

Amphibious Air Command and Control

Adapting for the Future Fight

by Capt Titus G. Lowell

PREFACE

P*This article was written while serving at TACRON-11 after having participated in a Marine Corp/Navy Operational Planning Team (OPT) that sought to address integration and improving synergy between Navy and Marine Air Command and Control (AC2) units in an amphibious environment.¹ Coming out of that OPT, the Navy, for lack of a better term, felt like the Marines were trying to take over their job or workspace. While I know that was not the case, a lot of the issue comes down to physical space on an already cramped ship. I shared the initial idea presented in this article during that OPT.*

>Capt Lowell is a Prowler Electronic Countermeasures Officer (7588). He served back-to-back tours at VMAQ-1 and VMAQ-4 where he deployed in support of Operations UNIFIED PROTECTOR, ENDURING FREEDOM, INHERENT RESOLVE, and FREEDOM SENTINEL as well as unit deployment program to MCAS Iwakuni, Japan. Capt Lowell executed PCS orders in the summer 2015 to the Navy's Tactical Air Control Squadron 11 (TACRON11) where he deployed with CPR-1/13th MEU for WESTPAC 16-2 and served as a Marine Liaison Officer, Tactical Air Control Center Watch Officer and Squadron Operations Officer. Capt Lowell is currently serving as a Marine Electronic Warfare and Electromagnetic Spectrum Operations Officer at the USSTRATCOM Joint Electromagnetic Warfare Center in San Antonio, TX.

The idea was literally formulating in my head during the OPT and I had not yet done any research or thought about how it might actually work. Since the writing of

this article, our 38th Commandant, Gen David H. Berger, has officially canceled some of the references I used; however, the premise and underlying concepts proposed in this article hold true and are possibly even more relevant today under the Commandant's Planning Guidance published in the summer of 2019, particularly in the area of Naval Integration as he states:

Navy and Marine Corps officers developed a tendency to view their operational responsibilities as separate and distinct, rather than intertwined. With the rise of both land and sea-based threats to the global commons, there is a need to reestablish a more integrated approach to operations in the maritime domain. Reinvigorating the FMF can be accomplished by assigning more Marine Corps forces to the Fleet, putting Marine Corps experts in the fleet Maritime Operations Centers, and also by shifting emphasis in our training, education, and supporting establishment activities.

While I have no delusions that this is a perfect solution to better integration, I firmly believe that some level of integra-



AC2 requires planning, commanding, directing, and supervising all air operations. (Photo by PFC Steven Wells.)

tion between the Navy and Marine Corps AC2 systems, particularly in the area of amphibious operations is required in order to better support the warfighter, improve our decision cycle(s) and stay inside adversarial OODA loops. I say this through the lens of having first-hand experience of a mishap that might have been avoided with a more integrated amphibious AC2 system.

The only thing we can't accept is not being willing to change.²
—Gen Robert Neller

AC2 in the single battle concept must be viewed as a single mission requiring a single AC2 system that accomplishes the mission requirements of both the commander of the amphibious task force (CATF) and the commander of the landing forces (CLF), regardless of command relationship. Today's amphibious warfare doctrine, tactics, techniques, and procedures, and SOPs are based on tactics and procedures that have not changed significantly since World War II. With the MV-22 online, ship-to-objective maneuver now a reality, and the changing capabilities of our Marine forces just over the horizon, these AC2 philosophies that we have relied upon for over 75 years are obsolete and long overdue for an update.

The amphibious AC2 system currently in place is two separate systems which are designed to work in concert with one another. However, half of this system is rarely, if ever, employed in today's amphibious warfare. The Navy tactical air control system (NTACS) is part of the Navy's composite warfare commander construct and is the current system in place for conducting amphibious AC2 from the ship. On the Marine Corps side, the Marine air command and control system (MACCS) is designed to "link-up" with the NTACS once a lodgment has been established ashore where elements of the MACCS can establish operations; however, the MACCS being established from ship-

to-shore during an amphibious operation is an increasingly rare occurrence, especially at the most common level of amphibious operations (MEU). When looking to the future through the lens of the Marine Corps Operating Concept (MOC) published in September 2016, we get the sense that utilization of the MACCS in amphibious warfare will soon be untenable.

The MACCS is based on the assumption that a full-scale amphibious landing will occur in much the same way it was done during WWII. With the increasing anti-access/area denial threat and the littorals becoming more and more contested, opportunities for phasing control ashore during an amphibious landing are diminishing. The more likely the case is that a lodgment will be created and secured (a sea port, airport, or most likely both). Once secured, a full MACCS (to support a MEB or MEF) will be inserted via strategic lift. In short, the majority of the amphibious landing and securing of the lodgment will already have taken place and will be transitioning to a full-scale land operation. This modern scenario still necessitates a smooth transition of AC2 from ship-to-shore, but it will not necessarily be accomplished with Marines from the amphibious force that

created the lodgment, as doctrine suggests.³ When examining the Theater Air Ground System in this context, a gap presents itself. The MACCS has been designed exclusively as a land-based system, with no intent to operate from ships, and the NTACS has been designed as purely a sea-based system, with no intent to operate on land. The Navy-Marine Corps team lacks an amphibious AC2 system that is designed to operate simultaneously on land and at sea. (See Figure 1.)

This shift in operations results in a properly equipped landing force, complete with appropriately-sized AC2 elements as part of the ACE, being underutilized. They spend the majority of their time aboard amphibious shipping with nothing to do but wait for that seemingly fleeting opportunity to go ashore. If they do go ashore, it will only be for a very short time. While this is occurring, their skills begin to atrophy and maintaining mission readiness becomes difficult, as maintaining any MOS proficiency in a congested shipboard environment can be difficult.

The MOC states:

We must examine how we organize and employ MAGTFs as units capable of meeting the challenges across the ROMO, including how to structure

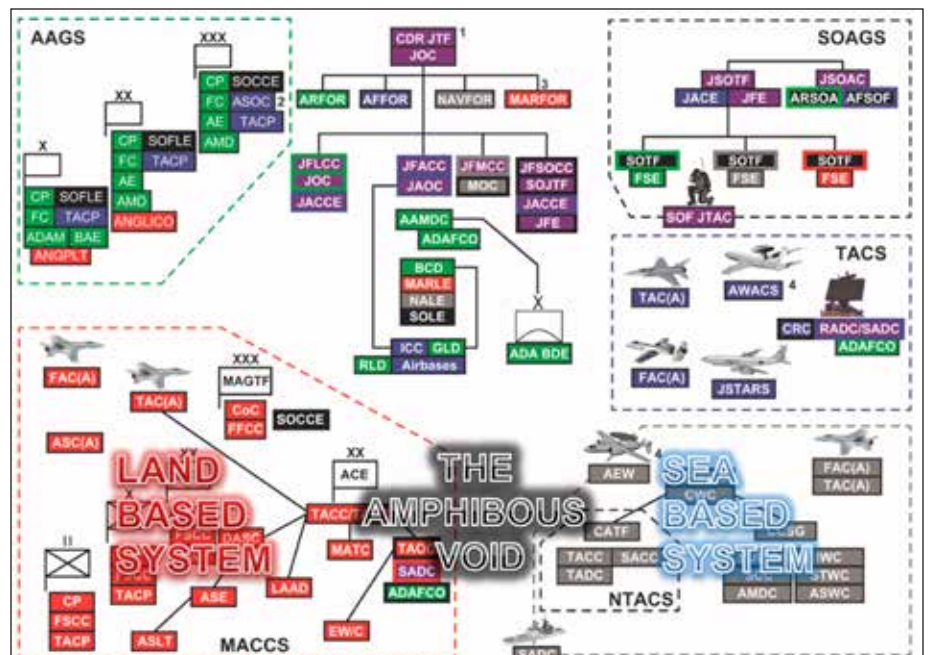


Figure 1.



There is a need for better integration of AC2 capabilities. (Photo by LCpl Kevan Dunlop.)

a MAGTF to fight as an integrated partner with the Navy in sea control and maritime superiority missions.⁴ Additionally, the MOC asserts that:

To provide the unity of command that is necessary to operate most effectively as an integrated Naval force, we must: Examine the Composite Warfare Construct or alternative C2 arrangements with the Navy to promote unity of effort in littoral warfare. Focus on strengthened Naval habitual relationships at the tactical and operational level ... Increase the number of Marines assigned to staffs supporting the Combined/Joint Force Maritime Component Commander (C/JFMCC) or fleet commander. Explore the effectiveness of creating a single Naval component for the Combatant Commands, tempered by the recognition that each Service has independent requirements.⁵

Understanding the fact that the last two objectives above are written with strategic and operational commands in mind, the intent behind them, however, can be applied at the tactical level. The MOC is directing us to take a hard look at command structures, explore new ideas, and identify where change needs to be made. Amphibious AC2 is one of these areas. Rather than viewing the amphibious operations area, particularly airspace and AC2, with a “yours” and “mine” mentality between

NTACS(CATF) and MACCS(CLF) dividing the airspace at the high-water mark (see Figure 2), it should be examined with an “ours” mentality. The amphibious objective area includes a singularly defined airspace. As a single three-dimensional space where a single operation is being conducted, it only makes sense to have a single AC2 organization that supports both the CATF and CLF in the overall mission.

It does not make sense to do away with either system entirely. In a land battle, once all the elements of the MACCS are in place, the MACCS is very effective and serves the landing force commander very well. Elements of the MACCS ashore are also extremely capable of integrating with the NTACS as they stand up, facilitating a smooth transition. Likewise, it does not make sense to do away with the NTACS. The NTACS and its integration with the composite warfare commander and shipboard systems work well for the maritime environment and projecting power from the sea. The solution to this problem is one that accomplishes the mission of both the CATF and the CLF. A combined AC2 system will provide each commander with increased manpower, expertise, and capabilities in the amphibious environment. For a MEU, and possibly a MEB, there should exist a single command that integrates elements of the NTACS and MACCS for the appropriate sized force. This must be a joint Navy/Marine Corps command at the operational and tactical level that serves the interests and mission requirements of both the CATF and the CLF.

In establishing a single command, the amphibious force as a whole would

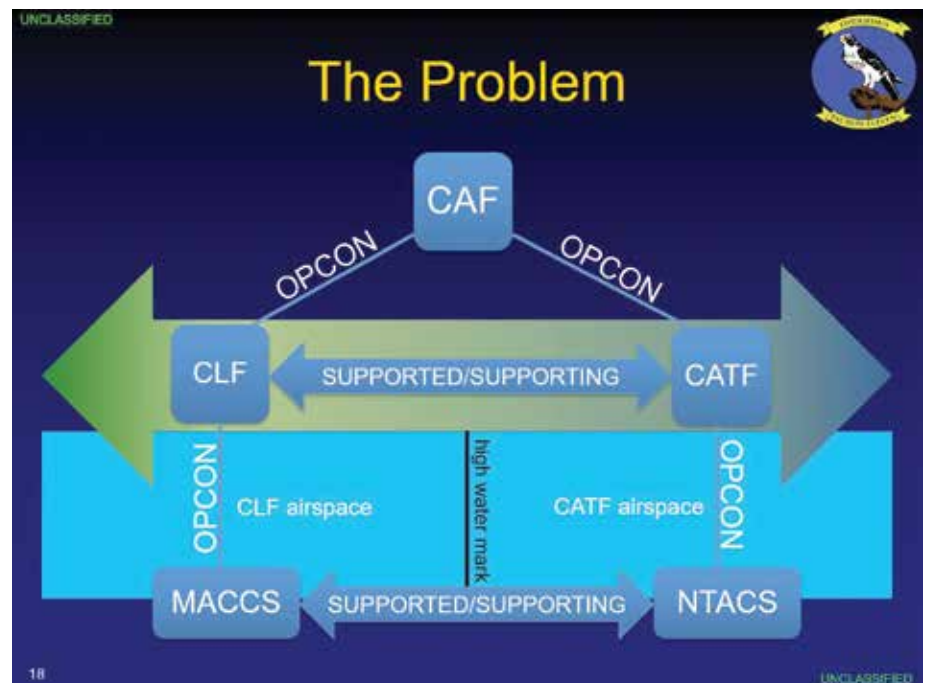


Figure 2.



Marines use a tactical aid to navigation devices to guide aircraft into a landing zone. (Photo by LCpl Kenny Nunez Bay.)

remove redundancies and increase the overall capability of the entire force in support of the warfighter on the ground. This new organizational construct would not be a reduction in manpower, but a joining of two separate command structures into one. Instead of one command structure (the MACCS) waiting to go ashore, they would be gainfully employed aboard the ship within this new joint unit. The Marine members of this unit would retain their ability to establish a MACCS ashore as needed. The Navy would also maintain its expeditionary capability for the CATF with the Marine augmentation team and expeditionary response team. The Navy would retain this capability in addition to gaining the capabilities and expertise of the Marines who would normally only go ashore in support of the CLF/MACCS. Additionally, the CLF will benefit from increased capability to send forces ashore through the Navy's Marine augmentation team and expeditionary response team.

A joint force structure for amphibious AC2 is in line with the Navy's vision for the future as well: "Improve Joint Force interdependence through initiatives that eliminate gaps and seams, reduce unnecessary redundancy, and increase synergy."⁶ Additionally, the Navy seeks to

Enhance the capability of MAGTF to command and control forces responding to crises or contingencies and executing forcible entry operations,⁷ as well as

enhance the ability to command and control operations to project power from the sea in contested environments,⁸

and

improve our capability to seize, establish, sustain, and protect austere expeditionary bases that enhance naval operations in anti-access/area denial threat environments.⁹

The command structure for this new joint command already exists in the Navy's tactical air control squadrons (TACRONs) and tactical air control group (TACGRU). The TACGRU/TACRON mission is to train, equip, and deploy detachments of AC2 units aboard amphibious shipping in support of the CATF. At the MEU level, moving from our existing command structures into this new joint command would only require moving selected table of organization and equipment for Marine air control group (MACG) MEU detachments from the MEU ACE to the TACRON where applicable. Instead of these MACG detachments executing temporary additional duty orders to the ACE, they would receive PCS/PCA orders to TACRON (or whatever new name might be created for the new joint command). This unit would train and deploy Navy and Marine AC2 professionals as a single unit working cooperatively toward the single mission of executing AC2 for the entire

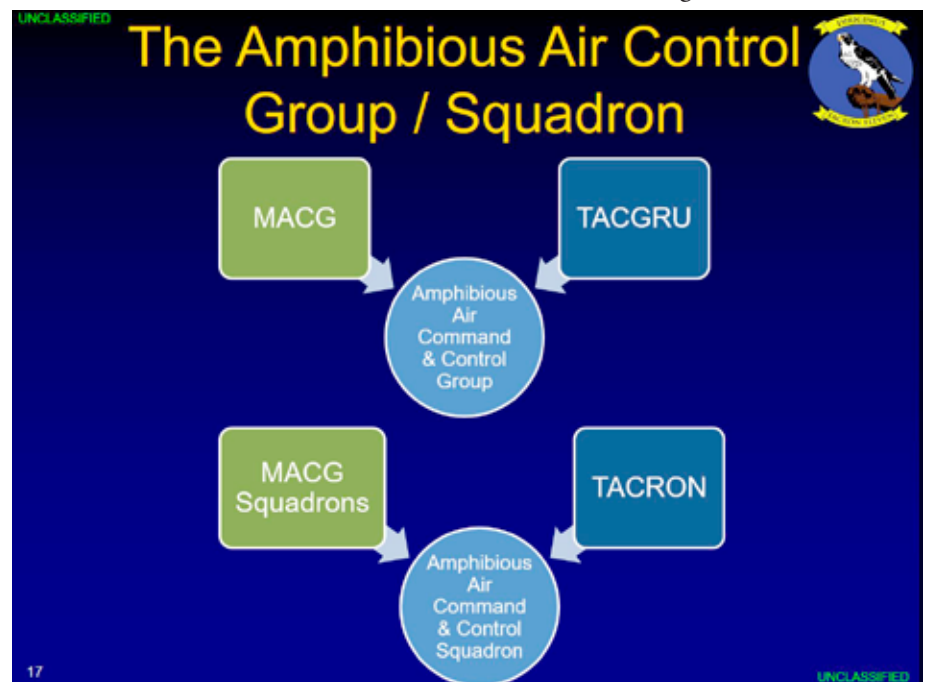


Figure 3.

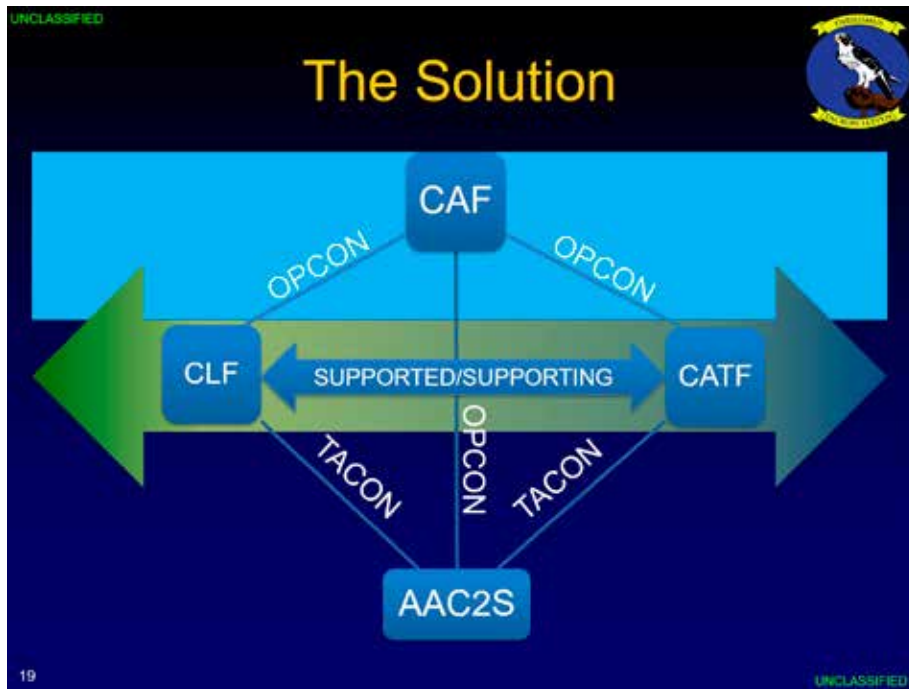


Figure 4.

amphibious force. In addition to these MACG MEU detachment personnel, additional MEB-/MEF-level personnel would PCA/PCS to TACGRU. At the TACGRU level, Marines and Sailors train and execute AC2 for MEB-/MEF-level amphibious operations. Not all elements of the MACCS will fall under this new command. For example, at the MEU level, low altitude air defense as well as Marine wing support squadron detachments at a minimum might still attach to the ACE while the air support element and Marine air traffic control mobile team PCS/PCA to this new AC2 organization. (See Figure 3.)

The natural question that follows this line of thinking is: in a command relationship such that the CATF and the CLF are co-equal commanders, where does this new joint organization fall? We easily find that answer when we look beyond the CATF/CLF command relationship. The CATF/CLF are not the commanders who receive an amphibious operations order from a combatant command or joint task force, that order is actually given to the Commander, Amphibious Forces (CAF) who retains OPCON of both the CATF and CLF. The CAF is the commander with overall responsibility for the execution of the am-

phibious operation. It is the CAF who is provided with the Amphibious Objective Area from the joint force commander. In this respect, it is the CAF who owns the airspace. As such, the CAF should retain OPCON of the AC2 system. During the conduct of the amphibious operation however, the CAF may delegate Tactical Control of the AC2 unit(s) to whom-ever the supported commander is. This way, when the supported/supporting relationship shifts between the CATF/CLF, Tactical Control of the AC2 unit(s) also shift between the CATF/CLF. (See Figure 4.)

This new integrated organization will reduce friction and improve processes through better unity of effort for both the CATF and CLF. Facilitating cohesive and thorough integration allows increased responsiveness to an ever-changing battlefield environment. This new AC2 system will increase the overall capabilities of the amphibious force for sustained flight operations. In the current system, the NTACS is capable of a sustained 10-hour flight window per day with a surge capability to 24 hours for a limited time.¹⁰ The new integrated command would allow for sustained 24-hour flight operations in a scenario where control is never

phased ashore. This is made possible through the integration of manpower into a single cohesive unit.

Fighting at and from the sea is not just in our future, it is now a reality with the introduction of the MV-22 Osprey and ship-to-objective maneuver. The F-35's interoperability capabilities only solidify the necessity for better integration from an AC2 perspective. An integrated AC2 organization for amphibious warfare is the necessary future when supporting both the CATF and the CLF in a single battle concept.

Notes

1. Headquarters Marine Corps, MSG DTD 271824Z FEB 17 Subj/Marine Air Command And Control (MACC) community and Tactical Air Control Group 1, naval Aviation Command and Control (AC2) integration Operation Planning Team (OPT) results, (Washington, DC February 2017)
2. Gen Robert Neller, "2018 Innovation Symposium," (presentation, 2018 Innovation Symposium, Quantico, VA Jul 2018)
3. Air Land Sea Application Center, *Multi-Service Tactics, Techniques, and Procedures for the Theater Air-Ground System*, (Langley, VA: June 2014).
4. Headquarters Marine Corps, *The Marine Corps Operating Concept: How an Expeditionary Force Operates in the 21st Century*, (Washington, DC: September 2016).
5. Ibid.
6. Department of the Navy, *A Cooperative Strategy for 21st Century Seapower*, (Washington, DC: March 2015).
7. Ibid.
8. Ibid.
9. Ibid.
10. Chief of Naval Operations, *OPNAVINST 3501.88F, Required Operational Capabilities and Projected Operational Environment for Tactical Air Control Squadrons*, (Washington, DC: December 2017).

