

Professionalizing Air Intelligence, Part II

Who needs an 0277?

by Capt Christopher A. Denzel

The question is facetious. But if we treat it seriously for a minute, we can understand some tectonic changes we should consider making throughout the air intelligence community.

Unfortunately, for those seeking a simple answer, the question exists not in a vacuum but with a few related questions, like: What role does the MAWTS-1 (Marine Aviation Weapons and Tactics Squadron One) S-2 play in air intelligence? How does air intelligence training take place? Why can't the MAWTS-1 S-2 do more? Why should we care?

Former CEO of “Stop and Shop,” Avram Goldberg, instead of asking his managers, “What is the problem?” when they came to him with an issue, asked them to tell him a story. What

>Capt Denzel is a Contingency Planner, Joint Force Headquarters–Cyber, Marine Corps Cyberspace Command. He is an Air Intelligence Officer and Weapons and Tactics Intelligence Officer.

he discovered was that the heart of the issue often lay beneath the second-order consequences initially identified as the problem. If we do the same with 0277s, we learn a great deal about where the core of the problem lies.

The conclusions to these questions lead us to understand that, in the current state: the 0277 and 0207 MOSs are redundant (but they shouldn't be), and MAWTS-1 has no authority, responsibility, or mechanism to standardize, advise, or regulate air intelligence training, tactics, techniques, and pro-

cedures (TTP) creation, SOP creation, or operational activity in the Operating Forces (but it should).

To fix this, we must address the limitations of current air intelligence force structure, revise the *Intelligence T&R (Training & Readiness) Manual* to utilize 0277s, tie unit readiness to intelligence T&R events, and revise the WTTP (Weapons and Tactics Training Program) to include air intelligence.

What Is an 0277?

The MAWTS-1 S-2 was originally created only to support the WTI (weapons and tactics instructor) course.

Initially, the intelligence support to other students at the WTI course was limited to aircrew debriefs and map distribution. In recent years, MAWTS-1 evolved from primitive intelligence support to emphasizing more advanced aviation intelligence methods, training, and instruction.¹

This resulted in an embedded Intelligence Officer Course curriculum within WTI, dating back at least to 1996.²

Without receiving an MOS (0277) from WTI, intelligence students relied on unit funding to attend the course. This placed these students at a disadvantage and made attendance difficult.³ The rigors of the course (which, at the time, was the first and only air intelligence training an intelligence officer in



Oftentimes, unit funds are used to send students to intelligence training courses. (Photo by Cpl Mackenzie Gibson.)

the MAW could receive) and the funding-related challenges of attendance led the community to conclude that not only should intelligence officers earn an MOS but that it would facilitate their attendance of the course and improve air intelligence training throughout the fleet. This finally gave air intelligence officers an MOS (0277) from course attendance, but the MOS originated from funding issues and anecdotal training shortfalls, not from a requirement found in any order, T&R manual, or other authoritative document.

0277 is a secondary MOS⁴ granted to Marine officers of the grades Warrant Officer 1 through lieutenant colonel who have completed the WTI course. 0277s are

subject matter experts on the tactical employment of threat weapon systems [sic]. WTI Intelligence Officers support MAGTF operations by training Marines to develop countermeasures for adversarial aviation threats.⁵

Their duties include:

1. "As the unit Intelligence Training Officer, develop and execute individual T&R Training and Collective Operational Unit Training,
2. Serve as the unit SME for intelligence support to mission planning, briefing/debriefing, threat systems, and unit weapons system employment. Be responsible for intelligence required for unit's mission in support of the MAGTF and Joint Tasking.
3. Assist in recommending to unit commanders qualified intelligence personnel for nominate [sic] to the WTI Course.
4. [Instruct] on current enemy capabilities and tactics to counter the threat."⁶

With an understanding of what an 0277 is, we can discuss its redundancy with 0207s by asking what 0277s do with their training.

What Do 0277s Do?

It is difficult to imagine a unit where the intelligence officer does not share the 0277's first, second, and fourth duties (inherent duties of any unit intelligence officer and included in the 0207 MOS description). The *MOS Manual's*

description of the 0207 confirms this; 0207s

serve as the intelligence functional experts at all command levels of the MAW. They develop and execute intelligence plans, policies, and procedures that facilitate operations across the six functions of Marine aviation. They are the advisors to commanders, staffs, and pilots on intelligence activities, operations, and actions as well as the provider of intelligence products to support mission planning and execution. They also support the overall intelligence effort of the parent command or intelligence authority.⁷

So we are left with only the third 0277 duty as a differentiator. That leaves us with an MOS that's only documented unique responsibility is to self-replicate. This is deeply unsatisfying.

If we try to answer this question by asking, "What unique place do 0277s hold in the *Intelligence T&R Manual*?" we find 0277s have their own chapter, but all of the individual events listed for 0277s are 0207 or 0200 individual events. Outside of the 0277 chapter, WTIs are mentioned only in two events:

- "INTL-GEN-4007: Integrate unmanned aerial vehicle operations to intelligence operations;"
- "0200-GEN-2010: Support the development of tactics to counter adversarial threats."⁸

For the first event, there appears no explicit reason why an 0277 is required. While the "Special Personnel Certs" for the event states,

Intelligence and METOC [meteorological and oceanographic] Officer and Chief, and other designated personnel ITI-I/WTI-I certified,

it is unclear if the WTI is a requirement or a nice-to-have. Since an ITI is equally acceptable and ITIs do not receive any special air intelligence training, it is challenging not to interpret this as a nice-to-have. Especially as none of the conditions, event components, or other elements of the event allude to a duty, responsibility, or special training that is unique to 0277s.

For the second event, the same problems exist. And interestingly, the standard and condition for the event do not

actually reference the development of counter-tactics at all. Furthermore, the last performance step ("Advise commander on countermeasures to threats") is not something 0277s are especially trained to do. Any 0207 has learned to conduct intelligence research and provide counter-tactics identified by the intelligence community, MAWTS-1, or other authoritative sources. 0277s receive no special training of the development or identification of counter-tactics.

We are left in the unfortunate position of being unable to justify the existence of the 0277 MOS by the MOS manual or the T&R manual (or, as we will see, any other possible source for justification).

How Does It Work With Aviator and Aircrew WTIs?

To understand the depth of utility missing from the 0277 MOS, we must first understand the wealth of utility offered by aviator/aircrew WTIs.

We begin with readiness. As an example, we will walk the dog with a Marine medium tiltrotor squadron (VMM).

- A VMM has six core and four core plus mission-essential tasks (METs).
- For a VMM to be considered "MET ready" for any given MET, it must be able to sustain, daily, a level of performance (a MET output standard) during contingency/combat operations.
- To pick one, a VMM core MET is "Conduct Aviation Support of Tactical Recovery of Aircraft and Personnel (TRAP)."
- For a 12-aircraft VMM, the associated MET output standard is 20 daily sorties.
- The ability to meet this output standard is defined by the Core Model Minimum Requirements training standard for readiness reporting, which defines a minimum crew composition of qualifications and designations reflecting the number of crews required for readiness reporting purposes.
- For the TRAP output standard, this is eight crews comprised of a pilot, copilot, and two crew chiefs,⁹ each qualified in (among other things)



There must be a differentiation between the 0207 and 0277 MOSs. (Photo by Cpl Michelle Reif.)

ground-threat reaction (an event “to develop proficiency in the use of Electronic Warfare Principles, Aircraft Survivability Equipment (ASE), and threat reactions versus counter enemy surface-to-air threats”).

- Training and qualification in ground-threat reduction requires an aviator/aircrew WTI “for all initial sorties in each program of instruction,” each instructional class, and each walkthrough.¹⁰ And the course material used for each class is created and maintained by MAWTS-1.

By walking the dog on readiness, we can see that, for a VMM to be MET ready, it must have a number of crew qualifications that require instruction, evaluation, and certification by aviator/aircrew WTIs.

To understand this framework more broadly: for aviators/aircrew, the WTI course is designed to cap off a three-tiered approach to training. Level I training occurs at the training squadrons. Level II training occurs at the tactical squadrons, instructed and managed by WTIs. And Level III training occurs during the WTI course, creating the instructors who conduct and manage Level II training.¹¹ With the exception of its link to readiness, this framework is not unlike the Marine Corps Martial Arts Program’s user, instructor, and instructor-trainer hierarchy. This

makes MAWTS-1 and aviator/aircrew WTIs a bona-fide requirement for a flying squadron to meet its METs.

Through these means, aviator/aircrew WTIs are tangible requirements that directly impact readiness, to which squadrons are held accountable.

Because Level II training for air intelligence does not require 0277s, there is no analogous Level III training that can take place for intelligence students at WTI. The WTI Intelligence Officer Course trains no T&R event that cannot be conducted without 0277s in the course of normal unit training and certifies no instructors required for the conduct of air intelligence at any place throughout the Operating Forces.¹²

In the Marine Corps, MOSs identify and codify personnel skill requirements and the development of individual training standards as found in T&R manuals. So without any requirement existing within the Operating Forces or T&R manuals for 0277s, why does the MOS exist?

Why Does 0277 Mean So Little?

A simple, if unwelcome, truth is that the 0277 MOS has as little meaning as it does because it is not differentiated from the current 0207 MOS.

Why are the two MOSs nearly identical? A partial explanation is that the 0207 schoolhouse was designed to

replicate much of the 0277 training at WTI. Prior to the creation of the Air Intelligence Officers Course (AIOC), no Marine Corps school existed to train 0207s (they instead attended Naval Intelligence Officers Basic Course which provided instruction inappropriate for MAGTF ACE support). The creation of AIOC was intended to provide 0207s with the credibility they had previously relied on WTI for.¹³ To achieve this, AIOC repurposed much of the course material from WTI’s Intelligence Officer Course, providing an almost identical academic experience.¹⁴ As a result, it is common for 0207s to return from WTI feeling underwhelmed. Who can blame them when the three weeks of WTI Intelligence Officer Course academics is spread out over the 14 weeks of AIOC first? WTI’s flight phase provides some benefit beyond AIOC but does not justify an entire MOS. Furthermore, it is widely accepted that most flight evolutions provide limited or no value to intelligence students because of the simplistic and highly scripted nature of the scenario and threat.¹⁵

If we turn our attention to tables of organization (T/O), we find that across the Marine Corps, there are 64 Billet Identification Codes (BICs) across 38 units that have the Billet MOS (BMOS) coded as 0277.¹⁶ Additionally, some MAW orders require the composite squadron intelligence officer aboard the MEU to be an 0277.¹⁷ However, these requirements are not enforced, no billet is coded as 0277N (necessary), and those who pay the most attention to them tend to be individuals seeking to justify for themselves a seat at an upcoming WTI course.

Ultimately, there is nothing inspectable or accountable that requires these BICs to be filled by 0277s. No unit will fail to show readiness, be unable to conduct a T&R event, or be deficient on a commanding general’s readiness inspection because of a shortage of 0277s or an 0277 BIC filled by a Marine without the MOS (while the opposite is true for aviator/aircrew WTIs). The requirement for 0277s is largely invisible to the Marine Corps. If the MAWTS-1 S-2 and every 0277

disappeared today, every facet of air intelligence and Marine aviation would operate without change tomorrow. But as we saw with the aviator/aircrew example, if MAWTS-1 and every aviator/aircrew WTI disappeared today, then tomorrow, every MAW's training and readiness would slowly and inexorably begin grinding to a halt.

The unfortunate and unavoidable conclusion is: in the current state, the requirement for 0277s is not founded in any document or practice. 0277s may add value to but do not fulfill any requirement tied to combat readiness, adherence to an MCO, or a unique skill set.

The flippant answer to the question, "What is an 0277 good for?" might be nothing. It is an MOS that is redundant with 0207, which cannot uniquely contribute to any measurable component of unit readiness or unit training, and thus fills BICs that are coded as 0277 without justification.

From Where Does MAWTS-1 Derive Authority?

The WTTP gives MAWTS-1 the mission to

provide standardized advanced tactical training and certification of unit instructor qualifications that support Marine Aviation Training and Readiness and to provide assistance in the development and employment of aviation weapons and tactics.¹⁸

But this is defined very narrowly, focusing on aviation and aviation ground communities covered by the Aviation T&R Program (air intelligence is considered a ground community and falls under the Ground T&R Program). The commander's intent of the order makes this explicit,

the WTTP supports individual and unit combat readiness by tasking MAWTS-1 to train officer and enlisted instructors to manage unit aviation training programs, develop aviation supplementary courses of instruction, standardize unit instructor certification programs, and develop and distribute academic courseware that supports the 200, 300, and 400 phases of the Marine Aviation T&R Program.¹⁹

There is no mention of air intelligence or specific scoping to the Aviation T&R Program.

The WTTP simply creates a requirement, however. While the good Marine in us might think that is enough, it is not. Ignored requirements abound in the Marine Corps. For example, *MCO 3502.4A* requires no less than six Joint Service Training Program (JSTP) trained personnel in each manned flying squadron. But you will be hard pressed to find a squadron that meets that requirement, let alone is aware JSTP exists. Why is this the case for an active MCO? Despite the first sentence of the order's commander's intent ("the JSTP is specifically aimed at increasing combat readiness"), it is not *actually* tied to readiness. In DRRS-MC (Defense Readiness Reporting System-Marine Corps), there is no field for the number of JSTP-trained personnel within the squadron. It is not a requirement in aviation T&R manuals, and it is not an inspectable item in any readiness inspection. Just as with 0277s, the requirement is effectively invisible, and no squadrons are held accountable to it.

This is why MAWTS-1 relies on more than the WTTP to exercise its authority and carry out its mission. MAWTS-1 relies on both the individual TMS (type/model/series) T&R manuals and the *Aviation T&R Program Manual (NAVMC 3500.14C)*. As described above in the readiness example, these require WTIs to conduct T&R events and certify individuals in their completion and require squadrons to maintain a certain number of trained WTIs.

How We Develop an Authoritative MAWTS-1 S-2

If the existence of the 0277 MOS is unjustified in its current state, how do we change that? There are three major areas that need addressing to create an authoritative and necessary MAWTS-1 S-2 (and, by extension, 0277s in the Operating Forces): force structure, mandate, and requirements.

The area of force structure is being addressed under the Commandant's Force 2025 initiative and will not be addressed here.

Mandate is more straightforward. Because MAWTS-1 S-2's oversight over air intelligence training would extend across all MAWs, an MCO would be required. Fortunately, such an order exists in the WTTP. The WTTP would be revised to actually give MAWTS-1 the mission of creating 0277s and (directly or through 0277s in the Operating Forces) providing authoritative oversight over air intelligence training. The MAWTS-1 S-2 is already undertaking efforts to add this to the order.

Requirements are also a straightforward, if more involved, area to address. Just as with flying units' readiness and inspection requirements, "teeth" would need to be put behind this new authority. Initially, air intelligence T&R events would need to be rewritten to require an 0277 to instruct or evaluate and/or require the use of MAWTS-1-approved materials. Because no aviation intelligence T&R events exist or are trained to in the fleet, these events would need to be identified and created.²⁰ Completion of these T&R events would then need to be tied to readiness or be both reportable and inspectable. Unit readiness through DRRS-MC or through readiness inspections would have to reflect the completion of T&R events to force units to adhere to the requirements.

This would be a hard sell if not for force structure courses of action being developed under Force 2025, where one unit and commander might be responsible for manning, training, and equipping most of the air intelligence Marines within a MAW. A new force structure would ensure there is one commander with the authority and the mission to conduct this training and certification and a unit with the collective manpower and expertise to do so.

Returning to force structure, MAWTS-1 S-2 might also require a TOECR (table of organization and equipment change request) to bring its personnel levels up to a point where it would have the capacity and requisite expertise to fulfill this new authoritative role. Because of this expanded authority, a new TOECR would be required above and beyond the currently planned

increase of three 0202s in the coming years at MAWTS-1.

These changes would mirror the aviation T&R model and thus are not as radical as they might appear—they simply align aviation intelligence T&R more closely with (if not under) the Aviation T&R Program.

Final Considerations

At least three final major considerations remain: assumptions, timing, and advocacy.

The underlying assumption in much of this entire argument is that air intelligence should mirror the aviation structure it serves (i.e., its T&R should reflect the Aviation T&R Program more than the Ground T&R Program). This assumption may not be valid, although some consensus exists that it is. But the future holds an increasingly complex and technical nature for air intelligence, with the fielding of new and more sophisticated sensors, sensor and system fusion, and more advanced and technical aircraft to support, as well as the air defenses they must face and the tactics/counter-tactics they must employ. And with the model of aviation T&R already dominant in the ACE, mirroring seems a natural fit.

The timing of these changes would require detailed planning, milestones, and decision points. The air intelligence community must develop a comprehensive campaign plan that addresses the multiple lines of effort and operations required to achieve this professionalization of the force.

Lastly, the appropriate advocacy is required. The air intelligence community cannot make these changes alone. As a community that supports aviators, the aviators will need to be advocates, too. This means not just the MAWTS-1 commander but the MAW commanding generals, and even perhaps the Deputy Commandant for Aviation. This, also, is not as dramatic as it may seem. Many aviators intuitively understand that as their aircraft are outfitted with increasingly advanced capabilities, and as the enemy threat becomes more sophisticated, the current state of Marine air intelligence

will increasingly lag behind, unable to provide the requisite support.

Conclusion

Ultimately, the air intelligence community, along with the aviators we support, must decide if the 0277 MOS means anything to us and if MAWTS-1 S-2 should be empowered to support the Operating Forces in an accountable way. If the answer to either of those questions is yes, then we must put our money where our mouth is with Force 2025 force structure efforts, a rewrite of the *Intelligence T&R Manual*, and a revision of the WTTP. If we stop with the creation of a force structure, without a thorough revision of the way we conduct air intelligence training and measure its readiness, we will have invalidated the new force-structure concept and simply have succeeded in reshuffling air intelligence Marines around the MAW.

Notes

1. Headquarters MAWTS-1, MAWTS-1 Intelligence Officer letter to Aviation Intelligence Community of Practice, “MAWTS-1 S-2 Manning Structure,” 15 January 2016.

2. Maj Walter L. Niblock, Capt Michael G. Ferguson, and Capt David A. DeMorat, “MAWTS-1 and the WTI,” *Marine Corps Gazette*, (Quantico, VA: December 1996).

3. Interview with LtCol Brendon Harper, 20 April 2017

4. Technically, 0277s is a “Necessary MOS” (NMOS), which is “A non-primary MOS (PMOS) that has a prerequisite of one or more PMOSs. This MOS identifies a particular skill or training that is in addition to a Marine’s PMOS but can only be filled by a Marine with a specific PMOS,” (see Headquarters Marine Corps, *NAVMC 1200.1B, MOS Manual*, (Washington, DC: 1 July 2016)).

5. *NAVMC 1200.1B*

6. Ibid.

7. Ibid.

8. This event appears twice, once in the WTI chapter and once in the ITI chapter.

9. Or one crew chief and one aerial observer/gunner.

10. Headquarters Marine Corps, *NAVMC 3500.11D, MV-22B T&R Manual*, (Washington, DC: 24 Oct 2014).

11. LtCol C.L. Vermilyea and Maj R.C. Kindsfater, “MAWTS-1: Aviation Training at Its Best,” *Marine Corps Gazette*, (Quantico, VA: March 1982).

12. Ironically, the only place where the 0277 MOS is required (by unit policy) for the conduct of unit air intelligence operations is at MAWTS-1 where the intelligence staff must themselves be graduates of the course. No 0277 billet on any T/O (including MAWTS-1’s) is coded as required.

13. Capt Donovan J. Salerno, “Rebuilding the 0207 Aviation Intelligence Officer,” *Marine Corps Gazette*, (Quantico, VA: February 2009).

14. When I attended AIOC in 2011, much of its courseware was lifted wholesale from MAWTS-1 with only the formatting changes, containing the same text, photos, and, in some cases, typos as the MAWTS-1 slides. The curriculum has since evolved.

15. The major exception is the single offensive anti-air warfare (OAAW) evolution in which (as of 2014, when I attended the course) only about 20 percent of intelligence students play a significant role.

16. Fiscal Year 2017 Tables of Organization and Equipment, Total Force Structure Management System, available at <https://tfsms.mceits.usmc.mil>.

17. Headquarters 2dMAW, *Wing Order 3100.3, Marine Expeditionary Unit Aviation Combat Element Standard Operating Procedures*, (Cherry Point, NC: 2d MAW, 21 September 2011).

18. Headquarters Marine Corps, *MCO 3500.109, Marine Corps Aviation WTTP*, (Washington, DC: 16 Jan 2007).

19. Ibid.

20. The only aviation-specific T&R events that currently exist are 1000-level events instructed at AIOC.

>Editor’s Note: This article is a continuation of Capt Denzel’s article on air intelligence that ran in the May 2017 issue of the Gazette.

