Creating a More Efficient DASC Crew

Subject Area Aviation

EWS 2006

Creating a More Efficient DASC Crew
Submitted by Captain Richard LaViolette

to

Major Nussberger, CG 13
February 7, 2006

maintaining the data needed, and coincluding suggestions for reducing	ection of information is estimated to ompleting and reviewing the collect this burden, to Washington Headqu ald be aware that notwithstanding ar MB control number.	ion of information. Send comment arters Services, Directorate for Info	s regarding this burden estimate ormation Operations and Reports	or any other aspect of the s, 1215 Jefferson Davis	his collection of information, Highway, Suite 1204, Arlington
1. REPORT DATE 07 FEB 2006 2. REPORT TYPE			3. DATES COVERED 00-00-2006 to 00-00-2006		
4. TITLE AND SUBTITLE				5a. CONTRACT NUMBER	
Creating a More Efficient DASC Crew				5b. GRANT NUMBER	
				5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S)				5d. PROJECT NUMBER	
				5e. TASK NUMBER	
				5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) United States Marine Corps, Command and Staff College, Marine Corps Combat Development Command, Marine Corps University, 2076 South Street, Quantico, VA, 22134-5068				8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)				10. SPONSOR/MONITOR'S ACRONYM(S)	
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION/AVAIL Approved for publ	ABILITY STATEMENT	on unlimited			
13. SUPPLEMENTARY NO	TES				
14. ABSTRACT					
15. SUBJECT TERMS					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON
a. REPORT unclassified	b. ABSTRACT unclassified	c. THIS PAGE unclassified	Same as Report (SAR)	13	

Report Documentation Page

Form Approved OMB No. 0704-0188

Introduction

The United States Marine Corps' Direct Air Support Center (DASC) is the world's most responsive aviation command and control agency for immediate requests. Currently, along with the rest of the Marine Air Command and Control System (MACCS), the DASC is in the process of transforming into the Common Aviation Command and Control System (CAC2S). When CAC2S is implemented, the DASC will become the Air Support Node (ASN). Because the structure of the ASN is still being finalized, now is the time to optimize both the current "legacy DASC's" and the ASN's efficiency by improving the crew structure. In order to make significant strides in the efficiency of both the current DASC and future ASN, Second Lieutenant Tactical Air Director (TAD) and Helicopter Director (HD) positions should be manned by enlisted Marines and a detachment operations officer billet should be created for Second Lieutenants.

Current Situation

In order to provide context for the proposed more efficient crew structure, the legacy DASC's current situation, including the crew structure and officer/enlisted relationship, must be understood. As seen in Figure 1, the current crew structure is complicated, and its efficiency is completely dependent on the professionalism of the individual Marines rather than a rank based chain of command.

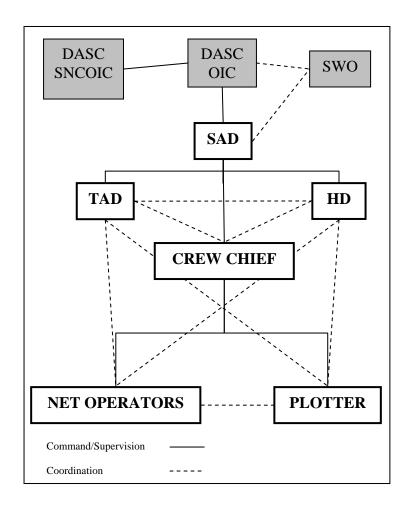


Figure 1. Notional DASC Organization.¹

The DASC crew is composed of the SAD position and those below it in Figure 1. The SAD is "the commissioned officer who is the most qualified DASC watch stander . . . responsible for the functioning of the DASC crew on watch." The crew chief is "normally a staff noncommissioned officer or noncommissioned officer and the most qualified enlisted watch stander," who is

2

¹ United States Marine Corps, *Direct Air Support Center Handbook* (Washington D.C.: Department of the Navy, Headquarters, U.S. Marine Corps, 2001), 1-4.

² United States Marine Corps, *Direct Air Support Center Handbook*, 1-4.

responsible for, "coordinating DASC-internal information flow (and) supervising the enlisted members of the crew."³

"Air support net operators are usually enlisted personnel who operate the various radio nets within the DASC." Net operator positions include the Fire Support Coordination net, Tactical Air Command (TAC) net, and Tactical Air Request/Helicopter Request (TAR/HR) net. Efficient communication between net operators is essential for Marine Air Ground Task Force (MAGTF) air and ground integration. For example, the amount of time it takes to launch a strip alert aircraft is determined by how long it takes for the request to flow from the TAR/HR net operator to the TAC net operator. As a Result, poor interpersonal communication reduces the efficiency of the DASC, and, ultimately, the MAGTF.

Air support plotters facilitate the procedural control of aircraft by plotting conventional and/or electronic maps with fire support coordination measures and airspace control measures. They "are usually enlisted personnel who, under the supervision of the SAD and crew chief, maintain the situation displays within the DASC." Because a lack of communication with any other position lessens the entire crew's situational awareness, the efficiency of DASC operations is dependent on the

_

³ United States Marine Corps, *Direct Air Support Center Handbook*, 1-6.

⁴ United States Marine Corps, *Direct Air Support Center Handbook*, 1-8.

⁵ United States Marine Corps, *Direct Air Support Center Handbook*, 1-9.

plotters' communication with the other members of the crew.

Although the Direct Air Support Center Handbook does not delineate manning of the TAD or HD (controller) positions, current practice is that both are manned by Second Lieutenants. TAD and HD communications with the SAD and crew chief are what complicate the crew structure. As part of the crew, the controllers have to follow the directions of the crew chief, but there are times when they must bypass the crew chief and directly consult the SAD. The two routes of information flow unnecessarily complicate crew communication.

Because the expedient processing of requests relies on personal communication among the crew members, the efficiency of the crew is completely dependent on the professionalism of the individual Marines. In routine practice, the Second Lieutenant controllers are working beside a Private First Class and receiving directions from a Corporal. Unfortunately, the assignment of officers and junior enlisted Marines (E-3 and below) to the same crew often results in self induced friction that reduces crew efficiency and requires exceptional professionalism. Crew efficiency is reduced because, regardless of one's professionalism, basic training and military environment inhibit the free flow of inter-personal communication. Marines can put their rank aside in order to

accomplish the mission, but requiring them to do so on a regular basis is a signal that the current structure must be changed.

The traditional officer/enlisted relationship was described by General Lejeune as that between a teacher and a scholar. In the DASC community, however, the officer is often the scholar and the enlisted Marine is the teacher. Unfortunately, motivated Second Lieutenants prepared to lead Marines end up as glorified radio operators under the direction of the very Marines they should be leading. The only reason the non-traditional DASC relationship has worked so far is due to the professionalism of the enlisted DASC crew members, who understand that the relationship is non-traditional and make a concerted effort to act appropriately and police their own accordingly.

The effects of the non-traditional relationship can be seen in garrison as well. With so many officers on a crew, the DASC's parent unit, the Marine Air Support Squadron (MASS), is staffed with a disproportionate number of junior officers. According to the *Training and Readiness Manual* (T&R Manual), the officer/enlisted ratio for a MASS is 30 to 69, or 2.3 Marines

⁶ Lejeune, John, A. *Marine Corps Manual* (with changes 1 and 2 and message 122003Z Aug 87, ALMAR 178/87) (Washington D.C.: Department of the Navy, Headquarters, U.S. Marine Corps, 1980) para 1100, pp 1-21, quoted in United States Marine Corps, *FMFM 1-0 Leading Marines* (Washington D.C.: Department of the Navy, Headquarters, U.S. Marine Corps, 1995), 97.

per company grade officer. Due to the current crew structure, however, an officer has less leadership responsibility than a Lance Corporal fireteam leader. The lack of leadership responsibility affects controllers' morale, which is reflected in both their performance and their crew's efficiency.

More Efficient Crew

A more efficient crew for the current "legacy DASC" that can start the transition to the ASN would have enlisted controllers and create a detachment operations officer billet for Second Lieutenants. Having enlisted controllers would improve efficiency because they have more experience, there would be one route for information flow, and traditional officer/enlisted relationship. Second Lieutenants would fill a detachment operations officer billet that would prepare them for being a Senior Air Director by learning all aspects of the DASC or ASN.

Ideally, enlisted controllers should be Sergeants or Staff Sergeants with years of experience with DASC operations. They will have spent time in the field and earned all of their net operator qualifications. Performing as TAD and HD are both training events in the current T&R manual and are included as

_

⁷ United States Marine Corps, *Aviation Training and Readiness Manual, Volume V, Marine Air Command and Control System (MACCS)* (Washington D.C.: Department of the Navy, Headquarters, U.S. Marine Corps, 2005), 1-4.

recommended skill training for Sergeants⁸ and Staff Sergeants⁹ in the 7242 MOS Road Map.¹⁰ Their situational awareness would be greater than that of a Second Lieutenant just out of school with no DASC experience because they would already understand the intricacies of DASC operations and how to control aircraft.

Additionally, because they would have earned all of their net operator qualifications, they will understand information flow into, within, and out of the DASC. This understanding of how the aircraft they control are going to be used by the MAGTF better than a Second Lieutenant with no time in an operating DASC.

Having enlisted controllers would also make the DASC more efficient because it would create a rank based chain of command with one route for information flow. Although the SAD is not in "command" of the DASC, the chain of command concept enables efficiency. Because he would outrank all of the crew members and be qualified on all of the crew positions, including the controller positions, the crew chief could better supervise the entire crew and be responsible for all information flowing to the SAD. Because crew members would be closer in rank, there would be an increase in information flow amongst the crew.

⁸ United States Marine Corps, Aviation Training and Readiness Manual, Volume V, Marine Air Command and Control System (MACCS), 2-31.

⁹ United States Marine Corps, *Road Map: The Road to Success for MOS 7242 Air Support Operations Operator* (Quantico, VA: Training and Education Command, 2005), 8.

¹⁰ United States Marine Corps, Road Map: The Road to Success for MOS 7242 Air Support Operations Operator, 9.

Additionally, junior Marines would not have to be concerned with properly addressing an officer in a fast paced stressful environment, and Lieutenants would not have to be concerned with getting too familiar with the Marines on their crew.

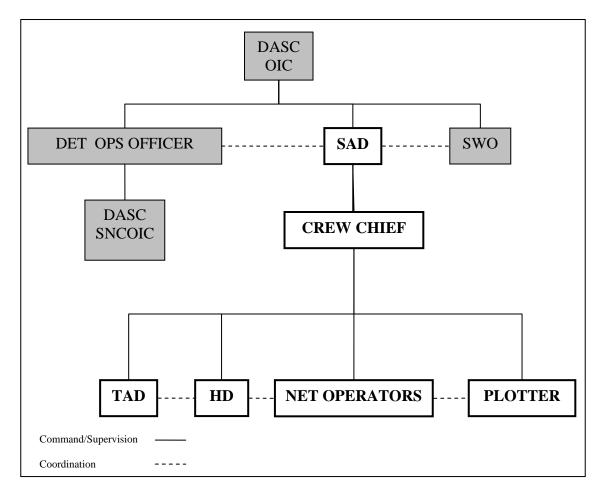


Figure 2. More Efficient Crew.

The proposed restructuring the crew would result in a more traditional officer/enlisted relationship. Having a traditional officer/enlisted relationship will result in higher morale and better performance for everyone involved because responsibility

will increase with rank and communication will flow smoothly among the ranks.

Create a Detachment Operations Officer billet

Employing Second Lieutenants as detachment operations officers instead of controllers would also increase the efficiency of the DASC. As a detachment operations officer preparing to be an SAD, a Lieutenant would conduct communications and logistical planning and fill additional billets such as convoy commander and camp commandant.

Communication planning would be an essential part of the newly created billet because the DASC relies on radio communication for procedural control of aircraft and processing air support requests. According to the handbook, "the primary rule for positioning the DASC is that the DASC must be located where it can communicate best to optimize its effectiveness."

In preparation for becoming an SAD, being a communication planner would educate the Lieutenant on DASC communication requirements and capabilities, as well as proper site selection. Additionally, having the detachment operations officer planning communications would make the crew more efficient because the SAD could devote more time to crew preparation.

Having a dedicated logistical planner will result in improved logistical support from organic assets. Because the

9

¹¹ United States Marine Corps, *Direct Air Support Center Handbook*, 4-24.

detachment operations officer can plan logistical support for future operations while the crew is conducting operations, the tempo will be increased by ensuring logistical support and giving more time for crew preparation. Because an SAD has to know what assets he has available, when they will run out, and how to get more, knowledge of DASC logistical requirements and the process of fulfilling them would also prepare the Lieutenant for being an SAD.

As an air support control officer, the Lieutenant would need some operational experience as well. As such, the detachment operations officer billet would also include some on the job SAD training in the DASC. Because the SAD training the detachment operations officer would have a thorough knowledge of how his crew is being supported by communication and logistics, crew efficiency would ultimately be improved. The detachment operations officer would experience first-hand whether or not his communication and logistical planning was sufficient and use that experience for future planning and conduct of operations.

Conclusion

The current DASC crew structure is effective, but it would be more efficient if it made crew changes that conformed to the traditional officer/enlisted relationship, which would result in improved information flow. Considering the current state of transformation from the DASC to the Air Support Node of CAC2S,

now is the ideal time to consider making changes to the crew structure. By modifying the crew structure and having experienced enlisted controllers and SADs who have served as detachment operations officers, DASC crews will be more efficient. As a result, there will be improved integration of air and ground elements of the MAGTF. 1,766 words.

Bibliography

- Lejeune, John, A. Marine Corps Manual (with changes 1 and 2 and message 122003Z Aug 87, ALMAR 178/87). Washington D.C.:

 Department of the Navy, Headquarters, U.S. Marine Corps, 1980. Quoted in United States Marine Corps, FMFM 1-0

 Leading Marines. Washington D.C.: Department of the Navy, Headquarters, U.S. Marine Corps, 1995.
- United States Marine Corps. Aviation Training and Readiness

 Manual, Volume V, Marine Air Command and Control System

 (MACCS). Washington D.C.: Department of the Navy,

 Headquarters, U.S. Marine Corps, 2005.
- --- Direct Air Support Center Handbook. Washington D.C.:

 Department of the Navy, Headquarters, U.S. Marine Corps,

 2001.
- --- Road Map: The Road to Success for MOS 7242 Air Support

 Operations Operator. Quantico, VA: Training and Education

 Command, 2005.