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MARINE CORPS ORDER 3500.109A

From: Commandant of the Marine Corps
To: Distribution List

Subj: MARINE CORPS AVIATION WEAPONS AND TACTICS TRAINING PROGRAM (WTTP)

Ref: (a) MAWTS-1 WTI Planning Conference Results (NOTAL)
(b) MAWTS-1 WTI Table of Organization (NOTAL)
(c) MCO 1900.16 (NOTAL)
(d) NAVMC 3500.14D
(e) MAWTS-1 Course Catalogs (NOTAL)
(f) CNAF M-3710.7
(g) OPNAVINST 3750.6S
(h) MCO 3500.32
(i) MCO P5102.1B
(j) MCO 3570.1C
(k) MAWTS-1 WTI Planning Guide (NOTAL)
(l) MAWTS-1 Academic Support Package (NOTAL)
(m) MCO 3502.3B
(n) MCO P1610.7F
(o) MCO 3500.11F
(p) MCO 3710.8
(q) MCO 3710.6A
(r) MCO 3500.27C
(s) SECNAV Notice 5210
(t) SECNAV M-5210.1 CH-1
(u) MCO 5210.11F
(v) 5 U.S.C. 552a
(w) SECNAVINST 5211.5F

Encl: (1) Weapons and Tactics Instructor (WTI) Course
(2) Supplementary Courses of Instruction

1. Situation. The Weapons and Tactics Training Program (WTTP) was initiated on 5 May 1976 to increase the combat readiness of aviation units. Marine Aviation Weapons and Tactics Squadron One (MAWTS-1) was commissioned on 1 June 1978 at Marine Corps Air Station (MCAS) Yuma, AZ to implement the WTTP. This Order provides policy and assigns responsibilities for execution of the WTTP. This Order is in accordance with references (a) through (w).

2. Cancellation. MCO 3500.109

3. Mission. The mission of MAWTS-1 is to provide standardized advanced tactical training and certification of unit instructor qualifications in order to support Marine aviation training and readiness (T&R). MAWTS-1 also provides assistance in the development and employment of aviation weapons and tactics.

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4. Execution

a. Commander's Intent and Concept of Operations

(1) Commander's Intent. The primary responsibility of Marine commanders is combat readiness. MAWTS-1 accomplishes this by conducting the twice-annual Weapons and Tactics Instructor (WTI) Course as well as supplementary courses of instruction as directed. 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 all phases of the Marine Aviation Training and Readiness Program. Commanders shall utilize all available resources to ensure their commands are trained per the current editions of appropriate Aviation T&R manuals and this Order.

(2) Concept of Operations. The Commanding Officer (CO) MAWTS-1 shall administer and manage the WTTP and is charged with the responsibility of conducting the WTI Course and developing supplementary courses of instruction and instructor certification programs that support the Marine Aviation T&R Program.

b. Tasks

(1) Deputy Commandant, Manpower and Reserve Affairs (DC M&RA). Upon successful graduation from the WTI course, DC M&RA shall not assign officer and enlisted Marines Permanent Change of Station/Permanent Change of Assignment (PCS/PCA) orders until they have completed the below specified time on station. Any deviations to the prescribed schedule will be endorsed by the first General Officer in the Marine's chain of command.

(a) 7577, 7377 and 6177: 18 months

(b) 7277: 12 months

(c) 5977 and 6877: 18 months

(d) 8077: 18 months

(e) 0277: 12 months

(f) 7077: 12 months

(2) Deputy Commandant, Aviation (DC AVN). Will serve as the lead Marine Corps proponent for MAWTS-1 and the WTTP on all matters including funding, manning, and facilities. DC AVN shall formally recommend approval or disapproval in all matters associated with WTTP.

(3) Deputy Commandant, Installations and Logistics (DC I&L). DC I&L will provide MAWTS-1 with facilities and logistical support.

(4) Commanding General, Marine Corps Combat Development Command (CG MCCDC)

(a) Coordinate all WTTP and T&R initiatives, and provide funding for Temporary Additional Duty (TAD) expenses for Marine Corps officer and

enlisted graduates receiving a secondary Military Occupational Specialty (MOS) upon completion of WTI (C 466).

(b) Administer the Joint National Training Capability (JNTC) program in support of MAWTS-1 and all other Accredited/Certified (A/C) programs in order to provide joint enablers to Service/United States Special Operations Command (USSOCOM) training with the objective of accurately replicating the operating environment necessary to successfully conduct integrated training needs that meets combatant commanders' requirements. (C 461).

(c) Ensure MAGTF-TC exercises Administrative Control (ADCON) and Operational Control (OPCON) over MAWTS-1, in addition to providing budget, accounting, reporting system, and technical guidance in managing annual appropriations and miscellaneous funding documents.

(5) Commanding Officer, Marine Aviation Weapons and Tactics Squadron One (CO MAWTS 1)

(a) Conduct no less than two resident WTI courses annually.

(b) Train officer and enlisted WTIs as required by Marine Force units and enclosure (1).

(c) Prior to each WTI Course, convene planning and Table of Organization (T/O) conferences to assign aircraft, personnel, and equipment responsibilities that support Marine Forces Prospective WTI (PWTTI) nominations.

(d) Assume OPCON of all units, equipment, and aircraft supporting the WTI Course. Additionally, assume OPCON of all personnel filling a WTI line number upon arrival at MCAS Yuma, including MCAS Yuma tenant command personnel per reference (b).

(e) Assume ADCON of all Marine Corps personnel filling a WTI line number upon arrival at MCAS Yuma per reference (b). MCAS Yuma tenant commands filling WTI line numbers will retain ADCON of both their personnel and personnel attached to their units for the WTI Course per reference (b).

(f) Serve as the funds administrator for planning, forecasting, and budgeting all unit funding requirements. Submit the MAWTS-1 budget, requests for budget increases, and requests for short term/one-time only funding increases to Commanding General, Marine Air Ground Task Force Training Command (CG MAGTFTC) for Operations and Maintenance Marine Corps (O&MMC) and to Commander, Marine Corps Forces Pacific (COMMARFORPAC) for Operations and Maintenance, Navy (O&MN), requirements.

(g) MAWTS-1 shall schedule and operate assigned WTI aircraft and aircrews per applicable directives.

(h) Conduct aviation and ground safety periods of instruction during each WTI class in order to teach unit training officers the tenets of risk management and familiarize them with the risk management tools available.

(i) Publish a course catalog for each aviation community containing all supplementary courses of instruction and instructor

certification requirements per enclosure (2).

(j) Conduct instructor certifications when requested per references (d) and (e). Within personnel constraints, provide instructor certifications and unit training for deployed squadrons.

(k) Submit a quarterly "authorized to fly" message notifying MAW G-3s of the aircraft MAWTS-1 instructors are qualified to fly.

(l) Conduct periodic liaison visits to all Marine Corps aviation and aviation ground units to conduct appropriate supplementary courses of instruction and provide new information on Marine Corps, Joint, and threat weapons and tactics developments, and assist unit WTIs in maintaining unit training programs.

(m) Provide representation at aviation conferences, Operational Advisory Groups, and other meetings of a tactical nature concerning aviation weapons and tactics.

(n) Serve as the syllabus sponsor for all aviation and Tactical Air Control Party related T&R manuals. MAWTS-1 shall ensure T&R conferences are conducted triennially in accordance with reference (d) or as desired by operating force units.

(o) Maintain an Aviation Development, Tactics and Evaluation (ADT&E) Department to execute Tactical Development and Evaluation projects and Qualitative Assessments on behalf of Marine Aviation and in coordination with Marine Operational Test and Evaluation Squadron One (VMX-1) Science and Technology Department when applicable.

(p) Maintain liaison with Tactical Training Exercise Control Group, Marine Corps Tactics and Operations Group, Marine Corps Logistics Operations Group, and Mountain Warfare Training Center, through MAGTFTC to ensure WTI Course and Service Level Training venues outlined in reference (o), aviation tactics, techniques and procedures, and lessons learned are shared.

(q) Maintain an aviation training system that supports mission planning and academics requirements for courses taught at MAWTS-1, communications with operational forces, and delivery of courseware supporting all phases of the Aviation T&R manuals to fleet forces, both ashore and afloat.

(r) Publish and distribute Marine Corps Aviation Tactics, Techniques, and Procedures (ANTTPs) as well as weapons and tactics newsletters covering WTI Course lessons learned, individual community contingency and deployment lessons learned, and instructor standardization updates.

(s) Maintain liaison with the U.S. Navy, U.S. Air Force, U.S. Army, Special Operations Command, and other military or technical organizations, including foreign services, to ensure that aviation tactics and courses of instruction are current and appropriate.

(t) MAWTS-1 shall provide MAWTS-1 instructors, when requested and available, to assist squadrons/units in preparing for Marine Corps Combat Readiness Evaluation (MCCRE). MAWTS-1 instructors may act as evaluators and

members of the Tactical Exercise Control Group for specific MCCRE events but are prohibited from serving as Exercise Commander, Exercise Director, or Tactical Exercise Commander.

(u) MAWTS-1 will serve as the Flight Leadership Standardization Evaluator (FLSE) Model Manager, appointing MAWTS-1 T/M/S Division Heads as FLSE Model Managers for their specific platforms per reference (d).

(6) Commander, Marine Forces Pacific (COMMARFORPAC); Commander, Marine Forces Command (COMMARFORCOM); and Commander, Marine Forces Reserve (COMMARFORRES).

(a) COMMARFORPAC, COMMARFORCOM, and COMMARFORRES will ensure sufficient resources are made available to support the WTPP.

(b) Major Subordinate Commands (MSC) are directed to provide the requisite resources to support the WTPP.

(c) Major Subordinate Elements (MSE) shall provide aircraft, personnel, and equipment augmentation as published in references (a) and (b).

(d) MSEs will coordinate with MAWTS-1 through the Aviation Training System to ensure effective and efficient training, flight leadership standardization, and pre-WTI support. Marine Aviation Training Systems Site Officers in Charge (OICs) will coordinate and facilitate Pre-WTI training for each Type/Model/Series.

c. Coordinating Instructions

(1) Submit all recommendations concerning this Order to the CO, MAWTS-1 via the appropriate chain of command.

(2) Ensure oversight of officer and enlisted PWTI nominations. Nominees shall have an absolute minimum of 18 months time on station remaining upon graduation from the WTI Course. PWTI nominees on active duty must be notified that acceptance of orders to the WTI Course incurs an active duty obligation of 24 months upon graduation from the course, per reference (c).

(3) Commanding Officers will provide oversight of unit instructor qualifications. Instructor qualifications shall be balanced with unit needs and mission requirements. Instructor qualifications in excess of those depicted in this Order and appropriate T&R Manuals shall be requested in writing by the squadron CO and approved by the group CO.

(4) Each squadron in the Group will have MAWTS-1 trained WTIs in the Training Officer billet(s).

(5) A professionally managed WTPP will be conducted that supports the unit's Mission, Mission Essential Task List and T&R syllabus.

(6) Qualified officer and enlisted PWTIs will be nominated for the MAWTS-1 WTI Course per references (a) through (w) and this Order.

(7) Officers and enlisted WTIs will be assigned to each unit WTI T/O billet, ensuring continuity in these billets. Particular attention shall be paid to ensure that the squadron and detachment PTO billets are manned by a

MAWTS-1 trained WTI.

(8) Candidates for unit instructor certifications will be selected per references (a) through (w) and appropriate Aviation T&R manuals. The number of instructors produced within a command shall be strictly controlled and must significantly increase a unit's ability to train for combat. Instructor qualifications in excess of those authorized per references (a) through (w) shall be requested in writing to the Group CO.

(9) MAWTS-1 officer aircrew will be authorized to act as Pilot in Command and Mission Commanders provided they are current and proficient in their model aircraft when requested for instructor certifications or unit training support.

(10) As the unit's training officer, WTIs will develop and execute a unit training program in accordance with the WTPP that supports the CO's training guidance. Training includes individual T&R training and collective operational unit training.

(11) WTIs will serve as the unit Subject Matter Expert (SME) for mission planning, briefing/debriefing, threat systems, and unit weapons system employment. Be responsible for the planning and integration of the unit's mission in support of MAGTF and Joint tasking.

(12) WTIs will recommend the most qualified personnel for nomination to the WTI Course and unit instructor qualifications. WTIs will also ensure unit instructor candidates are operationally and administratively prepared prior to requesting MAWTS-1 certification flights per reference (e) and enclosure (1), and appropriate T&R manuals.

(13) WTIs will ensure all training conducted adheres to established training standards, safety, and ORM procedures per references (a) through (w).

5. Administration and Logistics

a. Records Management. Records created as a result of this Order shall be managed according to National Archives and Records Administration (NARA) approved dispositions per references (s) and (t) to ensure proper maintenance, use, accessibility and preservation, regardless of format or medium. Refer to reference (u) for Marine Corps records management policy and procedures.

b. Privacy Act. Any misuse or unauthorized disclosure of Personally Identifiable Information (PII) may result in both civil and criminal penalties. The Department of the Navy (DON) recognizes that the privacy of an individual is a personal and fundamental right that shall be respected and protected. The DON's need to collect, use, maintain, or disseminate PII about individuals for purposes of discharging its statutory responsibilities shall be balanced against the individuals' right to be protected against unwarranted invasion of privacy. All collection, use, maintenance, or dissemination of PII shall be in accordance with the Privacy Act of 1974, as amended (reference (v)) and implemented per reference (w).

6. Command and Signal

- a. Command. This Order is applicable to the Marine Corps Total Force.
- b. Signal. This Order is effective the date signed.

A handwritten signature in black ink, appearing to read "D. H. Berger", is written over the text "the date signed" in item b.

David H. Berger
Commandant of the Marine Corps

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Weapons and Tactics Instructor (WTI) Course

1. General. CO MAWTS-1 is charged with the responsibility of conducting the semiannual WTI Course. Direct liaison at all Marine Corps levels of command is authorized for course planning, execution, and evaluation. Direct liaison with organizations and units from other U.S. Armed Services for purposes of entering into agreements establishing or modifying standards which are applicable to those services is authorized.

2. Weapons and Tactics Instructor (WTI) Course Overview. The WTI Course emphasizes integrated training between all facets of aviation, aviation ground support and supporting arms working within the Marine Air Command and Control System (MACCS) while in support of a MAGTF and Joint scheme of maneuver. The WTI Course will consist of seven weeks of instruction broken into an academic and flight phase. The objective is to train instructors who are not only weapons and tactics subject matter experts, but who are also skilled in the operational integration of the six functions of Marine Aviation and can act as the focal point for second, third and fourth tier T&R unit training, planning and execution. During the course, students refine their instructional skills and demonstrate the ability to plan and execute complex tactical evolutions while incorporating risk management concepts. Academic and integrated planning for ground combat arms students shall also be provided.

a. MAWTS-1 will present both friendly and enemy combat capabilities and detailed study of enemy weapons and tactics based on current intelligence and combat lessons learned.

b. Training management is an important aspect of the WTI academic curriculum. Classes in the development and use of training media and techniques of instruction will provide each WTI the knowledge and experience necessary to manage and conduct a training program in their unit. MAWTS-1 will also present instruction on training management and ensure each WTI is familiar with applicable references.

c. The WTI Course will include emphasis on risk management which will teach PWTTIs to inform and make risk decisions, implement controls, and prevent actions that result in unnecessary risk through leadership, standardization, and vigilance. The Period of Instruction (POI) will support the most current version of MCO 3500.27 by ensuring mission effectiveness and accomplishment through a balanced approach to risk management fundamentals and threat analysis.

d. Weapons and Tactics Instructions (WTI) Course Embedded Curriculum. The following courses shall be embedded within the WTI Course. The MAWTS-1 Course Catalogs provide a full course description and reference (k) establishes course prerequisites.

(1) Air Tasking Order Development (ATOD) Course (formerly known as the ACE Battle-staff Officers Course (ABOC)). The ATOP course is designed to train Naval Aviators (NA), Naval Flight Officers (NFO), and Command, Control, and Communication (C3) officers and Marines on Air Tasking Order (ATO) development/production using the Theater Battle Management Core System (TBMCS) and functioning as rotary and fixed wing frag officers in the TACC Current Operations organization.

(2) Marine Air Traffic Control Mobile Team Instructor (MMTI) Course. The MMTI course is designed to provide the MMT Member (MMTM) the knowledge and experience necessary to qualify as a MMT Leader (MMTL) and meet the requirements for designation as a unit MMTI. The course introduces Tactical Risk Management, the WTTP and the Systems Approach to Training and Education to enable students to develop unit training plans in accordance with applicable safety instructions and T&R manuals.

(3) Low Altitude Air Defense (LAAD) Enhancement Team Instructor (LETI) Course. The LETI course is designed to provide LAAD Platoon Commander and Section Leaders with advance tactics for air defense and ground operations. Phases 1 and 2 of the LETI course consist of academic instruction taught in a traditional classroom setting. Phase 3 of training consists of planning, briefing and practical application in a field environment.

(4) Advanced Aircraft Maintenance Officer Course (AAMOC). AAMOC is designed to empower maintenance managers with leadership tools, greater technical knowledge, and standardized practices through rigorous academics and hands on training in order to decrease ground related mishaps and increase sortie generation.

(5) Marine Aviation Weapons and Tactics Squadron One (MAWTS 1) Expeditionary Ordnance Course (MEOC). MEOC is designed to provide Aviation Ordnance officers and SNCOs greater technical knowledge on current and future expeditionary operations and also standardize practices through hands on training.

(6) Marine Aviation Weapons and Tactics Squadron One (MAWTS 1) Maintenance Management Course (3MC). 3MC will provide the initial foundation for maintenance management training for critical maintenance leadership billets, and breed the next generation of squadron commanders with a stronger maintenance management background.

3. Officer/Enlisted Weapons and Tactics Instructor (WTI) Requirements. The intent of the WTTP is to ensure that aviation units maintain an absolute minimum of one officer/enlisted WTI per MOS in the training officer billet to manage the unit's training program. Units shall ensure proper turnover and continuity in these WTI billets. Units should maintain sufficient numbers of WTIs to support expected operational deployment and contingency requirements. Considering the above factors, the required number of officer and enlisted WTIs in each unit are listed in Tables 1 and 2.

Unit	Officer
MAW (0277)	1
MAG (0277)	1
MATSS (75xx)	1/TMS
MACG	1
MWSG	1
VMM	2
FA-18 VMFA	1
FA-18 VMFA (AW)	1 Pilot/1 WSO
F-35C VMFA	1

F-35B VMFA	2
VMA	2
VMGR	2
HMH	3
HMLA (AH)	3
HMLA (UH)	3
MTACS (TACC)	2
MACS (HQ)	3
MACS (TAOC)	4
MACS (EW/C)	4
MACS (ATC Det)	1
LAAD	3
MASS (DASC)	3
MWCS	3
VMU	1
MWSS	1
Infantry Div.	1
Infantry Reg.	1
Artillery Reg.	1
MEU CE	1
ANGLICO	1
TTECG	1
EWTG-Lant/Pac	1 each
MCTOG	1

Table 1

Unit	Enlisted
VMGR FE	2
VMGR CM	2
VMGR NAV	2
VMM CC	2
HMH CC	3
HMLA CC	3
MTACS (TACC)	3
MACS (HQ)	2
MACS (TAOC)	1
MACS (EW/C)	1
MACS (ATC DET)	1
LAAD	3
MASS (DASC)	2
VMU	2

Table 2

4. Prospective Weapons and Tactics Instructor (PWTI) Prerequisites. WTI Course prerequisites are necessarily stringent due to the graduate level training nature of the course. Reference (k) outlines specific MOS qualifications prerequisites and Naval Aviation Training and Operational Procedures System (NATOPS) requirements. The following minimum flight hour requirements are also established:

a. NA nominees shall have 500 flight hours in class. KC-130 NA nominees shall have 700 flight hours in class.

b. NFO nominees shall have 400 flight hours in class.

c. Rotary Wing Crew Chief nominees shall have 400 flight hours in type.

d. KC-130 Aerial Navigators/Systems Operators shall have 1500 hours in type; Crewmasters shall have 2000 flight hours in type.

e. UAS nominees shall have 250 flight hours in UAS platforms.

5. Prospective Weapons and Tactics Instructor (PWTI) Nominations. WTI Course student nominations will be submitted by MSC G-3s to CO MAWTS-1; CG MAGTFTC and CG TECOM (ATSB) per reference (k).

6. Prospective Weapons and Tactics Instructor (PWTI) Waivers. Waiver of WTI Course prerequisites shall be avoided. When situations exist where course prerequisites cannot be met, waivers may be requested through the appropriate MSC G-3s and will be considered on a case-by-case basis by CO, MAWTS-1.

7. Administration

a. Weapons and Tactics Instructor, Table of Organization (WTI T/O). MAWTS-1 shall publish and distribute reference (b). The WTI T/O assigns line number tasking to supporting commands. Unit commanders will screen all personnel prior to assigning them to fill WTI Course T/O support billets and ensure they are physically qualified, free of pending disciplinary action, and meet all prerequisites (rank and designations) for the billet assigned. Marines who are on limited duty or are otherwise restricted from performing all duties associated with their MOS or assigned billet will not be assigned to support WTI Courses. Direct liaison in regards to administrative matters is authorized between the CO MAWTS-1 and WTI Course supporting units.

b. Fitness Reports. To/From Temporary Duty (TD/FD) fitness reports are not required for personnel attending/supporting the WTI Course. Parent commands should indicate periods of non-availability over 30 days in the next regular fitness report per reference (n).

c. Weapons and Tactics Instructions (WTI) Course Completion School Code. Marine graduates are authorized a school code of P2A upon completion of the WTI Course. Parent commands are responsible for entering the school code into the Marine Corps Total Force System (MCTFS).

d. Marine Corps Weapons and Tactics Instructions (WTI) Secondary Military Occupational Specialty (MOS) Assignment. The following Marine WTI Course graduates are granted a secondary MOS: NA/NFO - 7577; MACCS

Officers and Staff NCOs - 7277; UAS Aircrew - 7377; Weather Officer - 6877; MACCS Maintenance Officers and Staff NCOs - 5977; Rotary Wing Crew Chiefs - 6177; Air Officer (Officer only) - 8077; Aviation Ground Support (Officer and Enlisted) - 7077; and Intelligence (Officer and Enlisted) - 0277. MAWTS-1 shall provide graduates with a graduation certificate and roster signed by the CO MAWTS-1. Marine graduates are responsible for entering the appropriate MOS into MCTFS through their parent command's Integrated Personnel Administrative Center (IPAC). Officers and enlisted who attend the WTI Course with approved waivers will have the XX77 MOS withheld until all waived prerequisites are complete. Units will forward waiver completions via naval message to CO MAWTS-1.

8. Weapons and Tactics Instructions (WTI) Course Flight Approval. During the WTI Course flight phase, MAWTS-1 instructors and PWTIs are authorized to perform flight related duties aboard any command's aircraft in which they are NATOPS qualified. MAWTS-1 Instructor cross community flight operations are permitted on a not-to interfere basis. Cross-community flights will be approved in accordance with references (a) through (w).

9. Logistics and Fiscal

a. Each MSC shall provide funding for Transportation of Things (TOT), Transportation of Personnel (TOP), and related per diem expenses for subordinate units supporting WTI Courses. Supporting units shall plan and provide transportation of personnel, aircraft, and support equipment to and from MAWTS-1 in support of all WTPP related courses. MAWTS-1 will assist supporting units in their coordination of the return of personnel and equipment from MCAS Yuma to their respective commands.

b. Costs incurred in support of WTI will be borne by supporting ground and aviation units, to include: TOT, TOP, TAD, Bills of Materials (BOM), repairables, Petroleum/Oils/Lubricants (POL) and other consumables. MAWTS-1 provides funding for ground fuel and combat service support contracts for ground operations in direct support of WTI per references (a) and (b).

10. Safety Reporting

a. Aviation. In the event of an aircraft/Unmanned Aerial Vehicle (UAV) mishap during the WTI Course, the aircraft reporting custodian retains responsibility for the investigation and mishap reporting. Because of the probable geographic separation of the reporting custodian from the aircraft, MAWTS-1 shall be responsible for the initiation of all investigations and reports as required per reference (g). Formal shifting of responsibility from MAWTS-1 to the reporting custodian for conducting the safety investigation shall be contained in paragraph seven of the Mishap Data Report (MDR). Once the reporting custodian has assumed responsibility of the investigation, MAWTS-1 shall be included as information addressee and in the endorsing chain for all reports (e.g. Safety Investigation Report (SIR) and JAGMAN Investigation). CO, MAWTS-1 is accountable for all aircraft/DAV WTI Course mishaps with respect to safety award and mishap free flight hour accounting vice the reporting custodian.

b. Ground. In the event of a WTI ground mishap, the CO, MAWTS-1, who has OPCON over WTI personnel, is responsible for investigating and submitting the Safety Report (SAFEREP) per references (a) through (w). In

situations where the Marine's parent command is better suited to conduct the investigation, the CO, MAWTS-1 will request a change in investigating responsibility through CMC-Safety Division (SD). MAWTS-1 will be included in the endorsing chain of the SAFEREP and JAGMAN investigation.

11. Aircraft Maintenance. Planning, organization, and coordination of the overall maintenance process will be accomplished by the MAWTS-1 Aircraft Maintenance Officer. Maintenance and support personnel assignments will be allocated based on PWTI nominations. Maintenance personnel densities required to support the WTI Course shall be developed by MAWTS-1 to resemble operational realities within constraints necessary to safely conduct operations. MAWTS-1 will promulgate numbers and grade/MOS requirements, as well as reporting schedules and procedures per references (a) through (w). All personnel waiver requests must be coordinated through the requesting MSC and MAWTS-1. If aircraft or equipment status degrades to a point that course objectives cannot be met, replacement aircraft will be provided as requested by MAWTS-1. The MAWTS-1 AMO will recognize all qualifications, certifications, and licenses granted by an augment's parent squadron. This includes, but is not limited to: Quality Assurance Representative / Collateral Duty Inspector (QAR/CDI), Plane Captain, and "Safe for Flight" certification responsibilities.

12. Weapons and Tactics Instructions (WTI) Course Improvement. The experience and knowledge gained during each WTI class must be fully utilized to improve the follow-on course. A student course critique shall be scheduled immediately prior to WTI graduation to afford each student the opportunity to comment on both the academic and flight phases of the course. MAWTS-1 personnel shall continually review and update the WTI Course content to ensure that current threat, weapons and updated Marine Forces Tactics, Techniques and Procedure are incorporated.

13. Weapons and Tactics Instructions (WTI) Course after Action. CO MAWTS-1 shall provide CG TECOM, via CG MAGTFCTC, a WTI Course after action report. The report will include the WTI graduation roster, WTI Tactical Summary of Observations, status of Tactical Development and Evaluation projects and MAWTS-1 Qualitative Assessments. The report will also highlight any WTI administrative, operational, maintenance, or safety issues.

Supplementary Courses of Instruction

1. Overview. The Course Catalogs outline the WTI Course, supplementary courses of instruction, and the instructor certification processes for specific aviation community designations. These courses of instruction and certifications are required to support tactical training conducted per the appropriate Aviation T&R Manuals. Supplementary courses of instruction and instructor programs provide requisite knowledge for all stages of training. Instructor certification and re-certification courses outline the process of preparing and certifying an individual for a specific aviation designation. The Academic Support Package produced by MAWTS-1 contains academic material to support all courses listed in the Course Catalogs. Supplementary courses outside the WTI Course include:

a. Perspective Weapons and Tactics Instructor (PWTI) Commanders Course / Reblack. Designed to update group and squadron commanding/executive officers (Commander's Course) and WTIs (Reblack) returning to the Operating Forces on current aviation tactics, threat and individual/unit training issues.

b. Marine Division Tactics Course (MDTC). Designed to provide FA-18 and F-35 aircrew and Marine Air Intercept Controllers (AIC) with ground and airborne instruction in the doctrine, tactics, and weapons employment considerations for division employment in a complex threat environment.

c. Air Command and Control Officer Course (AC2OS). Designed to provide MACCS refresher training to Marine field grade officers returning for duty to the Marine Air Control Group (MACG). MAWTS-1 fleet support is available to assist MACGs in the conduct of their AC2OS.

d. Senior Watch Officers (SWO) Course. The SWO course is designed to familiarize potential SWOs with the agencies and equipment used to command and control Marine Aviation. Additionally, the course delves into command relationships across the MAGTF of importance to the Air Combat Element and those Joint agencies the Tactical Air Command Center (TACC) may interact with during execution. MAWTS-1 fleet support is available to assist MACGs in the conduct of the SWO Course.

2. Instructor Certifications. MAWTS-1 instructor certification authority and criteria are contained in this Order and references (d) and (e). Every prospective instructor shall meet these criteria prior to certification. Upon completion of certification criteria, the squadron/unit commander is authorized to designate the individual as an instructor. All designations shall be in writing and shall be recorded in the individual's NATOPS Qualification Jacket, MOS Training Jacket, and pilot logbook (as applicable). Instructor certifications include:

- a. Low Altitude Tactics Instructor (LATI).
- b. Terrain Flight Instructor (TERFI).
- c. Night Systems Instructor (NSI).
- d. Night Systems LATI (NSLATI).
- e. Night Systems Search and Rescue Instructor (NSSRI).

- f. Night Systems Familiarization Instructor (NSFI).
- g. Forward Air Controller (Airborne) Instructor (FAC(A)I).
- h. Air Combat Tactics Instructor (ACTI).
- i. Fighter Attack Instructor (FAI).
- j. Defensive Tactics Instructor (DEFTACI).
- k. Defensive Measures Instructor (DMI).
- l. Defensive Air Combat Maneuvers Instructor (DACMI).
- m. Weapons Training Officer (WTO).
- n. Aerial Gunner Instructor (AGI).
- o. Tail Gunner Instructor (TGI).
- p. Air Intercept Controller Instructor (AICI).

3. Unit Instructor Training. The type and number of instructor designations for each unit is a unit commander's prerogative. However, the requirement should be tailored to an informed assessment of training management objectives and unit requirements. It is not the intent of the WTTP to certify more instructors than a unit requires for training. Instructors are responsible for conducting standardized training and ensuring strict adherence to published safety procedures. Commanders should carefully screen and select only those personnel with the highest level of professionalism and skills for instructor designations. Commanders wishing to have more instructors than set forth in this document and references (d) and (e) shall make their request in writing to the Group CO.

APPENDIX A

Glossary of Terms and Abbreviations

3MC	MAWTS-1 Maintenance Management Course
A/C	Accredited/Certified
AAMOC	Advanced Aircraft Maintenance Officer Course
ABOC	Ace Battlestaff Officers Course
AC2OS	Air Command and Control Officer Course
ACTI	Air Combat Tactics Instructor
ADCON	Administrative Control
ADT&E	Aviation Development, Tactics and Evaluation
AGI	Aerial Gunner Instructor
AIC	Air Intercept Controller
AICI	Air Intercept Controller Instructor
ANTTPs	Aviation Tactics, Techniques, and Procedures
ATO	Air Tasking Order
ATOD	Air Tasking Order Development
BOM	Bills of Materials
C3	Command, Control, and Communication
CDI	Collateral Duty Inspector
CG	Commanding General
CO	Commanding Officer
COMMARFORCOM	Commander, Marine Forces Command
COMMARFORPAC	Commander, Marine Corps Forces Pacific
COMMARFORRES	Commander, Marine Forces Reserve
DACMI	Defensive Air Combat Maneuvers Instructor
DC AVN	Deputy Commandant for Aviation
DC I&L	Deputy Commandant for Installations and Logistics
DC M&RA	Deputy Commandant for Manpower and Reserve Affairs
DEFTACI	Defensive Tactics Instructor
DMI	Defensive Measures Instructor
DON	Department of the Navy
FAC(A)I	Forward Air Controller (Airborne) Instructor
FAI	Fighter Attack Instructor
FLSE	Flight Leadership Standardization Evaluator
IPAC	Installation Personnel Administrative Center
JNTC	Joint National Training Capability
LAAD	Low Altitude Air Defense
LATI	Low Altitude Tactics Instructor
LETI	LAAD Enhancement Team Instructor
MACCS	Marine Air Command and Control System
MACG	Marine Air Control Group
MAWTS-1	Marine Aviation Weapons and Tactics Squadron One
MCAS	Marine Corps Air Station
MCCDC	Marine Corp Combat Development Command
MCCRE	Marine Corps Combat Readiness Evaluation
MDR	Mishap Data Report
MDTC	Marine Division Tactics Course
MEOC	MAWTS-1 Expeditionary Ordnance Course
MMTI	Marine Air Traffic Control Mobile Team Instructor Course
MMTL	MMT Leader
MMTM	MMT Member
MOS	Military Occupational Specialty
MSC	Major Subordinate Command

MSE	Major Subordinate Element
NA	Naval Aviator
NARA	National Archives and Records Administration
NFO	Naval Flight Officer
NSFI	Night System Familiarization Instructor
NSI	Night System Instructor
NSLATI	Night System LATI
NSSRI	Night System Search and Rescue Instructor
O&MMC	Operations and Maintenance, Marine Corps
O&MN	Operations and Maintenance, Navy
OICs	Officers in Charge
OPCON	Operational Control
PCA	Permanent Change of Assignment
PCS	Permanent Change of Station
PII	Personally Identifiable Information
POI	Period of Instruction
POL	Petroleum/Oils/Lubricants
PWTI	Prospective Weapons and Tactics Instructor
QAR	Quality Assurance Representative
SAFEREP	Safety Report
SD	Safety Division
SIR	Safety Investigation Report
SME	Subject Matter Expert
SWO	Senior Watch Officer
T&R	Training and Readiness
T/M/S	Type/Model/Series
T/O	Table of Organization
TACC	Tactical Air Command Center
TAD	Temporary Additional Duty
TBMCS	Theater Battle Management System
TD/FD	To Duty / From Duty
TERFI	Terrain Flight Instructor
TGI	Tail Gunner Instructor
TOP	Transportation of Personnel
TOT	Transportation of Things
UAS	Unmanned Aerial System
UAV	Unmanned Aerial Vehicle
USSOCOM	United States Special Operations Command
VMX-1	Marine Operational Test and Evaluation Squadron One
WTI	Weapons and Tactics Instructor
WTO	Weapons Training Officer
WTPP	Weapons and Tactics Training Program