#### DEPARTMENT OF THE NAVY



NAVAL AIR FORCE, UNITED STATES PACIFIC FLEET SAN DIEGO CA 92135-7051 NAVAL AIR FORCE ATLANTIC NORFOLK VA 23551-2427

> COMNAVAIRPAC/ COMNAVAIRLANTINST 3500.1B N40 15 Sep 22

#### COMNAVAIRPAC/COMNAVAIRLANT INSTRUCTION 3500.1B

From: Commander, Naval Air Force, U.S. Pacific Fleet

Commander, Naval Air Force, Atlantic

Subj: SQUADRON TRAINING AND READINESS

Ref: (a) OPNAVINST C3501.2K

(b) OPNAVINST 3000.15A

(c) OPNAVINST 3500.38B

(d) OPNAVINST 3500.39D

(e) OPNAVINST 3501.360A

(f) NTRP 1-03.5

- (g) COMUSFLTFORCOM/COMPACFLTINST 3000.15B/ COMUSNAVEUR/COMUSNAVAFINST 3000.15
- (h) COMNAVAIRFOR M-3710.7
- (i) COMUSFLTFORCOM/COMPACFLTINST 3500.2A
- (j) COMUSFLTFORCOM/COMPACFLTINST 3501.3E
- (k) COMNAVAIRPAC/COMNAVAIRLANTINST 3500.38A
- (1) COMNAVAIRPAC/COMNAVAIRLANTINST 3502.1
- (m) COMNAVAIRFORINST 3510.11C

Encl: (1) VFA (F/A-18) Training and Readiness Matrix

- (2) VFA (F-35) Training and Readiness Matrix
- (3) TSW Training and Readiness Matrix
- (4) VAQ Training and Readiness Matrix
- (5) VAW Training and Readiness Matrix
- (6) VRC/VRM Training and Readiness Matrix
- (7) MPRA Training and Readiness Matrix
- (8) VQ(T) Training and Readiness Matrix
- (9) VR Training and Readiness Matrix
- (10) HSC Training and Readiness Matrix
- (11) VTUAV Training and Readiness Matrix
- (12) HSM Training and Readiness Matrix
- (13) HM Training and Readiness Matrix
- (14) VUQ Training and Readiness Matrix
- 1. <u>Purpose</u>. To promulgate specific aircraft training matrices for all Naval Air Force squadron flight crews and provide guidance for squadron training and readiness (T&R) reporting per references (a) through (m). The matrices quantify proficiency in the skills required to execute the Navy Mission Essential Task List (NMETL) for each community. The matrices are also linked to tasks in the Required Operational Capability / Projected Operational Environment (ROC/POE) instructions.

- 2. Cancellation. COMNAVAIRPAC/COMNAVAIRLANT INSTRUCTION 3500.1A.
- 3. Discussion. This instruction sets forth comprehensive squadron aircrew T&R requirements to conduct tasks based on the conditions and standards within the NMETL and wing training manuals (WTM). The T&R instruction will serve as a training guide to be used throughout the Fleet Response Training Plan (FRTP). This instruction provides guidance for carrying out the Commander, Naval Air Force, U.S. Pacific Fleet (COMNAVAIRPAC) and Commander, Naval Air Force, Atlantic (COMNAVAIRLANT) approved training policy. The T&R matrices for each type/model/series (T/M/S) are located in enclosures (1) through (14). The most current versions of these enclosures are located in the Commander, Naval Air Forces (COMNAVAIRFOR) readiness reference tool and the Sierra Hotel Aviation Readiness Program (SHARP) Library; contact the COMNAVAIRPAC N40 or COMNAVAIRLANT N40 office for the latest version. Appendix A is the T&R matrix format description. Appendix B is the T&R matrix and NMETL submission checklists. Appendix C is reserved for interim T&R matrices for units training to specialized missions that either are outside the scope of their community training matrices or represent unique missions outside the normal TYCOM funding profile. Appendix D details the equivalent sortie length-to-task matrix that enables aircrew to log the same task multiple times in a single sortie assuming required extended flight times have been achieved. Appendix E is a T/M/S breakdown of authorized aircrew that lists the TYCOM funded crews required to execute each matrix. Appendix F provides a description of the FRTP ordnance distribution and execution plan as well as the ordnance category delineation and calculations by T/M/S.
- 4. <u>Instruction Review</u>. COMNAVAIRFOR community T&R matrix sponsors, delineated in chapter 3.3, will periodically review applicable portions of this instruction and responsible WTM, and submit proposed changes to COMNAVAIRPAC for approval. Where disagreement is found to exist between this instruction and other wing, squadron, or unit documents, the provisions of this instruction take precedence.

#### 5. Records Management

- a. Records created as a result of this instruction, regardless of format or media, must be maintained and dispositioned for the standard subject identification codes (SSIC) 1000, 2000, and 4000 through 13000 series per the records disposition schedules located on the Department of the Navy/Assistant for Administration (DON/AA), Directives and Records Management Division (DRMD) portal page at <a href="https://portal.secnav.navy.mil/orgs/DUSNM/DONAA/DRM/">https://portal.secnav.navy.mil/orgs/DUSNM/DONAA/DRM/</a> Records-and-Information-Management/Approved% 20Record% 20 Schedules/Forms/
  AllItems.aspx. For SSIC 3000 series dispositions, please refer to part III, chapter 3, of Secretary of the Navy Manual 5210.1 of January 2012.
- b. For questions concerning the management of records related to this instruction [notice, change transmittal] or the records disposition schedules, please contact your local records manager or the DON/AA DRMD program office.

6. Review and Effective Date. Per OPNAVINST 5215.17A, COMNAVAIRPAC N40 and COMNAVAIRLANT N40 will review this instruction every two years on the anniversary of its effective date to ensure applicability, currency, and consistency with Federal, DoD, SECNAV and Navy policy and statutory authority using OPNAV 5215/40 Review of Instruction. This instruction will automatically expire six years after effective date unless reissued or canceled prior to six-year anniversary date, or an extension has been granted.

T. R. MARZANO

Chief of Staff

W. M. SLAUGHTER

Chief of Staff

Releasability and distribution:

This instruction is cleared for public release and is available electronically via:

COMNAVAIRPAC HIP:

https://cpf.navy.deps.mil/sites/cnap/n004/Pages/directives.aspx

COMNAVAIRLANT HIP:

https://usff.navy.deps.mil/sites/cnal/default.aspx

# TABLE OF CONTENTS

Chapter 1	GENERAL	GUIDA	NCE
-----------	---------	-------	-----

1.	Overview	1-1
2.	Chain of Command Responsibilities	1-1
	Training Phases	1-4
4.	Training and Readiness Matrices	1-5
5.	Fleet Replacement Squadron (FRS) Baseline	1-5
6.	Air Combat Training Continuum Integration	1-6
7.	General Naval Air Training and Operating Procedures Standardization (NATOPS)	
	Requirements	1-6
8.	Wing Training Manuals (WTMs)	1-6
9.	Forward Deployed Naval Forces (FDNF)	1-7
10	. Naval Air Force Reserve Squadrons (RESFORONS)	1-8
Ch	apter 2 SQUADRON TRAINING MATRIX FORMAT DESCRIPTION	
1.	Overview	2-1
2.	Methodology	2-1
3.	Matrix Sections	2-1
4.	Fleet Replacement Squadron (FRS) Baseline	2-5
5.	Air Combat Training Continuum Mapping	2-6
6.	Standardized Lists	2-6
Ch	apter 3 SQUADRON TRAINING MATRIX REVIEW AND VALIDATION PROCES	S
1.	Overview	3-1
2.	Matrix Creation Methodology	3-1
	Lead Type Wings	3-2
4.	Annual Training and Readiness Review Process	3-2
5.	Training and Readiness Matrix Change and Approval Process	3-3
Ch	apter 4 SQUADRON READINESS EXPECTATIONS AND CALCULATIONS	
1.	Overview	4-1
2.	Notional Fleet Response Training Plan	4-1
	Readiness Expectations/FRTP Phase Completion	4-1
	Training Hours	4-1
	Training Figure of Merit (TFOM) Calculations	4-4
6.	Use of SHARP	4-5
7.	Aviation Data Warehouse (ADW)	4-6

# Chapter 5 TRAINING AND READINESS REPORTING REQUIREMENTS

Appendix F: FRTP Ordnance Expenditure Plan/Ordnance Category Delineation

1. SHARP Current Readiness Assessment (CRA)	5-1
2. FRTP Phase Completion Reporting Requirements	5-2
3. T&R Matrix Waiver Process	5-4
<u>APPENDICES</u>	
Appendix A: T&R Matrix Format	
Appendix B: T&R Matrix and NMETL Submission Checklists	
Appendix C: Interim Training Matrix	
Appendix D: Equivalent Sortie Length (ESL) to Task Matrix	
Appendix E: Number of Authorized Crews	

### <u>CHAPTER 1</u> GENERAL GUIDANCE

- 1. <u>Overview</u>. The mission of Naval Aviation training is to prepare tactically and technically skilled aircrew to win at war. To develop the combat skills required to accomplish this mission, Naval Aviation relies on many interrelated components: the T&R matrices, Flying Hour Program (FHP), Non-Combat Expenditure Allocation (NCEA) ordnance, simulation, Advanced Readiness Programs (ARPs), Air Combat Training Continuum (ACTC), and FRTP major events. This instruction provides commanding officers with a tool to optimize readiness based on Mission Essential Tasks (METs) and an FHP that generates phased and sustainable readiness throughout the FRTP.
- 2. <u>Chain of Command Responsibilities</u>. COMNAVAIRPAC and COMNAVAIRLANT and their subordinate commands are responsible for the following actions:

### a. Type Commander (TYCOM)

- (1) Maintenance, revision, and approval of the T&R instruction. COMNAVAIRPAC N40 will host an aviation readiness review annually.
- (2) Monitor the training readiness for all Carrier Air Wings (CVW), CSCW-1, squadrons, and detachments.
- (3) Assign R+ months for CVW and expeditionary units to align with the Master Aviation Plan (MAP). Commander, Patrol and Reconnaissance Group (CPRG) will assign R+ months for the VP, VQ(E), and VPU communities.
- (4) Ensure wings, squadrons, and detachments are resourced to attain the highest level of readiness consistent with the specific phase of the FRTP.
- (5) Provide training to wings, squadrons, and detachments in the execution of the T&R instruction as well as automated information system tools for the tracking of squadron readiness.
- (6) COMNAVAIRPAC is the cognizant review authority responsible for the review of all aviation squadron-related NMETLs. COMNAVAIRPAC N40 reviews the draft NMETLs submitted by the type wings to ensure the lower-echelon NMETLs support both the T&R matrix and the higher-echelon NMETLs. COMNAVAIRPAC and COMNAVAIRLANT must review and forward for approval all submitted changes to NMETLs, as required, via the Navy Training Information Management System (NTIMS) and request approval from Commander, U.S. Fleet Forces Command (COMUSFLTFORCOM). Moreover, COMNAVAIRPAC and COMNAVAIRLANT must conduct joint NMETL reviews on an annual basis.
- (7) COMNAVAIRPAC and COMNAVAIRLANT staff will fund and manage its respective FHP. Commander, Naval Air Force Reserve (COMNAVAIRFORES) staff will fund and manage the RESFORON FHP.

- (8) COMNAVAIRLANT N40 manages the NCEA program for all active component squadrons. COMNAVAIRFORES manages the NCEA program for all reserve component squadrons.
- (9) Obtain and allocate resources necessary to support type wing participation in ARPs. Provide support, liaison, and coordination throughout all facets of Naval Aviation, both internal and external, to type wings and Type Wing Weapons Schools (TWWS), necessary to conduct ARP.

### b. Type Wing Commanders

- (1) Maintain a WTM that should be reviewed annually and updated to support changes in the associated T&R matrix.
- (2) In coordination with the TYCOM, manage R+ month assignment for the HSM (EXP), HSC (EXP), HM, and VQ(T) communities.
- (3) The type wing is the responsible organization (RESPORG) with the overall responsibility for executing its community-specific NMETL. Moreover, it is responsible for the development and maintenance of its NMETL and must submit all change recommendations to COMNAVAIRPAC N40, per chapter 3.
- (4) Submit matrix changes to COMNAVAIRPAC N40 for review and approval. Submit WTM changes along with a matrix change to maintain WTM alignment with the T&R matrix.
  - (5) Support training plans for assigned squadrons.
  - (6) Monitor the T&R level of each squadron.
- (7) Maintain a deployment certification process for expeditionary squadrons and detachments under their administrative control.
- (8) Ensure squadrons submit SHARP Current Readiness Assessments (CRA) per chapter 5.1.
- (9) Ensure squadrons receive SHARP updates and are maintaining accurate SHARP databases.
- (10) Report FRTP phase completion for independent deploying units and detachments per chapter 5.2.
- (11) The TWWS has responsibility for the operational conduct of ARP. Coordinate and liaise with the squadron commanding officer and outside agencies, as necessary, to conduct ARP.
- (12) Compile and maintain a comprehensive database of the tactical performance of squadrons participating in ARP. Provide squadron commanding officers with a thorough analysis of ARP tactical performance to include detailed Measures of Effectiveness (MOE) for

each MET and an overall numerical score. A copy of this document will be forwarded to the Naval Air Warfare Development Center (NAWDC) as an input for continual evaluation of the effectiveness of the ACTC process and to assess/ensure continuity of training within other FRTP training evolutions.

- (13) Provide ARP syllabus change recommendations to NAWDC as part of the annual review process based on tactical relevance and lessons learned.
- (14) Provide Tactical Support Wing (TSW) with a written debrief and evaluation of the support provided by adversary squadrons.

#### c. CVW Commanders

- (1) Provide oversight of operating target funds and NCEA management for attached squadrons and detachments.
  - (2) Oversee training plans for assigned squadrons.
- (3) Monitor squadron T&R status and ensure that assigned squadron commanders' assessments are standardized according to the readiness expectations listed in this instruction for their assigned FRTP phase. Highlight resource limitations with detailed commentary in the commander's assessment and a downgraded assessment category.
- (4) Pre-position NCEA ordnance necessary for continued squadron/wing unit-level training (e.g., ARP, at-sea work-ups and Naval Air Station Fallon detachments).
- (5) Manage CRA submissions and/or commanders' assessments for assigned squadrons. Squadron CRA and the Defense Readiness Reporting System Strategic (DRRS-S) Commanders' assessments for the entire air wing should be submitted within three days of the CVW commander's assessment in DRRS-S.

### d. Squadron Commanding Officers

- (1) Plan, develop, and execute training plans to achieve the highest level of readiness per this instruction.
- (2) Execute training in assigned METs commensurate with FRTP phase and available resources.
  - (3) Accurately report squadron and detachment training readiness per this instruction.
  - (4) Submit matrix changes to the community lead type wing as required.
- (5) Update DRRS-S commander's assessments per references (f) and (k) and submit a SHARP-generated CRA at least once every 15 days, per chapter 5.1.

e. <u>CVN Ordnance Handling Officer (OHO)</u>. The OHO will preposition all NCEA ordnance in support of the CVW per Appendix F for FRTP events.

#### f. NAWDC

- (1) NAWDC ordnance officer will preposition all NCEA ordnance in support of CVW Fallon detachments.
- (2) Assist, support, and coordinate with TYCOM, type wing, TWWS, and other services and agencies to ensure ARP remains standardized, effective, and current. Provide adversary support as necessary to augment TSW.
- (3) Conduct an annual review of the ARP syllabus contained in a NAWDC or a joint type wing ARP instruction to ensure tactical relevance, training continuity, and integration with other FRTP/ACTC events.
- 3. <u>Training Phases</u>. The overall training objective of Naval Air Force units is to achieve the highest level of combat readiness as efficiently as possible with the resources available. The FRTP is divided into training phases as described in references (b) and (g). Although training is continuous, readiness levels will vary depending on the phase within the FRTP. Available resources will be allocated based on a phased readiness profile, with the highest priority given to deployed units and units in pre-deployment work-ups and sustainment. For detachment-based squadrons, resources will be allocated based on individual detachment requirements.
- 4. Training and Readiness Matrices. The T&R matrix for each T/M/S consists of a squadron/detachment requirements, or experience factor (E<sub>f</sub>), section and a flight tasking, or performance factor (P<sub>f</sub>), section. Squadron requirements (ACTC levels, ordnance, crew qualifications, etc.) are delineated in the E<sub>f</sub> section. The P<sub>f</sub> section delineates how flight tasks relate to METs and what is required to build individual and crew proficiency. The term "aircrew" is used throughout this instruction to refer to any member of an aviation crew who logs training that contributes to a T&R matrix in SHARP. This includes naval aviators, naval flight officers, and naval aircrewmen who contribute to the readiness of a squadron or detachment. Tasks specific to each T/M/S matrix can be obtained through flights and simulators. The purpose of the T&R matrices is to provide guidelines for preparing aircrew to perform all assigned missions and tasks. These matrices are designed to develop proficiency in the required METs listed in the NMETL for each community.
- a. T&R matrix definitions, format, and utilization methodology are discussed in chapter 2 of this instruction. Appendix A provides the matrix format.
- b. TYCOM-approved training matrices are published as enclosures (1) through (14) and Appendix C, if applicable. These matrices can be updated and approved separately from this instruction. As T&R matrices are updated, they are incorporated into the latest release of the COMNAVAIRFOR readiness reference tool and the SHARP library. Current matrices can also be obtained from the TYCOM N40 code.

- c. An interim training matrix may be developed when a squadron or detachment is tasked with a mission that either is outside the community's normal capabilities or responds to a Request for Forces (RFF). When a unit trains to an interim matrix, it must be resourced to that matrix until the special mission or RFF expires. At that time, the unit will train and be resourced to their normal community matrix. Active interim training matrices are published in Appendix C.
- 5. Fleet Replacement Squadron (FRS) Baseline. SHARP is the authoritative readiness tracking and flight scheduling application for FRSs. To capture the inherent readiness of an FRS graduate, the type wing must generate an FRS baseline. The FRS baseline will be entered into the receiving squadron's SHARP database upon arrival of the FRS graduate. FRS baselines shall be updated upon FRS syllabi approval. Applicable T&R matrices include an FRS Baseline tab. Appendix A provides a sample FRS baseline page format. In all cases, if the new crew can be more accurately baselined with actual training documentation, that training may be logged in place of the FRS baseline.
- 6. <u>Air Combat Training Continuum Integration</u>. The T&R instruction was designed with the ACTC program for each T/M/S as an integral component. CVW, type wing, and squadron commanding officers must ensure that a robust ACTC program is in place and functioning in order to achieve optimized readiness. The ACTC program is a five-level program comprised of academics, computer-based courseware, simulators, and flight events. The program provides a syllabus outline for the training and evaluation of post-FRS pilots, naval flight officers, and aircrewmen at each of the experience levels defined below:

<u>Level</u>	Qualification/Designation
L1	FRS complete
L2	Intermediate
L3	Positional
L4	Advanced
L5	Weapons and Tactics Instructor (WTI)

Figure 1-1 ACTC Qualification Levels

- a. Reference (l) details the purpose, objectives, and scope of the ACTC program. Per reference (l), each community will specify the ACTC designation titles.
- b. To ensure a proper link between the T&R matrix required flight tasks and ACTC required flight tasks, type wings must generate an ACTC mapping page. Appendix A provides a sample ACTC mapping page format.
- 7. <u>General Naval Air Training and Operating Procedures Standardization (NATOPS)</u> <u>Requirements</u>. Flight crews are expected to achieve and maintain their individual flight qualification requirements for general aviation skills per reference (h).
- 8. Wing Training Manual (WTM). The T&R instruction is the foundation upon which the WTM is based. The WTM sets forth requirements for individual aircrew training and defines the resources required. The WTM is intended to provide community-specific details required to successfully execute training. As a minimum, the WTM (and addendums) must include

- a. A detailed description, prerequisites, and objectives of each training task in the  $P_f$  section of the T&R matrix.
- b. The requirements for completion and pass/fail criteria for each task in the  $P_f$  section. Initial criteria will be based on fleet experience or existing training documents and will be adjusted as required after periodic review of aircrew performance data.
- c. The Measures of Performance (MOPs) and Measures of Effectiveness (MOEs) must be used to evaluate each task. Debrief sheets will be included when applicable.
- d. WTM performance metrics must be linked and consistent with each community NMETL standards to ensure uniform CRAs.
- e. An enlisted aircrew training syllabus (other than the simulators and flights already listed in the matrix, if required).
  - f. A defined, direct link between ACTC events and T&R tasks.
  - g. Special qualification definitions and requirements (e.g., FAC(A), Strike Lead).
  - h. Stand-alone academic requirements that are not tied directly to a specific T&R task.
- i. A ground-training program that supports the flight-training syllabus, satisfies the requirements of mission qualifications, and maintains the professional standards required of naval aviators and aircrewmen.
- 9. Forward Deployed Naval Forces (FDNF). FDNF are required to maintain high readiness standards throughout the FRTP to support Secretary of Defense approved operational plans (OPLANs) and short-notice deployments. A modified version of the FRTP-based training and readiness model accounts for the unique circumstances influencing FDNF units. FDNF units typically participate in shorter deployments, multiple times in one year. They may not have ample time after a deployment for post deployment leave (PDL) as they must prepare for the next deployment. Additionally, FDNF units must perform continuous training in preparation to deploy with little prior notice. Due to these constraints, FDNF units have a two-year FRTP cycle which continues to repeat itself. This allows them to maintain a constant two-year periodicity for squadron qualifications. Squadron requirements such as the ARP syllabus and weapons expenditures must be based on this two-year cycle, and will be completed within that periodicity. The FDNF T&R matrices will be the responsibility of the respective T/M/S type wing commanders and reflect the specific requirements of the unique FDNF FRTP model. For the purposes of this instruction, FDNF units are defined as squadrons assigned to Carrier Air Wing FIVE (CVW-5), Helicopter Maritime Strike Squadron FIVE ONE (HSM-51), Helicopter Sea Combat Squadron TWO FIVE (HSC-25), and Helicopter Maritime Strike Squadron SEVEN NINE (HSM-79).
  - a. For CVW-5 units, the CVW Fallon and Composite Training Unit Exercise

(COMPTUEX or C2X) requirements found in T&R matrices will be satisfied by ARP completion (typically completed at NAS Fallon) and the biennial Exercise Valiant Shield, respectively.

- b. All ordnance expended by FDNF units are considered End-to-End (E2E). See chapter 2 for further details on ordnance expenditures.
- 10. <u>Naval Air Force Reserve Squadrons (RESFORONs)</u>. RESFORONs will implement T&R matrices to maintain combat ready crews that can be deployed per OPLAN requirements. Recognizing operational proficiency is a function of both experience and periodicity, the RESFORON T&R matrix is not tied to the active duty T&R matrix periodicity.
  - a. Upon mobilization, RESFORONs will maintain their T&R matrix.
- b. RESFORON T&R matrices will determine the periodic training and evaluation requirements such as NCEA allotments, ARPs, and carrier qualifications (CQ)/day landing qualification (DLQ).
- c. RESFORON T&R matrices must follow the same format and methodology as the active component T/M/S fleet matrices. RESFORON matrices (with the exception of TSW adversary units and VR) are located in the same enclosures as their counterpart active component matrices.
- d. RESFORONS covered under this policy include squadrons assigned to Tactical Support Wing, Fleet Logistics Support Wing, and Maritime Support Wing, to include Helicopter Sea Combat Squadron EIGHT FIVE (HSC-85) and Helicopter Maritime Strike Squadron SIX ZERO (HSM-60). Helicopter Mine Countermeasures Squadron FOURTEEN (HM-14) and Helicopter Mine Countermeasures Squadron FIFTEEN (HM-15) reserve components are governed by the active component HM matrix even though FHP funding for their reserve components is reimbursed by COMNAVAIRFORES.

### <u>CHAPTER 2</u> SQUADRON TRAINING MATRIX FORMAT DESCRIPTION

- 1. <u>Overview</u>. This section describes the methodology and format of a T/M/S T&R matrix, defines the components of the matrix, and discusses the relationships between these components. The T&R matrix is published in an Excel spreadsheet with multiple tabs that contain a summary page, the T&R matrix versions, an FRS Baseline Page, and an ACTC Mapping Page.
- 2. Methodology. The T&R matrix is comprised of two elements that contribute to readiness. The squadron/detachment requirements  $(E_f)$  and flight tasking  $(P_f)$  sections combine to meet the training requirements of a MET. Most matrices display METs in the form of a Navy Tactical Task (NTA). Other METs may be in the form of an Operational Task (OP), Strategic Theater Task (ST), or Strategic National Task (SN). Proficiency in a given MET is based on a flight task-to-periodicity relationship. The training required by this relationship drives the resource requirements.
- 3. <u>Matrix Sections</u>. The T&R matrix defines training requirements to ensure the proper readiness level for each MET. The composition of a T&R matrix is described below. Format for a standardized T&R matrix can be found in Appendix A. Appendix B includes a T&R matrix submission checklist for type wing use when creating a new matrix or modifying an existing matrix. The TYCOM shall use appendices A and B to verify all matrix submissions during the approval process.
- a. <u>METs</u>. METs are the unit level tasks that describe the missions for which a unit was designed and organized per the applicable ROC/POE document under major combat operations (MCO) conditions, and standards. Because METs that include these conditions and standards are classified, only the unit level MET names (displayed as NTA, ST, OP, or SN tasks) are listed in each T&R matrix. The full NMETL is displayed in the unit DRRS-S report and includes all METs against which the unit reports.
- (1) NTA 1.1.2.3.3 Conduct Flight Operations is required for every matrix and is the MET against which most general, non-tactical ashore and shipboard flying tasks are mapped. NATOPS, Emergency Procedures and Instrument Check tasks (flights and simulators) shall only be mapped to this NTA.
- (2) NTA 4.2.1.2 Conduct Aerial Refueling is required for units that have a tanking (i.e, provide fuel) responsibility. Units that only receive fuel via aerial refueling should map aerial refueling flight tasks to NTA 1.1.2.3.3 Conduct Flight Operations. Receive-only units may employ NTA 4.2.1.2 Conduct Aerial Refueling when unable to map to Conduct Flight Operations due to differing skilled crews requirements between METs.
- b. Squadron and Detachment Requirements ( $E_f$ ) Section. These columns represent the experience factor, or  $E_f$ , for the entire squadron or detachment. The numbers in these columns are whole numbers, not to exceed 100% completion, required to meet given criteria. Each matrix  $E_f$  section must include the following items at a minimum:

- (1) <u>Required ACTC levels</u>. Once an individual aircrew achieves a given ACTC level, that qualification will remain current until the aircrew departs the squadron. ACTC levels are not tied to an FRTP cycle and can transfer between squadrons with the individual. ACTC levels for each aircrew must be accurately represented in SHARP for readiness calculations to be reliable. All matrices shall include the number of required Level I pilots, NFOs, and naval aircrew as separate Ef items. Fleet units with no Level I personnel requirements may list Level II vice Level I.
- (2) <u>COMPTUEX (CVW squadrons only)</u>. COMPTUEX is a certification event. Completion of COMPTUEX allows the unit to report SAT in the COMPTUEX  $E_f$  column; the unit will remain SAT until the end of the FRTP cycle in which COMPTUEX was completed, regardless of aircrew turnover. See chapter 1.9 for FDNF requirements.
- (3) <u>CVW Fallon (CVW squadrons only)</u>. CVW Fallon (or Air Wing Fallon) is a unit level qualification event measured by the percent completion of individual aircrew. The CVW Fallon E<sub>f</sub> column in the T&R matrix shall list the funded number of aircrew, as the number of aircrew that are required to complete the CVW Fallon syllabus. The unit is required to log CVW Fallon completion in both the unit designation page and for each individual aircrew in SHARP. CVW Fallon will reset when a new FRTP cycle is entered in SHARP. See chapter 1.9 for FDNF requirements.
- (4) <u>ARP (if applicable to the community)</u>. ARP is a unit level qualification event measured by the percent completion of individual aircrew. The ARP  $E_f$  column in the T&R matrix shall list the funded number of aircrew, as the number of aircrew that are required to complete the ARP syllabus. The unit is required to log ARP completion in both the unit designation page and for each individual aircrew in SHARP. ARP will reset when a new FRTP cycle is entered in SHARP. See chapter 1.9 for FDNF requirements.
- (5) <u>Initial Ship Aviation Training Team (ISATT) (independently deploying helicopter detachments only)</u>. ISATT is a certification event. Completion of ISATT allows the unit to report SAT in the ISATT Ef column, which will remain SAT until the end of the FRTP cycle in which ISATT was completed, regardless of aircrew turnover. ISATT will reset when a new FRTP cycle is entered in SHARP.
- (6) Ordnance Expenditures (as applicable). Ordnance is classified in two categories (High Training Value and End-to-End). These categories are based on how the ordnance expenditure impacts the unit's readiness.
- (a) <u>High Training Value (HTV) Ordnance</u>. HTV ordnance is intended to provide aircrew with the opportunity to expend live or inert NCEA ordnance in a training environment. HTV ordnance expenditures are defined by either the total number of crews who require an HTV weapon expenditure within an FRTP, the average number of HTV weapons expended per crew within an FRTP, or the total number of HTV weapons expenditures required by the unit within an FRTP. When calculating  $E_f$  values in the Current Readiness Assessment (CRA), SHARP will compare actual number of HTV weapons expended by active aircrew to the number of required HTV weapon expenditures listed in the T&R matrix and display the percentage complete for each ordnance item. Ordnance expenditures in this category no longer count towards a unit's

readiness when the aircrew who expended the ordnance departs the unit. HTV Ordnance expended in one unit is not credited to another unit's readiness when the aircrew who expended this ordnance transfers. When a visitor is part of a crew that expends ordnance from a unit's NCEA, that visitor's contribution must not contribute to that unit's readiness. Ordnance category assignments and T/M/S-specific business rules are described in Appendix F.

(b) End-to-End (E2E) Ordnance. E2E ordnance is intended to provide squadron experience with limited availability weapons during the FRTP. Ordnance in this category is expressed as a whole number required per squadron, per FRTP, and is listed on the E<sub>f</sub> section. E2E ordnance is attributed to the squadron as a whole because it reflects the entire process of planning, build-up, loading, arming, and delivery. Therefore, readiness is not affected when a crew member who expended an E2E weapon transfers from the squadron. E2E ordnance expenditures remain valid until the end of the FRTP in which it was expended. Ordnance category assignments and T/M/S-specific business rules are described in Appendix F.

Note: Per chapter 1.9, all ordnance expended by FDNF units are considered E2E.

- (c) Ordnance Currency. All ordnance expenditures remain current until the end of the FRTP cycle in which they were expended. Ordnance that is required for training but is not listed in the Ef section must be included in Appendix F of this instruction. Ordnance calculations are enabled by running the CRA report in SHARP. SHARP calculates the ordnance expenditures based on specific business rules, defined in Appendix F, and counts the number of active aircrew at the time of the report. Under no circumstances must the ordnance expended by any aircrew in one squadron be credited towards the readiness of another squadron. Detachments may transfer HTV ordnance expenditures between detachments within the same squadron if the date that the ordnance was expended falls within the FRTP dates of the gaining detachment. In all cases, individual flight tasks completed while expending ordnance may transfer from one unit to another. Due to limited resources and aircrew rotation, it is imperative that operations and training officers maximize the training opportunities for aircrew who will continue to positively affect a unit's readiness throughout the entire FRTP.
- (7) <u>Training Hour Execution</u>. A full description of the Training Hour Execution calculation is discussed in chapter 4.4.
- (8) Type wings may add other T/M/S specific qualifications to this section to include items such as NVG, DLQ, crews qualified on various weapon systems, ordnance expenditures by crew, TERF qualified crews, SAR crews, strike leads, and FAC(A) crews.
- c. <u>Pf Section</u>. This section represents the training that an individual aircrew must accomplish to be included in a skilled crew. Chapter 4.5 describes the calculation methodology for Training Figure of Merit (TFOM) using  $P_f$ .
- (1) <u>Required Skilled Crews Column</u>. This column represents the targeted number of fully trained crews in each individual MET. A skilled crew is achieved when all the individual aircrew required by the T/M/S crew composition rules have satisfied all the flight task requirements for a given MET. Skilled crews in each matrix are normally equal to the number of

FHP funded crews listed in Appendix E. In some cases, the type wing may determine that a MET requires a smaller number of skilled crews.

- (2) Flight Task List. The flight task list for each T/M/S delineates the type of training that may be conducted in an aircraft or simulator. Each task is mapped to one or more MET as indicated by an "X" in the task column. Specific standards required to complete flight tasks are delineated within each T/M/S WTM. Aircrew are considered to have completed a given flight task when all required iterations have been completed to satisfy the required number per aircrew position within the task periodicity. Each task will have a corresponding "hours per task" that indicates the nominal hours required to complete the task. The "hours per task" value, along with the required iterations and periodicities, provide the basis for calculating the required training hours per month per aircrew for a given T/M/S. Flight tasks that do not have an "X" in the column are support tasks (such as functional check flights) that do not contribute to readiness attainment. To achieve the deployment standard of readiness, units must complete and remain current in all tasks per their respective periodicities. When a flight task may be completed through multiple means that require tracking (i.e., completing a flight task through the use of any of several, distinct mission systems) the matrix will include "parent" and "sub" tasks. The "parent task" is the flight task that is listed on the flight task list. The sub-tasks are the individual tasks that are flown and logged in SHARP to accomplish the objectives of the parent task. When a matrix uses sub-tasks, the task number/name of the sub-task and its relationship to a parent task are listed in the notes section of each matrix in a separate table. The matrix will clarify in a note which of the sub-tasks are required to satisfy the parent task. Only the approved sub-tasks listed in the matrix will be available for selection in SHARP for flight logging purposes. See Appendix A for examples.
- (3) <u>Training Hours Calculation</u>. As explained above, training hours are calculated using listed hours per task, periodicities, and required iterations. Training hours may be categorized by flight only, simulator only, flight or simulator, or any such combinations that facilitate proper resourcing and planning. Simulator hours may also be categorized by types of simulators as necessary. Each matrix includes a "100% T&R Hours" calculation at the bottom of the Flight Task List. This number represents the monthly hours required for each individual member of a skilled crew to achieve a  $P_f$  value of 100.

Logging of simulator events must be completed by using SHARP to ensure that these tasks and the training contribution they provide to an individual aircrew are properly documented and credited to the respective aircrew.

- d. Notes Section. Any notes required to further explain squadron or detachment requirements must be listed in a section to the right of the  $P_f$  section. A smaller readiness standards box is located under the METs section. Each notes section, as a minimum, must include the following;
- (1) <u>General Notes</u>. Per Appendix A, this portion lists policy guidance and other general information not specifically tied to the matrix.
- (2) <u>T/M/S Specific Notes</u>. This section contains notes that provide necessary guidance for achieving the requirements listed in the T&R matrix. This section may list crew composition

requirements that are too detailed for inclusion in the readiness standards box. Sub-task details are also listed in this section.

- (3) <u>Readiness Standards</u>. This box lists primary aircraft authorization (PAA), crew/seat ratio, required crews, Equivalent Sortie Length (ESL), T&R matrix hours, simulator fidelity (a percentage of required T&R hours that may be done in a training device), and crew composition information. This information is derived from the ROC/POE, this instruction, and the matrix itself and serves as the definitive source for populating reference (m) readiness standards. Crew composition information too detailed to fit in the readiness standards box may be listed instead as a T/M/S specific note as described above.
- 4. Fleet Replacement Squadron (FRS) Baseline. Type wing commanders must create and maintain a baseline of T&R tasks completed by all FRS CAT I graduates. Upon completion of the FRS syllabus, all baseline tasks completed by the CAT I graduate will transfer to the receiving fleet squadron where the data must be inserted into the SHARP database. SHARP will then calculate the readiness achieved and integrate it with the squadron's readiness calculations. Fleet replacement squadrons that have the ability to transfer actual SHARP data, vice a baseline, have the option to do so on a T/M/S-wide basis. In all cases, if the new aircrew can be more accurately baselined with actual training documented in previous flight records, that training may be logged in the place of an FRS baseline. The FRS baseline must represent all tasks completed in the CAT I syllabus. Units may baseline CAT II-V graduates using portions of the CAT I FRS baseline as appropriate. If the baseline data is used, the completion date for the entire flight task set will be the date the student detaches from the FRS, regardless of when the actual task was completed. If SHARP data is transferred, the completion date is the actual date the task was accomplished. This process enables the graduate to contribute immediately to the receiving command's readiness. The FRS baseline is a separate tab within each T/M/S matrix. Appendix A provides an example.
- 5. <u>Air Combat Training Continuum Mapping</u>. ACTC events have inherent T&R value since they are designed to train and test many of the same flight tasks as the T&R matrices. The objectives of a particular event may vary for aircrew at different ACTC levels and are specified in the WTM. The accomplishments within an ACTC syllabus flight or simulator must relate directly to a T&R matrix task. The ACTC mapping tab within the T&R matrix illustrates this direct link. Appendix A provides an example.
- 6. <u>Standardized Lists</u>. Missions, qualifications, and other items logged in SHARP must be standardized at either the TYCOM level or by the lead type wings representing each community (e.g., HSM, VFA, VAW, etc.) to ensure historical data quality and uniformity. The aforementioned representatives will have the requisite permissions in SHARP to make changes to the standardized lists.
- a. Names must be limited to 10 characters. The description must be limited to 100 characters.
- b. Mission lists for FRS must be managed by their lead type wing and included in the applicable T/M/S T&R matrix as a separate tab.

c. Mission lists for commands that do not fall under a type wing (e.g., NAWDC) must manage their own lists.

### <u>CHAPTER 3</u> <u>SQUADRON TRAINING MATRIX REVIEW AND VALIDATION PROCESS</u>

- 1. <u>Overview</u>. Naval Aviation training is a fluid process, evolving with changes in doctrine, requirements, and weapon systems. Constant improvements and changes are required to ensure units are training to current requirements and peak efficiency is maintained. This section provides guidance on the methodology employed to create the various training matrices and general procedures for running the review process.
- 2. Matrix Creation Methodology. The cornerstone of Naval Aviation aircrew training is the training event. A training event is defined as a task conducted in flight or in the simulator in which a set of well-defined objectives are practiced and tested in an environment where mission tasks can be expected to be performed. The T&R matrix  $P_f$  section delineates tasks that encompass the training required within each MET of that particular community. More than one task may be completed during a single flight or simulator training period, and a task may be logged more than once in a flight if the flight time thresholds are met in the ESL matrix in Appendix D and WTM guidance allows it. Training objectives for each task are defined in WTMs and associated with supported METs. The standards for each should be stringently followed.
- a. Revision of training matrices requires a review of the T/M/S ROC/POE. The ROC/POE statements define the basic operational and resource requirements for each T/M/S. ROC statements assign primary and secondary naval warfare mission areas for each T/M/S. POE statements establish the operational condition and profile for which the unit must be manned, operated, and maintained.
- b. Squadron METs are derived from the ROC/POE and used to build the unit NMETL. The NMETL is chopped by the type wing, routed through COMNAVAIRPAC N40 and approved by COMUSFLTFORCOM N7. The approved NMETL is maintained in NTIMS, which is used to feed the unit's METs to DRRS-S for readiness reporting.

Note: Units must not change any portion of their NMETL within NTIMS. COMNAVAIRPAC, acting as the cognizant review authority, will forward to COMUSFLTFORCOM all changes to a community's NMETL. The TYCOM may delegate responsibility for editing NMETLs in NTIMS to certain type wings, but still maintains responsibility as the cognizant review authority.

- c. Defined objectives for each task are developed and included with the MOP/MOE in each WTM. These criteria should be specifically related to the conditions and standards in the associated NMETLs.
- d. The  $E_f$  section allows communities to identify the major training evolutions that must be completed during the FRTP to reach higher levels of readiness. These requirements are in addition to the individual aircrew requirements presented in the  $P_f$  section.

3. <u>Lead Type Wings</u>. The type wings listed below have the primary responsibility for creating, conducting periodic reviews, maintaining, and submitting the respective community ROC/POE, NMETL, T&R matrix, and WTM.

Community	TMS	Lead Type Wing
VFA	F/A-18E/F	COMSTRKFIGHTWINGPAC
VFA	F-35C	COMJSFWING
TSW (Adversary)	F/A-18/F-16/F-5	COMTACSUPWING
VAQ (CVW/EXP)	EA-18G	COMVAQWINGPAC
VAW	E-2C/E-2D	
VRC	C-2A	COMACCLOGWING
VUQ	MQ-25	
VRM	CMV-22B	COMVRMWING
MPRA	P-8/P-3/EP-3/MQ-4	COMPATRECONGRU
VQ(T)	E-6B	COMSTRATCOMMWING ONE
VR	C-40/C-130	COMFLELOGSUPWING
HSC (CVW/EXP/NSW)	MH-60S	COMHELSEACOMBATWINGPAC
VTUAV	MQ-8B/C	COMHELSEACOMBATWINGFAC
HSM (CVW/EXP)	MH-60R	COMHELMARSTRIKEWINGPAC
HM	MH-53E	COMHELSEACOMBATWINGLANT

Figure 3-1 Lead Type Wings

- 4. <u>Annual Training and Readiness Review Process</u>. The type wing may convene a T&R matrix and WTM review at its discretion or when directed by higher authority. T&R matrix reviews will normally be convened on an annual basis. This typically happens at the annual aviation readiness review. The TYCOM may schedule a mid-year T&R review if emergent requirements dictate the need for immediate changes. The purpose of the annual T&R matrix and WTM review is to:
  - a. Update community ROC/POE and applicable portions of the NMETL.
- b. Evaluate the T&R matrix and WTM using data collected since the last review. Validate currency requirements, prerequisites, MOP/MOE, and resources required for T&R tasks using completion data and documented deficiencies in aircrew performance.
- c. Ensure ACTC qualification requirements are updated as the community develops and integrates the program.
- d. Incorporate new missions, tasks, and weapon systems to determine if additional tasks are warranted or required.
  - e. Ensure appropriate NCEA levels are documented.
- f. Review Navy Aviation Simulation Master Plan (NASMP) and the simulator roadmap to adjust flight task relationships for available simulator functionality.

- 5. <u>Training and Readiness Matrix Change and Approval Process</u>. Recommended changes to this instruction and T&R matrices must be submitted as follows:
- a. Change recommendations are sent to the cognizant lead type wing commander. The lead type wing commander must validate and forward the recommended changes to COMNAVAIRPAC N40. COMNAVAIRPAC N40 will coordinate all matrix changes with COMNAVAIRLANT N40 prior to approval. If matrix changes are to be considered, the type wing must include an electronic copy document summarizing the changes in detail. Submission checklists (Appendix B) must be submitted with any proposed changes to the T&R matrix or NMETL. When a type wing updates a T&R matrix, they shall also make corresponding updates to the associated wing training manual (WTMs) and Current Readiness standards, as applicable.
  - b. Only COMUSFLTFORCOM approved METs are used in the T&R matrix.
- c. If a Joint Chiefs of Staff (JCS) RFF requires a community to alter training for a single squadron or detachment, an interim T&R matrix will be developed by the type wing for TYCOM approval.
- d. Changes to individual T/M/S matrices will be published by COMNAVAIRPAC N40D via the COMNAVAIRFOR readiness reference tool and the SHARP library.

### <u>CHAPTER 4</u> SQUADRON READINESS EXPECTATIONS AND CALCULATIONS

- 1. <u>Overview</u>. This chapter defines and describes the methodology of the execution of the T&R matrices and readiness calculations as they pertain to both the individual aircrew and the squadron overall, and the methodology behind the DRRS-S interface for unit readiness reporting.
- 2. Notional Fleet Response Training Plan. The T&R instruction has been designed around the FRTP. The FRTP notional profile provides a building block approach to achieving desired readiness states as a unit progresses through the various phases of the FRTP. This is accomplished by completion of individual training at the unit level and completion of major training events within the FRTP (e.g., ARP, CVW Fallon, and COMPTUEX). Squadrons should strive to meet these readiness levels with the flight hour funding provided. Squadrons and wings that are required to maintain a higher constant state of readiness (e.g., FDNF, TACAMO, VPU, VQ, and HM) will be funded at the appropriate levels to ensure that they can maintain the prescribed capability requirements as delineated by higher authority.
- 3. Readiness Expectations and FRTP Phase Completion. The TYCOM training goal is to have each squadron, or detachment attain a minimum TFOM of 80 (green) in all METs prior to the start of the unit's deployment. While deployed, external resources (those resources not under direct control of the unit Commanding Officer/Detachment OIC) and training opportunities must be provided by the operational commander to maintain readiness at deployment expectations. Each T&R matrix will contain type wing—developed TFOM goals for each MET by FRTP phase. These values represent the recommended end of phase TFOM goals for units as they progress though the FRTP cycle and are based on the unit receiving all required resources (e.g., flight hours, NCEA, etc.) for each phase.
- a. Carrier Strike Group (CSG)/Expeditionary Strike Group (ESG) based squadrons and detachments are expected to attain a minimum TFOM of 80 (green) in all METs after the completion of Integrated Phase. Units not deployed in sustainment may fall below 80 TFOM but must be recoverable to 80 TFOM within 30 days of notification to deploy.
- b. Independently deploying squadrons and detachments (MPRA, and VAQ/HSC/HSM EXP) are expected to attain a minimum TFOM of 80 (green) in all METs after completion of their Advanced Phase. Units not deployed in sustainment may fall below 80 TFOM but must be recoverable to 80 TFOM within 30 days of notification to deploy.
- 4. <u>Training Hours</u>. Programmed readiness thresholds within the FRTP require management processes supported by accurate and persistent flight hour data that represents fleet operations. FHP is structured to support training to meet the Chief of Naval Operations (CNO) readiness requirements.
  - a. The following methodology is used in the SHARP application:
- (1) All flight and simulator events have inherent training value whereby proficiency can be gained.

- (2) Logging multiple tasks is permitted during a single event. Aircrew can log a single task more than once only when the event time exceeds the ESL values listed in Appendix D.
- (3) Fleet units are assigned specific R+ months associated with their respective FRTP profile and phase. R+ month assignments are managed by the TYCOM FHP Managers (or as delegated to the type wings) within the Aviation Data Warehouse (ADW). Flight hour requirements by R+ month are defined in the T/M/S Current Readiness standards (reference (m)).
- b. "90-Day Rolling Average" Training Hour Execution Requirement. The training hour execution calculation represents the minimum training hours a squadron or detachment is required to execute over a moving 90-day interval. SHARP will automatically calculate the 90-day average by summing a unit's daily training hour execution over a moving 90-day period and comparing it to the training hour requirement over the same period. For 90-day periods that cover partial months, the training hour requirement is pro-rated for each day assigned to each R+month. Simulator hours contribute to the 90-day rolling average up to the maximum simulator fidelity figure as listed in each T&R matrix.
- (1) <u>Training Hour Execution Requirement ( $TH_{req}$ )</u>. The  $TH_{req}$  value is calculated by adding the training flight and simulator hour requirements for each assigned R+ month over the respective 90-day period. Mission Essential Support Hours (MESH) and other contingency hour requirements are not included in ( $TH_{req}$ ).
- (2) <u>Training Hours Executed ( $TH_{exe}$ )</u>. The  $TH_{exe}$  is calculated by adding the flight and simulator hours executed over the 90-day period. All hours flown by both active aircrew and visitors count towards  $TH_{exe}$ . MESH and other contingency hours executed are included in  $TH_{exe}$ . Hours flown by aircrew who have departed the squadron will count towards the training hour calculation.

Note: Hours for each flight or simulator event will only be credited to one unit or detachment, even when the aircrew might be comprised of members of different units or detachments. Credit is applied to the unit selected for "T&R credit" in the SHARP flight logger.

(3) When a unit generates a CRA, SHARP will calculate the 90-day rolling average by dividing TH<sub>exe</sub> by TH<sub>req</sub>. Example: 10-plane, 15 crew (no AR) F/A-18E squadron during basic phase (R+7, R+8, and R+9 assigned over 90-day period):

		Requirement per Standards (re	Current Readiness eference (m))	Actual Hours Flown		Credited Hours	
Month	R+ Month	Training Hour Requirement	Allowable Sim Contribution based on Sim Fidelity %	Flight	Sim	Flight	Sim
Oct	R+7	222.8	60.8	201.5	17.1	201.5	17.1
Nov	R+8	243.0	68.0	182.2	72.4	182.2	68.0
Dec	R+9	263.3	73.7	270.1	0.0	270.1	0.0
		Training Hour Standard: 729.1				Actual	: 738.9

Figure 4-1 Sample 90-day Training Hour Execution

In Figure 4-1, the squadron's  $TH_{req} = 729.1$  (sum of the training hours requirement over the three months). Although all aircraft and simulator hours flown total 743.3 (total of "Actual Hours Flown" cells), the actual credited, or  $TH_{exe}$ , is 738.9. The difference between actual hours flown and  $TH_{exe}$  is due to actual simulator hours flown in November exceeding the allowable simulator contribution limit of 68.0 hours for that month. The simulator contribution limit is based on the simulator fidelity figure listed on the applicable T&R matrix and current readiness tables.

Note:  $TH_{req}$  is not equal to flight hour grants as it ignores MESH. In the above example, MESH would have represented an additional 60 hours on top of  $TH_{req}$ .  $TH_{exe}$  is concerned with executing training hour requirements and not with FHP grants.

Note: In detachment-based squadrons, the accuracy of the 90-day rolling average depends on the proper crediting of flight hours to each detachment as each flight is logged. Units can only credit flight hours to one detachment when a flight is logged. It is the responsibility of squadron operations officers to ensure flight hours are credited to the proper detachment. Detachment-based squadrons must also avoid logging hours to the "homeguard" (the parent command in SHARP) when the hours more appropriately reflect training gained by a detachment; improperly logging hours to the homeguard likely will degrade artificially a detachment's 90-day rolling average.

#### c. Definitions of Flight Hours

- (1)  $\underline{\text{Training Hours}}$ . Any flight hour, or portion of a flight hour, dedicated to the attainment of a T&R task. Training hour requirements are depicted on the T/M/S readiness standards by R+ month.
- (2) <u>Mission Essential Support Hours (MESH)</u>. Those flight hours required in excess of the T&R baseline to support peacetime baseline requirements. MESH varies depending on support of CSG, ESG, FDNF, or expeditionary operations and is calculated for both ashore and afloat. Notional MESH requirements are depicted on the T/M/S readiness standards. Examples of flights that are supported by MESH:
  - (a) Ferry flights
  - (b) Logistics flights in excess of T&R required flights

- (c) Functional Check Flights (FCF)
- (d) Service sorties (missile/target profiles)
- (e) Tanking flights
- (3) <u>Special Interest Hours</u>. Special interest hours are those flight hours, or portion of a flight hour, that are flown in support of contingency operations or for other notable purposes (e.g., Humanitarian Assistance and Disaster Relief (HADR), Defense Support of Civilian Authorities (DSCA), and Foreign Military Sales (FMS)). These hours are not mutually exclusive and will overlap with other flight hour categories. For example, a single 1.5-hour joint contingency operations, NVG, and embarked event would be counted as 1.5 hours under each category. Type wings may customize SHARP to collect additional types of special interest hours as desired. Refer to COMNAVAIRPAC or COMNAVAIRLANT N40 FHP managers for additional reporting requirements.
- 5. Training Figure of Merit (TFOM) Calculations. COMUSFLTFORCOM mandates that all units use a common training readiness metric that reflects a Performance Factor  $(P_f)$  and an Experience Factor  $(E_f)$  for each MET. The resultant value of these factors is called the TFOM. The following paragraphs describe how the performance and experience factors combine to calculate TFOM for each MET. The  $P_f$  and  $E_f$  values are transmitted via the CRA to NTIMS where the TFOM for each MET is calculated. NTIMS sends TFOM values for each MET to the Navy Readiness Reporting Enterprise (NRRE) where through some business rules the values are converted to C Levels and populate the Calculated Training C-Level in SORTS.
- a. <u>TFOM</u>. The TFOM calculation is the measure of a unit's training capability in a given MET. Performance and experience factor values are calculated in SHARP when a CRA is generated. TFOM is calculated via the following equation: TFOM =  $(P_f \times E_f) / 100$ .
- b. <u>Performance Factor ( $P_f$ )</u>. The  $P_f$  calculation is calculated by taking the maximum value of either the Skilled Crews (SC) computation or the SC computation + Training Progression (TP) computation divided by two. In no case can the  $P_f$  be greater than 100.

$$P_f = MAX [SC or (SC+TP)/2]$$

SC = Number of skilled crews attained / Number of skilled crews required

Note: A skilled crew is based on the crew composition and Flight Task currency rules which are outlined in each matrix. Each required crewmember of a skilled crew must have executed all the required flight tasks for a given MET.

TP = (Executed Tasks by COB/Required Tasks by COB) x (Number of crews COB / Number of FHP funded crews)

Note: The (Number of crews COB / Number of FHP funded crews) figure is limited to 1.

- c. Experience Factor ( $E_f$ ).  $E_f$  is based on a unit's ability to meet all the resource requirements for each MET as outlined in each T/M/S matrix. The total  $E_f$  computation for a given MET will be the average of all  $E_f$  items required for that MET multiplied by 100. Values for individual  $E_f$  items will equal the percent completion for that individual item.  $E_f$  items that contain "SAT" will be assigned a value of either 0 or 1.
  - $E_f$  = (Average of all individual  $E_f$  items for a given MET) x 100
- 6. <u>Use of SHARP</u>. All COMNAVAIRPAC, COMNAVAIRLANT, and COMNAVAIRFORES squadrons and detachments (to include fleet replacement squadrons) must use SHARP to log actual and simulated flights. Squadrons assigned to a T&R matrix must also submit CRAs per chapter 5.1. COMNAVAIRPAC, COMNAVAIRLANT, and COMNAVAIRFORES encourage the use of other SHARP capabilities such as flight scheduling, syllabus and qualification tracking, and flight logbook generation.
- a. Units will consider aircrew on temporary additional duty (TAD) status as a member of the unit in SHARP. Conversely, units that lose members to TAD will delist them in SHARP.
- b. Detachment-based squadrons shall place unassigned members in homeguard to preserve the ability to track training and readiness for all squadron aircrew. Squadrons will not submit CRAs for homeguard. Homeguard will be mapped to the most demanding T&R matrix only for tracking purposes.
- 7. <u>Aviation Data Warehouse (ADW)</u>. The ADW is the central repository for SHARP data and is used to manage all squadron and detachment R+ months as well as execution for the Flying Hour Program. Access to ADW is controlled by the COMNAVAIRPAC N40 FHP manager.

### <u>CHAPTER 5</u> T&R REPORTING REQUIREMENTS

- 1. <u>SHARP Current Readiness Assessment (CRA)</u>. Units are required to submit SHARP training data to the ADW at least once every 15 days using the SHARP-generated CRA. CRAs must also be submitted when there is a significant change in readiness (e.g., upon completion of ARP, C2X, ITE, Operation Readiness Inspection/Assessment (ORI/ORA), CVW Fallon, or any major readiness generating exercise), and upon commencement of a major deployment. Additional CRAs may be required by higher authority as required.
  - a. The CRA data is essential for the following reasons:
- (1) Data source for current readiness reporting to analyze resources expended by COMNAVAIRPAC and COMNAVAIRLANT units.
- (2) Authoritative data source that provides the  $P_f$  and  $E_f$  scores required to calculate a unit's TFOM score in NRRE.
- (3) Source for data analysis by COMNAVAIRPAC, COMNAVAIRLANT, type wings, COMUSFLTFORCOM, CNO, Center for Naval Analyses, and approved defense contractors.
- b. <u>Non-Receipt of CRA Files</u>. Technical issues may arise, causing non-delivery of CRAs. Type wings are responsible for contacting customer service representatives listed on the SHARP website as soon as possible if they suspect a problem. SHARP support customer service representatives will take action to resolve technical problems.
- c. <u>Data Management Responsibilities</u>. Other reports within SHARP allow the squadron/detachment to access their particular readiness posture and aid in the development of future training plans. The squadron or detachment is required to actively manage its respective SHARP database to ensure consistent accuracy of CRA data. Data management includes, but is not limited to:
  - (1) Maintaining aircrew qualifications/designations (NVG, ACTC, Strike Lead, etc.)
  - (2) Updating FRTP start and end dates
  - (3) Maintaining aircrew status (active, visitor, deleted, etc.)
  - (4) Updating aircrew projected rotation dates
  - (5) Ensuring R+ months are correct and up-to-date

2. FRTP Phase Completion Reporting Requirements. Reference (g) requires the various echelon III and IV commanders to report FRTP phase completion and make recommendations to COMPACFLT/ COMUSFLTFORCOM for deployment certification for units under their administrative control. This section contains the phase completion reporting requirements for aviation units that have defined FRTP phase completion milestones and are listed in the paragraphs below. Since aviation units have different FRTP milestones, not all units will have the same phase completion reporting requirements.

### a. CVW (CONUS/FDNF) Units

- (1) Completion of Tailored Ship's Training Assessment (TSTA) shall mark completion of the Basic Phase. There are no separate reporting requirements for CVW squadrons to report Basic Phase completion.
- (2) NAWDC is responsible for reporting completion of the Advanced Phase after CVW Fallon completion per reference (g).
- (3) CSG-4/15 are responsible for reporting completion of the Integrated phase after completion of C2X and recommending deployment certification for the deploying CSG/CVW to COMUSFLTFORCOM or C3F per reference (g).
- (4) CVW squadrons shall record completion of ARP, CVW Fallon, and C2X in SHARP and submit a CRA from SHARP immediately upon completion of these milestones.
- (5) If training deficiencies still exist at the completion of C2X (TFOM less than 80 in any MET), the squadron shall list them in their DRRS-S Core (Training) remarks and shall include a plan to correct the listed deficiencies.

#### b. MPRA Squadrons (VP/V(Q)/VPU)

- (1) CPRG is responsible for reporting completion of the Advanced Phase after ARP completion for squadrons per reference (g). Squadrons shall log ARP completion in SHARP and immediately submit a CRA.
- (2) CPRG is responsible for recommending deployment certification for deploying squadrons and independently deploying crews under their administrative control to COMUSFLTFORCOM or C3F after successful completion of the Operational Readiness Exam (ORE). Squadrons shall record completion of ORE in SHARP once certified by COMUSFLTFORCOM/C3F for deployment and immediately submit a CRA.
- (3) If training deficiencies still exist at the completion of ORE (TFOM less than 80 in any MET), the squadron shall list them in their DRRS-S Core (Training) remarks and shall include a plan to correct the listed deficiencies.

### c. VAQ EXP Squadrons

- (1) Completion of ARP shall mark completion of the Basic Phase. Squadrons shall record ARP completion in SHARP and immediately submit a CRA.
- (2) Completion of the Integrated Training Event (ITE) and the Operational Readiness Assessment (ORA) shall mark completion of the Advanced Phase. Squadrons shall log completion of ITE in SHARP after completion of both ITE1 and ITE2 and immediately submit a CRA.
- (3) Commander, Electronic Attack Wing Pacific (CVWP) is responsible for recommending deployment certification for deploying VAQ EXP squadrons to COMUSFLTFORCOM or C3F after successful completion of both ITEs and the Operational Readiness Assessment (ORA).
- (4) VAQ EXP squadrons shall record completion of ARP, ITE, and ORA in SHARP and submit a CRA from SHARP immediately upon completion of these milestones.
- (5) If training deficiencies still exist at the completion of ITE/ORA (TFOM less than 80 in any MET), the squadron shall list them in their DRRS-S Core (Training) remarks and shall include a plan to correct the listed deficiencies.

#### d. HSC/HSM EXP ESG Detachments

- (1) Completion of ARP shall mark completion of the Basic Phase. Detachments shall record completion of ARP in SHARP and immediately submit a CRA.
- (2) Completion of C2X or ARG/MEUEX (whichever happened later) shall mark the completion of the Integrated phase. Upon completion of the Integrated Phase, CSG-4/15 are responsible for recommending deployment certification for the deploying ESG and embarked units to COMUSFLTFORCOM or C3F per reference (g).
- (3) If training deficiencies still exist at the completion of C2X and/or MEUEX (TFOM less than 80 in any MET), the detachment shall list them in their DRRS-S Core (Training) remarks and shall include a plan to correct the listed deficiencies.

#### e. HSM/HSC/HM EXP (CONUS/FDNF) Detachments

- (1) Successful completion of ARP shall mark completion of the Basic Phase. Detachments shall record completion of ARP in SHARP and immediately submit a CRA after completion of each event.
- (2) Successful completion of a certifying event shall mark completion of the Advanced Phase.
- (3) The lead HSM and HSC type wings are responsible for developing the criteria for a deployment certification for their respective communities. The deployment certification process shall be documented in a joint training instruction and include the following minimum criteria.
  - a. HARP completion is required for all units

- b. ISATT completion is required for embarked units
- c. Criteria for certifying land-based rotational detachments
- (4) The type wing shall submit a deployment certification recommendation to the TYCOM upon completion of all required training and events.
- (5) If training deficiencies still exist at the completion of the certifying event, (TFOM less than 80 in any MET), the detachment shall list them in their DRRS-S Core (Training) remarks and shall include a plan to correct the listed deficiencies.
- (6) Participation in a COMUSFLTFORCOM or C3F sanctioned certifying event (C2X or CERTEX) for a detachment assigned to a ship may be treated as a certifying event.
- 3. <u>T&R Matrix Waiver Process</u>. The T&R waiver process is a tool to officially evaluate and document the risk at the TYCOM level when a unit has not completed all Ef requirements of the T&R matrix.
- a. A waiver shall be submitted as outlined below when the following squadron/detachment requirements have not been completed
  - (1) When ARP is not completed per the NAWDC or type wing ARP instruction
  - (2) When CVW Fallon is not completed per the NAWDC required syllabus
  - (3) When a required certification event is not completed
- b. CVW and type wings may request  $E_f$  waivers when resources are not available or when external factors (weather, operational tasking, range availability, etc.) preclude execution of tasks in the T&R matrix. CVW commanders must initiate waiver requests for squadrons under their operational control. Type wing commanders must initiate waiver requests for squadrons not attached to a CVW and all detachments under their administrative control. Waivers for  $E_f$  items shall only be approved at the TYCOM level. There is no waiver approval process for  $P_f$  items. Waiver requests must be submitted to the administrative TYCOM (Info the opposite coast TYCOM). The following example must be used to request a T&R waiver in the form of a naval message.

FROM (CVW or TYPE WING)
TO COMNAVAIRPAC SAN DIEGO CA or COMNAVAIRLANT NORFOLK VA//
INFO COMNAVAIRLANT NORFOLK VA or COMNAVAIRPAC SAN DIEGO CA//
(Other PLAs as required)
BT
UNCLAS

MSGID/GENADMIN//

SUBJ//COMNAVAIRPAC/COMNAVAIRLANTINST 3500.1B TRAINING AND READINESS WAIVER REQUEST//

REF/A/DOC/COMNAVAIRPAC/COMNAVAIRLANTINST 3500.1B/DDMMMYY // AMPN/ COMNAVAIRPAC/COMNAVAIRLANTINST 3500.1B, SQUADRON TRAINING AND READINESS INSTRUCTION //

POC // [CVW OR TYPE WING POC]

1. REMARKS/[The following information must be provided for each squadron for which the waiver is requested. The information must be provided in a four column format]

Unit	E <sub>f</sub> item	Start Date	End Date
VFA-ZZZ	AGM-65E MAVERICK	<b>DDMMMYY</b>	DDMMMYY
VAQ-XXX	AGM-88 HARM	<b>DDMMMYY</b>	<b>DDMMMYY</b>
HSC-XX	AGM-114 HELLFIRE	<b>DDMMMYY</b>	<b>DDMMMYY</b>

- 2. JUSTIFICATION
- A. [Describe the reason for the waiver (e.g., NCEA shortfall/type ordnance)].
- B. [Is the waiver required due to the lack of an external resource (range, targets, etc.), and what is the expected future availability of that resource]
- 3. MITIGATION. [What has the unit accomplished to mitigate the training ordnance or other  $E_f$  item shortfall (e.g., sims, CATMs, etc.)]
- 4. CLOSING REMARKS.//

#### Notes:

- 1. If multiple types of ordnance or other  $E_f$  items are involved, separate line descriptions and justifications are required.
- 2. The waiver end date should coincide with the last day of the sustainment period (to include surge). Actual start and end dates are required. Do not request "Start/End of FRTP."