Training Air Traffic Controllers

Improving knowledge and proficiency

by MGySgt Romano E. Kidd

Throughout the Marine air traffic control (ATC) community's existence, there has been a symbiotic relationship between the air wing and the air stations. The air stations provide a training venue for the controllers, and the controllers allow the air stations to operate, utilizing the Marines within the ATC facilities. However, this relationship over time has caused the focus of Marine ATC to shift from a warfighting capability to a sustainment of air stations in the Marine Corps. Training and manpower requirements are based on air station facility requirements, with the expectation that the combat mission mirrors the air station structure and operating procedures. Controllers then enter an expeditionary environment trying to apply Federal Aviation Administration (FAA) rules and regulations as well as ATC facility standards to a fluid combat environment. This has caused problems between ATC agencies, the other agencies of the Marine air command and control system (MACCS), and the flying units. This became apparent during Operation IRAQI FREEDOM and most recently with Operation ENDURING FREEDOM in regard to the sharing of airspace with other agencies/units, both aviation and ground. Marine air traffic controllers are not proficient or knowledgeable in their role and responsibility in the MACCS or during combat operations.

The focus of training at air stations is to produce FAA qualifications, allow-

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Lives depend on his proficiency. *(Photo by LCpl Josue Aguirre.)*

ing the air stations to operate within the continental United States as part of the national airspace system. The major issue with the current training structure at the air station is the disparity in skill sets among controllers with the same skill designator (7252, 7253, 7254).[1] Under the current construct, air traffic controllers are trained at the air stations to be able to perform on particular operating positions at that specific geographical location. As a controller moves from location to location, he must become qualified again at the new air station. Each air station is different in its qualification requirements based on whether it is a jet base or helicopter base, or on the number of runways, size of airspace, or many other unique factors. However, some controllers cannot become qualified at their next duty stations, even though they have been designated as tower, arrival, or approach controllers at a prior location. The inability to become qualified at an air station requires the individual to have his MOS revoked and to be reassigned to another MOS because training requirements are based on supporting the facility's requirements and not the Operating Forces' needs. Changing skill designation requirements would significantly reduce revocation within the ATC MOS, as units could utilize controllers who are training and readiness core skill competent regardless of their ability to perform at a specific air station. The Marine Corps needs to stop creating geographically specific air traffic controllers qualified to work in the FAA and start making Marine air traffic controllers capable of deploying and operating in an expeditionary environment.

The most significant change that needs to occur within the ATC community is the defining of skill sets necessary to attain an MOS skill designation. Under the current system, the Marines are evaluated daily by a qualified on-the-job instructor who bases his recommendation for qualification on a purely subjective basis predicated by the requirements of that specific airfield. No checklist or standard is codified to determine when an individual controller attains a tower (7252), arrival (7253), or approach (7254) skill designation. Different air stations have different levels of volume and complexity of air traffic. Controllers at the different air stations have different levels of capabilities, but all receive the same skill designation when they become qualified on a particular operating position in that particular ATC facility. This creates a disparity in what a squadron, group, or wing commander may receive when he deploys in support of operations or exercises. Standardization of skill set requirements for the ATC community is a necessity, so that a controller who is qualified to perform tower operations at Marine Corps Air Facility Quantico has the same skill sets and capabilities as someone qualified at Marine Corps Air Station Yuma. These standards would be based on wartime mission requirements, not on FAA or air station requirements.

As simulation becomes more realistic and inexpensive, it must become a source of valuable training. Simulators need to be designed for current and future expeditionary ATC equipment that will allow personnel to maintain proficiency while in garrison and to prepare personnel for deployment. Simulators with core skill designed training syllabi would be utilized to standardize the training requirements for the different skill designations. The resultant combination of simulated and live traffic would be in keeping with what other aviation units do, and it has been proven to be effective in training. This would not preclude the qualification of personnel on operating positions at a specific air station; they would simply not receive a skill designation based on local requirements but on Marine Corps requirements. This would require a complete rewriting of the ATC training and readiness manual to create a training pipeline for combat crew position requirements. The MOS manual would also need to be changed to correlate

skill designation prerequisites with specific, quantifiable combat requirements that would eliminate the subjective and station-centric requirements currently in place.

Another significant change to the training process would be the designation of basic air traffic controllers upon completion of MOS school and immediate assignment to the Operating Forces. Currently, MOS school graduates are designated as ATC students (MOS 7251) and can only be assigned to air stations. This model was based on the idea that MOS school graduates cannot perform as air traffic controllers without qualifications at an air station first. Another issue was the possibility that deployment early in their careers could prevent them from reaching required gates that have been established to man and operate Marine Corps air stations, not necessarily ATC detachments in support of the MAW.[2] These requirements need to be eliminated as they are not in the best interest of the Marine Corps.

Another major problem in the ATC community deals with the assignment of controllers to the Fleet Assistance Program (FAP). Controllers are defined as Category I FAP personnel[3] whose operational and training opportunities for individual MOS skill maintenance and improvements are found at the installation commands. This definition does not actually hold true for controllers because the FAP does not properly train the controllers to perform in an expeditionary environment. Air station commands do not address combat-specific skills or expeditionary equipment in any of the training programs throughout the Marine Corps. This should not be the case, as air stations are directed to train air traffic controllers who are FAP/temporary additional duty in accordance with the ATC training and readiness manual and record the Marine's training in M-SHARP.[4] The emphasis at air stations though is to train controllers to operate their individual ATC facilities. Training pipelines for FAP personnel are designed to support the needs of the individual ATC facility and are not based on the needs of the Operating Forces. Air stations do not feel any impetus to train Marine personnel on warfighting capabilities. The only training discussed in any of the FAP agreements throughout the Marine Corps deals with standard required military training (e.g., rifle range, physical fitness test, etc.). Marine ATC mobile teams are the initial and most often utilized structure in expeditionary ATC. This skill set is not trained to at any air stations or while the controllers are assigned to the air station. Marine air control squadrons need to be actively involved in the training of their Marines to support their wartime mission providing input on the controllers training pipeline.

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Many station training personnel (mostly civilians who are retired military controllers) claim that ATC personnel can quickly learn expeditionary equipment after they are required to deploy. This creates a large gap in proficiency in the utilization of expeditionary equipment. Marine controllers must be proficient in the use of expeditionary equipment. This is the reason that the preponderance of ATC training and readiness manual events are equipment-centric. The equipment utilized in a station environment does not correspond to ATC expeditionary equipment. Although Marines can quickly be spooled up on how to operate the expeditionary equipment, they will neither be proficient at utilizing it nor be able to appropriately respond to emergency/unusual conditions that may occur. The ability to operate ATC expeditionary equipment aboard Marine Corps air stations must occur through shared training opportunities where the expeditionary equipment is utilized to conduct station operations.

The ATC community needs to stop training FAA-qualified controllers and start qualifying Marine air traffic controllers. Training must focus on expeditionary ATC performing as part of the MACCS in support of the MAWs. Marine air control squadrons require access to their personnel for training on a regularly scheduled basis and should be responsible for the tracking and monitoring of core skill proficiency of their ATC units. The air station ATC facilities are still invaluable as training venues for controllers to talk to live aircraft and hone skills taught on the simulators. Air stations are simply an air traffic controller's part-time job while he waits to deploy in support of our Nation's requirements. The Marine Corps has always espoused "train as you fight." Unfortunately ATC has not been doing so, but with a radical change to how the community is structured and performs training, it could.

Notes

1. Skill designators fall under the MOS manual but are not considered a primary or basic MOS (7252 tower controller, 7253 arrival controller, and 7254 approach controller).

2. *MarAdmin 230/04, ATC MOS Qualification Requirements*, Headquarters Marine Corps, Washington, DC, 19 May 2004.

3. *Marine Corps Order 1000.8, Fleet Assistance Program*, Headquarters Marine Corps, Washington, DC, 12 July 1994.

4. M-SHARP is Marine aviation's web-based application for scheduling, training management, operational risk management, and reporting of training readiness. *Navy Marine Corps 3500.14B, Aviation Training and Readiness Program Manual*, Headquarters Marine Corps, Washington, DC, 20 May 2009, delineates that Marine Corps air stations for ATC and airfield services are aviation ground communities under the training and readiness program.

Effects-Based Training

Leveraging differentiation in Marine Corps aviation training

by Capt Michael J. Oginsky

On 6 January 2011, then-Secretary of Defense Robert M. Gates announced a series of initiatives aimed at reducing inefficiency and waste throughout the Department of Defense (DoD). In this speech Mr. Gates also set forth plans to delay production of the F–35B (the Marine Corps variant of the Joint Strike Fighter intended to replace aging F/A–18, AV–8B, and EA–6B airframes) by 2 years due to development and operational testing delays.[1] Thus Marine Corps aviation finds itself in a precarious situation. Future funding for flight operations is currently under threat and may decrease due to budgetary pressure and flight hour shortfalls.[2] Further, aging airframes, which were to be completely out of service by 2019 or 2020, must now continue operating through 2022, putting additional strain on aircraft with little remaining design life.[3]

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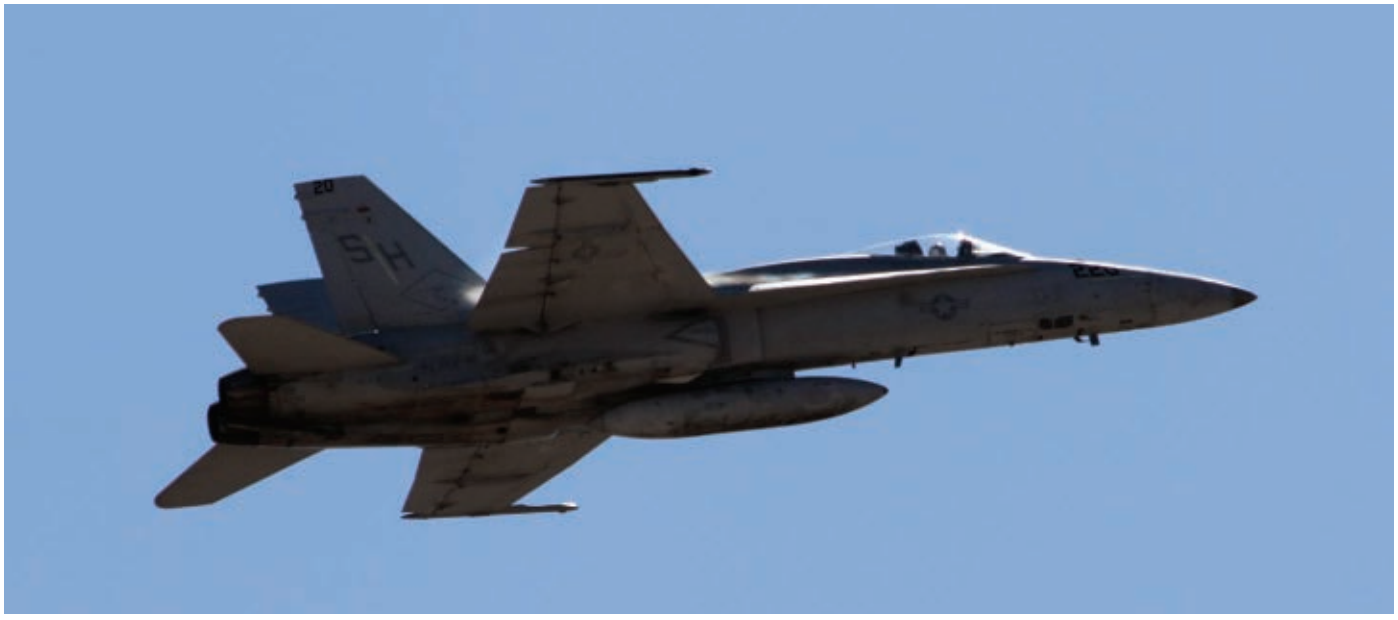
Like many other DoD areas in these circumstances, Marine aviation must find a way to more efficiently employ its resources in order to maintain current levels of operational readiness. Of the many programs within Marine aviation, aircrew training is in need of the greatest reform. Hampered by a "one size fits all" mentality to the maintenance of aviator tactical proficiency, current training and readiness (T&R) regulations disregard individual aviator experience and capability, which leads to the inefficient use of available resources and incorrect assessments of unit operational readiness. By adopting a T&R structure founded on differentiation among aviators, and the factors that affect skill retention and maintenance, Marine Corps aviation can increase operational readiness and training effectiveness and more efficiently utilize aviation assets.

The Model Aviator and Readiness Assessments

Aviation T&R manuals provide squadron operations departments with the roadmap to operational readiness. Within each type/model/series (T/M/S)-specific T&R, a unit's mission essential tasks translate directly into a series of partial- and whole-task training events meant to establish the skills requisite to the tactical employment of aircraft. Upon completion of a training event, aircrew



Training events establish requisite skills based on T&R specifics. *(Photo by Cpl Alexandra Vazquez.)*