REPORT DOCUMENTATION PAGE				Form Approved OMB No. 0704-0188
Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing this collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to Department of Defense, Washington Headquarters Services, Directorate for Information Operation Operation Randows and Reports (0704-0188), 1215 Jefferson Davis Highway, Suite 1204, Aritington, VA 22202-202. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. PLEASE DO NOT RETURN YOUR FORM TO				
1. REPORT DATE (DD-MM-YYYY) 10 MAY 2007	2. REPORT TYPE	INAL	3	. DATES COVERED (From - To)
4. TITLE AND SUBTITLE			5	a. CONTRACT NUMBER
Naval Expeditionary Air Power, A Justified C		apability	5	b. GRANT NUMBER
		5	c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S)		5	d. PROJECT NUMBER	
Richard M. Kelly, LCDR, USN		5	e. TASK NUMBER	
Paper Advisor (if Any): Jody Richardson		5	f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S)		8	. PERFORMING ORGANIZATION REPORT NUMBER	
Joint Military Operations Department Naval War College				
686 Cushing Road Newport, BL02841-1207				
9. SPONSORING/MONITORING AGENCY NA)	1	0. SPONSOR/MONITOR'S ACRONYM(S)	
		N	11. SPONSOR/MONITOR'S REPORT IUMBER(S)	
12. DISTRIBUTION / AVAILABILITY STATEMENT Distribution Statement A: Approved for public release; Distribution is unlimited.				
13. SUPPLEMENTARY NOTES A paper submitted to the faculty of the NWC in partial satisfaction of the requirements of the JMO Department. The contents of this paper reflect my own personal views and are not necessarily endorsed by the NWC or the Department of the Navy.				
14. ABSTRACT				
Recent sustained operations provide an excellent example of how the Navy could better support the Joint Force Commander through the use of an expeditionary element of the Carrier Strike Group's airwing. The Navy should formally establish the capability of this tailorable force as a core capability of the CSG that is available to the Combatant Commander or Joint Force Commander upon assignment. This forward deployable element of the CSG's most flexible asset provides for the maximum support of JFACC and JFMCC tasking during the sustained operations, such as the Stability, Security, Transition, and Reconstruction phase. Not only will this formalization give the warfighter the best opportunity to succeed, but it provides the Joint Force Commander a known quantity with established capabilities, limitations and required resources to make the most informed decision on the management of assigned assets.				
15. SUBJECT TERMS				
Carrier Strike Group, expeditionary, JFC, JFACC, JFMCC, forward deployable.				
16. SECURITY CLASSIFICATION OF:		17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON Chairman, JMO Dept
a. REPORT b. ABSTRACT UNCLASSIFIED UNCLASSIFIED	ASSIFIED UNCLASSIFIED	_	19	19b. TELEPHONE NUMBER (include area code)
				401-841-3556
				Standard Form 298 (Rev. 8-98)

NAVAL WAR COLLEGE Newport, R.I.

Naval Expeditionary Air Power, a Justified Capability

by

Richard M. Kelly LCDR USN

A paper submitted to the Faculty of the Naval War College in partial satisfaction of the requirements of the Department of Joint Military Operations. The contents of this paper reflect my own personal views and are not necessarily endorsed by the Naval War College or the Department of the Navy.

Signature: _____

10 May 2007

Introduction

Recent actions by United States Navy and Marine Corps carrier-based aircraft in support of Operation Enduring Freedom (OEF) and Operation Iraqi Freedom (OIF) have demonstrated the immense capability of the Carrier Strike Group (CSG) to sustain airborne power projection deep in-land from the sea. Questions concerning the value gained by the expensive acquisition and maintenance of such a capability, versus the limitations inherent in not having it, have been addressed, if not put to rest. As Stability, Security, Transition and Reconstruction (SSTR) operations continue in both countries, and the need to support troops on the ground from the air has remained, these carrier-based forces continue to demonstrate their ability to provide that support, over great distances, and continue to meet the other needs placed upon the CSG by the Joint Force Commander (JFC). As rosy as that sounds, the most relevant question that should follow is, "Are the assets provided to the JFC being used to support the assigned tasks in the most effective and efficient manner?" or, "Are we getting the most bang for our buck?" It is not purely about economics, although there are significant economic implications for commanders. The issue focuses on supporting the missions of the JFC to the best of the CSG's ability.

The concept of employing CSG air assets solely from the carrier is limiting in scope and reduces operational flexibility. Although the ability to project power over long distances from the sea is an incredible advantage when no airfield close to the fight is available, the requirement to do so when one is available becomes an inefficient use of assets. Geographical constraints and emerging threats to the carrier, especially in the littorals, will continue to drive it to distances that take assets further from the fight. Carrier-based sorties over these distances require significant overhead to achieve missions in the form of fuel, tanker assets, transit time, and asset life. In the end, this overhead limits the actual amount of support that can be provided in the form of targets serviced, time on station, and response time. In addition, the CSG commander is also typically tasked with providing support to the Joint Force Maritime Component Commander (JFMCC) and positioning the carrier in the maritime environment to that end. These supported tasks can at times be at odds with each other and limit overall effectiveness. Therefore, in order to most effectively support the needs of the JFC, the CSG should have the inherent and formalized capability to support the Joint Force Air Component Commander (JFACC) in sustained operations through the use of an expeditionary element of the air wing from an established Forward Operating Base (FOB).

<u>Analysis</u>

Current operations in OIF and OEF provide excellent examples of the value inherent in a forward deployed element of the carrier air wing. The protracted duration of security operations in both theaters, and the tempo of operations (optempo) demands placed on Air Force and Marine Corps expeditionary air elements, continues to require tactical air support from deployed CSGs in support of the Joint Forces Land Component Commander (JFLCC) in both theaters. While it is never prudent to plan to fight the last war, it appears evident that the current sustained operations in these theaters are indicative of a capability the U.S. military should be prepared to exercise for current and future operations. In order to properly assess and justify this capability, it is essential to understand how the CSG currently supports the JFC and JFACC, what the limitations of that method are, and whether or not the current doctrine provides any guidance or direction. In order for the JFACC to best support the JFLCC, he must efficiently manage all available assets and capabilities to fill the Air Support Requests (ASR) for ground operations. Units that are assigned to the JFC provide estimates for what level of support they are capable of providing to the JFACC. Currently a CSG coordinates through the Naval Air Liaison Element (NALE) and essentially 'contracts' to a level of support that the carrier can provide in the form of number of sorties, their duration, and during what time frame of the day they are available to support ASRs. The level of support must take into account the planned cyclic operations, deck space allocation, distance from the operating area, support sorties required and sorties to support the JFMCC. This commitment references what can be supported on a normal operating day, as well as a surge capability, and has the ability to adjust through continuous coordination should priorities change.¹ The JFACC must sequence all of the assets throughout the day with the appropriate timing, airborne fuel requirements, and priority of support for ground operations.

The predominance of operations in OIF over the past four years has placed the carrier in the northern Arabian Gulf with a typical sortie support of 16-18 F/A-18 sorties and four EA-6B sorties per day in support of the JFLCC, limited to a 10- to 12-hour fly day.² This placement commits the aircraft to approximately a 400-nm transit to their first tanker and the operating area, generally taking between an hour and an hour and a half. Due to this transit time and the nature of carrier cyclic operations, a common practice is to launch spare aircraft that are appropriately configured and armed, with a crew that is briefed and prepared to fulfill the mission of the primary aircraft should it not be mission capable. This is typically done at a ratio of one spare for every section (two aircraft), and that spare aircraft is airborne for one full cycle (approximately one and a half hours). Each one of these sections

typically fulfills two vulnerability periods (vul) of one hour each in support of JFLCC ASRs, accounting for between 20-25 percent of the daily coverage.³ Each asset from the carrier requires an in-flight refueling prior to the first vul, one in-between, and one at the end to enable the transit back to the carrier. Each of these in-flight refuelings involves between 8,000 and 12,000 pounds of jet fuel. These sorties vary in length from five to seven and a half hours in order to cover the two one-hour vul windows.⁴ Since the carrier must constantly adjust positioning due to constraints placed on it by sea room for flight operations, weather, traffic, possible threats and support of JFMCC missions, the allotted transit times for these sorties must be an estimate. Because of this long and ever-changing transit distance and other factors such as wind, enroute weather, and launch cycle length, aircraft are often either unable to make the assigned tanker or vul times, or require more than their apportioned fuel to make up for the increased speed to make up the time. Additionally, the aircrew must take these elements into account for the return to the carrier and may be required to leave their last vul time early in order to make their landing cycle time.

Most recent operations provide an excellent example of the demands being placed on a CSG and the flexibility and efficiency gained by the use of an expeditionary element of air assets. During the 2006 deployment to the Persian Gulf region, the Enterprise Carrier Strike Group and Carrier Air Wing One (CVW-1) were tasked to support operations in OIF and OEF simultaneously.⁵ In order to do this, an expeditionary element of the Air Wing was formed and deployed to Al Asad airfield in support of OIF missions from September 2006 to October 2006.⁶ The deployment of this element to an established airfield ashore allowed the carrier to reposition to better support OEF missions. In addition to these heavy commitments, the CSG was still able to support the JFMCC tasking in both the Gulf of Oman and the Arabian Gulf.⁷ With only nine strike-fighter aircraft and 18 aircrew⁸, this detachment was able to provide an average of 10 to 14 sorties per day in support of OIF.⁹ At the same time, the remaining assets on the carrier were able to simultaneously support 14-16 sorties per day in OEF, support the JFMCC¹⁰, and maintain essential defense of the carrier.

In order to accomplish this expeditionary deployment into Al Asad, CVW-1 personnel had no established doctrine or practice to reference. Instead they took advantage of the expeditionary capabilities of the attached Marine Corps F/A-18 squadron. This squadron was organized, trained, and equipped to perform this function, but was attached to CVW-1 as part of the Tactical Aircraft (TACAIR) Integration Plan.¹¹ Utilizing a large element of the Marine maintenance department, the detachment was organized using maintenance expertise, equipment, aircraft and aircrew from across the airwing squadrons, including an element from the carrier's Aviation Intermediate Maintenance Detachment (AIMD).¹² The existing infrastructure at Al Asad airfield in Iraq was used to provide the majority of the requirements for the detachment personnel to live and work there, including the existing logistics support chain. This chain was already in place due to the presence of Air Force and Marine Corps squadrons operating there, but was supplemented by utilization of the C-2 Greyhound (COD) into a common supply point or the S-3 Viking directly into the airfield.¹³

The value of placing Navy air assets close to the fight is not a new concept, nor is the practice of placing normally carrier-based assets ashore to support the JFACC. Marine Corps and Navy squadrons have been fulfilling the need for F/A-18 and EA-6B tactical air support in OIF and OEF since 2003 as part of the Unit Deployment Program (UDP). F/A-18 squadrons regularly deploy to Al Asad with 12 aircraft and are able to maintain an average of

12 to 16 sorties per day that cover an 18-hour segment of the day. Additionally, the close proximity allows these assets to cover alerts, reducing the need for airborne aircraft to fulfill some ASR requirements.¹⁴ When optempo and readiness issues created gaps in EA-6B UDP deployments, carrier-based Prowler squadrons have deployed in their stead.¹⁵ Carrier-based SH-60 squadrons have regularly deployed an element into Kuwait to supply a much needed Combat Search and Rescue (CSAR) capability and have fulfilled ASR requirements in southern Iraq that would otherwise be impractical from the carrier.¹⁶ One factor common to all is that these detachments were ad hoc organizations to fill requirements with no established guiding doctrine on how to execute the deployments and achieve success.

The next question that should be addressed to gain perspective is that of doctrine and how it guides the use of assets. Joint Doctrine states that a JFC will normally designate a JFACC whose purpose is to "maximize operational effectiveness" and who, "synchronizes and integrates the actions of assigned, attached, and supporting air capabilities/forces in time, space and purpose." It also states that, "The JFACC must exploit the unique characteristics of air capabilities/forces made available for tasking to achieve assigned objectives as rapidly and as effectively as possible."¹⁷ With the CSG's assignment to a Joint Task Force (JTF), the assets and capabilities which it brings to the fight are provided to support the JFACC and JFMCC, and the balance of the support between them is determined by the JFC. With this doctrinal guidance taken into account, Naval Doctrine provides direction on how best to use naval air assets to support the JFC through multiple publications. Admiral Vern Clark (then Chief of Naval Operations) provided his overriding guidance in *Sea Power 21: Projecting Decisive Joint Capabilities* when he stated that the "Navy must expand its striking power…and develop transformational ways of fulfilling our enduring mission of…power

projection...and forward presence" and "When we cannot achieve operational objectives from over the horizon, our Navy-Marine Corps team moves ashore."¹⁸ Current Navy doctrine clearly states, "There may be occasions when some of the CVW aircraft operate from a forward operating base."¹⁹ Perhaps the guidance is most definitively stated in the *Navy* Transformation Roadmap: Power and Access from the Sea when it articulates that, "Sea Strike will also bring fully integrated naval aviation force packages that include Marine squadrons embarked on carriers and amphibious ships, and Navy squadrons operating from expeditionary shore bases. This integration will provide even more responsive and expeditionary forces, while achieving greater effectiveness and efficiencies. It will disperse sustainable naval combined-arms power far more broadly than today, providing joint combatant commanders with greatly increased operational flexibility to deliver lethal and non-lethal effects."²⁰ While all of these documents point the Navy toward providing this capability, there is no doctrinal guidance for the CSG on how to deploy these units and integrate them into the infrastructure of a deployed base. Most importantly, the units which will perform this tasking are not organized, trained, or equipped to do so.

Conclusions

Armed with the information on how the Navy currently supports the JFC from the carrier, the limitations which that method presents, the demonstration of an expeditionary element's capabilities, and the doctrinal guidance that both the joint and Navy leadership has provided, it is perhaps time to assess if this is the best way to do business. While there is no doubt that the CSG can support the assigned tasks solely from the carrier, it is also evident that the constraints placed upon the JFACC to use of those carrier-based assets create large

inefficiencies. The biggest driving factor in the JFACC's ability to use carrier air assets is airborne fuel. The 16,000 to 20,000 pounds of jet fuel used by each aircraft merely to transit from the carrier would equate to between two and three hours of additional on station time for those aircraft if they were forward deployed. With this fuel the aircraft could effectively support an additional two standard vul periods in the same amount of flight time. Airborne fuel often becomes limited due to tanker maintenance issues, increased temperatures that reduce how much fuel the tanker can take off with, or increased fuel requirements due to active support of troops in contact. When this reduction in available fuel occurs, the first sorties that the JFACC will eliminate are carrier-based, because they get more on station support for the same amount of gas from forward based aircraft.²¹ In addition to this overarching advantage, forward deployment would bring other advantages to the JFACC. The element could support ASRs filled by assets in an alert status and would have a longer and more flexible window of support. If required, high demand Forward Air Controller (Airborne) (FAC(A)) crews could be placed closer to the fight and thus not be limited by crew day, resulting in more on-station time. Without carrier recovery limitations, aircraft could now carry more weapons and have the ability to service more targets, or designated mean points of impacts (DMPIs). Overall, the forward basing of Navy tactical aircraft provide for a more efficient use of assets by the JFACC and JFC.

The advantages of forward deploying these assets are not limited to the JFACC. For the JFMCC, once the carrier is not tied to conducting flight operations to service the JFACC's commitments to the JFLCC, it can then be better positioned to support maritime or other tasking. This freedom of maneuver also better facilitates the CSG's ability to counter emerging threats and manage available sea space. The open deck space made available by the forward deployed assets can be used to increase the number of aircraft on the flight deck to support this tasking, effectively increasing the overall support capability of the airwing. Additionally, the period in which flight operations are performed by the carrier are no longer tied to the JFACC's requirements and can be shifted to support this JFMCC tasking.

While the focus of this paper is primarily on how the CSG can best support the JFC and JFACC in real-time operations, the long-term impacts on the sustainability of these types of operations must be addressed from an asset stewardship aspect. The Navy and Marine Corps are currently attempting to manage a rapidly aging Hornet fleet through the Department of the Navy Tactical Air Integration plan as the Joint Strike Fighter program continues to experience delays. This plan uses Capabilities Based Scheduling (CBS) to appropriately source Navy and Marine Corps tactical air assets to meet operational requirements.²² Although this plan uses Marine Corps squadrons to supplement air wings and Navy squadrons to fill UDP needs, the end result is that the Department of the Navy is attempting to fill the need for 40 strike fighter squadrons (ten air wings) with only 35 squadrons and still meet the UDP requirement.²³ When combined with recent high tempo operations these aircraft are getting used at a rate faster than expected. With this in mind it behooves the Navy to get the most out of every flight hour. It would be beyond the scope of this paper to discuss the specifics of aircraft life in terms of hours, catapults and traps, but the savings of aircraft life-cycle overhead spent to support operations can be seen in how operations are currently performed. Initially it would appear that the forward basing of aircraft would yield a 35-40 percent savings in total flight time by eliminating the hour to hour and fifteen minute transit to and from the carrier for a standard flight supporting 2 vul periods. In fact, when the hour and a half of flight time of the required airborne spares for

carrier-based operations is taken into account, the savings reach 50-55 percent. This decrease in overall flight time would reduce the frequency of phase maintenance, maintenance man-hours, and parts usage, effectively reducing real-time and future operating costs. For the JFC these savings most directly affect the amount of fuel that must be provided as overhead to support ASRs. This reduced requirement could either reduce the tanker requirement for the JFACC or allow that fuel to be used to increase on station time, thereby covering more ASRs with same amount of fuel and less total aircraft. Indirectly these savings allow the Navy, as a force provider, to more effectively support the JFC in the long term by extending the life of the assets.

An analysis of the best way to achieve assigned tasks would not be complete without also addressing the possible shortcomings and/or other options available. To say that this proposed capability could be achieved without encountering some hurdles, or that there is no other way to achieve the assigned tasks, would be optimistic and myopic. With the majority of the maintenance and supply infrastructure resident on the carrier, there are significant challenges to operating naval assets away from them for extended periods of time. Without a doubt there are carrier landing currency issues for aircrew. Also, the CSG's most flexible and lethal asset is the embarked airwing. Taking a portion of that force away could limit the CSG's effectiveness to react to emerging tasking. And lastly, since the Navy and Marine Corps already have an expeditionary capability in the UDP squadrons, should those assets not be used to fill this requirement? Although these are all valid arguments, the first two can be overcome through proper organization and planning. The last issue has limitations that make the use of UDP squadrons for long-term sustained operations challenging for the future and a concomitant effect that reduces those squadron's ability to maintain the core competencies incumbent on carrier aviation.

The inherent issues with operating carrier aircraft away from the 'airfield' and infrastructure that was designed to sustain them are evident, but they can be overcome. First, it must be assumed that this expeditionary element is designed to be deployed to an established airfield where basic elements of airfield control, food, lodging, and force protection, and a supply line are already established, as is demonstrated by Al Asad in Iraq. By utilizing a relatively short duration period that the aircraft and aircrew are rotated from the shore base to the carrier, say 20 days, multiple obstacles can be overcome. This rotation would be transparent to the support of the Air Tasking Order (ATO), other than the fact that the aircraft would originate at one location and return to another. The most instrumental aspect to this rotation would be that it would reduce the maintenance detachment size and the required supply support ashore by keeping all phase maintenance aspects on the carrier. The second advantage to this approach is that by rotating three to four aircraft every 20 days, the same number of aircrew would also be rotated. This would not only maintain aircrew currency, but it would also increase across the airwing the level of proficiency in the theater of operations.

There are many aspects that must be taken into account when analyzing the concept of taking a portion of the CSG's airwing away from it. There is no doubt that different tasking demands, geographic aspects and possible threats in the JOA must be taken into account before this capability could be used, and it is up to the JFC to decide if an expeditionary detachment is an appropriate allocation of the assets. The question that must be answered is what limitations are placed on the JFC and the nation's strategic leadership to quickly reassign a CSG, with all of its capabilities, to respond to emerging tasking. The correct answer should be none. To achieve this freedom of action, the detachment of assets would have to be made with a requirement to maintain a capability to return to the carrier in a pre-determined period of time. For example, that requirement could be that the aircraft are to be maintained at a readiness level that permits at least 90% to return to the carrier in less than 12 hours. This would preserve the CSG's ability to rapidly react to re-tasking with a fully capable airwing. The first part of this problem would be solved through the regular rotation of assets. This rotation would keep the majority of maintenance aboard the ship, thereby keeping the number of non-mission capable aircraft to a minimum. An additional facilitating practice could be to keep the aircraft configured to recover onboard the carrier (carrierized) at all times in order to eliminate the preparation time should the aircraft be recalled to the carrier. This would also provide the capability to divert to the ship any aircraft with a malfunction that would be better repaired there. Through the use of established theater logistics, the remaining personnel and equipment would be transported to an airfield where the COD could return them to the carrier. By having an organized and logical plan to quickly re-aggregate the carrier's assets, the risks incurred by temporarily dividing them can be mitigated.

If it is assumed that expeditionary tactical assets are the most efficient method to support sustained operations when an appropriate airfield is available, then it is logical to ask whether the Navy and Marine Corps UDP method is a better one than deploying assets from the carrier. The TACAIR Integration plan and the CBS have effectively pooled all Navy and Marine Corps strike aircraft to meet the demanding operational schedule for carriers and UDP.²⁴ Under these programs Navy squadrons are transferred out of their airwings and

training schedules to fill UDP requirements, while Marine Corps squadrons are assigned to carrier based airwings. The Navy squadrons must be re-organized, trained and equipped to meet the Marine Corps readiness requirements for the UDP. To date, two F/A-18 squadrons have trained and deployed in this role since 2005. During the UDP training cycle both of these squadrons experienced difficulties in meeting the readiness metrics required by the Marine Corps due to a lack of experience with the UDP training program.²⁵ Both of these squadrons have been scheduled to operate as UDP assets for two deployment cycles. During that time the squadron's requirements to maintain proficiency in carrier qualification, mine warfare and anti-submarine warfare are removed.²⁶ Once directed to return to an airwing and the standard Fleet Readiness Training Plan (FRTP) schedule, these squadrons must reacquire these essential core competencies. This is easier said than done when minimal experience or currency in these mission areas is resident within the squadron after such a long interruption in their practice. The Marine Corps has recognized this challenge and as a practice has had four squadrons designated as carrier squadrons that are assigned to airwings and do not fulfill UDP requirements. As both services retire old aircraft and await delivery of the Joint Strike Fighter (JSF), the requirements of the current high optempo versus the available resources are making this scheduling of assets problematic. The current CBS has no other Navy squadron designated to fill the UDP role after the current squadron completes its commitment, and the Marine Corps is forecasting that it will have to use a squadron traditionally assigned to carrier operations to meet the UDP requirements past 2009.²⁷ This leaves no room for additional UDP squadrons to fill tasking that carrier based aircraft are currently performing in OIF and OEF. Although this is a current issue, it is a reasonable

indicator of the effects of long term Stability, Security, Transition, and Reconstruction (SSTR) operations on the limited resources available.

Recommendations

Although previous instances where assets have been deployed from the carrier ashore to better meet the JFC's needs have been successful, it has primarily been due to the initiative, creativity and flexibility of the personnel tasked. There currently is no guiding doctrine, training or method in place to achieve success. For the JFC to make an informed decision as to whether or not this is the best employment of assets in the Joint Operations Area (JOA) there is no stated capabilities or listing of what is required to enable it. In order to ensure that the assets employed are properly organized, trained and equipped to succeed in their mission, a formalized doctrine for preparation and employment must be established. The capability should be included and published as a core capability of the CSG available to the JFC upon assignment.

For this capability to be effective, the doctrine guiding its use must be detailed and feasible. The current guidance for UDP squadron preparation and lessons learned from previous units utilized in this capacity should be referenced to establish a training program that can be integrated into the current FRTP. Specific items such as nuclear / biological / chemical (NBC), weapons, and battleskills training are specified for Navy squadron personnel in the UDP and could be easily incorporated.²⁸ Readiness metrics can be adopted from the UDP evaluation cycle and incorporated into the standard Navy readiness matrix. An evaluation is required to determine what the minimum and maximum size of the detachment would be in order to be effective, and still provide the carrier enough on-board assets to fulfill its remaining missions. The expeditionary force would be tailorable in size

and function. It could be composed solely of strike-fighter aircraft, or have assets and functions that include Electronic Attack, Tactical Reconnaissance and CSAR. From this estimate the composition of assets, personnel and equipment would be determined. Guidance and funding could then be provided to airwing commanders to properly organize and equip specified personnel during the FRTP, and identify specific assets and equipment for the expeditionary force, should it be called upon. For example, one or two squadron Executive Officers (XO), an appropriate maintenance team from across the airwing squadrons, and possibly even specific airframes and support equipment would be identified, trained and equipped early in the FRTP. A framework for essential standard operating procedures (SOP) could be designed and provided to facilitate the intent for operations, currency and maintenance. Once this framework for the element is available, the infrastructure and logistic support aspects required to enable a detachment of this type to a facility can be established to aid in planning and integration. With the introduction of the Growler for the electronic attack mission and the JSF, commonality and integration issues will simplify these logistical requirements. The advantage of this formalization to the CSG commander is that his personnel and equipment are better prepared to deploy, operate and return successfully.

Not only does this formalization serve the warfighters to achieve success, but it provides the JFC with the known capabilities, limitations and support requirements of a consistently capable asset associated with the CSG. With this information the JFC can make a better-informed decision that can accurately evaluate the advantages, risks and availability of resources associated with using this capability. Armed with this information, the JFC's staff can more readily identify an appropriate airfield from which to base the force, ensure the required infrastructure is in place, and coordinate essential logistical support. Additionally, this information can be applied to facilitate future operations. From a joint planning perspective, the products of this formalization will allow future operations to incorporate the capabilities and requirements associated into the planning.

Final Remarks

As a force provider, the Navy should endeavor to provide the Combatant Commanders and Joint Force Commanders with the most capable and flexible force possible to achieve their objectives. There is no doubt that the Carrier Strike Group provides an incredibly potent and sustainable force from the sea, of which the most flexible asset is the airwing. Recent operations have demonstrated that supporting over-land operations for sustained duration from the carrier comes at a large overhead cost to the JFC. Numerous Navy and Marine Corps units have demonstrated the increased capabilities and efficiencies that a small expeditionary force close to the supported elements can provide. Recent published guidance from both joint and Navy leadership recognizes the value of expeditionary air assets and directs that the capability be developed. However, no formal doctrine exists to facilitate the organization, training, and equipping of such a capability.

In order to provide the most effective, efficient and flexible force, the Navy should formally develop the ability to deploy an expeditionary element of the airwing as a core capability of the CSG. The formalization of this capability is essential to providing the JFC the required information to best employ the assigned forces. It is also essential to the warfighter to ensure the best opportunity for success, by providing the appropriate training, equipment and procedures to accomplish the mission. It would provide the JFC with a tailorable force that can support sustained operations from a FOB with minimal overhead. The formalization minimizes the risk of dividing the carrier's resident forces by establishing a known method and time frame to re-aggregate them if required for re-tasking. Although the concept of placing naval air assets ashore from the carrier seems anathema to the Navy way of doing business, it is a capability that is currently practiced but not formalized or held to a standard.

The formal pursuit of this capability in no way relegates the carrier to a delivery vehicle of assets. It is merely one of many capabilities that the CSG brings to support the JFC when the situation presents itself and the JFC deems its use appropriate. In fact, the development of this capability maintains the critical core competencies that are lost in the commitment of Navy squadrons to the UDP schedule that are currently being used to provide a similar capability. Additionally, it allows Navy commanders to meet theater support requirements during sustainment operations while being better stewards of their assets by minimizing flight time overhead.

As recent operations in OIF and OEF demonstrate, the United States military must be prepared to practice long term support for SSTR operations. TACAIR for that mission is essential and the Navy must endeavor to provide the most effective and efficient support for that mission. An expeditionary element of the airwing that can be placed ashore provides that capability while allowing the rest of the airwing and the CSG to support other tasking. In short, it is a capability that is justified and essential for future success.

Notes

- ¹ Central Command, Air Force Component, Combined Air Operations Center,
- "Master Air Attack Plan (MAAP)," 2003-2007, http://caoc.rela.centaf.af.rel.smil.mil/,
- (accessed February 2007 through April 2007).

⁹ Central Command, Air Force Component, Combined Air Operations Center,

- http://caoc.rela.centaf.af.rel.smil.mil/, (accessed February 2007 through April 2007).
- ¹⁰ Central Command, Air Force Component, Combined Air Operations Center, "Air Tasking Order (ATO), 2003 to 2007.

¹² Craig Bangor, LCDR, USN, CVW-1 staff, e-mail message to author 10 April 2007.

¹³ Operations Officer, VMFA-251, to Commanding Officer, VMFA-251, After action report, 5 February 2007, 8-21.

Craig Bangor, LCDR, USN, CVW-1 staff, e-mail message to author 10 April 2007.

¹⁴ Central Command, Air Force Component, Combined Air Operations Center,

¹⁵ Central Command, Air Force Component, Combined Air Operations Center,

"Master Air Attack Plan (MAAP)," 2003-2007, <u>http://caoc.rela.centaf.af.rel.smil.mil/</u> (accessed February 2007 through April 2007).

Jerry Holden, CDR, USN, NALE Director, Al Udeid CAOC, e-mail message 8 April 2007. ¹⁶ Central Command, Air Force Component, Combined Air Operations Center,

¹⁷ Chairman, U.S. Joint Chiefs of Staff, Command and Control for Joint Air Operations, Joint Publications (JP) 3-30 (Washington, DC: CJCS, 5 June 2003), vii.

² ibid

³ Jerry Holden, CDR, USN, NALE Director, Al Udeid CAOC, e-mail message 14 April 2007.

⁴ Central Command, Air Force Component, Combined Air Operations Center,

[&]quot;Air Tasking Order (ATO)," 2005, <u>http://caoc.rela.centaf.af.rel.smil.mil/</u>, (accessed February 2007 through April 2007).

⁵ Craig Bangor, LCDR, USN, CVW-1 staff, e-mail message to author 10 April 2007. ⁶ Commanding Officer, VMFA-251 to VMFA-251, Letter of Instruction (LOI) for

Deployment in Support of Operation Iraqi Freedom, Al Asad AB Iraq, 28 August 2006, 1.

⁷ Central Command, Air Force Component, Combined Air Operations Center,

[&]quot;Air Tasking Order (ATO), September 2006 to October 2006.

http://caoc.rela.centaf.af.rel.smil.mil/, (accessed February 2007 through April 2007).

⁸ Commanding Officer, VMFA-251, LOI, 28 August 2006, 3.

[&]quot;Master Air Attack Plan (MAAP)," September 2006-October 2006,

¹¹ Commander, Naval Air Forces to Deputy Commandant for Aviation, United States Marine Corps, Memorandum of Agreement, 23 November 2005.

[&]quot;Master Air Attack Plan (MAAP)," 2003-2007, <u>http://caoc.rela.centaf.af.rel.smil.mil/</u> (accessed February 2007 through April 2007).

[&]quot;Master Air Attack Plan (MAAP)," 2003-2007, <u>http://caoc.rela.centaf.af.rel.smil.mil/</u> (accessed February 2007 through April 2007).

CDR Scott R. Bischoff (former HS-8 Commanding Officer), interviewed by author, 3 April 2007.

¹⁸ Admiral Vern Clark, "Sea Power 21: Projecting Decisive Joint Capabilities," Proceedings, October 2002, 33-41.

¹⁹ Chief of Naval Operations, Navy Strike and Fire Support, Naval Warfare Publications (NWP) 3-09.1, (Washington, DC: Headquarters Department of the Navy, July 2005), 3-2.

²⁰ U.S. Navy. Office of the Chief of Naval Operations, Naval Transformational Roadmap,

"Power and Access...From the Sea", Washington, DC: Department of the Navy 2004, 9-10. ²¹ Jerry Holden, CDR, USN, NALE Director, Al Udeid CAOC, e-mail message 8 April 2007.

²² Commander, Naval Air Forces, Memorandum of Agreement, 23 November 2005,1,2.

Michael Spears, CAPT, USMC, e-mail message to author, 26 March 2007.

²³ Michael Spears, CAPT, USMC, e-mail message to author, 26 March 2007.

²⁴ Commander, Naval Air Forces, Memorandum of Agreement, 23 November 2005.

²⁵ Michael Spears, CAPT, USMC, e-mail message to author, 26 March 2007.

²⁶ Commander, Naval Air Forces, Memorandum of Agreement, 23 November 2005, Enclosure (2).

²⁷ Michael Spears, CAPT, USMC, e-mail message to author, 26 March 2007.

²⁸ Commander, Naval Air Forces, Memorandum of Agreement, 23 November 2005, Enclosure (2).

Selected Bibliography

- U.S. Office of the Chairman of the Joint Chiefs of Staff. Command and Control for Joint Air Operations. Joint Publication (JP) 3-30. Washington, DC: CJCS, 5 June 2003.
- U.S. Navy. Office of the Chief of Naval Operations. Navy Strike and Fire Support. Naval Warfare Publication (NWP) 3-09.1. Washington, DC: Headquarters Department of the Navy, July 2005.

U.S. Office of the Chairman of the Joint Chiefs of Staff. Command and Control for Joint Maritime Operations. Joint Publication (JP) 3-32. Washington, DC: CJCS, 8 August 2006.

- U.S. Navy. Office of the Chief of Naval Operations. Joint Force Maritime Component Commander (JFMCC) Planning and Execution. Naval Warfare Development Command (NWDC) TACMEMO 3-32-03. Washington, DC: Department of the Navy, June 2004.
- U.S. Navy. Office of the Chief of Naval Operations. Naval Operations Concept 2006. Washington, DC: Department of the Navy 2006.

U.S. Navy. Office of the Chief of Naval Operations. Naval Transformational Roadmap, "Power and Access...From the Sea". Washington, DC: Department of the Navy 2004.

- Clark, Vern, Admiral, USN, "Sea Power 21: Projecting Decisive Joint Capabilities." *Proceedings*. October 2002.
- Commander, Naval Air Forces. To Deputy Commandant for Aviation, United States Marine Corps, Memorandum of Agreement, 23 November 2005.
- Commanding Officer, VMFA-251. To VMFA-251, Letter of Instruction for Deployment in Support of Operation Iraqi Freedom, Al Asad AB Iraq. 28 August 2006.
- Operations Officer, VMFA-251. To Commanding Officer, VMFA-251. After action report, 5 February 2007.
- Clatterbuck, Benjamin R. *Expeditionary Air Power in the Post Cold War Era*. United States Marine Corps Command and Staff College Paper. Marine Corps Combat Development Command, Quantico, VA, 2001.
- Lamberth, Benjamin S. American Carrier Air Power at the Dawn of the 21st Century. RAND Report MG-404. RAND Corporation, Santa Monica, CA, 2005.

- Gordon, John. Carrier Capabilities, Exploring New Combat and Non-Combat Roles and Missions for the U.S. Carrier Fleet. RAND Report MG-448. RAND Corporation, Santa Monica, CA, 2006.
- Central Command, Air Force Component, Combined Air Operations Center. "Air Tasking Order (ATO)," 2003-2007. <u>http://caoc.rela.centaf.af.rel.smil.mil/</u>. (accessed February 2007 through April 2007).
- Central Command, Air Force Component, Combined Air Operations Center. "Master Air Attack Plan (MAAP)," 2003-2007. <u>http://caoc.rela.centaf.af.rel.smil.mil/</u>. (accessed February 2007 through April 2007).