marines to use ground-based missile fires to support the U.S. Navy in sea control and sea-denial operations.

But, secondly, Major Dossetto highlighted the challenge of working joint strike in a dynamic targeting environment.

The challenge is to get the approval authority and clearance in a timely manner against the right targets at the right time. This poses a major challenge for the evolution of C<sup>2</sup> as the joint forces whether they be the Marines working with the Navy, or the Marines working with either the Army or Air Force, requires C<sup>2</sup> integration to have an effective process for approval authority and clearance for fires support.

One issue we discussed was the advantage the Marines have over the Army in terms of working fires support organically which is based on integration of rotary wing along with fixed wing assets with the ground fires support elements. The Marines organic integration of fire support from the ground and from both rotary wing and fixed wing assets means that the USAF, for example, finds how the Marines do fires integration to be very compatible with their own thinking with regard to the ways ahead with regard to dynamic targeting.

I am quite struck with how the evolution of artillery pieces in the ground scheme of maneuver can become even more important in the future, in terms of the ability of mobile artillery to move around the battlefield and be camouflaged to make them a difficult target to eliminate.

For example, as Germany rethinks how it could deploy force to the evolving European theater of operations, having a heavy lift helicopter like the CH-53K to move German artillery pieces into the various seams which the Russians might wish to exploit in times of conflict is a key part of the deterrent capability which can be deployed rapidly and effectively.

When I asked Major Dossetto what he felt was the key priority for the fires support elements in the Marines going forward, he had a very clear answer: "We need to refine our processes for joint fire support integration and be able to deliver responsive strike in a joint environment.

That means delivering more rapid decision-making and that requires more rapid approval authority and clearance on the battlefield.”

**NOTE: THE REMAINING ARTICLES WERE PUBLISHED BY MAWTS-1 AND HIGHLIGHT ASPECTS OF THEIR TRAINING DURING THE WTI EXERCISES**

## Training for Distributed STOVL Operations: WTI 2-22

05/19/2022

U.S. Marines assigned to Marine Aviation Weapons and Tactics Squadron One (MAWTS-1), utilize bulk fuel equipment shown to conduct a ground refuel during Weapons and Tactics Instructor (WTI) course 2-22, at Laguna Army Airfield, Yuma, Arizona, March 29, 2022.

WTI is a seven-week training event hosted by MAWTS-1, providing standardized advanced tactical training and certification of unit instructor qualifications to support Marine aviation training and readiness, and assists in developing and employing aviation weapons and tactics.

03.29.2022

Photos by Lance Cpl. Symira Bostic\_

Marine Aviation Weapons and Tactics Squadron-1





# Emergency Arresting Gear System Training: WTI-2-22

05/17/2022

U.S. Marine Corps Lance Cpl. Alexandra Mendezmanzo, an expeditionary airfield systems technician from Coachella, California, assigned to Marine Aviation Weapons and Tactics Squadron One (MAWTS-1), operates an emergency arresting gear system, during Weapons and Tactics Instructor (WTI) course 2-22, at Marine Corps Air Station Yuma, Arizona, March 24, 2022.

03.24.2022

Photo by Lance Cpl. Symira Bostic\_

Marine Aviation Weapons and Tactics Squadron-1



## Training for FARP Operations: WTI-2-22

**05/09/2022**

U.S. Marines assigned to Marine Aviation Weapons and Tactics Squadron One (MAWTS-1), conduct a forward arming and refueling point (FARP) exercise, during Weapons and Tactics Instructor (WTI) course 2-22, at Auxiliary Airfield II, near Yuma, Arizona, March 26, 2022.

03.26.2022

Video by Lance Cpl. Dean Gurule

Marine Aviation Weapons and Tactics Squadron-1



## **Training to Provide High Mobility Artillery Rocket System (HIMARS) Fire Support: WTI-2-22**

**05/08/2022**



U.S. Marines assigned to Kilo Battery, 2nd Battalion, 14th Marine Regiment, 4th Marine Division, fire an M142 High Mobility Artillery Rocket System (HIMARS), during Weapons and Tactics Instructor (WTI) course 2-22, near Chocolate Mountain Aerial Gunnery Range, California, April 13, 2022.

04.13.2022

Photo by Lance Cpl. Dean Gurule

Marine Aviation Weapons and Tactics Squadron-1



## Long-Range Force Insertion Training: WTI-2-22

**05/05/2022**

A U.S. Marine Corps MV-22B Osprey with Marine Aviation Weapons and Tactics Squadron One (MAWTS-1), is prepared for takeoff after a refuel during Weapons and Tactics Instructor Course (WTI) 2-22, near Yuma, Arizona, April 6, 2022.

04.06.2022

Photo by Lance Cpl. Symira Bostic\_

Marine Aviation Weapons and Tactics Squadron-1



## Recovery After Airfield Attack Training: WTI-2-22

**05/01/2022**

U.S. Marines with Marine Aviation Weapons and Tactics Squadron One (MAWTS-1), survey the runway for damage during a basic recovery after attack (BRAAT) practical application during Weapons and Tactics Instructor (WTI) course 2-22, at Auxiliary Airfield II, near Yuma, Arizona, March 24, 2022.

03.25.2022

Video by Lance Cpl. Emily Weiss\_





## Training for Fire Support: WTI-1-22

**04/26/2022**

U.S. Marine Corps mortarmen, with 3rd Battalion, 1st Marine Regiment, 1st Marine Division, prepare a mortar firing line during Weapons and Tactics Instructor (WTI) course 1-22, at Observation Point Feet, Chocolate Mountain Aerial Gunnery Range, Calif., Sept. 24, 2021.

09.24.2021

Photo by Cpl. Jeremy Alfaro\_

Marine Aviation Weapons and Tactics Squadron-1



## MV-22B Night Tactics Training: WTI 2-22

**04/24/2022**

U.S. Marine Corps Cpl. Dominic McCarron, from Colorado Springs, Colorado, a crew chief for the MV-22B Osprey, assigned to Marine Aviation Weapons and Tactics Squadron One (MAWTS-1), analyzes terrain during a night tactics exercise in support of Weapons and Tactics Instructor (WTI) course 2-22, at San Clemente Island, California, April 4, 2022.

04.05.2022

Photo by Lance Cpl. Emily Weiss\_

Marine Aviation Weapons and Tactics Squadron-1





## **CH-53E External Lift Training in Support of USMC Expeditionary Operations: WTI-2-22**

**04/23/2022**

A U.S. Marine Corps CH-53E Super Stallion aircraft assigned to Marine Aviation Weapons and Tactics Squadron One (MAWTS-1), conducts an external lift exercise during Weapons and Tactics Instructor (WTI) course 2-22, at Auxiliary Airfield II, near Yuma, Arizona, March 29, 2022.

03.29.2022

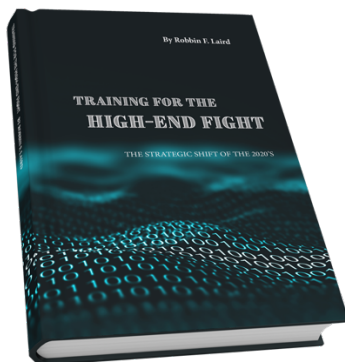
Photo by Lance Cpl. Emily Weiss\_

Marine Aviation Weapons and Tactics Squadron-1



## Training for the High-End Fight (2021)

Earlier visits to MAWTS-1 are a key part of my book published last year focused on training for the high-end fight.



"Training for the High-End Fight" highlights the essential strategic shift for the US and allied militaries from land wars in the Middle East to the return of great power competition. The primary challenge of this strategic shift will be the need to operate a full spectrum crisis management force. That means training a force capable of delivering the desired combat and crisis management effect in dealing with 21st century authoritarian powers.

As Admiral Nimitz confronted the last century's challenges in the Pacific, he concluded a core lesson for this century's Pacific warriors: "Having confronted the Imperial Japanese Navy's skill,

energy, persistence, and courage, Nimitz identified the key to victory: 'training, TRAINING and M-O-R-E T-R-A-I-N-I-N-G.'

The U.S. and its core allies are shaping new capabilities to deal with the various threats and challenges affecting XX1st Century global theaters. Flexibility in operations and agility in inserting force with a proper calibration of effect will be enhanced as new systems come online in the years ahead.

But these systems will have the proper effect only in the hands of skilled warriors, who, today, have to face a radical disjuncture from traditional training approaches and thinking in order to address these new types of threats and work towards a seamless common operating picture.

This book looks at the further adaptation and evolution of the U.S. forces in preparing for conflict in a contested environment, variously referred to as the return of Great Power Competition, peer conflict, or the high-end fight. The book is built around what was learned from a number of visits and discussions at warfighting centers in the United States during visits over the past few years, with the bulk of the interviews included in the book coming from visits in 2020. These visits have been to Norfolk, Virginia; Jacksonville and Mayport, Florida; San Diego, California; and Las Vegas and Reno, Nevada.

The book starts by providing a brief overview on the strategic shift and the crafting of the integrated distributed force to be able to deliver effective outcomes for our political leaders.

The book then turns to the two key enablers of the integrated distributed force, namely, C2 and Intelligence, surveillance, and reconnaissance (ISR), and with these terms being redefined in many ways in terms of how the force is evolving them, leveraging them, and transforming them.

The setting is then in place to discuss what it means to train for the high-end fight. To train for and execute the capabilities of the high-end fight requires that training and exercises be well funded, and the innovations being generated by the warfighting centers drive force structure development.

The force that is evolving is a very capable one, but the reset in its combat approaches and combat architecture is crucial to enhancing its capabilities to provide for the skill necessary to master the puzzles and challenges of escalation management and to shape the skills needed for the world we are now in.

This reset in combat approach is pivotal to enhancing our escalation management skills and for protecting the liberal democracies against 21st century authoritarian powers. Informed by interviews with officers at a number of U.S. war fighting training centers, readers will discover the future of 21st Century combat, and how our forces are preparing for it.

<https://sldinfo.com/books/training-for-the-high-end-fight-the-strategic-shift-of-the-2020s/>