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THE JOINT FORCE AIR COMPONENT COMMANDER, CARRIER BATTLEGROUP, ANE FLEET AIR DEFENSE: INGREDIENTS FOR INCOMPATIBILITY DURING THE JOINT TASK FORCE EXERCISE

by

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A paper submitted to the Faculty of the Naval War College in partial satisfaction of the requirements of the Joint Maritime Operations Department.

The contents of this paper reflect my own personal views and are not necessarily endorsed by the Naval War College of the Department of the Navy.

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This paper identifies those factors responsible for this incompatibility by illustrating how these two organizations affect one another within the context of JTFEX, then seeks ways in which both the CVBG organization and JTFEX can change in order to create a more agreeable working relationship and a better exercise.

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LIST OF ABBREVIATIONS

AADC	Area Air Defense Commander
AAWC	Anti-Air Warfare Commander
AREC	Air Resource Element Coordinator
ASUWC	Anti-Surface Unit Warfare Commander
ASWC	Anti-Submarine Warfare Commander
ATO	Air Tasking Order
AWC	Air Warfare Commander (Proposed)
C2WC	Command and Control Warfare Commander
CAP	Combat Air Patrol
CVBG	Carrier Battlegroup
CWC	Composite Warfare Commander
FAD	Fleet Air Defense
FLEETEX	Fleet Exercise
JFACC	Joint Force Air Component Commander
JOA	Joint Operating Area
JTF	Joint Task Force
JTFEX	Joint Task Force Exercise
OPCON	Operational Control
RADC	Regional Air Defense Commander
STWC	Strike Warfare Commander
TACON	Tactical Control
TLAM	Tomahawk Land Attack Missile
UNAAF	Unified Action Armed Forces, Joint Pub 0-2

INTRODUCTION

USACOM's Joint Task Force Exercise (JTFEX) unintentionally creates an adversarial relationship between the participating carrier battlegroup (CVBG) and the Joint Force Air Component Commander (JFACC) by allowing the JFACC to exercise authority within the battlegroup's command and control organization. Specifically, this exercise places the CVBG in an awkward position by assigning responsibility for fleet air defense (FAD) to the JFACC while requiring it to operate in a high air, surface and sub-surface threat environment. The result is an 'US' vs. 'THEM' relationship at the working level of both the CVBG and JFACC staffs; leaving a bad impression of JFACC operations upon the members of the participating CVBG, and a bad impression of CVBG operations upon the multi-service members of the JFACC.

This paper will briefly describe the Joint Task Force Exercise, examine the contrasting operational methods of a CVBG and a JFACC, and illustrate how these two organizations affect one another within the context of JTFEX. Finally, it will seek ways to reduce this exercise generated tension in order to create a more agreeable working relationship in the hope that eventually the Navy will universally accept, and maybe someday even believe in, JFACC operational methods.

JOINT TASK FORCE EXERCISE (JTFEX)

JTFEX is an important training evolution for the CVBG because, while on deployment, it will be expected to smoothly integrate into existing joint operations around the world. JTFEX grew from Commander, Second Fleet's FLEETEX, which was the advanced phase evaluation of the carrier battlegroup. The primary function of FLEETEX was to test the CVBG's Composite Warfare Commander (CWC) organization. USACOM's adoption and expansion of FLEETEX broadened the scope, making it a joint exercise, with joint forces, organized into a joint task force (JTF) organization.

The core of the 'blue' air forces for JTFEX come from the CVBG that has reached the end of its pre-deployment work-up cycle. Aviation assets from other services come from units that are available during the time frame of the exercise. Basing of these land based air forces varies from exercise to exercise, so to simplify exercise preparations these ever changing 'blue' force air bases are designated 'ex-scenario', which means outside the scope of the exercise.

The exercise scenario puts the CVBG in the littoral waters of a fictitious enemy country exposing it to a sophisticated air, surface, and submarine threat at the same time the JFACC is conducting an offensive air-to-ground operations. This situation creates great tension between

the CVBG commander, who requires as many air-to-air capable assets the battlegroup can provide for fleet defense, and the JFACC, who requires as many air-to-ground capable assets as the battlegroup can provide for offensive operations. In an attempt to ease this asset allocation tug-of-war, the JFACC is assigned FAD responsibility in order to use single mission Air Force fighters, whose 'ex-scenario' airfields do not require air defense, for maritime combat air patrol (CAP) to free up the Navy's bombing capable fighters.

The elements of JTFEX that magnify the JFACC-CVBG incompatibility can be identified by taking a macro look at what JTFEX requires a carrier battlegroup to do. A single CVBG must dedicate its air assets to power projection without having first gained battle-space dominance. What ensues is a tense struggle over the allocation of scarce air assets between the CVBG for fleet defense, and the JFACC for pursuit of the strategic overland air operation. Add to the mix the JFACC's authority, now having FAD responsibility, to reduce maritime CAP coverage in order to reinforce overland air operations and you have a formula for conflict.

CARRIER BATTLEGROUP (CVBG)

The Navy's Carrier Battlegroup is an autonomous fighting force made up of ships, submarines, aircraft and the command and control structure required for independent

military operations. This command and control structure is the Composite Warfare Commander concept or CWC. The CWC evolved over many years as a way to accommodate the conflicting requirements of a naval force to spread out over many square miles of ocean and yet operate as a single entity.

The CWC divides the battlegroup into five different warfighting capabilities and assigns each to an independent warfare commander. They are the Strike Warfare Commander (STWC), Command and Control Warfare Commander (C2WC), Anti-Submarine Warfare Commander (ASWC), Anti-Surface Unit Warfare Commander (ASUWC), and Anti-Air Warfare Commander (AAWC). These five warfare commanders exercise tactical control (TACON) of organic assets and capabilities assigned to them by the CVBG commander in order to operate within their warfare area.[1] Due to the complexity of carrier flight deck operations, a centralized coordinator, known as the Air Resource Element Coordinator (AREC), coordinates the distribution of aircraft sorties between all of the warfare commanders.[2] There is no similar coordinator for surface ships and submarines.

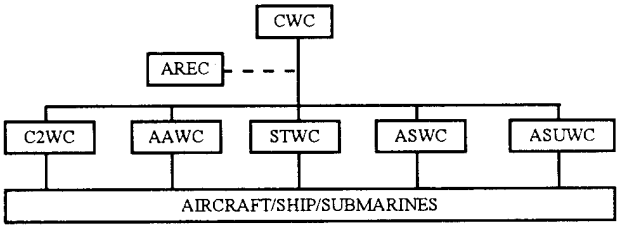

Fig. 1. CWC Organization

The strength of the CVBG comes from the flexibility afforded the warfare commanders to operate autonomously within their warfare areas, and to coordinate with one another for the efficient use of assets. To accomplish this the CVBG commander issues mission-type orders, expressing what needs to be done, to the warfare commanders who develop plans and coordinate the use of assets for battlegroup operations. The idea is to decentralize the planning and real time decision making authority over battlegroup operations away from the top and push it down to the individual warfare commanders.[3]

Naval aviation is an integral part of battlegroup operations. It is tightly woven throughout all of the warfare areas. It is the aircraft operating with the ships and submarines that gives the battlegroup its formidable power.[4] But the sortie generation capability of the aircraft carrier is seldom sufficient to fulfill the CVBG's collective requirements for aircraft. Therefore, aircraft sorties generally operate in more then one warfare area at a time requiring close coordination by the warfare commanders. This coordination is most critical in the area of fleet defense where the AAWC, ASWC and ASUWC work as one to present a 'seamless' defensive bubble around the battlegroup.[5]

JOINT FORCE AIR COMPONENT COMMANDER (JFACC)

Joint doctrine for the planning and employment of joint military air operations is rooted in the long held Air Force belief that all air assets within the theater of operations should be placed under the control of a single commander.[6] Air power, free from the restraints of supporting a surface force, is a versatile conventional military power capable of delivering a deadly blow against the enemy almost anywhere within the theater of operations.[7] This force can strike at the full depth and breadth of the enemy's warfighting machine, dominating the battlefield. With the publication of Joint Pub 3-56.1, *Command and Control of Joint Air Operations*, The Chairman of the Joint Chiefs of Staff formally adopted the concept of a single air commander by creating the Joint Force Air Component Commander or JFACC.

The JFACC concept is founded on a system of centralized planning and decentralized execution. "Centralized planning is essential for controlling and coordinating the effort of the forces. Decentralized execution is essential because no one commander can control the detailed actions of a large number of units or individuals."[8]

The JFACC is designed to be the operational commander for aviation units organized in administrative wings and reliant on task-type orders to effectively participate in

major military operations. To accomplish this, the JFACC centralizes the planning and decision making authority at the top and administers to the individual aviation units with the Air Tasking Order (ATO), a very detailed document delineating exactly what each sortie will do.

The JFACC will normally exercise Operational Control (OPCON) over forces assigned and attached and Tactical Control (TACON) of other military air assets.[9] In other words, a service component commander assigned JFACC responsibility will maintain OPCON of service assets and exercise TACON of sorties and capabilities made available. Only the joint force commander will normally have OPCON of all air assets.[10]

Joint Publication 3-56.1 establishes the Area Air Defense Commander (AADC) as the single commander responsible for the air defense of the joint force. The joint force commander should assign this responsibility to the component commander best equipped to perform the duty, but joint doctrine recommends the AADC responsibility be incorporated into the JFACC.[11] When assigned AADC, JFACC responsibilities can broaden to include the control of land and sea based air defense assets and capabilities.

JFACC-CVBG RELATIONSHIP

This analysis of the JFACC-CVBG relationship will deal strictly with the effect the JFACC, as AADC, has on the ability of the AAWC, ASWC and ASUWC to provide a unified fleet defense when the air portion of that defense is a JFACC responsibility.

As described above, the JFACC and CVBG are two very different organizations with different methods of operating and conflicting airpower employment philosophies. The JFACC's system that centralizes the planning and decision making authority at the top conflicts with the CVBG's system that pushes that authority down to subordinate commanders. JTFEX, by making the air defense of the battlegroup the responsibility of the JFACC, forces these two organizations to intermingle in a way that creates tremendous tension.

JTFEX attempts to capitalize on the benefits associated with the centralized control of air forces by placing all air defense assets under one commander. The intended effect is a gain in efficiency to create a more effective air defense with the same number of assets or to maintain the same capability with fewer. For example, the use of F-15C air superiority fighters, which are not air-to-ground capable, for FAD can free up multi-role F/A-18's for joint interdiction operations; or because USN and USAF tactical aircraft use different means for air-to-air refueling,

efficiencies can be gained in the utilization of valuable tanker aircraft; or ship based surface-to-air missile systems can be used to free up mobile ground based systems for use further inland.

The mechanics of placing all FAD assets under one commander is done by making the JFACC, as AADC, responsible for the air defense of the entire joint operating area (JOA). The JOA is then divided up into regions and the CVBG commander is designated the Regional Air Defense Commander (RADC) of the maritime region.[12] On the surface, this reorganization looks like just a minor change to the organizational chart, but because fleet defense sorties are normally not considered joint sorties, this 'small' change creates significant problems for the CVBG commander.

Typically, battlegroup sorties are apportioned first to fill the warfare commanders' needs, known as direct support sorties, and the remainder are offered to the JFACC for joint use, known as common use sorties. When the JFACC has FAD responsibility, air defense sorties which before were direct support now become common use. This is significant to the CVBG commander for two reasons: (1) The AAWC, now acting as the JFACC's representative, no longer has the same authority as the other warfare commanders. This divides the CWC organization by putting the ASUWC and ASWC, responsible for planning the surface and sub-surface defense, on one side; and the JFACC, responsible for planning the air

defense, on the other. (2) FAD sorties are now apportioned at the same time as other joint use sorties, exposing them to the possibility of being used to fulfill other joint needs. Since aircraft carriers are restricted in the number of sorties they can generate in one day, and the JTFEX scenario guarantees that there are never enough sorties to fulfill all of the joint component commander's needs, the CVBG stands a good chance of receiving fewer air defense sorties then it otherwise would.

JFACC having responsibility for FAD not only affects the CVBG's ability to plan, but to execute as well, because the ASUWC and ASWC are restricted in their ability to negotiate with the AAWC for the use of multi-mission assets within their areas of responsibility. For example, when the CVBG commander is responsible for FAD, an F/A-18 on CAP station controlled by the AAWC can easily be 'borrowed' by the ASUWC to investigate a surface contact. But when the JFACC has FAD responsibility, the same request must go outside the battlegroup and up to the JFACC for consideration, making decisions critical to the defense of the fleet more complicated and potentially more time consuming.[13]

As can be seen, the effect of this 'small' change in the organizational chart on the CVBG is significant. Coordinated planning and execution becomes more difficult, the number of FAD sorties may decrease, and decisions

directly affecting the CVBG's defensive posture are made outside of the authority of the CVBG commander. The cumulative effect is to weaken the battlegroup's defensive bubble by creating a 'seam' right down the middle.

SOLUTIONS TO JFACC-CVBG INCOMPATABILITY

First a disclaimer; anything short of redesigning the CVBG organization from scratch to compliment the JTF will only reduce the extent of the incompatibility, not eliminate it. With that stated, this section will first address the root cause of the JFACC-CVBG tension, which is the incompatibility between the JFACC's 'centralized' operations and CVBG's 'decentralized' operations, in an attempt to find a way to make them more compatible. Then the elements of JTFEX that magnify this incompatibility will be identified and changes recommended.

In an attempt to simplify the analysis required to find a solution to the root problem, two assumptions are made: (1) The JFACC-CVBG relationship is one of superior to subordinate. The CVBG commander, as the Naval Forces Commander (NAVFOR), is not subordinate to the JFACC in the JTF organization of JTFEX, but when assigned RADC the CVBG commander becomes subordinate to the JFACC with respect to the allocation and employment of air defense assets. (2) There are only two methods of command and control,

'centralized' and 'decentralized'. Acceptance of these two assumptions allows a very straight forward comparison of the different possible 'centralized' and 'decentralized' combinations within a superior-subordinate relationship.

1. *Centralized Superior-Centralized Subordinate*: Subordinate's organization operates as designed under superior's centralized control creating a favorable working relationship.
2. *Centralized Superior-Decentralized Subordinate*: Subordinate's organization is restrained by the superior's centralized control creating an unfavorable working relationship.
3. *Decentralized Superior-Centralized Subordinate*: If subordinate is capable of autonomous operations it operates well under decentralized control, if it is not, it does not.
4. *Decentralized Superior-Decentralized Subordinate*: Subordinate's organization operates as designed under superiors decentralized control creating a favorable working relationship.

According to the above analysis, combinations 1 and 4 create the most favorable working relationships, combination 3 depends on the capability of the subordinate, and combination 2 creates the least favorable. Since combination 2 most closely represents the JFACC-CVBG relationship, a change to any of the other three would be an

improvement. Changing to combination 1 requires the CVBG to become more centralized while the JFACC remains the same, and combinations 3 and 4 require the JFACC to become more decentralized while the CVBG remains the same. To require the JFACC to become more decentralized to accommodate the Navy ignores the fact that the Air Force is reliant on a centralized organization to operate. therefore combination 1, the CVBG becoming more centralized, is the only real option.

To make this change the author recommends: (1) Create a sixth warfare commander, the Air Warfare Commander (AWC), that will subsume the responsibility of STWC and AREC to become the 'JFACC' of the battlegroup. (2) Adopt the 72 hour Air Tasking Order (ATO) timeline for operational planning and execution. This second change has already been adopted by several East coast battlegroups. The result of these two changes will be to centralize the control of battlegroup air operations under one warfare commander who will function within the CWC in the same manner the JFACC functions within the JTF organization. The AWC will be responsible for the planning and coordination of all CVBG airborne power projection operations, to include both aircraft and Tomahawk Land Attack Missiles (TLAM). For this reason the logical choice for AWC is the Airwing Commander. The AWC will also be responsible for the coordination of all non-power projection CVBG air operations. Warfare

commanders will request air assets from the AWC for use within their warfare areas in the same way the JTF component commanders request air assets from the JFACC.

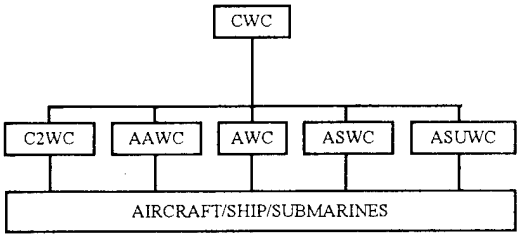

Fig. 2. Recommended CWC Organization

The AWC will also be the CVBG's single point of contact with the JFACC during joint operations, making the JFACC's presence more transparent to the other warfare commanders.

As mentioned earlier, no change short of a total overhaul will resolve all JFACC-CVBG conflicts, and these changes are not an exception. The outcome of these changes will be seen more on the planning side than on the execution side. The defensive 'seam' created when the JFACC has FAD responsibility will only be reduced, not eliminated. But on the whole, if these changes are implemented, the benefits gained while operating within a JTF organization will far outweigh the disadvantages that may arise during autonomous operations.

Focusing now on JTFEX, the author recommends two changes to eliminate the tension created by the exercise: (1) Reduce the threat to the CVBG. The maritime capability

of the enemy is too much for a single CVBG. Naval operations, conducted from outside littoral waters, are required to reduce enemy maritime capability before the CVBG can move in and do anything more then defend itself. In an actual operation the campaign timeline would allow for this to occur, but exercise constraints do not. So the threat needs to be considerably reduced in order to allow the CVBG to realistically contribute to the joint campaign. (2) Allow the CVBG commander to maintain FAD responsibility. As the UNAAF recommends, "JFCs should allow Service tactical and operational assets and groupings to function generally as they were designed."[14] On the surface this may appear to be a move toward decentralized operations, contradicting the centralized-centralized AWC solution proposed above; but within the context of the overall JFACC-CVBG relationship, not just FAD, it is not. The presence of the AWC, whether the CVBG has FAD responsibility or not, creates a more centralized organization.

The CVBG commander retaining FAD responsibility will benefit the exercise in three ways. First, the CWC can function as designed to produce a 'seamless' defensive bubble around the battlegroup. Second, the CVBG's underlying uneasiness, caused by the JFACC having the authority to move assets away from FAD to support overland operations, is removed. And third, the complexity of the hastily pieced together exercise JFACC is reduced by

eliminating the need for FAD planning, lessening the potential for confusion between the two organizations.

In summary, the CVBG will be able to integrate into joint organizations more effectively and with less internal turmoil by (1) creating a battlegroup 'JFACC' to plan and allocate air assets, and (2) adopting the 72 hour ATO planning and execution timeline. JTFEX will become a more valuable and less painful training evolution for the CVBG by (1) reducing the threat to the battlegroup and (2) allowing the CVBG to maintain sole responsibility of fleet defense.

CONCLUSION

It was shown that the JFACC and the CVBG have basic organizational incompatibilities that become aggravated while participating in USACOM's Joint Task Force Exercise. These incompatibilities can be boiled down to the constraints placed on the CVBG's 'decentralized' organization by operating under the JFACC's 'centralized' organization. JTFEX's policy of assigning FAD responsibility to the JFACC further inflames the organizational conflicts to a point where an 'US' vs. 'THEM' atmosphere is created. This paper recommends two changes the CVBG can make to the CWC organization to help ease the tensions evident in a generic JFACC-CVBG relationship, and

two changes specific to JTFEX to help facilitate a better exercise.

The two CVBG changes are to create a sixth warfare commander, called the Air Warfare Commander, to perform 'JFACC-like' duties within the battlegroup, and to adopt the 72 hour ATO planning and execution timeline. The two JTFEX changes are to reduce the maritime threat to the CVBG so it can participate more realistically in the joint campaign, and to let the CVBG commander maintain sole responsibility for battlegroup defense.

It is the firm belief of the author that the results of these recommendations, if implemented during a JTFEX, will go a long way toward eroding the institutional barriers that have been erected by the Navy against the JFACC method of operating, and may someday lead to its universal acceptance.

NOTES

[1] Naval Warfare Publication 10-1(Rev. A), Composite Warfare Commander (CWC) Manual,3-1.

[2] Ibid., 2-1.

[3] Joint Publication 3-04, Doctrine for Joint Maritime Ops (Air), A-1.

[4] James A. Winnefeld, Command and Control of Joint Air Operations: Some Lessons Learned from Four Case Studies of an Enduring Issue (Santa Monica, CA: Rand, 1991), 7.

[5] Naval Warfare Publication 10-1-21 (Rev. A), Anti-Air Warfare Commander's Manual, 3-7.

[6] Dwight R. Motz, JFACC: The Joint Air Control 'Cold War' Continues..." Marine Corps Gazette, January 1993, 67.

[7] Winnefeld, 6.

[8] Joint Publication 0-2, Unified Action Armed Forces (UNAAF), IV-2.

[9] Joint Publication 3-56.1, Command and Control for Joint Air Operations, II-2.

[10] Joint Pub 0-2, IV-10.

[11] Joint Pub 3-56.1, II-4.

[12] Commander Joint Task Force Nine Five Zero, CJTF 950 OPORD-JFACC (AFLOAT) PROCEDURES (DTG 280130Z NOV95), 7B1.

[13] CJTF 950, 9F.

[14] Joint Pub 0-2, IV-4.

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