# DEPARTMENT OF THE NAVY



HEADQUARTERS UNITED STATES MARINE CORPS 3000 MARINE CORPS PENTAGON WASHINGTON D.C. 20350-3000

> MCO 3710.8 AVN 30 Sep 2011

#### MARINE CORPS ORDER 3710.8

From: Commandant of the Marine Corps

To: Distribution List

Subj: UNITED STATES MARINE CORPS NAVAL AIR TRAINING AND OPERATING PROCEDURES

STANDARDIZATION (NATOPS) PROGRAM

Ref: (a) OPNAVINST 3710.7U

(b) NAVAIR 00-80T-112 (NOTAL)

(c) COMNAVAIRFORINST 4790.2A CH-2 (NOTAL)

(d) NAVMC 3500.14

(e) MCO P1000.6G

(f) MCO 3710.4A

(g) MCO 3710.6

(h) NAVMC 3710.6

(i) MCO P5720.73 Ch 1

(j) OPNAVINST 3750.6R

(k) MCO 5100.29A

(1) MCO 1542.7 Series

(m) SECNAV M-5210.1

(n) Federal Acquisition Regulation, March 2005, Vol. I

(o) OPNAVINST 5510.48

Encl: (1) USMC NATOPS PROGRAM

(2) USMC NATOPS AND PUBLICATIONS MATRIX

(3) USMC INDIVIDUAL WAIVER/EXTENSION REQUEST TEMPLATE

(4) USMC NATOPS PROGRAM EVALUATION CHECKLIST

(5) UNIT NATOPS PROGRAM EVALUATION REPORT

(6) USMC UNIT WAIVER/EXTENSION REQUEST MESSAGE TEMPLATE

(7) USMC DIFDEN WAIVER REQUEST TEMPLATE

# 1. Situation

- a. Purpose of this Order is to amplify policy and procedural guidance of references (a) through (h) in administering the NATOPS program within Marine Corps Aviation and set forth the NATOPS policy, organization, and requirements of the Commandant, U.S. Marine Corps. This Marine Corps Order (MCO) will specifically address procedures and guidelines for individual and unit NATOPS and Instrument Evaluations, waivers, extensions, reporting, and flight operation standardization within Marine aviation. This Order shall be applicable to all USMC aircraft platforms and aviation related systems.
- b. The essential elements of the NATOPS program are a thorough knowledge of all aircraft systems and adherence to approved operating procedures and standardization. A NATOPS evaluation measures the knowledge and compliance with operating procedures, not flight proficiency or weapons readiness. Any tendency to expand the NATOPS evaluation into these areas must be avoided. The NATOPS Instrument Evaluation program assists the commanding officer in maintaining a high level of all-weather flying proficiency in his/her unit.
- c. Reference (a) established the NATOPS program within Naval Aviation and the instructions and information contained therein are applicable to DISTRIBUTION STATEMENT A: Approved for public release; distribution is unlimited

Marine aviation. The Commandant of the Marine Corps (CMC) through the Deputy Commandant for Aviation (DC AVN) is a member of the NATOPS Advisory Group (NAG) and serves as a Cognizant Command (COG). The NATOPS Advisory Group is responsible to the Chief of Naval Operations (CNO) for the proper operation of the NATOPS program. Commander, Marine Forces Command (COMMARFORCOM), Commander, Marine Forces Pacific (COMMARFORPAC), and Commanding General 4th Marine Aircraft Wing (CG 4th MAW) are also NATOPS Advisory Group members, and serve as a Cognizant Command (COG) and execute those duties and responsibilities as delineated in reference (a).

2. Cancellation. This Order cancels the following directives: MCO 3710.4A and  $\overline{\text{MARFORPACO}}$  3710.1.

### 3. Mission

- a. To improve combat readiness, reduce aviation mishaps, and improve flight safety through the effective standardization of aircrew practices and procedures in the execution of Operational Excellence. Effective implementation of the NATOPS program is a leadership responsibility.
- b. Compliance with the NATOPS program and publications is mandatory at all levels within Marine aviation; however, nothing contained therein shall prevent the aircrew from taking such actions as the aircrew may deem necessary, under unusual or emergency conditions, to safeguard life and property.
- c. In those specific instances in which a service member is in compliance with reference (c), he/she must also be in compliance with references (a) and (b) to function/operate as a crewmember in USMC aircraft.

#### 4. Execution

- a. The NAG members are responsible for the administration of specific portions of the NATOPS program as assigned by reference (a). This responsibility encompasses the assignment of Model Manager Commands (Evaluation Units) of those aircraft and manuals depicted in enclosure (2).
- b. To be effective, the NATOPS program must be responsive to the requirements of the users and therefore, readily changeable. Users have a responsibility to ensure that NATOPS publications are correct and current.
- c. NATOPS publications are issued for the purpose of standardizing aviation flight and flight related procedures and do not include tactical doctrine. Although it is not intended that the NATOPS manual duplicate or replace other publications such as tactical manuals, some conflict may occur. Should conflict exist between the training and operating procedures found in the NATOPS publications and those found in other publications, the NATOPS publications will govern.

# 5. Administration and Logistics

- a. Specific administration and logistics of the USMC NATOPS program will be addressed in chapter 2.
- b. This Order standardizes and jointly satisfies the requirement for each Marine Corps NATOPS Advisory Group member (Commandant of the Marine Corps; Commander, U.S. Marine Corps Forces Command; Commander, U.S. Marine Corps Forces Pacific; and Commanding General, 4th Marine Aircraft Wing) to

have their own order addressing evaluations, reporting, and waivers per reference (a).

c. Records created as a result of this directive shall include records management requirements to ensure the proper maintenance and use of records, regardless of format or medium, to promote accessibility and authorized retention per the approved records schedule and reference (m).

## 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.

T. G. ROBLING

Deputy Commandant for Marine Aviation

DISTRIBUTION: PCN 10203460600

## LOCATOR SHEET

Subj:	USMC	NATOPS	PROGRAM							
Locatio	on:									
	-		Indicate	location(s)	of	copy(ies)	of.	this	Order.)	

# RECORD OF CHANGES

Log completed change action as indicated.

Change Number	Date of Change	Date Entered	Signature of Person
change number	Dace of change	Date Entered	Incorporated Change
	+		incorporaced change
•			
<del> </del>			
-			
	-		
			·
· ·			

# TABLE OF CONTENTS

IDENTIFI	CATION	TITLE	PAGE
Chapter	1	NATOPS PROGRAM DUTIES AND RESPONSIBILITIES	.1-1
1.		Tasks	.1-1
2.		Liaison	
3.		Summary of NATOPS Program Roles	
Figure 1	-1	USMC NATOPS Program Command Structure	.1-8
Chapter	2	NATOPS ADMINISTRATION AND LOGISTICS	.2-1
1.		Administration and Logistics	.2-1
2.		NATOPS Changes	.2-1
3.		NATOPS Review Conferences	.2-2
Chapter	3	NATOPS EVALUATIONS	.3-1
1.		NATOPS Evaluations	.3-1
2.		Individual NATOPS Evaluations	
3.		Unit NATOPS Evaluations	
4.		NATOPS Program Standardization and Evaluation	
5.		NATOPS Instrument Program Standardization and	.5-0
<i>J</i> .		Evaluation	2 0
_			
6.		Enlisted Aircrew	.3-8
Chapter	4	WAIVERS AND EXTENSIONS	.4-1
1.		General Administration of Waivers and Extensions	.4-1
2.		Individual Waivers	.4-2
3.		Unit Waivers	
4.		Individual Extensions	
5.		Unit Extensions	
6.		Duty Involving Flying Denied (DIFDEN) Waivers	4 3
0.		Ducy involving riging benied (Dirben) waivers	.4-3
Chapter	5	REPORTING	.5-1
•			
1.		Reporting	
2.		Upline Reporting	.5-1
Chapter	6	MARINE HELICOPTER EXPERIMENTAL SQUADRON ONE	.6~1
1,		Marine Helicopter Experimental Squadron ONE	.6-1
2.		Waivers and Extensions	
3.		Reporting	
·		Reporting	.0-2
Chapter	7	MARINE AVIATION WEAPONS AND TACTICS SQUADRON ONE	.7-1
1.		Marine Aviation Weapons and Tactics Squadron ONE	. 7 - 1
2.		Waivers and Extensions	
		marvers and Entendrond	. 1 2

3.	Reporting
Chapter 8	MARINE OPERATIONAL TEST AND EVALUATION SQUADRON TWENTY-TWO
1.	Marine Operational Test and Evaluation Squadron
2.	TWENTY-TWO
3.	
<i>3</i> .	Reporting
Chapter 9	OPERATIONAL SUPPORT AIRLIFT
1.	Operational Support Airlift
2.	Waivers and Extensions
3.	
	Naval Flight Officers
4.	Reporting
Figure 9-1	VMR USMC Lead NEU Assignment
Chapter 10	USMC AVIATION RESERVES
1.	USMC Aviation Reserves
2.	Waivers and Extensions
3.	Reporting
4.	
<b>±.</b>	Model Manager Responsibilities
Chapter 11	MANEUVER DESCRIPTION GUIDES
1.	Maneuver Description Guides
2.	Design and Development
3.	Maneuver Description Guide Management
Figure 11-1	MDG Custodians
Chapter 12	ORIENTATION/INDOCTRINATION FLIGHTS
1.	Background
2.	Approval Authority
3.	Eligible Personnel
4.	Flight Limitations and Restrictions
5.	Ground Combat Student Orientation/Indoctrination
<b>5.</b>	Flights
6.	Ground Commander Orientation/Indoctrination Restrictions and Requirements
7.	Physical and Survival Training Requirements
Chapter 13	INSTRUMENT GROUND SCHOOL
1.	Purpose and Administration
1.	

3. 4. 5. 6. 7.	Course of Instruction
APPENDIX A	GLOSSARY OF ACRONYMS
ENCLOSURE 1	USMC NATOPS PROGRAM
ENCLOSURE 2	USMC NATOPS AND PUBLICATIONS MATRIX
ENCLOSURE 3	USMC INDIVIDUAL WAIVER AND EXTENSION REQUEST TEMPLATES
ENCLOSURE 4	USMC NATOPS PROGRAM EVALUATION CHECKLIST
ENCLOSURE 5	UNIT NATOPS PROGRAM EVALUATION REPORT
ENCLOSURE 6	USMC UNIT WAIVER AND EXTENSION REQUEST MESSAGE TEMPLATES
ENCLOSURE 7	USMC DIFDEN WAIVER REQUEST TEMPLATE

#### NATOPS Program Duties and Responsibilities

1. <u>Tasks</u>. Compliance with the NATOPS program requires strict enforcement of standardization. Assignment of NATOPS related tasks requires high quality control in assigning appropriate personnel to these billets. NATOPS management requires the assignment of the following responsibilities.

### a. Deputy Commandant for Aviation (DC AVN)

- (1) The DC AVN is the final authority for all USMC Aviation NATOPS program issues and shall serve as the safety advocate for all Marine aviation units per applicable directives. Specific responsibilities for coordinating the overall NATOPS program are assigned as follows.
- (2) Aviation Plans, Programs, Doctrine, Joint Matters, and Budget Branch (APP): Reporting policies for all Marine Aviation per applicable directives.
- (3) Aviation Weapons Systems Requirements Branch (APW): Training and standardization requirements and policies for all Marine Aviation per applicable directives.
- (4) Aviation Manpower and Support Branch (ASM): Manpower and waiver/extension policies for all Marine Aviation per applicable directives.
- (5) Aviation Expeditionary Enablers (APX): Unmanned Aircraft System (UAS), Aviation Ground Support (AGS), and Air Traffic Control (ATC) training and standardization policies per applicable directives.
- b. Commandant of the Marine Corps Safety Division (CMC SD) Aviation

  Branch. Responsible for aviation safety policies for all Marine aviation
  units per applicable directives and coordinate actions with DC AVN guidance
  on all aviation safety matters.
- c. NATOPS Advisory Group (NAG) (DC AVN, COMMARFORCOM, COMMARFORPAC, and CG 4th MAW)
- (1) Implement, supervise, and evaluate the NATOPS program for all aviation units within their commands and coordinate standardization across the entire Force per this Order and other applicable directives.
- (2) Accountable for the duties and responsibilities as NATOPS Coordinators as delineated in reference (a).
- (3) Maintain liaison with other NATOPS coordinators and CNAF Force NATOPS (Code N455).
- d. Cognizant (COG) Command (DC AVN, COMMARFORCOM, COMMARFORPAC, and CG 4th MAW). Accountable for the duties and responsibilities as a COG Command as delineated in reference (a).

#### e. Model Manager Unit (MMU)

- (1) The unit or department designated by the COG(s) to administer the NATOPS program for a specific aircraft model or aviation related system. When referring to the MMU, it is implied that the Model Manager (MM) and the MMU are equivalent. The NATOPS Model Manager (MM) shall be the unit commander or head of department as applicable (e.g., KC-130J ATU) designated by the COG(s) to administer the NATOPS program for a specific aircraft model or aviation related system. These assignments can be found at the NATOPS Status Report at <a href="https://airworthiness.navair.navy.mil">https://airworthiness.navair.navy.mil</a> and delineated in enclosure (2). An Other Designated Unit (ODU) is one that is charged by the NATOPS MMU and is designated by the COG(s) to administer the NATOPS program for a specific aircraft model series sufficiently different from the parent type model (e.g., CH-53E and CH-53D).
- (2) Review the assigned NATOPS publications to ensure they contain the latest approved operating procedures and make appropriate recommendations to COGs on all matters concerning NATOPS manuals.
- (3) Accountable to the COG for the effective administration of the duties and responsibilities as a NATOPS MM as delineated in reference (a).
- (4) Submit via their respective Chain of Command (CoC) (i.e. MAW) funding requirements (TAD, Travel, Conferences etc.) in the execution of their MM responsibilities.
- (5) In accordance with Aviation Training System (ATS) processes and in coordination with the local MATSS, serve as the simulator accrediting authority to certify respective T/M/S simulators capable of executing NATOPS and Instrument evaluation events. Ensure an updated list of approved simulators is reflected in the applicable T&R manual and OPNAV 3710 Individual Flight Activity Report (IFAR) Appendix.
- (6) Shall ensure the standardization of instrument procedures through coordination with all required units and personnel.

#### f. NATOPS Program Manager (NPM)

- (1) Assigned and designated in writing by the MM to administer the NATOPS program for a specific aircraft model or aircraft-related system in the MMU. Responsible to the MM for specific duties in the maintenance of assigned NATOPS publications, and serve as the MM's single Point of Contact (POC) for all NATOPS related issues.
- (2) Review the assigned NATOPS publications to ensure they contain the latest approved operating procedures and make appropriate recommendations to COG(s) on all matters concerning NATOPS manuals.
- (3) Accountable for the duties and responsibilities as a NATOPS Program Manager as delineated in reference (a).
  - (4) Specific duties of PMs for aircraft are as follows:
- (a) Make appropriate recommendations to the COG command on all matters concerning the NATOPS manuals.

- (b) Review the initial drafts of NATOPS flight manuals and pocket checklists when provided by NATOPS Products Administrator.
- (c) Maintain complete records of interim changes to preliminary NATOPS manuals and to ensure that all users are promptly informed.
- (d) Ensure timely updates of NATOPS publications. Request and recommend convening of NATOPS review conferences from the appropriate COG per the provisions of reference (a).
- (e) Assume technical cognizance for functional check flight requirements and review, update and expand existing checklists and procedures.
- (f) Collect, review and compile recommended routine changes to the NATOPS publications for which they are responsible per the provisions of reference (a).
- (g) Ensure that all conference attendees have received agenda items no later than 20 days prior to convening a review conference.
- (h) Chair the review conference and be responsible for its format as prescribed in reference (a).
- (i) As required by reference (a), compile and provide the NATOPS Conference Report to Commander, Naval Air Systems Command (COMNAVAIRSYSCOM) (AIR-4.0P), with a copy to COGs and all major aviation commands which operate the same type of aircraft.
- (j) Prepare and maintain a bank of questions and answers for use by NATOPS instructors in preparing the written examinations. With the maturity of ATS, at least the closed book examinations should be migrated into an automated Learning Management System (LMS) (e.g., MCALMS).
- (k) Integrate risk management concepts and wording into crew coordination and flight planning sections of the individual aircraft NATOPS manuals.

## g. Lead NATOPS Evaluation Unit (NEU)

- (1) A command designated as the NATOPS Model Manager Unit (MMU) for a T/M/S aircraft and responsible for ensuring all individuals and units operating that T/M/S aircraft receive NATOPS Evaluations. Unless otherwise designated, the NATOPS MMU is also the Lead NEU.
- (2) A command designated by a NAG member, normally the COG Command, to conduct NATOPS Evaluations of other units operating that T/M/S aircraft as delineated in reference (a).
- (3) Accountable to the COG for the execution of the duties and responsibilities as a NATOPS Evaluation Unit as delineated in reference (a).

## h. NATOPS Evaluation Unit (NEU)

(1) Additional evaluation units designated by the MM/Lead NEU and endorsed by the T/M/S COG command to conduct unit NATOPS evaluations of specific units. At least one other NEU for a particular T/M/S at the

squadron or Group level should be selected to foster cross-community interaction and facilitate geographically separated unit NATOPS requirements.

(2) Accountable to the NATOPS MM for the execution of the duties and responsibilities as a NATOPS Evaluation Unit as delineated in reference (a).

#### i. NATOPS Evaluator (NE)

- (1) A highly qualified aircrew member in support of a NATOPS Evaluation unit and designated in writing by the NATOPS MM for a particular T/M/S to facilitate Unit NATOPS Evaluations, standardize NATOPS Instructors, and conduct NATOPS evaluations on behalf of the NATOPS MM.
- (2) Each NEU and/or Group commander shall recommend to the NATOPS MM no more than (2) highly qualified NAs or NFOs (Captain/O-3 or above) and, as applicable, Enlisted Air Crewmen (EAC, Sgt/E-5 or above) to the assigned duties as NEs. When more than one type of aircraft is assigned to the NEU a sufficient number of NEs shall be assigned to support the MM in the execution of NATOPS standardization and evaluations.
- (3) Each T/M/S NE shall receive an annual standardization evaluation which may be conducted with their annual NATOPS evaluation. The evaluation and designation and administered by the designated Model Manager (MM).
- (4) Accountable to the NATOPS MM to execute the duties and responsibilities as a NE as delineated in reference (a) to include:
- (a) Responsible for the supervision, coordination, and evaluation of the NATOPS program for those units under the purview of the NEU.
- (b) Conduct unit NATOPS evaluations for units as directed or within their purview as specified by reference (a), including one or more random flight evaluations for each aircrew position. Provide a formal written report to the inspected unit commanding officer summarizing the unit's NATOPS Evaluation with copies of the report to be retained by the evaluated unit, NEU, and a copy to be forwarded to the appropriate MAW Director of Standardization and Safety (DOSS) office. The format utilized is depicted in enclosure (5).
- (c) Conduct annual evaluations of all unit-level NATOPS Instructors (NI and ENI) and select Contract Instructors (CI). Those CIs responsible for NATOPS evaluations will be evaluated and standardized by the NE and recommended for designation as ANIs by the MAG Commander. CIs shall not be designated as NEs.
- (d) Maintain a master library of appropriate NATOPS publications and other associated instructions. This library may be maintained in digital format by downloading applicable NATOPS publications and changes from the Naval Air Technical Data and Engineering Service Command (NATEC) official web site (https://mynatec.navair.navy.mil/).
- j. <u>Unit Commanders</u>. The effectiveness of the NATOPS program within a command/unit rests with the commanding officer. As such, commanding officers shall ensure appropriate emphasis is placed on the NATOPS Program and that all available tools are effectively utilized. This Order, OPNAVINST 3710.7, NATOPS manuals, NATOPS flight manuals, and T&R manuals are some of the most

effective tools to achieve the required standardization and training goals and shall be the foundational publications for the program.

- k. <u>Unit NATOPS Officer (UNO)</u> An aircrew member whose primary duty is in the administration of the NATOPS program within a squadron or unit and is responsible to the unit Commanding Officer for the execution of the NATOPS program as prescribed in reference (a). The UNO may also be an NI if desired, but must go through the applicable evaluation process as an NI. Responsibilities include:
- (1) Administer the Taxi/Turn up/APU license program as required per reference (c) if applicable.
- (2) Annually administer open and closed book NATOPS examinations (prepared and maintained by the Model Manager) to all NAs, NFOs, and EAC on the aircraft assigned.
- (3) Maintain NATOPS Flight Training and Qualifications Jackets (OPNAV Form 3760/32) and other appropriate records on all flight personnel per reference (a).
- (4) Ensure that all flight personnel comply with NATOPS requirements which include, but not limited to: annual NATOPS examinations and checkflight events, annual flight physical, instrument rating requirements, Naval Aviation Survival Training Program (NASTP), egress training, Centrifuge-based Flight Environment Training (CFET) (when applicable), Crew Resource Management (CRM), and other applicable directives, instructions, and orders.
- (5) When compliance with any prescribed NATOPS procedure is found to be impractical or it is desired that a new procedure be initiated, commence action in the form of urgent or routine change recommendations when new or improved procedures indicate the advisability of such changes.
- (6) When compliance with any prescribed NATOPS procedure is found to be impractical for safe, efficient, and effective flight and ground operations for a temporary period due to environmental, mission, or operational constraints, request an extension/waiver with a justification and an interim solution which meets the spirit and intent of the NATOPS program. Submit the request through the USMC NATOPS Program Command Structure as depicted in figure 1-1, utilizing the message format in enclosure (3). Specific guidance on waivers and extension shall be covered in chapter 4 of this Order.
- (7) As specified in reference (d), ensure all flight personnel complete the monthly emergency procedures written examinations and quarterly flight simulators/static cockpit-cabin drills. The results of the monthly emergency procedures examinations and reviews shall be maintained IAW reference (d).
- (8) Maintain positive control over all NATOPS publications in the unit and ensure all required changes are incorporated.
- (9) Maintain a master library of appropriate NATOPS publications and associated instructions and be thoroughly knowledgeable of their contents. Liaison with the T/M/S MM to ensure the completeness of received changes and record keeping.

- 1. NATOPS Instructor (NI)/Enlisted NATOPS Instructor (ENI). A highly qualified aircrew member standardized (initial and subsequent NATOPS evaluations) by the NATOPS MM or NE and designated by the Commanding Officer whose primary duty should be to implement the NATOPS standardization and evaluation program within a squadron or unit.
- (1) The NI may also be the unit's UNO and shall also conduct or assist in those duties and responsibilities as delineated for the UNO.
- (2) Each aircraft squadron/air station commander shall designate, in writing, no more than one NATOPS Instructor (NI) from assigned NA or NFO personnel and one from assigned Enlisted Aircrew (EAC) personnel for each permanently assigned T/M/S. To ensure the effectiveness of the NATOPS program and provide continuity, NIs should remain in the billet for a minimum of 12 months. To support temporary composite Aviation Combat Element (ACE) constructs, use of ANI's is appropriate and should be commensurate with the composite duration.
- (3) NATOPS Instructor (NI) Selection Criteria. Commanders should select their NI as applicable with a weight matching that given to the selection of the unit's Weapons and Tactics Instructor (WTI), Flight Leadership Stan/Eval (FLSE), or Quality Assurance Officer (QAO). Commanders should consider experience level, demonstrated judgment and maturity, as well as the officer's ability to work with and affect other departments within the unit when selecting this officer.
  - (a) NATOPS Instructor (NI) Requirements
- $\underline{1}$ . NI shall be a highly-qualified, winged aviator, of the rank of Captain/O-3 or higher.
- 2. A NI shall possess flight designations commensurate with their peer group, with the minimum being that of Section Leader. Exceptions for the Section Leader requirement are the qualification as a Transport Plane Commander (TPC) for Operational Support Airlift (OSA) and KC-130 pilots, 750 total flight hours for Naval Flight Officers, and Mission Commander designation for VMU NIs.
- $\underline{3}$ . Exceptional candidates may be ready to serve as NIs ahead of their peers and prior to meeting the enumerated requirements. Waiver authority to deviate from these requirements resides with the Wing Commanding General or first General Officer in the chain of command.
- (b) NI duties include the following duties, but are not limited to:
- $\underline{1}$ . Administer/conduct annual NATOPS evaluations for unit flight personnel per reference (a) on the aircraft assigned.
- $\underline{2}$ . As required, recommend unit personnel for designation as ANIs to facilitate NATOPS evaluation and standardization of unit aircrew.
- $\underline{3}$ . Execute a proactive NATOPS/NATOPS Instrument Program to ensure standardization of procedures and basic flight operations.

- $\underline{4}$ . Advise the unit leadership, Operations, Maintenance, and DSS on all matters pertaining to the unit's NATOPS standardization program.
- $\underline{5}$ . Ensure strict flight and aircraft-related standardization in conjunction with the Flight Leadership Stan/Evaluator (FLSE) and WTI by enforcing applicable directives on behalf of the Commanding Officer.
- $\underline{6}$ . Assist the Aviation Safety Officer (ASO) as necessary in conducting pre-mishap plan drills and annual training. Ensure the training adequately covers all required NATOPS issues dealing with emergency situations and the procedures to be accomplished both in the aircraft and by supporting personnel on the ground (i.e., Operations Duty Officer ODO).
- $\underline{7}$ . Shall conduct sufficient training of the unit aircrew personnel to ensure the squadron has a capability to accomplish its mission with qualified NATOPS and NATOPS instrument qualified/rated aircrew.
- m. Assistant NATOPS Instructor (ANI)/Assistant Enlisted NATOPS Instructor (AENI). An aircrew member, designated in writing by the unit commanding officer, whose collateral or secondary duty is to assist the UNO/NI in the administration and execution of the NATOPS program within a squadron or unit.
- (1) Commanders should select their ANI from amongst the most qualified in specific model(s) aircraft assigned to the command.
- (2) Per references (a), (g) and (h), select Contract Instructors (CIs) are authorized to perform NATOPS evaluations in training devices/simulators. They shall be designated in writing by the Marine Aircraft Group (MAG) commanding officer with the limit of their designation for NATOPS evaluations restricted to an Assistant NI. All CI ANI evaluations shall be done by uniformed NEs. Specific qualification, designation, and currency/proficiency standards for CIs are delineated in chapter 3.
- 2. <u>Liaison</u>. In order to correlate data, locate areas of weakness and recommend corrective action, direct liaison is necessary in administering certain aspects of the program.
- a. Supervisors, evaluators and model managers are authorized direct liaison with COGs, other supervisors/evaluators (Navy and other commands), and squadron instructors of similar aircraft models on matters relating to their specific model(s).
- b. Unit NIs are authorized direct liaison with other unit instructors on matters pertaining to their aircraft platform or aviation related system.
- 3. <u>Summary of NATOPS Program Roles</u>. The prioritization as follows assists in explaining the flow of the NATOPS Program from policy to execution at the unit level as depicted in figure 1-1. More specific definitions can be found in reference (a).
- a. Naval Advisory Group (NAG) members monitor the NATOPS program and issue NATOPS program directives concerning but not limited to NATOPS evaluations, waivers, and reporting procedures.

- b. Cognizant Command (COG) units are responsible for the oversight of NATOPS programs for those specifically assigned T/M/S aircraft or aviation-related function.
- c. Model Manager Units (MMU) and Model Managers (MM) designated by the COG and responsible for the overall NATOPS standardization and currency of all assigned NATOPS publications and flight crews. MMUs are also referred to as the Lead NATOPS Evaluation Unit (NEU) for a T/M/S platform or aviation-related function.
- d. NATOPS Program Manager (NPM) is designated and responsible to the MM for specific duties in the maintenance of assigned NATOPS products and acts as the MM's single point of contact on all NATOPS related issues.
- e. The NATOPS Evaluation Unit (NEU) is a squadron or Group level unit designated in writing by the MM/Lead NEU to conduct NATOPS unit evaluations operating that specific T/M/S or aviation-related function.
- f. The NATOPS Evaluator (NE) is highly qualified individual designated in writing by the MM to conduct NATOPS unit evaluations operating that specific T/M/S or aviation-related function. The NE is not required to reside within the unit designated as the NEU. However, when acting as the NE, it is done on behalf of the NEU.
- g. A Unit NATOPS Officer (UNO) is designated in writing and responsible to the unit Commanding Officer for NATOPS program administration.
- h. A NATOPS Instructor (NI) is designated and responsible to the unit's Commanding Officer for implementation, conduct, and management of the NATOPS standardization and evaluation program within a squadron or unit. Any further reference to NI is synonymous with ENI, and includes the intended role/responsibility afforded to both Officer and Enlisted aircrew (as appropriate).
- i. Assistant NATOPS Instructors (ANI) and Enlisted NATOPS Instructors (ENIs) are highly qualified aircrew members designated in writing by the Commanding Officer to assist the UNO/NI in the administration and execution of the NATOPS program within a squadron or unit. Any further reference to ANI is synonymous with AENI, and includes the intended role/responsibility afforded to both Officer and Enlisted aircrew (as appropriate).

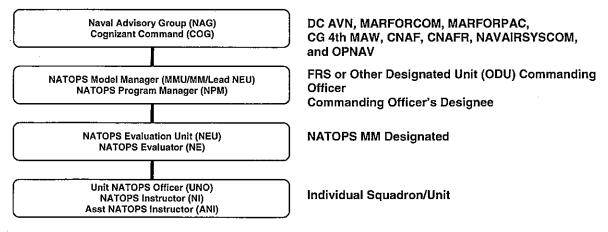


Figure 1-1.--USMC NATOPS Program Command Structure

# Administration and Logistics

1. Administration and Logistics. The administration and logistics of the USMC NATOPS program shall be in accordance with references (a), (b), and this Order.

### a. Policy

- (1) The intent of this Order is to further define for Marine Aviation those areas or issues which require greater clarification and not to conflict with or restate existing policies already established or establish inflexible rules and procedures. Should a conflict arise between guidance contained in this Order and those found in other NATOPS publications, the NATOPS publications shall govern, otherwise the most restrictive guidance shall apply. In those situations where guidance is lacking, it is expected that sound judgment and common sense will be exercised. A recommended change or identification of the issue shall be forwarded via the chain of command to DC AVN for consideration in the review of this Order.
- (2) It is the responsibility of all MMs, NPMs, NEs, UNOs, NIs, and ANIs/ENIs to thoroughly review, understand, and comply with guidance contained herein.
- (3) Additionally, all aircrew should possess a working knowledge of this Order.
- b. NATOPS Manual/NATOPS Flight Manual. NATOPS manuals are issued for certain special operations involving manned aircraft which lend themselves to standardization such as Air-to-Air Refueling, CV, LHA/LPH/LHD, Instrument Flight, and Landing Signal Officer (LSO) etc. NATOPS flight manuals are for specific model aircraft and contain standardized ground and flight operating procedures, training requirements, limitations, and technical data necessary for the safe and effective operation of the aircraft and are referenced in enclosure (1). The inclusion of the F-35B Lightning II Joint Strike Fighter (JSF) and Unmanned Aerial Vehicles (UAV)/Unmanned Aircraft Systems (UAS) will be addressed in interim changes or a revision of this Order if and when applicable NATOPS publications have been approved.

#### 2. NATOPS Changes

### a. NATOPS Change Recommendations

- (1) NATOPS publications are developed by users for users. Increased aircraft familiarity, changing operational requirements, and new developments will require continued updating of these manuals. Users must accept the primary responsibility for updating these manuals. If an individual knows of a better procedure or is aware of a conflict between NATOPS and other doctrine(s), the individual is obligated to propose a change to the applicable publications. It is anticipated that the majority of changes will be initiated at the squadron/unit level; however, individuals at any level of command may originate a change recommendation.
- (2) NATOPS change recommendations are either routine or interim, depending on the urgency of the recommendation.

- (3) Routine change recommendations are those that do not require immediate issuance to the fleet. Only one change proposal per form is authorized. Forms shall be submitted IAW procedures set forth in reference (a).
- (4) Interim change recommendations are those that require near-term issuance to the fleet. Interim change recommendations are additionally categorized as either "priority" or "urgent" based on the consequence of the content of the change. Interim changes shall be submitted IAW procedures set forth in reference (a).
- (5) The transmission of urgent and priority change recommendation messages is authorized during MINIMIZE.

## 3. NATOPS Review Conferences

- a. Review Conferences. The effectiveness of the NATOPS program is largely dependent upon frequent review and updating of NATOPS manuals to ensure that they reflect current procedures and accurate technical information.
- (1) The responsibility for scheduling, convening, and conducting a NATOPS Pre-Conference or Review Conference rests with the appropriate MMU/MM. These conferences will be executed IAW procedures set forth in reference (a) (https://airworthiness.navair.navy.mil). Units designated as a MMU shall possess a copy of the Naval Tactical Support Activity's NATOPS Program Manager Handbook. This reference contains detailed information concerning MM duties and specifically how to conduct a NATOPS Conference.
- (2) All units are strongly encouraged to provide experienced and knowledgeable representation at NATOPS conferences to provide accurate information concerning the performance capabilities of respective T/M/S aircraft and to improve the quality of the NATOPS program.
- b. <u>Conference Reports</u>. As an official record of the conference, distribution and use of conference reports shall be IAW reference (a).
- c. Advance Change Items. During the conference proceedings, certain items, such as revised emergency procedures, may be identified as items that should become effective as soon as possible. The conference attendees may designate such agenda items as "Advance Changes." An Advance Change designation stipulates that upon receipt of the conference report, commands shall immediately implement Advance Change items as mandatory. Advance Change items must be written clearly and correctly. Further guidance concerning Advance Change items is clearly delineated in the NATOPS Program Manager Handbook.

## NATOPS Evaluations

- 1. NATOPS Evaluations. NATOPS evaluations measure an individual's procedural understanding, airmanship, systems knowledge, situational awareness, and judgment. These evaluations also measure the degree of compliance and the health of the NATOPS program within a unit. References (a) through (d) establish evaluation procedures and performance requirements for the conduct of NATOPS, NATOPS Instrument, and maintenance flight and ground operations. Additionally, they address the maintenance of certain records pertaining to these checks, evaluations, and examinations.
- 2. <u>Individual NATOPS Evaluations</u>. References (a) through (d) establish evaluation procedures, testable information, and performance requirements for individual NATOPS evaluations. Additional instructions are contained in the NATOPS evaluation section of the respective T/M/S NATOPS flight manuals. Chapter 2 of reference (d) also provides additional instructions for the conduct of individual NATOPS evaluations and maintenance of records.

#### a. Individual NATOPS Evaluations

- (1) Required personnel not possessing a current NATOPS qualification in model(s) shall satisfactorily complete an evaluation IAW references (a), (b), and (d) prior to the commencement of flight/ground operations. To the maximum extent possible, approved simulators shall be used as the primary means to execute all NATOPS evaluations. The evaluation can be accomplished in an approved simulator/training device (e.g., Weapons Systems Trainer-WST, Operational Flight Trainer-OFT, Aircrew Procedures Trainer-APT, Flight Training Device-FTD, Containerized Flight Training Device-CFTD, Tactical Operational Flight Trainer-TOFT, Deployable Mission Rehearsal Trainer-DMRT, Full Flight Simulator-FFS, Full Mission Simulator-FMS, and others as they come online). Due to enhanced evaluation methods and risk mitigation, use of simulators/training devices is the preferred means to train and evaluate those emergencies and/or scenarios that present significant increased risk when performed in an aircraft. If no such device is available, static cockpit/cabin, or flight deck may be utilized. If in the course of completing an evaluation, flight events in the aircraft are required (due to the lack of approved and appropriate training device/simulator), flight/ground operations can be completed under the "pilot under instruction" construct to achieve a NATOPS qualification. Flight personnel have a maximum of three (3) months to complete NATOPS requalification. This period of instruction is extendable to six (6) months with appropriate justification. This period of instruction is not waiverable. Extensions on a case-by-case basis with justifications can be submitted via the appropriate chain of command for adjudication by the appropriate COG. This is not to be used repeatedly for an individual to circumvent the requirements for a NATOPS evaluation currency and qualification process.
- (2) Individual NATOPS evaluations and standardization evaluations for each crew position shall include two parts: 1) a ground portion consisting of a NATOPS open and closed book examinations and oral examination; and 2) a simulator/flight portion consisting of the NATOPS standardization/evaluation event. Further NATOPS program evaluation and standardization criteria are covered in paragraph 4.

- (3) The oral examination shall include aircraft systems and limitations, procedural knowledge, and restrictions as described in the NATOPS manuals and the T/M/S Maneuver Description Guide (MDG) per chapter 11 of this Order. It is recommended that the oral examination be conducted either prior to or during the ground portion of the event evaluation separate from a flight. However, under certain circumstances when this action is required (e.g., deployment); it shall be documented in the evaluation report. The evaluation(s) shall be conducted by the appropriate NI/ANI and accomplished in accordance with references (a) and (b) and the respective NATOPS flight Manual, Commercial Derivative Aircraft (CDA) NATOPS Pointer Manual, Partial NATOPS Flight Manual, and Supplemental NATOPS Manual as applicable.
- (4) NATOPS evaluations shall be completed at least annually thereafter and within 12 months of the preceding evaluation as directed in reference (a).
- (5) NAs/NFOs/EAC returning from assignment/flying status where a valid NATOPS evaluation could not be performed, shall be granted a period of three (3) months in which to complete the evaluation. These circumstances are limited to hospitalization, temporary removal from flying status by competent authority, or assignment to a billet where certain flight requirements have been waived by CMC (DC AVN).
- (6) Circumstances or situations may occur in which aircrew are extended in combat operations beyond estimated/expected rotations dates and may preclude NATOPS evaluations to be completed safely. In such cases an extension can be requested as delineated in chapter 4 of this Order.
- (7) Unless the reason for expiration is covered or related to the circumstances outlined in paragraphs (5) and (6) above, the commanding officer shall direct the NA/NFO/EAC to appear before a Field Flight Performance Board (FFPB), per reference (e). The requirement for a FFPB may be waived if, in the opinion of the commanding officer, expiration of NATOPS qualification was beyond the control of the individual.
  - (8) Waivers and extensions are addressed in chapter 4 of this Order.
- (9) For those NA/NFO/EAC on DIFOP and routinely flying but not directly attached to a squadron/unit, the MAG shall appoint a unit responsible for maintaining their logbook and NATOPS Jacket. Additionally, that unit may create a skeleton NATOPS jacket as necessary. The purpose of a skeleton jacket is to provide a readily available verification of pertinent and current flight qualification information and medical clearance for that aircrew. Additionally, this skeleton jacket provides the supported unit with immediately accessible information in the event of a mishap. The upkeep of this jacket is the responsibility of the individual aircrew member to ensure it is valid and current. The individual aircrew member shall provide the skeleton jacket to the supported unit's Operations Duty Officer (ODO) prior to initiating flight-related operations. Flight operations shall not be authorized without a valid NATOPS/skeleton jacket.
  - (10) A NATOPS Skeleton Jacket shall contain, at a minimum:
- (a) Copy of current annual flight physical (DD Form 2807-1/DD Form 2808).

- (b) Copy of current aviation survival training (physiology and water). Aviation survival training (physiology and water) is not applicable to UAV/AUS operators.
- (c) Copy of current NATOPS evaluation report (OPNAV 3710/7) (NA/NFO/EAC).
- (d) Copy of current instrument rating request (OPNAV 3710/2), when applicable (NA/NFO).
- (e) Copies of certification that flight personnel have successfully completed aviation survival, aircraft egress, ejection seat training (when applicable), CFET (when applicable), and Night Vision Device (NVD) training, and annual static/systems reviews as required.
- b. <u>Failures</u>. The intent is to shift the fleet from a "Zero Defect" mentality of no failures to a stringent objective appraisal of procedural understanding, airmanship, systems knowledge, situational awareness and judgment.
- (1) In the event of the initial failure of an academic/dynamic evaluation event the following guidance is provided.
- (a) Evaluees who receive a grade of "Unqualified" on their initial or annual ground or flight evaluation shall be allowed 30 days to complete the reevaluation with no administrative action required.
- (b) The unit CO may, at his discretion, ground/restrict the evaluee from flying/flight operations until a grade of "Qualified" is achieved on all evaluation events.
- (c) It is highly recommended that the CO convene a Human Factors Board (HFB) on the individual who failed the NATOPS evaluation event to ascertain if there were any human factors associated with or explaining/justifying a failure that was beyond the control of the individual.
- (d) The evaluee shall be provided a reasonable opportunity to correct deficiencies prior to reevaluation. At the discretion of the commanding officer, the reevaluation event need only consist of those areas/subareas in which the grade of unqualified was assigned.
- (2) In the event of a failure of the reevaluation, disposition of the evaluee shall be in accordance with all applicable directives, instructions, and orders, found in references (a), (b), (d), (e) and those directives and instructions by the appropriate COG. If a HFB was not previously conducted with the first NATOPS failure, the squadron or unit commanding officer shall convene a Human Factors Board (HFB) on the individual who failed the NATOPS reevaluation to ascertain if there were any human factors issues involved in the first or subsequent failure.
- 3. <u>Unit NATOPS Evaluations</u>. Unit NATOPS evaluations provide a mechanism for evaluating the effectiveness and standardization of a unit's NATOPS program, aircrew knowledge, and adherence to prescribed NATOPS procedures. This NATOPS evaluation is separate from, and supplements, the MAW CG Inspection Program. The unit NATOPS evaluation may be conducted as part of, or in conjunction with, a command inspection.

- a. <u>Unit NATOPS Evaluation Administration</u>. Requirements for the conduct of the unit NATOPS evaluation are delineated in references (a) and (b). For USMC commands, every unit which conducts flight operations and/or NATOPS evaluations shall be required to receive a Unit NATOPS Evaluation.
- (1) The responsibility for scheduling the Unit NATOPS evaluation shall reside on the unit requiring the inspection. The request shall be submitted to the Lead NEU/MM via naval message NLT 45 days prior to the 18-month due date. The Lead NEU can then elect to delegate the execution of the Unit NATOPS evaluation to an appropriate NEU/NE, as required. Coordination shall take place between the requesting unit and the assigned inspecting NEU/NE. Upon completion of the Unit NATOPS evaluation a naval message announcing the satisfactory completion shall be released to the Lead NEU/MM (or applicable oversight agent) and CMC SD and appropriate COG. In no circumstances shall the evaluation process take longer than 60 days from start to finish as defined from in-brief to release of the completion message. It is incumbent upon the requesting unit with multiple T/M/S aircraft to ensure synchronization of all required support necessary to accomplish the Unit NATOPS evaluation in a single 60 day timeframe.
- (2) The 18-month evaluation cycle, per reference (a), may be extended up to a maximum of 24-months for circumstances such as extended deployments, and only for those units whose previous evaluations indicated a high degree of NATOPS program effectiveness as defined by the previous annual evaluation results and in the judgment of the unit commanding officer. Requests for an extension of a unit's NATOPS evaluation shall be submitted at least 45 days prior to the 18-month due date and routed thereafter to the appropriate NATOPS MMU/MM and the appropriate COG of the requesting unit. The request shall include a justification and a future proposed evaluation date. This eliminates the request for extension due to oversight. The message format is depicted in enclosure (6).
- b. The purpose for the Unit NATOPS Evaluation is to assess the units' compliance with the NATOPS program and to ensure the standardization across the fleet T/M/S. Unit NATOPS evaluations shall consist of five parts: Inbrief/out-brief, Programmatic Evaluation, NATOPS Instructor evaluations, Random Sampling, and Written Report.
- (1) <u>In-Brief/Out-Brief</u>. An in-brief and out-brief shall be conducted with the unit CO or other appropriate command representatives to discuss the evaluation process and results. An in-brief with all available aircrew shall be conducted to outline the unit NATOPS evaluation program, discuss the conduct of the unit NATOPS evaluation, and brief recently revised or new aircraft operating procedures.
- (2) <u>UNO</u> and <u>NATOPS</u> Program Evaluation. A thorough evaluation of the unit's NATOPS Officer and the inspection of Unit NATOPS Evaluation Program shall be conducted to ensure the administrative management is in keeping with NATOPS standards. The unit's NATOPS program shall be assessed utilizing the unit NATOPS Automated Inspection Reporting Systems (AIRS) checklist and the checklist provided in enclosure (4). Units comprised of multiple T/M/S aircraft (i.e. UC-35 and UC-12 aircraft) shall be required to only have a single Unit NATOPS Program Evaluation. Only one T/M/S NE is required to perform the NATOPS Program Evaluation. A separate NATOPS Program Evaluation is not required for each individual T/M/S aircraft unless a failure occurs

for any one of its aircrew evaluations. This is done to ascertain if the management of that T/M/S NATOPS program contributed to the failure.

- (3) <u>UNI Evaluations</u>. The NEU/NE may select any one of the unit's NIs/ANIs for each crew position for the standardization evaluation. This standardization evaluation may be comprised of either the NE initiating an Individual NATOPS evaluation on the selected NI/ANI -or- the assessment of the NI/ANI in the performance of an Individual NATOPS evaluation on a selected crew member. These Individual NATOPS evaluations shall be conducted IAW paragraph 2 of this chapter. Units with multiple T/M/S are further required to have UNI evaluations for each aircraft.
- (4) Random Sampling Evaluations. IAW reference (a), the NEU/NE shall execute an Individual NATOPS evaluation for each crew position selected at random to measure overall adherence to NATOPS procedures. For units with multiple T/M/S, a random sampling is required for each T/M/S. These Individual NATOPS evaluations shall be conducted IAW paragraph 2 of this chapter.
- (5) <u>Written Report</u>. A formal written report to the Unit Commanding Officer summarizing the unit NATOPS evaluation, original and a copy of the report shall be retained by the evaluated unit and the NEU respectively. Only the NE performing the NATOPS Program Management Evaluation needs to complete a full report. In a multi-crewed aircraft the ENI will provide the pilot NE with his/her report for the EAC evaluation portion of the NATOPS report. Additional T/M/S NE need only address those areas specific to the evaluation of that T/M/S aircrew and their performance. Comments and remarks are not limited to their performance but, may also include those issues associated or tied to NATOPS program management. Additionally, a copy of the written report will be forwarded to the appropriate Group and MAW Directors of Standardization and Safety (DOSS) office. The format utilized is depicted in enclosure (5).
- (6) It is the joint responsibility of the unit requiring the NATOPS evaluation and the NATOPS evaluator to ensure the above requirements are met. The NE will report compliance and completion to the MM NPM when the evaluation is complete.
- c. Unit NATOPS Evaluation of MMU. The MMU (e.g., Fleet Replacement Squadron (FRS), Aircrew Training Unit (ATU), etc.) has the same responsibilities and actionable items as any other fleet squadron/unit. To provide oversight of the MMU and ensure standardization and strict adherence to the NATOPS program, a Model Manager Unit NATOPS evaluation shall be conducted in the same manner as any other fleet squadron/unit.
- (1) It is desired that the random sampling be taken only from staff instructor cadre and should include personnel augmenting the FRS/ATU as instructors (i.e., MAG and MAW staff).
- (2) The MM should request another MM's NPM to evaluate his own NPM's NATOPS program management and execution by reviewing the instructional knowledge and standardization process that is utilized while evaluating personnel and units. This action provides an objective outside unbiased review while allowing the cross-pollination of standardized procedures and techniques among the various NPMs and MMs. A NEU/NE from within the COG's organization is the primary designee to perform this type of MMU evaluation. However, under certain circumstances, the COG may request an MMU/NEU from

another COG to conduct the NATOPS evaluation, (e.g., MARFORCOM may request a unit NATOPS evaluation for VMMT-204 from an NEU within MARFORPAC). The NE shall be independent of the MMU organization/command structure.

- (3) A formal written report and outbrief to the MMU CO summarizing the evaluation and the unit's performance shall be completed. A copy of the written report and outbrief with the MMU CO's comments shall be forwarded via the MAG and MAW to the appropriate COG. The MAG Commander and MAW Commanding General may also comment on the FRS Unit NATOPS evaluation performance. The same rules for unit NATOPS evaluation record keeping applies to the FRS and the respective NEU/NE.
- 4. NATOPS Program Standardization and Evaluation. During the initial or annual evaluation of all NPMs, NEs, NIs, and ANIs for each and every respective crew position and at all levels of the NATOPS program, shall undergo a NATOPS certification process consisting of: 1) an Individual NATOPS evaluation IAW paragraph 2 of this chapter; and 2) a Standardization Evaluation. These evaluation events can be run concurrently and should be utilized to satisfy the individual's annual NATOPS requirements.
- NATOPS Program Standardization and Evaluation (Stan/Eval). Program Standardization and Evaluation (Stan/Eval) shall consist of an oral assessment of concepts, doctrines, and procedures as related to the operation of the aircraft and the NATOPS program. This oral assessment is uniquely separate from the Individual NATOPS evaluation as it emphasizes standardization metrics and not individual performance. The Stan/Eval shall also assess knowledge and instructional capabilities as they pertain to the NATOPS program with emphasis in recognizing distinctions between NATOPS procedures and techniques. Additionally, IAW reference (d), the Stan/Eval should review objective assessment criteria and instructional metrics of performance used in all flight maneuvers and evaluated in NATOPS evaluations. The Stan/Eval should validate that the NATOPS program evaluator (e.g., NE, NI, etc) is denoting acceptable momentary deviations from established procedures such that these deviations do not result in jeopardizing the aircraft and passengers with safety of flight issues. The standardization portion of the NATOPS evaluation is critical to the success of the NATOPS Program.
- b. NATOPS Program Manager (NPM) Evaluation. The MM or his designee, shall evaluate the NPM. It is highly encouraged that NPMs and MMs leverage NATEC Representatives and NATIP data as additional resources to enhance their knowledge in support of NATOPS programs.
- c. NATOPS Evaluator (NE) Evaluation. The MM or the NPM (as the NE for the MMU) shall evaluate a particular unit's NE.
- d. NATOPS Instructor (NI) / Assistant NATOPS Instructor (ANI)

  Evaluations. The MM, NPM, or an NE shall evaluate a particular unit's NIs and/or ANIs.
- e. Contract Instructor (CI) Standardization and Evaluation. The execution of the NATOPS program demands a consistent and high degree of standardization. To this end, Contract Instructors are ideally suited to support the unit commanding officer in an unbiased and outside assessment of their aircrew during NATOPS and Instrument evaluations. However, this provision does not preclude a unit from utilizing its own uniformed NATOPS instructors. Per references (a), (g), and (h), select CIs are authorized to

conduct NATOPS and Instrument evaluations and shall be designated by the MAG CO for that particular T/M/S as assistant NATOPS Instructor / Instrument Evaluators (ANI/IE). Continued leadership engagement is expected to ensure an effective unit NATOPS program. Select CI - ANI/IEs are required to obtain and maintain qualification and currency/proficiency minimums to ensure they are reputable and can provide a high level of confidence in standardization for the NATOPS program and instruction provided.

- (1) Contract Instructors (CIs) qualified and designated as ANI/IEs are accountable to uphold service-level aviation standardization and NATOPS minimums per this Order and its references. The MATSS OIC and the Contract Officer's Representative (COR) shall be informed of any concerns which may require appropriate and/or contractual action. MATSS is responsible to track all CI qualification and currency/proficiency minimum standards.
- (2) Contract Instructor qualification and designation. The qualification standards for USMC Contractor Instructor Assistant NATOPS Instructor (ANI)/NATOPS Instrument Evaluator (IE) include the satisfactory completion of all the following annual events: 1) T/M/S provided open and closed book NATOPS Examination; 2) Individual NATOPS Evaluation per paragraph 2 given by a uniformed NE; 3) Instrument Ground School; and (4) Instrument Flight Evaluation Event per reference (b) (simulated only) by Standardization Board or unit Instrument Flight Board member. Prior to actual execution of ANI/IE duties, qualified CIs must be endorsed by the MATSS OIC and designated by the Group CO. IAW references (a) and (1), a CRM evaluation is a distinct assessment that is usually accomplished in conjunction with the NATOPS evaluation. If a MATSS desires to enable CIs to do this, it is recommended that coordination be made to make CIs CRM Facilitators.
- (3) Contract Instructor ANI/IE currency and proficiency minimums.
  USMC Contractor Instructor ANI/IE are expected to maintain minimum levels of currency and proficiency to enable relevant, comprehensive, and standardized instruction and evaluation.
- (a) Minimums: Individual CI ANI/IE required performance minimums include: 1) monthly 30-min Emergency Procedures simulator event provided by any NI/ANI; 2) monthly T/M/S provided Emergency Procedures examination; and 3) Minimum (simulated) flying hours for aircrew over 20 years experience per reference (a). Unless a specific CI is a Naval Aviator and holds a current instrument rating in the T/M/S in which they are instructing, applicable minimums shall only be performed in the simulator.
- (b) <u>Currency/Proficiency</u>: To ensure instruction and evaluation currency, CI ANI/IE currency shall not be less than 4-hours or 2 NATOPS/Instrument evaluation events every 45 days and must be tracked by the MATSS. Currency may be regained by having: 1) the first instructional/ evaluation period will be completed under the oversight/purview of a NI/ANI; 2) complete an EP exam and EP simulator event; and 3) the successful completion of a Closed Book NATOPS Examination.
- f. Monthly Emergency Procedures (EP) Reviews Requirements. A monthly EP examination and simulator/static cockpit-cabin check are mandatory as delineated in references (a) and (d).
- g. NATOPS Model Manager (MM) Training System Certification (TSC). The MM for a T/M/S shall perform the following additional function as delineated in references (d), (g) and (h). It is essential for fleet standardization

that these required actions receive equal emphasis as the standard MM duties and responsibilities. The assessment of USMC simulators' capability to support NATOPS and NATOPS instrument training and evaluations lies within the scope of the T/M/S MM. As such, any discrepancies shall be reported to HQMC AVN APW-71 via the local MATSS and advising TECOM ATD or other in using the appropriate action process (e.g. ATS Training Management Process (TMP) or via direct liaison) as delineated in references (d), (g), and (h).

- 5. NATOPS Instrument Program Standardization and Evaluation. The NATOPS instrument flight program and evaluation requirements are clearly delineated in references (a), (b), and (d). The MM for a T/M/S is responsible to ensure the adequate standardization of instrument procedures through coordination with all required units and personnel.
- a. <u>USMC Instrument Ground School Program Coordinator (IGSPC)</u>. The Marine aviation IGSPC is located at Marine Aviation Training System Site (MATSS) New River. As such it will perform those duties and responsibilities as delineated in references (d), (g), and (h). The IGSPC is the Point of Contact (POC) liaison with the OPNAV designated DON IGS MM (Chief of Naval Aviation Training (CNATRA)). The IGSPC is responsible for the content, management, and standardization of USMC NATOPS Instrument Ground School. It is incumbent upon each USMC MM to coordinate efforts with the USMC IGSPC through their local MATSS to establish a professional level of standardization for Marine aviation. Specific duties and responsibilities are delineated in chapter 13.
- b. Instrument Evaluations shall be accomplished IAW references (a) and (b).
- c. <u>USMC Contract Instruction (CI) Instrument Standardization</u>. Those CIs who attain and maintain the NATOPS Instrument Evaluator (IE) designation may conduct instrument evaluations utilizing the simulator. The MAG Commander shall designate those recommended CIs who meet the standards. Specific qualification, currency, and proficiency criterion for CI instrument evaluation is found in paragraph 4.
- (1) Since CIs do not reside within a squadron, their Instrument Flight Board shall be conducted at least quarterly during the MATSS Standardization Board. This will suffice in meeting the spirit and intent as defined in references (a) and (b). This allows the MAG commander (with input from the respective squadron CO's or their representatives) to have control over the standardization of the instrument flight training and evaluation program.
- (2) Compliance with this Order and references (g) and (h) are essential for effective and efficient utilization of contract personnel to assist military personnel in the performance of their duties.
- 6. Enlisted Aircrew (EAC). To provide amplifying guidance for the definition of EAC as defined in reference (a) and the requirements for EAC NATOPS evaluations. The term enlisted aircrew encompasses all USMC Aerial Observers (AO), Aerial Gunners (AG), Loadmasters (LM), Crewmaster (CM), and Crew Chiefs (CC). Personnel designated as either a CC, LM, CM or AO/AG will be required to comply with reference (a), concerning NATOPS and NATOPS evaluations when acting as a designated aircrew member.

## Waivers and Extensions

- 1. General Administration of Waivers and Extensions. Waiver policy for the administration of reference (a) is clearly defined in chapter 1 of that directive. For the purposes of submitting requests and accountability for completing the required action items, a clear understanding and expectation between a waiver and an extension is required. A waiver "waives the requirements to perform an actionable item" and shall include a time period as applicable. For NATOPS program compliance, a standing waiver shall not exist. Extensions are to be utilized to extend the time period necessary to complete an actionable item. Individuals and units are directed to clearly request the appropriate recourse for their circumstance.
- a. <u>USMC Waiver Authority</u>. Authority for the deviation of policy set forth in the execution of this Order for all USMC commands and personnel resides with DC AVN. DC AVN delegates waiver authority appropriately defined in reference (a) to MARFORCOM, MARFORPAC, and CG 4th MAW for those individuals and units under their cognizance. DIFDEN waivers are addressed in paragraph 6 of this chapter.

### b. Waivers.

- (1) There are no permanent waivers.
- (2) All waivers for USMC personnel and units must be submitted via naval message for review and disposition and resubmitted again on an annual basis. Submission process requires addressing the authorizing COG or ISIC in addition to informing the other USMC COGs (e.g., DC AVN, MARFORCOM, MARFORPAC, and CG 4th MAW) on all waiver request submissions utilizing the message template depicted in enclosure (6). DC AVN (Code ASM) will be copied/informed on each message to preclude differences based upon location and standardization of policy. Waiver requests shall be specific for the purpose for which they are required and shall include a time limit and justification. Under no circumstances will a request for a waiver be submitted nor accepted due to complacency, oversight or willful disobedience of reference (a).
- (3) Failure to resubmit constitutes the withdrawal of the waiver by the requesting command and/or individual.
- (4) Concurrent with the waiver resubmission, a copy of the proposed new procedures for NATOPS manuals and the justification for the proposed change shall be submitted per the directions given in chapter 2 of reference (a). All waiver resubmissions and their associated change proposal (for NATOPS Manual, NATOPS Flight Manual, and recommended changes to this Order) shall be forwarded through the chain of command via the appropriate COG for endorsement or non-concurrence.
- c. <u>USMC Extension Authority</u>. Authority for the deviation of policy set forth in the execution of this Order for all USMC commands and personnel resides with DC AVN. MARFORCOM, MARFORPAC, and CG 4th MAW shall have extension authority for those individuals and units under their cognizance.

- d. Waiver Delegation Authority. DC AVN, MARFORCOM, MARFORPAC, and CG 4th MAW may grant waivers to the provisions of NATOPS flight manuals as delineated in reference (a). Waiver requests shall be specific for the purpose for which they are granted and shall include a time limit and justification. When one COG grants or denies a waiver/extension to an individual or unit under their cognizance and another individual/unit requests the same with another COG and the outcome is opposite (e.g., MARFORCOM denies request for waiver and MARFORPAC grants a similar request), then DC AVN shall be the final authority on the approval/denial of those requests. This may include the revocation of a previously denied/granted requested waiver. This action standardizes policy amongst USMC NAG/COG members and Marine Aviation. For USMC personnel assigned to USN commands or units, those individuals shall submit their extension or waiver requests through their current chain of command (e.g., a Captain (USMC) assigned to VFA-XXX shall submit his request for an extension through the VFA-XXX chain of command to the appropriate COG, in this case the TYCOM). A copy of the request and all subsequent endorsements/denials shall be forwarded to DC AVN (Code ASM).
- e. <u>Exceptions</u>. Exceptions to waiver or extension request/approval procedures are rare and shall require justification for each extenuating circumstance. Submission of a request for a waiver/extension or an exception to the waiver/extension process does not alleviate nor defer any actionable items required from the individual or unit.
- 2. Individual Waivers. An individual may request a waiver as defined in reference (a) of a current NATOPS/NATOPS Instrument Evaluation, Naval Aviation Survival Training Program (NASTP), Flight Physical, and Flight Time utilizing the form and format in enclosure (3). The circumstance and situation for deployments is clearly delineated in chapter 2 of reference (a). All other circumstances will require a special request. An individual submits via letter format the request for the waiver via the chain of command to the appropriate COG. The COG has the authority to grant the waiver of individual evaluations and requirements for up to 90 days past the actionable date with due justification (e.g., medical condition which precludes the performance of a NATOPS or NATOPS Instrument evaluation or participation in NASTP, etc.), but it will not be granted for complacency, lack of oversight or willful disobedience of reference (a). The request for an waiver shall be submitted no earlier than 45 days prior and no later than 30 days prior to the actionable date.
- 3. <u>Unit Waivers</u>. Waivers should not be requested for Unit NATOPS evaluations. An extension shall be the first mitigating step towards compliance IAW paragraph 5. The circumstance for deployments is delineated in chapter 2 of reference (a). All other circumstances will require a special request. For circumstances not defined herein, a unit CO may request a waiver through the appropriate COG or ISIC in addition to informing the other USMC COGs utilizing the message format depicted in enclosure (6).
- 4. <u>Individual Extensions</u>. In lieu of a waiver, an extension should be requested as defined in reference (a). An individual may request an extension of a current NATOPS/NATOPS Instrument Evaluation, NASTP, Flight Physical, and Flight Time. The circumstance and situation for deployments is clearly delineated in chapter 2 of reference (a). All other circumstances will require a special request. This request shall be specific for the purpose for which it is granted and shall include a time limit and justification. An individual submits via letter format the request for the

extension via the chain of command to the appropriate COG. The COG has the authority to grant the extensions of individual evaluations and requirements for up to 90 days past the actionable date with due justification (e.g. medical condition which precludes the performance of a NATOPS or NATOPS Instrument evaluation or participation in Physiology or Water Survival training, etc.), but it will not be granted for complacency, lack of oversight or willful disobedience of reference (a). The request for an extension shall be submitted no earlier than 45 days prior and no later than 30 days prior to the actionable date.

Unit Extensions. A unit CO may request an extension of a unit's NATOPS evaluation to the appropriate MM informing his chain of command and COG. The circumstance for deployments is delineated in chapter 2 of reference (a). All other circumstance will require a special request and shall be specific for the purpose for which it is granted and shall include a time limit and justification. A unit submits the request via naval message for an extension to the MM and informs the appropriate chain of command and COG. The MM will either grant or deny the extension request and inform the requesting unit, the requestor's chain of command (MAG/MAW), and the respective COG. Under no circumstances will a request for an extension be submitted nor accepted due to complacency, lack of oversight or willful disobedience of reference (a). The request for an extension shall be submitted no earlier than 60 days prior and no later than 30 days prior to the actionable date. For Unit NATOPS evaluations of MMUs, extension requests shall be routed from the MMU/FRS CO via the appropriate MAG and MAW for concurrence/non-concurrence to the COG for final decision and adjudication.

## 6. Duty Involving Flying Denied (DIFDEN) Waivers

- a. <u>Purpose</u>. A DIFDEN waiver allows Aeronautically Designated Personnel (ADP) in DIFDEN status the opportunity to conduct flight operations, on a not to interfere basis, with an endorsing aviation unit. Commands are not obligated to provide any flight time (including OPNAV minimums) to ADP on a DIFDEN waiver.
- b. Administration. DC AVN is the approval authority for DIFDEN waivers. DIFDEN waivers are granted on a not to interfere, case-by-case basis and shall be closely controlled by DC AVN (Code ASM).
- (1) All OPNAV requirements, with the exception of annual flight time minimums, shall be adhered to and complied with as if on Duty Involving Flight Operations (DIFOPS) orders. This includes, but is not limited to obtaining and maintaining NATOPS and NATOPS Instrument qualifications as well as complying with all NASTP, T&R, and command requirements.
- (a) DIFDEN waivers do not alleviate ADP or commands from any other OPNAV, NATOPS, or T&R program requirements established to safely sign for and/or fly Marine Corps aircraft relative to the specific role, mission, and responsibility.
- (b) Flights conducted under DIFDEN waiver shall update ADP's currency and proficiency with regards to T&R program manual codes.
- (2) Flights in a DIFDEN with waiver status do not constitute operational flying months toward the achievement of operational flight gates.

- (3) DIFDEN waivers shall not exempt ADP from Fleet Replacement Squadron (FRS) refresh requirements as prescribed in reference (d). The DIFDEN waiver will only be granted to those ADP who are within the Tactical Unit Refresher Programs of Instruction (POI) criteria listed in the Aircrew Refresher Training Matrix (Figure 4-2) of reference (d). ADP may be exempted from FRS refresher training when returning to DIFOP if all of the following conditions are met:
- (a) Accumulated OPNAV semi-annual flight time minimums for the 6 months prior to returning to DIFOPS status in the applicant's fleet Type/Model/Series (T/M/S) aircraft.
- (b) Completed OPNAV instrument and NATOPS evaluation requirements in applicant's T/M/S aircraft.
  - 1. Prorating of minimums do not apply under DIFDEN waiver.
  - 2. Flight time waivers do not apply under DIFDEN waiver.
- (4) Requests per enclosure (7) for waivers of DIFDEN status must be forwarded to CMC (ASM) via chain of command for approval.
- (5) Applicants shall submit an Administrative Action Form (NAVMC 10274) to include:
- (a) Date of last Operational Fly in T/M/S while under DIFOP orders. Additionally, if requesting a renewal of DIFDEN waiver, provide total flight hours, instrument hours, and night hours flown over the past 12 and 6 month periods.
  - (b) Date of last NASTP.
  - (c) Date of last NATOPS Check.
  - (d) Date of last Inst Check.
  - (e) Date of last Flight Physical.
  - (f) Date of last flight.
  - (g) Total flight time by T/M/S.
  - (h) List of applicants qualifications.
  - (i) The relevant Type/Model/Series aircraft to be flown DIFDEN.
  - (j) Justification/rationale for the request.
- (k) A positive endorsement from the aircraft reporting custodian's chain of command, which will include a full explanation of the anticipated frequency of flight and justification for flying the applicant.
- (1) A positive endorsement from the applicant's DIFDEN chain of command.
  - (m) A copy of orders assigning DIFDEN.

- (6) If the above criteria is met and more than 5 flights per month are expected for the performance of the applicant's duties, the applicant's parent command should consider a request to MMOA to change the applicant's orders from DIFDEN to DIFOP.
- (7) ADP's initial DIFDEN waiver will remain in effect for a period of no more than 12 months from the last day of the month in which the waiver is approved. The duration of the DIFDEN waiver will be such that it does not exceed the "Time out of Model" refresher criteria dictated in reference (d); subsequent DIFDEN waiver requests will be granted if the ADP was able to accumulate OPNAV semi-annual flight time minimums for the 6 months prior to the expiration of the latest DIFDEN waiver.

# Reporting

- 1. <u>Reporting</u>. Aviation reporting requirements and procedures are specifically addressed throughout reference (a).
- a. Reporting and Recording of Deviations and Violations of Flying Regulations and Mishap Information. In addition to the reporting requirements set forth in reference (a), ALL USMC COMMANDS in receipt of a reported deviation or violation will report such to DC AVN via the appropriate COG for comments.
- b. Reporting of Other, Media, or Service Level Attention Incident. This Order does not alleviate individuals or commands of reporting those incidents which may attract other, media, or service level attention to the appropriate chain of command. This Order also does not relieve those personnel from taking the appropriate action as directed in reference (a) or other directives, instructions, or orders.
- 2. <u>Upline Reporting</u>. Upline reporting is addressed in reference (a). The Marine Corps utilizes Marine Sierra-Hotel Aviation Readiness Program (M-SHARP) for readiness reporting. Emerging reporting criteria for F-35B Lightning II will be forthcoming through the Autonomic Logistics Information System (ALIS).

#### Marine Helicopter Experimental Squadron ONE (HMX-1)

- 1. Marine Helicopter Experimental Squadron ONE (HMX-1). As the MM for VH-3D and VH-60N, HMX-1 shall designate a NPM for each of these T/M/S. Respectively, the CO shall designate an adequate number of NES/NIS and ENIS for pilot and enlisted aircrew positions for each T/M/S aircraft. For those other T/M/S aircraft which HMX-1 operates, a minimum of one NI/ENI is required for each crew position.
- a. <u>Individual NATOPS Evaluations</u>. All individual NATOPS and NATOPS instrument evaluations shall be conducted IAW references (a), (b), and (d).
- (1) Primary T/M/S NATOPS Evaluations. In support of fleet aircraft, a UNO/NI and ANI requirements are the same as any other operational fleet squadron/unit. The evaluation process for these qualifications and designations remain the same. It is highly encouraged that simulators and MATSS be leveraged to the utmost extent possible and coordinate evaluation requirements with required travel missions/operations.
- (2) Executive Flight Detachment (White-Side) T/M/S NATOPS Evaluations. Due to the unique nature of aircraft and mission operations at HMX-1, the Commanding Officer shall be the designated MM for the VH-3D, VH-60N, and any other aircraft that may enter service with the Executive Flight Detachment. As such, the MM will assign a separate VH-3D and VH-60N NATOPS Program Manager (NPM) for each T/M/S who also functions as the NATOPS Evaluator/NATOPS Instructor who may also be the unit NATOPS Officer.
- b. <u>Unit NATOPS Evaluations</u>. Due to the unique environment in which HMX-1 operates, Unit NATOPS Evaluations for HMX-1 shall be conducted as follows:
- (1) HMX-1 will conduct monthly EP exams and quarterly EP simulators/static cockpit drills as stated in references (a) and (d) for each T/M/S for which the aircrew member is NATOPS qualified to enhance NATOPS standardization.
- (2) HMX-1 Unit NATOPS evaluation is unique and requires external coordination for the unit and independent T/M/S evaluations. HMMT-164 is assigned as the primary NEU to conduct HMX-1 Unit NATOPS evaluation. This evaluation should be specific to an In-Brief/Out-Brief, UNO and NATOPS Program Evaluation, UNI evaluation (for like T/M/S), random sampling (for like T/M/S), and written report. In the event that HMMT-164 cannot perform the Unit NATOPS evaluation for HMX-1, the HMX-1 CO shall notify DC AVN requesting assignment of an alternate NEU.
- (3) With the varied T/M/S aircraft assigned to HMX-1 the UNI evaluations and random sampling for each crew position is required to be complete as part of the Unit NATOPS evaluation IAW the 60 day time period as delineated in chapter 3, paragraph 3. Requirements for one UNO/NI and one random sampling for each crew position from each T/M/S (Exception VH-3D and VH-60N) shall be completed IAW chapter 3.
- (4) The conduct of the unit NATOPS evaluation for HMX-1 is unique with regards to VH-3D and VH-60N evaluations. The Commanding Officer or if

designated, the Executive Officer, shall conduct a unit NATOPS evaluation of those personnel assigned and qualified to fly VH aircraft.

(5) A formal written report and/or out-brief to the Commanding Officer or other appropriate command representative summarizing the unit NATOPS evaluation process and results shall be completed. A copy of the report shall be retained by HMX-1 and a second copy with HMX-1 Commanding Officer's comments to be forwarded and/or briefed to DC AVN. The format utilized is depicted in enclosure (5). Upon completion of the Unit NATOPS evaluation a naval message announcing the satisfactory completion shall be released to DC AVN and CMC SD. HMX-1 shall not release this message until all individual T/M/S evaluation elements are complete.

#### 2. Waivers and Extensions

- a. <u>Waivers</u>. All NATOPS and NATOPS instrument waiver requests and criteria for HMX-1 personnel shall be completed per references (a), (b), (d), and this Order, and shall be forwarded from the Commanding Officer to DC AVN for decision and adjudication.
- b. Extensions. All NATOPS and NATOPS instrument extension requests and criteria for HMX-1 personnel shall be completed per references (a), (b), (d), and this Order, and shall be forwarded from the Commanding Officer to DC AVN for decision and adjudication.
- 3. Reporting. All NATOPS and NATOPS instrument reporting requirements shall be conducted per references (a) through (h) and this Order.

# Marine Aviation Weapons and Tactics Squadron ONE (MAWTS-1)

- 1. Marine Aviation Weapons and Tactics Squadron ONE (MAWTS-1). MAWTS-1 shall designate a minimum of one UNO and an adequate number of NIs for each T/M/S and crew position. Due to their mission, MAWTS-1 should not be performing the NATOPS NE duties and therefore should not have any designated NEs assigned to the unit. The evaluation process for these qualifications and designations are delineated in references (a), (d), and this Order. It is incumbent upon the MAWTS-1 Division UNO/NI designated personnel to ensure compliance with this Order and to take full advantage of resources (aircraft and simulators) when available.
- a. <u>Individual NATOPS Evaluations</u>. All individual NATOPS and NATOPS Instrument evaluations shall be conducted per references (a), (b), and (d). Due to the unique composition of MAWTS-1, individual NATOPS requirements for MAWTS-1 personnel shall be conducted as follows:
- (1) MAWTS-1 personnel should conduct monthly EP exams and EP simulators/static cockpit drills as stated in references (a) and (d) for each T/M/S for which the aircrew member is NATOPS qualified to comply with NATOPS and enhance standardization. However, due to the lack of available aircraft/simulators (exception being AV-8B) the monthly EP sim/static aircraft drill in reference (d) shall be accomplished quarterly at a minimum. MAWTS-1 Division UNO/NI designated personnel should ensure compliance with the successful completion of the monthly EP exams.
- (2) It is incumbent upon MAWTS-1 aircrew personnel to comply with references (a), (d), and this Order in the successful completion of NATOPS requirements. It is highly encouraged to leverage the simulators and MATSS to the utmost and coordinate these evaluations with required travel missions/operations. All MAWTS-1 Instructor aircrew should receive their annual individual NATOPS evaluations from either the MMU or a NEU in order to receive an objective and unbiased assessment of their NATOPS procedural and systems knowledge, airmanship, situational awareness, and judgment. As an option and with the approval of the MAWTS-1 CO or XO, the MAWTS-1 T/M/S NI may also give the individual NATOPS evaluation.
- b. <u>Unit NATOPS Evaluations</u>. Unit NATOPS Evaluations for MAWTS-1 shall be conducted as follows:
- (1) Unit NATOPS evaluation procedures are set forth in references (a), (d), and this Order. For convenience of geographic proximity, 3d MAW has cognizance over MAWTS-1 NATOPS program coordination and accountability for identifying the NEU for MAWTS-1 Unit NATOPS evaluations from within 3d MAW. The CO MAWTS-1 will submit a request IAW guidelines in chapter 3 via naval message to CG 3d MAW while informing CG TECOM and DC AVN. 3d MAW shall then assign a primary NEU and multiple NEs for each T/M/S (each shall be an O-4 or higher) for the purposes of the MAWTS-1 Unit NATOPS evaluation.
- (2) Once the NEU with supporting NEs are assigned and the evaluation is scheduled, the NEU will conduct the Unit NATOPS evaluation IAW chapter 3 for the In-Brief/Out-Brief, UNO and NATOPS Program Evaluation, and the following modifications for MAWTS-1. Because MAWTS-1 is comprised of

multiple T/M/S aircrew they should be required to only have a single Unit NATOPS Evaluation.

- (3) To facilitate the UNI Evaluations and Random Sampling Evaluations, MAWTS-1 should provide the squadron's authorized to fly roster to the NEs for all aircrew and each T/M/S they are qualified to fly.
- (4) For UNI Evaluations, the NEU/NE should either schedule an evaluation IAW chapter 3 for the NI/ANI -or- if the NI/ANI has completed the individual NATOPS evaluation with the MMU/NEU within the last 60 days of initiating the Unit NATOPS evaluation that NI/ANI has satisfied the requirement for a UNI Evaluation.
- (5) The Random Sampling Evaluation shall be accomplished for each crew position. The primary candidates for this sampling should be selected from a pool of those MAWTS-1 aircrew whom did not receive their Individual NATOPS evaluations from the MMU or NEU.
- (6) To preclude potential schedule conflicts, MAWTS-1 can request Unit NATOPS evaluations to be initiated and completed prior to the 18-month mark timeframe but no less than 12-months to accommodate Exercise or Fleet Support Operations.
- (7) The formal written report shall be conducted IAW chapter 3 with a copy of the report retained by MAWTS-1 and a second copy with the MAWTS-1 Commanding Officer's comments to be forwarded and/or briefed to CG TECOM and to DC AVN. The format utilized is depicted in enclosure (5). Upon completion of the Unit NATOPS evaluation a naval message announcing the satisfactory completion shall be released to DC AVN and CMC SD and informing CG TECOM and CG 3d MAW. MAWTS-1 shall not release this message until all individual T/M/S evaluation elements are complete.

### 2. Waivers and Extensions

- a. <u>Waivers</u>. All NATOPS and NATOPS instrument waiver requests and criteria for MAWTS-1 personnel shall be completed per references (a), (b), (d), and this Order. Waiver requests shall be forward from the Commanding Officer to DC AVN via CG TECOM for decision and adjudication.
- b. <u>Extensions</u>. All NATOPS and NATOPS instrument extension requests and criteria for MAWTS-1 personnel shall be IAW references (a), (b), (d), and this Order. Extension requests shall be forward from the Commanding Officer to DC AVN via and CG TECOM for decision and adjudication and inform CG 3d MAW.
- 3. <u>Reporting</u>. All NATOPS and NATOPS instrument reporting requirements shall be conducted per references (a) through (h) and this Order.

# Marine Operational Test and Evaluation Squadron TWENTY-TWO (VMX-22)

- 1. Marine Operational Test and Evaluation Squadron TWENTY-TWO (VMX-22). VMX-22 shall designate a minimum of one UNO and an adequate number of NTs for each T/M/S and crew position. It is incumbent upon the VMX-22 UNO/NI and aircrew personnel to ensure compliance with references (a), (d), and this Order in completing their NATOPS requirements and take full advantage of resources (aircraft and simulators) when available. It is highly encouraged to leverage the simulators and MATSS to the utmost extent possible.
- a. <u>Individual NATOPS Evaluations</u>. All individual NATOPS and NATOPS instrument evaluations shall be conducted per references (a), (b), (d), and chapter 3 of this Order. UNO/NI and ANI requirements are the same as any other operational fleet squadron/unit. The evaluation process for these qualifications and designations remain the same. VMX-22 personnel are required to conduct monthly EP exams and quarterly EP simulators/static cockpit drills as stated in references (a) and (d) for each T/M/S for which the aircrew is NATOPS qualified.
- b. Unit NATOPS Evaluations. Unit NATOPS Evaluations for VMX-22 shall be conducted as follows:
- (1) Unit NATOPS evaluation procedures are set forth in references (a), (d), and this Order. For convenience of geographic proximity the respective Wing has cognizance over VMX-22 NATOPS program coordination. In this case, 2d MAW will be accountable for identifying the NEU for VMX-22 Unit NATOPS evaluations from within 2d MAW. The CO VMX-22 will submit a request IAW guidelines in chapter 3 via naval message to CG 2d MAW while informing DC AVN and COMOPTEVFOR. 2d MAW shall then assign a primary NEU and multiple NEs for each T/M/S for the purposes of the VMX-22 Unit NATOPS evaluation.
- (2) Once the NEU with supporting NEs are assigned and the evaluation is scheduled, the NEU will conduct the Unit NATOPS evaluation IAW chapter 3 and the following modifications for VMX-22. To facilitate the UNI Evaluations and Random Sampling Evaluations, VMX-22 should provide the squadron's authorized to fly roster to the NEs for all aircrew and each T/M/S they are qualified to fly.
- (3) To preclude potential schedule conflicts, VMX-22 can request Unit NATOPS evaluations to be initiated and completed prior to the 18-month mark timeframe but no less than 12-months to accommodate Test and Evaluation Operations.
- (4) The formal written report shall be conducted IAW chapter 3 with a copy of the report retained by VMX-22 and a second copy with the VMX-22 Commanding Officer's comments to be forwarded and/or briefed to DC AVN and to COMPOPTEVFOR, if requested. The format utilized is depicted in enclosure (5). Upon completion of the Unit NATOPS evaluation, a naval message announcing the satisfactory completion shall be released to DC AVN and CMC SD and informing the applicable Wing CG. VMX-22 shall not release this message until all individual T/M/S evaluation elements are complete.

## 2. Waivers and Extensions

- a. <u>Waivers</u>. All NATOPS and NATOPS instrument waiver requests and criteria for VMX-22 personnel shall be IAW references (a), (b), (d), and this Order. Waiver requests shall be forward from the Commanding Officer to DC AVN for decision and adjudication.
- b. Extensions. All NATOPS and NATOPS instrument extension requests and criteria for VMX-22 personnel shall be completed per references (a), (b), (d), and this Order. Extension requests shall be forwarded from the Commanding Officer to DC AVN for decision and adjudication and informing the applicable Wing CG and COMOPTEVFOR.
- 3. <u>Reporting</u>. All NATOPS and NATOPS instrument reporting requirements shall be conducted IAW references (a) through (h) and this Order.

#### Operational Support Airlift (OSA)

- 1. Operational Support Airlift (OSA). For USMC, the term "OSA" applies to the C-9B, UC-35C/D, UC-12B/F/W, and C-20G aircraft. For NATOPS program execution and accountability, a VMR unit includes OSA aircraft and will also include the addition of HH-46E and HH-1N Search and Rescue (SAR) aircraft. All VMR units shall designate a UNO per unit and an NI for each crew position in T/M/S. It is incumbent upon the VMR unit UNO/NI and aircrew personnel to ensure compliance with references (a), (d), and this Order in completing their NATOPS requirements and take full advantage of resources (aircraft and simulators) when available.
- a. <u>Individual NATOPS Evaluations</u>. All individual NATOPS and NATOPS instrument evaluations shall be conducted per references (a), (b), and (d). The evaluation process for qualifications and designations are delineated in references (a), (d), respective NATOPS Flight Manuals (NFM), reference (n), and this Order. Compliance with individual NATOPS evaluations shall be IAW chapter 3 and applicable directives for Pilot Qualified in Model (PQM) criteria in Commercially-Derived Aircraft (CDA). Individual NATOPS evaluations for VMR aircrew shall be conducted IAW chapter 3 with the following exception. The simulator/flight portion may be accomplished using Contracted Aircrew Training (CACT) or appropriate T/M/S simulators. If not available, the flight portion will be flown IAW the "pilot under instruction" construct. Requirements for each T/M/S UNO/NI/ANI/ENI are as with any other operational fleet squadron/unit. Currently, CACT does not include provisions for a NATOPS evaluation. Such NATOPS evaluations are conducted locally IAW reference (d).
- (1) VMR aircrew will conduct monthly EP exams and EP static cockpit/cabin drills as stated in references (a) and (d) for each T/M/S for which the aircrew member is NATOPS qualified. EP reviews for in-flight operations will be accomplished annually during recurrent training utilizing CACT simulators.
- (2) To the maximum extent possible, emergency procedure evaluations/reviews shall be conducted while the aircraft is on the ground and static to prevent any inadvertent self-induced emergencies and/or damage/injury to the aircraft, supporting equipment, and ground personnel. This does not preclude simulated single-engine approach and missed approach operations. Training for single-engine failures shall be simulated only, i.e. the engine thrust lever shall be retarded to a lower thrust setting to simulate the emergency thrust condition. Additionally, simulated single-engine failures shall be conducted only in Visual Meteorological Conditions (VMC). Initiation should be performed on downwind and in the approach/landing pattern only. Simulating a single-engine failure on takeoff/touch-and-go with the aircraft on the runway is prohibited. A NATOPS evaluation for a pilot or EAC shall not be performed with passengers or cargo aboard.
- b.  $\underline{\text{Unit NATOPS Evaluations}}$ . VMR Unit NATOPS Evaluations shall be conducted as follows:
- (1) Unit NATOPS evaluation procedures are set forth in references (a), (d), and this Order. For NATOPS standardization and service-level oversight VMR Unit NATOPS Evaluations shall be under the direct cognizance of a Marine

Corps Model Manager (MM) or Other Designated Unit (ODU). With the exception of those denoted in figure 9-1, the prioritization for USMC unit oversight is as follows: 1) USMC MM like T/M/S; 2) USMC ODU like T/M/S; 3) USMC MM dissimilar T/M/S; and 4) USMC ODU dissimilar T/M/S. This construct is to evaluate and ensure NATOPS program management meets USMC standardization requirements. For VMR Unit NATOPS evaluations, a review of the squadron/unit NATOPS program and its execution shall be conducted by a designated NE.

VMR Unit	T/M/S	MM	USMC Lead NEU
VMR-1 (Cherry Point)	C-9B	CFLSW	
	UC-35	VMR Andrews	VMR Miramar
	HH-46E	HMMT-164	
H&HS New River	UC-12B/F	CFLSW	KC-130J ATU
H&HS Beaufort	UC-12B	CFLSW	VMR New River
Miramar Flight Dept	UC-12W	VMR Belle Chasse	VMR Belle Chasse
	ŬC-35	VMR Andrews	VMR Belle Chasse
H&HS Yuma	UC-12F	CFLSW	HMLA-773
	HH-1N	HMLA-773	ПЧЦА- / / 3
VMR Andrews	UC-35	VMR Andrews	VMR Miramar
VMR Belle Chasse	UC-12W	VMR Belle Chasse	VMR Det Miramar
	UC-35	VMR Andrews	VMR Dec Milamai
MCAF Kaneohe Bay	C-20G	CFLSW	MAG-24
H&HS Futenma	UC-12W	VMR Belle Chasse	VMR Belle Chasse
	UC-35	VMR Andrews	VER BEITE CHASSE
H&HS Iwakuni	UC-12W	VMR Belle Chasse	VMR Belle Chasse

Figure 9-1.--VMR USMC Lead NEU Assignment

- (2) The VMR/H&HS CO or Detachment OICs will submit a request IAW guidelines in chapter 3 via naval message to all of their respective MMs for T/M/S assigned, including the USMC Lead NEU and informing the appropriate COG, chain of command (MCI, MARFOR), and DC AVN.
- (3) Upon receipt of the Unit NATOPS evaluation request, the MM and the USMC Lead NEU shall coordinate individual and programmatic evaluations of the requested unit. The USMC Lead NEU shall ensure they assist the requesting unit and coordinate the assignment of qualified NEs for each T/M/S.
- (4) Once supporting NEs are assigned and the evaluation is scheduled, the NEU will conduct the Unit NATOPS evaluation IAW chapter 3 and the following modifications for VMR units. To facilitate the UNI Evaluations and Random Sampling Evaluations, VMR UNOs should provide the squadron's authorized to fly roster to the NEs for all aircrew and each T/M/S they are qualified to fly. The appropriate T/M/S NE will conduct their portion of the Unit NATOPS Evaluation as well as the random sampling evaluation of crew members shall be accomplished per references (a), (d), and this Order. The evaluation shall be specific to each crew position.
- (5) The VMR unit shall keep a copy of its evaluation on record. For VMR units which have multiple T/M/S aircraft, they shall follow the multiple T/M/S guidelines delineated in chapter 3.

- (6) The formal written report shall be conducted IAW chapter 3 with a copy of the report retained by VMR and a second copy with the VMR Commanding Officer or Detachment OIC comments to be forwarded to the respective COG. Upon completion of the Unit NATOPS evaluation a naval message announcing the satisfactory completion shall be released to all of their respective Model Managers for T/M/S assigned, the appropriate COG, chain of command (MCI, MARFOR), CMC SD, and DC AVN. VMR shall not release this message until all individual T/M/S evaluation elements are complete. The format to be utilized is depicted in enclosure (5).
- (7) The purpose of these stringent requirements is to provide strict oversight and compliance with the standardization of NATOPS and NATOPS Instrument program procedures and operations within Marine Aviation to include VMR units.

## 2. Waivers and Extensions

- a. <u>Waivers</u>. NATOPS and NATOPS instrument waiver requests and criteria for VMR aircrew shall be IAW references (a), (b), (d), and this Order. Waiver requests shall be forward from the Commanding Officer/Detachment OIC to the respective COG IAW chapter 4 for decision and adjudication.
- b. Extensions. All NATOPS and NATOPS instrument extensions requests and criteria for VMR aircrew shall be IAW references (a), (b), (d), and this Order. Extension requests shall be forwarded from the Commanding Officer/Detachment OIC to the respective COG IAW chapter 4 for decision and adjudication.
- c. Unit NATOPS Evaluation Waivers and Extensions. All Unit NATOPS Evaluation waiver and extension requests for VMR units shall be IAW references (a), (b), (d), and this Order. Guidelines are delineated in chapter 4.

## 3. Naval Flight Officers

- a. Naval Flight Officers (NFO). Marine Corps Naval Flight Officers are qualified Naval Aircrew. They have served as Qualified Observers (QO) in the UC-12B/F for numerous years. These officers often serve as the CO of H&HS squadrons, MCASs, and MCAFs, and have on their Tables of Organization and Equipment (TO&E) the UC-12 aircraft. USMC NFOs are authorized to be included for duty assignments in UC-12 aircraft as the Qualified Observers. UC-12B/F is certified under reference (n), part 23. While the UC-12W is certified under reference (n) part 23 Commuter Category, it has an exemption for single pilot flight. Normal complement of flight crew would be two qualified pilots. In this instance, the weight of past practice and competence in NFO performance of co-pilot duties, it is reasonable that an NFO trained to fly the UC-12 at the appropriate contract flight instruction site, will be considered qualified and trained for qualified observer duties and responsibilities in the right seat.
- b. Flight Qualification Requirements. Only USMC NFOs which have successfully completed contractor provided FRS/1000-Level T&R training ground school instruction and its associated simulator events qualify to fly as Qualified Observers from the right seat of the UC-12.
- 4. Reporting. All NATOPS and NATOPS instrument reporting requirements shall be conducted IAW references (a) through (h) and this Order.

#### USMC Aviation Reserves

# 1. USMC Aviation Reserves

- a. <u>Individual NATOPS Evaluations</u>. All USMC Aviation reserve units shall conduct individual NATOPS and NATOPS instrument evaluations per references (a), (b), (d), and this Order.
- b. Unit NATOPS Evaluations. All USMC Aviation reserve units shall conduct Unit NATOPS and NATOPS instrument evaluations per references (a), (b), (d), and this Order.

## 2. Waivers and Extensions

- a. <u>Waivers</u>. All NATOPS and NATOPS instrument waiver requests and criteria for USMC Aviation Reserve personnel shall be completed per references (a), (b), (d), and this Order. Waiver requests shall be forwarded from the Commanding Officer to DC AVN for decision and adjudication via CG 4th MAW for concurrence.
- b. Extensions. All NATOPS and NATOPS instrument extensions requests and criteria for USMC Aviation Reserve personnel shall be IAW references (a), (b), (d), and this Order. Extension requests shall be forward from the Commanding Officer to DC AVN for decision and adjudication via CG CG 4th MAW for concurrence.
- 3. Reporting. All NATOPS and NATOPS instrument reporting requirements shall be conducted IAW references (a) through (h) and this Order.

## 4. Model Manager Responsibilities

- a. <u>Model Manager (MM)</u>. USMC Aviation Reserve units which have been designated to assume MM roles and responsibilities during Marine Aviation transitions to newer platforms shall assume those roles and responsibilities per references (a) through (h) and this Order.
- b. <u>Legacy Platform Units</u>. It may become apparent in the future that Marine Aviation Reserve units may be the only unit flying a legacy platform until it fully transitions to the newer aircraft. Until such time, that unit will be the NATOPS Designated Unit reporting to the Type and Model (T/M) NATOPS Model Manager for its NATOPS and NATOPS Instrument program requirements and evaluations.

#### Maneuver Description Guides

1. Maneuver Description Guides (MDG). Per reference (a), a supplemental NATOPS Manual may be issued to reduce the size of an aircraft NATOPS Flight Manual (NFM). It is to contain additional information from specific sections of the NFM and is only valid when used in conjunction with the aircraft NFM. For Marine aviation, this particular Supplemental NATOPS Manual shall be referred to and known as the Maneuver Description Guide (MDG). It is intended as a T/M/S specific guide used to further define procedural aspects of NATOPS maneuvers which are required for the standardized and effective execution of operations in all regimes of flight. The intent for the MDG is to serve an aviator from initial FRS training and remain relevant throughout their flying career in that T/M/S aircraft. Aircrew shall adhere to standards outlined in the MDG at all times. These standards will be evaluated during annual NATOPS evaluation events.

## 2. Design and Development

a. Standardization. Each and every USMC T/M/S aircraft shall have a MDG to provide community-wide direction on standardized flight, integrated Crew Resource Management (CRM) maneuvers, and flight related procedures. As an extension of the NATOPS Flight Manual, figure 11-1 delineates respective MDG custodian responsibilities and are closely aligned to T/M/S MMs. Should a conflict arise between guidance in the MDG and those found in other publications, NATOPS publications shall govern, otherwise the most restrictive guidance shall apply. It is the responsibility of the aircrew to notify the MDG custodian for necessary corrective or amplifying action. The MDG must be current and relevant to fleet-wide application. It is recommended that assigned MDG custodian take an active role in ensuring periodic review and solicit input from fleet users.

T/M/S	මණිලි -	T//M//S	र्णानी है	T/M//S	<b>Unit</b> G
UH-1N/Y	HMLAT-303	F/A-18A-D	VMFAT-101	C-20G	VMR Kaneohe Bay
UH-1Y	HMLA-773	EA-6B	MAG-14	UC-12B/F	VMR New River
AH-1W/Z	HMLAT-303	F-35B	VMFAT-501	UC-12W	VMR Belle Chasse
CH-46E	HMMT-164	F-5E	VMFT-401	C-9B	VMR-1
MV-22B	VMMT-204	KC-130J	KC-130J ATU	VH-3D	HMX-1
CH-53D	MAG-24	KC-130T	VMGR-234	VH-60N	HMX-1
CH-53E	HMHT-302	RQ-7B	VMU-1	Salar Salar Salar Salar Salar	
AV-8B	VMAT-203	UC-35C/D	VMR Andrews	41 A	

Figure 11-1.-- MDG Custodians

- b. Format. The format shall be logically designed to mirror relevant chapters and topics from the NFM and shall be applicable to all areas of operation for that T/M/S aircraft.
- c.  $\underline{\text{Terminology}}$ . There shall be a glossary of acronyms and terms included in each MDG applicable across each T/M/S. This will require a coordinated effort across all Wings to ensure terms and acronyms are included in each T/M/S MDG.

## 3. Maneuver Description Guide Management

- a. Maneuver Description Guide Management. The assigned MDG custodian shall assume responsibility for consolidating and coordinating input, maintenance, and revision of the MDG. The Flight Leadership Standardization Evaluation Program Manager, Program Coordinators, and Cadres are integral members of the review process for the MDG content. They are expected to provide assistance in the drafting and revision of the MDG. MATSS may be used as a focal point for coordinating meetings, working groups, and conferences to support these standardization efforts. Inputs from the T/M/S MM and UNO/UNI during the initial draft and subsequent revisions are essential to ensure all applicable and relevant data, policies and procedures are captured.
- b. MDG Approval Authority. Upon review, the approving authority for an aircraft MDG shall be each MAG CO or appropriate USMC O-6 with that T/M/S aircraft under their respective command or reporting chain.
- c. <u>Maneuver Description Guide Review</u>. At a minimum, the MDG will be reviewed and updated either before or after a community NATOPS conference. T&R syllabus sponsors or Operational Advisory Group (OAG) conference may also initiate guidance for a review of the MDG.

## Orientation/Indoctrination Flights

1. <u>Background</u>. Reference (a) authorizes orientation flights for specific purposes and as stand-alone events in Naval Aircraft. For Marine aviation, orientation/indoctrination flights will be on a limited basis and are intended to give non-crewmember but otherwise authorized individuals an opportunity to develop a unique understanding of the roles and missions of various aviation assets. Orientation/indoctrination flights must be deemed as beneficial to the Marine Corps and the DOD to qualify for preauthorization.

## 2. Approval Authority

- a. DC AVN is the approval authority for selected passengers to receive orientation/indoctrination flights in high performance jet, tiltrotor, and AH-1 aircraft. This also includes personnel occupying a crew seat position, aircraft with personal oxygen systems, and during shipboard catapult launches or arrested landings.
- b. The COMMARFORCOM, COMMARFORPAC and COMMARFORRES/CG 4th MAW are delegated authority to approve orientation/indoctrination flights for the following passengers aboard USMC cargo/transport aircraft within CONUS (The restrictions in paragraph 1 set forth above still apply.):
- (1) U.S. military personnel on active duty or on active duty for training.
- (2) Foreign military personnel who possess proper base/installation visitation authorization pursuant to established policies and procedures.
- (3) Foreign civilians assigned to a North Atlantic Treaty Organization (NATO) headquarters and who possess a base/installation visitation authorization pursuant to established policies and procedures.
- (4) U.S. citizens except for spouses of government personnel, key non-DOD federal officials, and members of Congress and their staffs.
- c. The COMMARFORCOM and COMMARFORPAC are authorized to approve orientation/indoctrination flights aboard cargo/transport aircraft for foreign nationals (military and civilian) within their respective overseas areas of responsibility.
- d. CMC (AVN Code ASM) will be an information/copy to addressee on all correspondence (e-mail and messages) which approves an orientation/indoctrination flight aboard Marine Corps aircraft.
- 3. <u>Eligible Personnel</u>. Eligible personnel may include non-crewmember military personnel, DOD civilian employees, and contractors to DOD when required in conjunction with assigned duties or contractual responsibilities and when such flights would be in the best interest of the Marine Corps. Additional criteria for eligibility is listed in reference (a).

#### 4. Flight Limitations and Restrictions

- a. In no case shall orientation/indoctrination flights in Marine Corps aircraft be conducted to provide point-to-point transportation.
- b. Only highly qualified flight personnel shall be selected to conduct orientation/indoctrination flights.
- c. Orientation/indoctrination flights involving third nation nationals into or over foreign countries will not be approved unless confirmation on entry clearance has been received from the foreign governments concerned.
- d. Flights involving disclosure of classified information to foreign nationals require compliance with provisions of reference (o).
- e. Formation flying shall not be performed unless required for a specific purpose.
- f. Physical and survival training requirements as outlined in reference (a) are met.
- g. Flights shall be conducted at no additional cost to the government and are not to interfere with operations and training of the organization providing subject flight.
- 5. Ground Combat Student Orientation/Indoctrination Flights. The Commanding Officer MAWTS-1 is delegated the authority to approve orientation/indoctrination flights conducted in support of Ground Combat students assigned to the Weapons and Tactics Instructor (WTI) Course. The restrictions set forth in paragraph 2.a. still apply.
- 6. Ground Commander Orientation/Indoctrination Restrictions and Requirements. In addition to the basic flight restrictions in paragraph 4 the following shall also apply. The intent of this program is to enable specifically authorized personnel, and is focused on ground commanders, with an introduction into the complexities of Marine aviation to provide those commanders with a better understanding of the critical balance between safety and mission accomplishment in support of the MAGTF operations.
- a. Flights are limited to Commanders at the battalion level and above and shall be on a voluntary basis only.
  - b. Flights are authorized on a not-to-interfere basis in all aircraft.
- c. For attack type aircraft, flights may be planned for air-to-ground missions (The restrictions set forth in paragraph 2.a. still apply.). Flights in cargo/transport type aircraft should represent a typical assault mission profile.
- d. If possible, flights should be conducted in conjunction with a ground exercise in order to provide the Commander with a greater appreciation of the coordination and communications required to execute a mission.
- e. Flights at night are not encouraged due to the increased risk. A day orientation/indoctrination flight is required prior to any night flight (flights need not be flown on the same day). Non-crewmembers will not occupy

any crew seat during flights conducted at night or with troops/passengers embarked.

- f. The number of orientation/indoctrination flights provided to any individual will not exceed three (3). Only one (1) night flight is authorized.
- g. Non-crewmembers receiving orientation/indoctrination flights are not authorized to control the aircraft.
- h. Non-crewmembers will receive a complete and thorough flight brief by the pilot in command to include NATOPS, emergency procedures, necessary passenger coordination as a part of the flight crew, and safety items. Additional items per T/M/S briefing standards are required along with a brief on the nature and conduct of the mission. Flights shall be conducted within the guidelines of the appropriate aircraft NATOPS and regulations as set forth in the references.
  - i. No additional funding will be provided to support this program.
- j. Caution must be taken to avoid any perception that anything other than a dedicated training effort is being provided to enhance the effectiveness of Marine Commanders.

## 7. Physical and Survival Training Requirements

- a. Physical and Survival Training requirements:
- (1) A current flight physical with valid Aeromedical Clearance Notice (NAVMED 6410/2) is required for selected passengers. Use of medical screening (see reference (a)) by non-DOD personnel is required at their own expense.
- (2) A current flight physical with valid Aeromedical Clearance Notice (NAVMED 6410/2) is required for passengers who occupy a crew position.
- (3) Naval Aviation Survival Training Program (NASTP) requirements for passengers are required for flights in non-cargo/transport type aircraft and extended over-water flights (non-cargo/transport aircraft) as defined in reference (a).
- (4) The pilot in command shall ensure that passengers and selected passengers are thoroughly briefed prior to flight on use of Aviation Life Support Systems (ALSS), available oxygen systems and ejection seats (as applicable); and on procedures for emergency egress, ditching, crash landing, and bailout.

#### b. Waivers:

- (1) The requirement for a flight physical for passengers or selected passengers may be waived provided the individual has a current physical which is reviewed by a flight surgeon and has obtained a valid Aeromedical Clearance Notice prior to any NASTP training or flight.
- (2) NASTP training waivers for orientation/indoctrination flights in aircraft equipped with ejection seats and/or personal oxygen systems which are used for primary life support will not be granted.

(3) Waivers for water survival training, may be granted provided the orientation/indoctrination flight is conducted over land.

#### Instrument Ground School

1. Purpose and Administration. Per reference (a), a valid instrument rating/qualification is a requirement for Pilots/NFOs (DIFOPS). The requirement for the annual completion of IGS is also delineated in reference (a). Instrument Ground School (IGS) provides a formal syllabus/course of instruction mandated to facilitate the fulfillment of that requirement. A standardized and robust instrument training and evaluation program assists the operational commander in maintaining a high level of all-weather flying proficiency in his unit. Through the Aviation Training System (ATS) and per references (g) and (h), Marine aviation has provided the means to standardize and deliver the IGS syllabus/course of instruction for the Marine Corps.

#### 2. Roles and Responsibilities

- a. Instrument Ground School Program Coordinator (IGSPC). IAW references (g) and (h), the IGSPC serves as the Marine aviation liaison on behalf of HQMC AVN with the OPNAV-designated DoN IGS Model Manager (IGSMM) (Chief of Naval Aviation Training, CNATRA). In coordination with CNATRA and with concurrence from HQMC AVN, the IGSPC shall recommend policy for the execution of Instrument Ground School and the subsequent instrument examination. Clarification on IGS as related to reference (a) is expected to be provided by the IGSMM to the USMC through the IGSPC. The IGSPC shall develop, maintain and through the MATSS, provide Marine aviation commands with a standardized IGS syllabus/course of instruction. This course of instruction shall meet the requirements stated in references (a), (b), and this Order, and its development shall be approved by and coordinated with CNATRA. The IGSPC shall act as the single point of contact for all IGS issues with specific responsibilities to include the following:
- (1) Provide a CNATRA-approved template for required courses to all MATSS.
- (2) Maintain and disseminate an approved IGS questions database that can facilitate multiple randomized examinations.
- (3) Coordinate with CNATRA as necessary for emerging and additional requirements to properly program for applicable resources.
- (4) IGSPC shall manage the content of all general instrument training materials and coordinate the approval and standardization of all instrument training with CNATRA.
- (5) Maintain and disseminate a standardized template for course rules to be used by each MATSS OIC as they coordinate for the development of local site-specific briefings.
- b. Each MATSS OIC will coordinate with their respective Wing and Group DOSS and Station ATC detachments to develop and maintain standardized instrument training requirements specific to its local operating area (e.g., course rules). These course rules will be coordinated with the IGSPC for incorporation into the IGS program.

- c. MATSS shall provide assistance, as required, to unit COs for NATOPS and instrument evaluations. To further improve standardization of instrument and NATOPS evaluations, COs should seek to utilize CIs and aircraft simulation devices to the maximum extent possible.
- d. NATOPS Model Managers shall retain responsibility for the development and standardization of all platform specific NATOPS instructional materials and coordinate their respective IGS requirements with the IGSPC and IAW references (a), (b), and (d). Each individual community, in coordination with the NATOPS and FLSE model manager and syllabus sponsor, shall develop specific NATOPS training and evaluation requirements and incorporate them into its T&R manual.
- e. IGS courseware development and sustainment funding will be coordinated through the ATS processes and HQMC AVN advocacy IAW references (g) and (h).
- 3. Course of Instruction. The IGS syllabus should be tailorable to meet the requirements for a particular T/M/S aircraft and its operation, based upon its capabilities for instrument flight. IGS may be sub-divided into core modules to include: Rotary Wing, Tilt-Rotor, Fixed-Wing (TACAIR), and Fixed-Wing (Non TACAIR). Each module will cover the core knowledge areas. Requested changes to the syllabus shall be submitted to the IGSPC for review and incorporation annually and may be done as part of the IGS Content Review Board process. Changes of an immediate nature shall be submitted for incorporation on a case-by-case basis.
- a. The following list is intended to provide minimum level topics to be covered in the IGS syllabus/course of instruction IAW references (a) and (b).
  - (1) The following are considered core knowledge areas:
    - (a). DOD/DON Regulations and Instrument procedures
    - (b). FAA regulations and Instrument procedures and/or applicable aeronautical publications
    - (c). GPS policy and fundamentals review
    - (d). Flight Information Publication (FLIP)
    - (e). International Civil Aviation Organization (ICAO)
    - (f). Jeppesen/Host-Nation considerations
    - (g). Flight Planning/Flight Plans
    - (h). Preflight Weather/Meteorology, including air masses, fronts, thunderstorms, microbursts, and windshear, weather briefs, severe weather hazards, DD-175-1, weather reports, and pilot responsibilities
    - (i). Notice to Airmen (NOTAMS)/Use of non-DOD GPS NOTAMS systems
    - (j). Use of non-DOD instrument approach/departure procedures
    - (k). Reduced Vertical Separation Minimums/Minima (RVSM) procedures, requirements and denial reports
    - (1). Spatial Disorientation
    - (m). Air Traffic Control
    - (n). Landing/Lighting considerations
    - (o). Oceanic Procedures/Shipboard-based Instrument Flight Rules (IFR) Operations
    - (p). Terminal Instrument Procedures (TERPS)
    - (q). Navigational Aids (NAVAIDS)
    - (r). Low Altitude Procedures/High Altitude Procedures
    - (s). Radar Navigation (RNAV)/Radio Navigation Point (RNP)

- (t). Weather Radar
- (u). Airspace
- (v). Altimetry
- (w). Holding
- (x). Arrival
- (y). Instrument Approach/Departure procedures
- (z). Communications/Radio procedures
- (aa). Emergency procedures
- (bb). Circling/Circling Missed Approach
- (cc). Missed Approach
- (dd). Familiarity with FAA Instrument Procedures Handbook, Instrument Flying Handbook, FAR/AIM, and Handbook of Aeronautical Knowledge as references
- (2) The following are considered additional knowledge areas:
  - (ee). Local MCAS/NAS/JRB Course rules and procedures
  - (ff). Local MCAS/NAS/JRB Special Visual Flight Rules (VFR)
     procedures
  - (gg). Local MCAS/NAS/JRB terminology
- 4. <u>Instrument Examination</u>. The requirement for the satisfactory completion of an examination subsequent to IGS is delineated in references (a) and (b). A minimum grade of 80% shall be required. The policy for waivers and extensions for instrument rating/qualification and IGS is delineated in reference (a).
- 5. Instrument Ground School (IGS) Instruction. IAW references (g) and (h), the Marine Corps Aviation Learning Management System (MCALMS) web-based / web-enabled delivery system may be used for a self-contained Computer Based Training (CBT) course of instruction. IGS can also be facilitated, instructed, or taught by a member of that squadron/unit Instrument Flight Board (IFB). IGS delivery via MCALMS is intended as the primary method. However, until fully mature, IGS should also continue to be available through traditional stand-up instruction.
- a. Take Home Instruction and Examination. Until such time that the online web-enabled course is available, all requests for take home instruction and examinations must be requested by the individual and endorsed by the individual's Commanding Officer.
- b. <u>Deployed Instruction and Examination</u>. For those circumstances in which IGS cannot be accomplished prior to deployment, there are three options to satisfy that requirement (in priority order).
  - (1) The NATOPS IGS course and examination can be accomplished online.
- (2) The NATOPS IGS Course and examination can be accomplished utilizing a deployable MCALMS Laptop, which will have the IGS course and examination programs available.
- (3) The NATOPS IGS course and examination can be accomplished utilizing a compact disc (CD) with the appropriate course and examination preloaded on it.
- c. <u>Instrument Ground School (IGS) Recording</u>. For each of the aforementioned methods of instruction, the IGS course and examination will

provide the individuals name and rank, score, date of examination, and a confirmation number. This provides the means to verify an individual's performance such that in the event of a failure appropriate action can be administered/taken.

- 6. <u>Waiver of IGS Requirement</u>. The NATOPS IGS requirement cannot be waived. Pilots, NFOs, and aircrew who are required to attend shall attend the appropriate course of instruction and successfully complete a written examination. The online web-enabled examination satisfies this requirement. Additionally, when certain circumstances preclude that, guidance provided in references (a), (b), (d), and this Order shall be followed.
- 7. Instrument Ground School Content Review Board (IGS CRB). The CRB shall review the entire content of the IGS quarterly. Results of the board will be documented and made available to HQMC AVN and respective Wing ATS Directors. This Board shall be chaired by the IGSPC and shall be comprised of the respective MATSS OICs or the appropriate representative at locations without a MATSS to serve as that MCAS/MCAF's Standardization Board representative for IGS.
- a. Local Site-Specific Instrument Ground School (IGS) Standardization. A local IGS review shall be accomplished quarterly at each Site/MATSS hosted Standardization Board Meeting per references (g) and (h). A MCAS/MCAF ATC representative shall be present to provide input and receive feedback during the IGS portion of the Standardization Board. Information is not limited to instrument approaches and departures but may also include local course rules, taxi and refueling operations etc. It is the forum to provide a professional exchange of ideas and concepts to enhance aviation flight and ground operations.
- b. It is highly recommended that these meetings be conducted virtually via Video Teleconference (VTC) or other means to enable maximum continuity of information flow and flexibility in availability.

T/M/S	NAG	COG	MMU/MM	NPM
AH-1W	MARFORPAC	MARFORPAC	HMLAT-303	HMLAT-303
AH-1Z	MARFORPAC	MARFORPAC	HMLAT-303	HMLAT-303
UH-1N	MARFORPAC	MARFORPAC	HMLA-773	HMLA-773
UH-1Y	MARFORPAC	MARFORPAC	HMLAT-303	HMLAT-303
CH-46E	MARFORPAC	MARFORPAC	HMMT-164	HMMT-164
CH-53D	MARFORPAC	MARFORPAC	MAG-24	MAG-24
CH-53E	MARFORCOM	MARFORCOM	HMHT-302	HMHT-302
CH-53K	NAVAIR	NAVAIR	HMHT-302	HMHT-302
AV-8B	MARFORCOM	MARFORCOM	VMAT-203	VMAT-203
EA-6B	CNAF	CNAF N3A5	VAQ-129	VAQ-129
F/A-18A/B/C/D	CNAF	CNAF N3A1	VFA-106	VFA-106
KC-130T	CG 4th MAW	CG 4th MAW	VMGR-234	VMGR-234
KC-130J	MARFORCOM	MARFORCOM	KC-130J ATU	KC-130J ATU
VH-3D	DC AVN	DC AVN	HMX-1	HMX-1
VH-60N	DC AVN	DC AVN	HMX-1	HMX-1
VH-XX	NAVAIR	NAVAIR	HMX-1	HMX-1
MV-22B	MARFORCOM	MARFORCOM	VMMT-204	VMMT-204
F-5E	CNAFR	CNAFR N52	VFC-13	VFC-13
UC-35C/D	CG 4th MAW	CG 4th MAW	VMR Andrews	VMR Andrews
C-20G	CNAFR	CNAFR N52	CFLSW	CFLSW
C-9B	CNAFR	CNAFR N52	CFLSW	CFLSW
C-12B/F	CNAFR	CNAFR N52	CFLSW	CFLSW
C-12W	CG 4th MAW	CG 4th MAW	VMR Belle Chasse	VMR Belle Chasse
F-35B	DC AVN	DC AVN	VMFAT-501	VMFAT-501
RQ-7B	MARFORPAC	MARFORPAC	VMU-1	VMU-I
HH-1N	MARFORPAC	MARFORPAC	HMLA-773	HMLA-773
HH-46E	MARFORPAC	MARFORPAC	HMMT-164	HMMT-164

## USMC NATOPS Matrix

DC AVN = Deputy Commandant for Marine Aviation

MARFORPAC = Commanding General, Marine Forces Pacific

MARFORCOM = Commanding General, Marine Forces Command CG 4th MAW = Commanding General, Fourth Marine Aircraft Wing

2d MAW = Second Marine Aircraft Wing

CNAF = Commander Naval Air Forces

CNAFR = Commander Naval Air Forces Reserve

NAVAIR = Commander, Naval Air Systems Command

CFLSW = Commander, Fleet Logistics Support Wing

Publication Title									
NAG	COG	NATOPS Publication Coordinator	MMU/MM	NPM					
The state of the s	NATOPS Survival Manual, NAVAIR 00-80T-101								
BUMED	BUMED	BUMED	NAMI	NAMI					
	CV NATOPS Manual, NAVAIR 00-80T-105								
CNAL	CNAL	CNAL	OIC LSO School	OIC LSO School					
	LHA	/LHD NATOPS M	Ianual, NAVAIR 00-80T-106						
CNAF	CNAF	CNAF	CNSF (Code N42)	CNSF (Code N42)					
			S Manual, NAVAIR 00-80T-10						
NAVAIR	NAVAIR	NAVAIR	NAVAIR AIR 4.4.5	NAVAIR AIR 4.4.5					
			fueling, ATP-56(B)						
MARFORPAC	MARFORPAC	NAVAIR	MAWTS-1	MAWTS-1					
			Officer NATOPS Manual, NAV						
MARFORCOM	MARFORCOM			MAG-14					
		. ~	Manual, NAVAIR 00-80T-113						
CNAF	CNAF	CNAF	Aircraft Handling Team	Aircraft Handling Team					
	L		(CNAL Code N73A)	(CNAL Code N73A)					
			ol Manual, NAVAIR 00-80T-11						
NAVAIR	NAVAIR	NAVAIR	OPNAV Code 885F	OPNAV Code N885F					
			Corps Air Stations NATOPS I	Manual, NAVAIR 00-80T-115					
NAVAIR	NAVAIR	NAVAIR	PMA-251M	PMA-251M					
			NATOPS Manual, NAVAIR 00-						
NAVAIR	NAVAIR	NAVAIR	PMA-202F	PMA-202F					
NATOPS U.S. Navy Firefighting and Rescue Manual, NAVAIR 00-80R-14									
NAVAIR	NAVAIR	NAVAIR	PMA-251B2	PMA-251B2					
			escue Information Manual, NA						
NAVAIR	NAVAIR	NAVAIR	PMA-251	PMA-251					
			ge Operations Manual (Ashore)						
NAVAIR	NAVAIR	NAVAIR	PMA-251	PMA-251					

USMC Publications NATOPS Matrix

## Legend

MARFORPAC = Commanding General, Marine Forces Pacific MARFORCOM = Commanding General, Marine Forces Command NAVAIR = Commander, Naval Air Systems Command BUMED = Chief, Bureau of Medicine and Surgery CNAF = Commander, Naval Air Forces

CNAL = Commander, Naval Air Forces Atlantic

NAVMC	STRATIVE ACTION (5216) C 10274 (REV. 3-93) (EF) Editions will be used		ACTION NO.  3. DATE	2. SSIC/FILE NO.
4. FROM	(Grade, Name, SSN, MOS, or CO, Pers. O., etc.)	5. ORGANIZA	TION AND STATION (Comple	te address)
(1) CO, À	As required) viation Command (3) CG MAW/MCI IAG/Station (4) CG MARFOR	Command's	Complete Address	
7. TO:	Commandant of the Marine Corps (ASM) 3000 Pentagon Marine Corps Rm 5E527 Washington, DC 20380-1775		ect st	
10, REFE (1) OPAN (2) MCO	RENCE OR AUTHORITY (if applicable) NVINST 3710.7 series 3710.8	11. ENCLOSU	IRES (if any)	

2. The following information is provided:

actionable requirements on my part.

a. Date of last physiology/water survival training completed: (Qualified, Conditionally Qualified, Unqualified - state one)

1. Per the references, I respectfully request an/a extension/waiver to (Physiology, Water Survival, NATOPS, NATOPS Instrument, Flight Physical, Flight Time - state one) requirement while assigned to (Command) for the period of (from date) to (end date). I understand an/a extension/waiver does not relieve me of any

- b. Date of last NATOPS evaluation: (Qualified, Conditionally Qualified, Unqualified state one)
- c. Date of last NATOPS instrument evaluation: (Qualified, Conditionally Qualified, Unqualified state one)
- d. Date of last flight physical: (PQ/AA, NPQ/AA (waiver granted), NPQ/AA (waiver requested) state one)
- e. Current Type/Model/Series aircraft flown and position: (Pilot, Weapons Systems Officer, Electronic Countermeasures Officer, Tactical Systems Operator, Flight Engineer, Crew Chief, Aerial Observer, Aerial Gunner, Flight Surgeon, Aerospace Physiologist, Aerospace Experimental Psychologist, Aeromedical Safety Corpsman state one)
  - f. Date of Last flight flown in current T/M/S:
  - g. Total flight hours/ Total hours in model/Hour flown last 360days/180days/90days:
  - h. List of qualifications
  - i. Justification/rationale for the request:

13. PROCESSING ACTION. (Complete processing action in item 12 or on reverse. Endorse by rubber stamp where practicable.)

USMC Individual Extension/Waiver Request Template

# NAVMC 10274 (REV. 3-93) (EF) BACK

(Sign) FI MI LName Rank USMC	
·	
·	

USMC Individual Extension/Waiver Request Template

# NATOPS PROGRAM EVALUATION CHECKLIST

Command:  Commanding Officer:  Unit NATOPS Officer/NATOPS Instructor:  Assistant NATOPS Instructor:  Enlisted NATOPS Instructor:  Enlisted NATOPS Instructor:  Instructor:  Enlisted NATOPS Instructor:  NATOPS Evaluation Unit:  NATOPS Evaluator:  Enlisted NATOPS Evaluator:  Date Commenced/Date Completed:
NATOPS evaluations measure an individual's procedural understanding, airmanship, systems knowledge, situational awareness, and judgment. These evaluations measure the degree of compliance, standardization, and the health of the NATOPS program within a unit.
NATOPS evaluations are not only conducted to check the health of a NATOPS program but also to ensure standardization of the unit NATOPS program, evaluations, and instruction.
Unit NATOPS evaluations provide a mechanism for evaluating the effectiveness and standardization of a unit's NATOPS program, aircrew knowledge, and adherence to prescribed NATOPS procedures. This NATOPS evaluation is separate from and supplements the MAW CG's Inspection Program. This does not preclude the unit NATOPS evaluation from being conducted as part of/in conjunction with a command inspection.
It is the joint responsibility of both the unit requiring the NATOPS evaluation and the NATOPS evaluator to ensure the following requirements are met.
Part 1
A. An In-brief with the unit Commanding Officer or other appropriate command representative to discuss the evaluation process.
Comments:
B. Unit NATOPS In-brief with all applicable aircrew to outline the Unit NATOPS evaluation program - Overview of the NATOPS Evaluation Program - Conduct of the Unit NATOPS evaluation - Recently revised or new aircraft operating procedures
Comments:

C. Unit NATOPS Officer/NATOPS Instructor/Assistant NATOPS Instructor Evaluations for each crew position

- NATOPS Open Book Examination
- NATOPS Closed Book Examination
- Oral examination
  - o Aircraft limitations
  - o Aircraft systems
  - o Aircraft emergency procedures
  - o NATOPS evaluation procedures
  - o Instructional techniques knowledge
- NATOPS Evaluation Event (Flight/Simulator)
- Review of Authorized to Flv Roster

- keview of Authorized to Fly Roster	
Comments:	Press,
D. Unit random sampling of the aircrew assigned to a specific command/unit for flight operations.  - NATOPS Open Book Examination  - NATOPS Closed Book Examination	_

- Oral examination
  - o Aircraft limitations
  - o Aircraft systems
  - o Aircraft emergency procedures
  - o NATOPS evaluation procedures
- NATOPS Evaluation Event (Flight/Simulator)

Comments:	

## Part 2

- A. AIRS Detailed Inspection Checklists (use applicable checklists)
  - Aviation Facilities (880)
  - Headquarters/Squadron Items (875)
  - Aircrew Training (850)
  - Aviation Safety (870)

\*NOTE\*

Checklists can be accessed at https://hqinet001.hqmc.mil/IG/div\_inspections/airs%20checklists/airs\_index.htm

Comments:		

- B. NATOPS Jacket Evaluation Procedures

	21	Doog	tho	MATIONO	Toalsot	contain	_	rogord	Ωf	disclosure	attached	t o	tho
	4)	DOES	CHE	NATOPS	uacket	Contain	a	record	OΤ	disciosure	actached	LU	CTIC
fror	ıt	cover'	?										

Comments:	

3) Does the NATOPS jacket contain only records or documents that contain pertinent data on the aviation status of the individual?
Comments:
4) Does the NATOPS jacket contain Privacy Act Statement (OPNAV 5211/9) and is it properly filled out and signed by the individual?
Comments:
5) Does the NATOPS jacket contain a review and certification record (OPNAV 3760/32A shall be used)?
Comments:
6) Is the NATOPS Jacket reviewed by the commanding officer or a designated individual:  a) Upon reporting to the unit? b) Annually (within 30 days of Date of Birth (DOB))? c) Upon a major change in flight status? d) Upon detachment from the unit?
Comments:
7) (GENERAL) Does Part B of the NATOPS Jacket contain a copy of the most current authority for flying status (Officers - DIFOPS, Enlisted - signed Volunteer to Fly Letter and Designated Flight Status Letter from commanding officer)?
Comments:
8) (GENERAL) Does Part B of the NATOPS Jacket contain a copy of any letters of suspension and/or revocation of flying status filed for permanent retention?
Comments:
9) Does the NATOPS jacket contain a copy/original of the current BUMED 6410/1 (Aeromedical Grounding Notice) or 6410/2 (Aeromedical Flight Notice)?
Comments:

10) Are all "Grounding" and "Up" chits covering the current annual flight physical maintained until the succeeding year's flight physical clearance notice is received?
Comments:
11) (GENERAL) Does Part C of the NATOPS Jacket contain a copy of any medical waivers and are they retained as long as they are in effect?
Comments:
12) (GENERAL) Does Part D of the NATOPS Jacket contain a record of flight equipment issue maintained utilizing OPNAVINST 3760/32B?
Comments:
13) (QUALIFICATIONS AND ACHIEVEMENTS) Does Part A of the NATOPS Jacket contain a copy of OPNAV 3760/2C (Flight Designation Record) and are all qualifications entered?
Comments:
14) (QUALIFICATIONS AND ACHIEVEMENTS) Does Part A of the NATOPS Jacket contain copies of designation letters containing designation dates and approving authority signatures maintained following OPNAV 3760/32C?
Comments:
15) (QUALIFICATIONS AND ACHIEVEMENTS) Does Part B of the NATOPS Jacket contain an OPNAV 3760/32D and does it contain a list of all tactical and mission oriented designations? Designation letters may be maintained, but are not required.
Comments:
16) (MISCELLANEOUS) Does Part C of the NATOPS Jacket contain copies of Crew Resource Management (CRM) training documented correctly and current IAW OPNAVINST 1542.7C series.
Comments:

17) (TRAINING) Does Part A of the NATOPS Jacket contain a copy of OPNAV 3760/32E and does it contain a list of all formal schools and courses attended (Regular squadron and ground training lectures will not be included)?
Comments:
18) (TRAINING) Does Part A of the NATOPS Jacket contain a copy of the Training Command Student Summary and all Fleet Replacement Squadron (FRS) Summaries for the training completed after 01JAN88?
Comments:
19) (TRAINING) Does Part B of the NATOPS Jacket contain a copy of OPNAV 3760/32F and is the required Physiology and Water Survival training current and documented?
Comments:
20) (TRAINING) Does Part C of the NATOPS Jacket contain a copy of OPNAV 3760/32G with all examination scores correctly entered utilizing the 4.0 grade scale?
Comments:
21) (TRAINING) Does Part C of the NATOPS Jacket contain a copy of the most recent "Open" and "Closed" Book Examinations or Answer Sheets maintained?
Comments:
22) (TRAINING) In Part C of the NATOPS Jacket do the dates on the examinations match the dates on the evaluation forms?
Comments:
23) (TRAINING) In Part D of the NATOPS Jacket do the dates on the evaluation report match the dates on the examination and the dates in the Aviator's Flight Logbook (OPNAV 3760/31)?
Comments:

24) (EXAMINATIONS) Does Part C of the NATOPS Jacket contain a copy/original of a current and graded course rules examination (Pilots only)?
Comments:
25) (EXAMINATIONS) In Part D of the NATOPS Jacket do the entries in the aviator's flight logbook accurately support the date, time, and Bureau number (BUNO) on the NATOPS Evaluation Report?
Comments:
26) (TRAINING) Does Part D of the NATOPS Jacket contain a copy/original of the NATOPS Evaluation Form (Kneeboard card checklist) with each OPNAV 3710/7?
Comments:
27) Has the Commanding Officer made written comments/remarks on the NATOPS evaluee's NATOPS Evaluation Report (OPNAV 3710/7 Form in the Commanding Officer's Comments) regarding the skills and future potential of the evaluee?
Comments:
28) (TRAINING) Does Part E of the NATOPS Jacket contain a copy/original of the current OPNAV 3710/32H (Record of Mishaps/Flight Violations) and are comments entered by the commanding officer?
Comments:
29) (FLIGHT RECORDS) Does Part B of the NATOPS Jacket contain a copy/original of the current OPNAV 3710/32H (Record of Mishaps/Flight Violations) and are comments entered by the commanding officer?
Comments:
C. An Out-brief with the unit commanding officer or other appropriate command representative to discuss the evaluation results.
Comments:

unit NATOPS evaluation, with a copy of the report to be retained by the Evaluation Unit and a second copy to be forwarded to the appropriate MAW CG Director of Safety and Standardization (DOSS) Office.
Comments:
E. NATOPS Program Management Evaluation Procedures  1) Does the NATOPS Officer/Instructor utilize the NATOPS Model Manager authorized/prescribed "Open" and "Closed" book examinations for NATOPS evaluations?
Comments:
2) Does the NATOPS Officer/Instructor utilize the NATOPS Model Manager authorized/prescribed "Oral" examinations for utilization during NATOPS evaluations?
Comments:
3) When compliance with any prescribed NATOPS procedure is found to be impractical or it is desired that a new procedure be initiated, is a request for waiver submitted per references (a) and (b)?
Comments:
4) Does the NATOPS Officer/Instructor utilize the NATOPS Model Manager authorized/prescribed "NATOPS Evaluation Aviation Training Form (ATF)" for NATOPS evaluations?
Comments:
5) Does the NATOPS Officer/Instructor ensure all flight personnel complete their monthly Emergency Procedures (EP) examinations and monthly EP Simulator/static cockpit/cabin review?
Comments:

D. A formal written report to the Unit Commanding Officer summarizing the

F. NATOPS Instrument Program Management Evaluation Procedures				
1) Does the NATOPS Officer/Instructor have the appropriate designation/assignment letters for NATOPS Instrument Flight Board membership?				
Comments:				
2) Do the members of the unit NATOPS Instrument Flight Board hold a "Special" instrument rating as specified in reference (a).				
Comments:				
3) Do unit aircrew who are required to attend an approved Instrument Ground School (IGS) course of instruction comply with IGS requirements?				
Comments:				
4) Are unit aircrew in compliance with NATOPS Instrument requirements prior to commencement of their NATOPS instrument evaluation (e.g. IGS and the completion of all instrument approaches and time requirements)?				
Comments:				
5) Are NATOPS Instrument qualifications and designation appropriate maintained in the correct format and training records?				
Comments:				

1

## Letterhead

3710 NATOPS Date

From: NATOPS Evaluator, (NATOPS Evaluation Unit), Rank, First Name MI Last

Name

To: Commanding Officer, (unit receiving evaluation)
Info: Commanding Officer, (NATOPS Evaluation Unit)
Commanding General, (appropriate MAW/MCI)

Subj: UNIT NATOPS PROGRAM EVALUATION REPORT

Ref: (a) OPNAVINST 3710.7U (NATOPS)

(b) NAVMC 3500.14 (T&R Program Manual)(c) MCO 3710.8 (USMC NATOPS Program)

Encl: NATOPS PROGRAM EVALUATION CHECKLIST

- 1. References (a) through (c) delineate the requirements, responsibilities, and procedures essential to conduct a unit NATOPS evaluation. NATOPS evaluations measure an individual's procedural understanding, airmanship, systems knowledge, situational awareness, and judgment. These evaluations measure the degree of compliance and the health of the NATOPS program within a unit. NATOPS evaluations are conducted not only to check the health of a NATOPS program but also to standardize NATOPS evaluations and instruction. Unit NATOPS evaluations provide a mechanism for evaluating the effectiveness and standardization of a unit's NATOPS program, aircrew knowledge, and adherence to prescribed NATOPS procedures. This NATOPS evaluation is separate from and supplements the MAW CG's Inspection Program. This does not preclude the unit NATOPS evaluation from being conducted as part of/in conjunction with a command inspection.
- 2. (NATOPS Evaluation Unit) conducted the required Unit NATOPS Evaluation for (unit receiving evaluation) on (dates, e.g. 02 05 May 1996 or 30 May 02 June 1997). This evaluation was comprised of those requirements set for in references (a) through (c). The Unit NATOPS Officer/NATOPS Instructor, (Rank, First Name MI Last Name), was evaluated. The random sampling of unit aircrew personnel consisted of: (Rank, First Name MI Last Name/Aircrew Position: Pilot, Weapons Systems Officer, Electronic Countermeasures Officer, Tactical Systems Operator, Flight Engineer, Crew Chief, Aerial Observer, Aerial Gunner, Flight Surgeon, Aerospace Physiologist, Aerospace Experimental Psychologist, Aeromedical Safety Corpsman state one), and additional as required. (Rank, First Name MI Last Name) assisted in the evaluation, acting as my Enlisted Aircrew NATOPS Evaluator.
- a. <u>Major Discrepancies</u>: There were no major discrepancies and/or deviations from standardized procedures and/or polices.

## b. Minor Discrepancies:

- (1) Two (2) Pilot NATOPS Jackets did not have the requisite Flight Clearance Notices. (This example is for sample purposes only.)
- (2) One (1) Aerial Observer NATOPS Jacket did not have the requisite signed Volunteer to Fly Letter. (This example is for sample purposes only.)

- (3) Monthly NATOPS examinations are missing for several aircrew personnel. Personnel were TAD during that time period, no make up examinations were provided. Unit NATOPS Officer/NATOPS Instructor has remediated the examinations to those selected individuals. (This example is for sample purposes only.)
  - c. Comments were noted on the NATOPS Program Evaluation Checklist.
- 3. Overall, the program meets the requirements, spirit and intent of the NATOPS Program. Next (unit receiving evaluation) Unit NATOPS Evaluation is NLT (Day Month Year).
- 4. As the NATOPS Evaluator for this Unit NATOPS Evaluation, my contact information is: Commercial (XXX) XXX-XXXX/DSN XXX; email XXXXXX.@usmc.mil.

FI. MI. Last Name

```
Date-Time group
      Originator (unit requesting waiver/extension)//***//
FM
TO
      (Appropriate NATOPS Model Manager) //***//
(Respective COG/NAG of requesting unit)//***//
CMC WASHINGTON DC AVN ASM (UC)
INFO (Evaluation unit in your chain of command) //***//
CMC WASHINGTON DC AVN APW (UC)
CMC WASHINGTON DC AVN APP (UC)
CMC WASHINGTON DC AVN APX (UC)
CMC WASHINGTON DC SD (UC)
(Other USMC COG/NAG) //***//
(Appropriate MAW/MCI)//***//
(Other appropriate units in your chain of command) //***//
UNCLAS/N3711)
MSGID/GENADMIN/ORGINATOR UNIT/
SUBJ/REQUEST FOR (WAIVER or EXTENSION - state one) of UNIT NATOPS
EVALUATION//
REF A/ DOC/ OPNAVINST 3710//
REF B/ DOC/ MCO 3710.8//
NARR/REF A IS OPNAVINST 3710.7 SERIES, CHAPTER 2. REF B IS USMC NAVAL AIR
TRAINING AND OPERATING PROCEDURES STANDARDIZATION (NATOPS) PROGRAM.//
POC/XXXXXXXXX, X.X./MAJ/NATOPS/TEL: (XXX) XXX-XXXX DSN XXX/
EMAIL: XXXX.XXXXXXXXX@USMC.MIL//
RMKS/1. IAW REFS A ND B, (unit requesting waiver/extension) RESPECTFULLY
REQUESTS A (WAIVER or EXTENSION - state one) TO ITS UNIT NATOPS EVALUATION
FROM (Dates) TO (Dates). THE FOLLOWING INFORMATION IS PROVIDED:
A. DATE OF LAST UNIT NATOPS EVLAUATION:
B. MINOR DISCREPANCIES DURING LAST UNIT NATOPS EVALUATION:
C. MAJOR DISCREPANCIES DURING LAST UNIT NATOPS EVALUATION:
D. NOTABLE POSITIVES DURING LAST UNIT NATOPS EVALUATION:
   COMMANDING OFFICER DURING LAST UNIT NATOPS EVALUATION:
F. NATOPS OFFICER DURING LAST UNIT NATOPS EVALUATION:
   JUSTIFICATION:
3. REQUEST APPROVAL.
```

ADMINISTRATIVE ACTION (5216) NAVMC 10274 (REV. 3-93) (EF) Previous editions will be used SN: 01094F-063-3200 U/I: PADS OF 100	ACTION NO.     2. SSIC/FILE NO.     DATE	
4. FROM (Grade, Name, SSN, MOS, or OD, Pers. O., etc.)  Self Explanatory 6. VIA (As required) (1) DIFDEN Command (3) CO, MAG/Station	DIFDEN Command's Complete Address	
(2) CO, Aviation Command (4) CG, Wing/MCI  7.  Commandant of the Marine Corps (ASM) 3000 Pentagon Marine Corps Rm 5E527 Washington, DC 20380-1775	8. NATURE OF ACTION/SUBJECT  DIFDEN Waiver Request  9. COPY TO (As required)	
10. REFERENCE OR AUTHORITY (f applicable) (a) MCO 3710.8 series (b) OPNAV 3710.7 series	11. ENCLOSURES (if any) (1) Copy of DIFDEN orders	
12. SUPPLEMENTAL INFORMATION (Reduce to minimum wording - typ  1. Per the references, I respectfully request a DIFDEN w to augment (Aviation Command) for the period of (from granted on a "not to interfere" basis and the aviation com additional flight training.	raiver while assigned to (DIFDEN Command) in order date) to (end date). I understand a DIFDEN waiver is	
<ol> <li>The following information is provided:</li> <li>a. Date of last Operation Fly in T/M/S while under D         -IF currently on DIFDEN waiver, provide the follo         - Flight Hours / Instrument Hours / Night Hours</li> <li>b. Date of last Physiology/water survival</li> </ol>	IFOP orders wing information for the past 12 and 6 month periods:	

USMC DIFDEN Waiver Request Template

13. PROCESSING ACTION. (Complete processing action in item 12 or on reverse. Endorse by rubber stamp where practicable.)

d. Date of last Inst Check

e. Date of last Flight Physical

g. Justification/rationale for the request

f. The relevant Type/Model/Series aircraft to be flown DIFDEN

NAVIVIC 102/4 (REV. 3-93) (EF) BACK				
(Sign)				
(Sign) FI. MI. LName Rank USMC				
·		·		

USMC DIFDEN Waiver Request Template

#### APPENDIX A

#### GLOSSARY OF ACRONYMS

AA Aeronautically Adaptable

ADP Aeronautically Designated Personnel
AENI Assistant Enlisted NATOPS Instructor

AG Aerial Gunner

AGS Aviation Ground Support

AIRS Automated Inspection Reporting System

ANI Assistant NATOPS Instructor

AO Aerial Observer

APP Aviation Plans, Programs and Budget Branch

APU Auxiliary Power Unit

APW Aviation Weapons Systems Requirements Branch

APX Aviation Expeditionary Enablers Branch

ASM Aviation Manpower Support Branch

ATB Aviation Training Branch
ATS Aviation Training System
CACT Contracted Aircrew Training

CAP Civil Air Patrol

CDA Commercial Derivative Aircraft

CFET Centrifuge-based Flight Environment Training
CG 1 MAW Commanding General First Marine Aircraft Wing
CG 2D MAW Commanding General Second Marine Aircraft Wing
CG 3D MAW Commanding General Third Marine Aircraft Wing
CG 4th MAW Commanding General Fourth Marine Aircraft Wing

CG Commanding General CI Contract Instructor

CM Crewmaster

CMC Commandant of the Marine Corps

CMC SD Commandant of the Marine Corps Safety Division

CNAF Commander Naval Air Forces
CNATRA Chief of Naval Aviation Training

CNO Chief of Naval Operations

COG Cognizant Command

COMMARFORCOM Commander Marine Forces Command
COMMARFORPAC Commander Marine Forces Pacific
COMMARFORRES Commander Marine Forces Reserves
COMNAVAIRSYSCOM Commander Naval Air Systems Command

COMOPTEVFOR Commander Operational Test and Evaluation Force

CONUS Continental United States
CRM Crew Resource Management
CV Multi-Purpose Aircraft Carrier
DC AVN Deputy Commandant for Aviation
DIFDEN Duty Involving Flying Denied
DIFOPS Duty Involving Flying Operations

DOB Date of Birth

DOSS Director of Safety and Standardization

EAC Enlisted Aircrew

ENI Enlisted NATOPS Instructor

EP Emergency Procedures

FAA Federal Aviation Administration
FFPB Field Flight Performance Board

FMS Foreign Military Sales
FRS Fleet Replacement Squadron

HMX Marine Helicopter Experimental Squadron

IAW In Accordance With

IGS Instrument Ground School

IGSPC Instrument Ground School Program Coordinator

ISIC Immediate Superior in Command

JSF Joint Strike Fighter
LHA/LHD Amphibious Assault Ship

LM Loadmaster

LMS Learning Management System
LSO Landing Signal Officer
MAG Marine Aircraft Group
MAD Military Aggistance Program

MAP Military Assistance Program MARFORPACO Marine Forces Pacific Order

MATSS Marine Aviation Training System Site

MAW Marine Air Wing

MAWTS Marine Aviation Weapons and Tactics Squadron
MCALMS Marine Corps Aviation Learning Management System

MCI Marine Corps Installations

MCO Marine Corps Order

MDG Maneuver Description Guide

MM Model Manager

MMOA Manpower Management Officer Assignment

M-SHARP Marine Sierra-Hotel Aviation Readiness Program

NA Naval Aviator

NAA Not Aeronautically Adaptable

NAG NATOPS Advisory Group

NASTP Naval Aviation Survival Training Program

NATEC Naval Air Technical Data and Engineering Service

Command

NATO North Atlantic Treaty Organization

NATOPS Naval Air Training and Operating Procedures

Standardization

NAVMC Navy Marine Corps Directive

NC NATOPS Coordinators
NE NATOPS Evaluator
NEU NATOPS Evaluation Unit
NFO Naval Flight Officer
NI NATOPS Instructor

NJROTC Navy Junior Reserve Officer Training Corps

NPM NATOPS Program Manager
NPQ Not Physically Qualified
NVD Night Vision Device

OAG Operational Advisory Group
ODO Operations Duty Officer
ODU Other Designated Unit
OSA Operational Support Airlift

POC Point of Contact
POI Program of Instruction
PQ Physically Qualified
QO Qualified Observer

ROTC Reserve Officer Training Corps
SARA Safety and Risk Assessment
SEPCOR Separate correspondence
SME Subject Matter Expert
T&R Training and Readiness
T/M/S Type, Model, Series
TAD Temporary Assigned Duty

TECOM Training and Education Command
TMP Training Management Process
UAS Unmanned Aircraft System
UNO Unit NATOPS Officer
USMC Unites States Marine Corps

VIP Very Important Person

VMX Marine Operational Test and Evaluation Squadron

WTI Weapons and Tactics Instructor