CNAP/CNAL 3500.1B
T&R Presentation



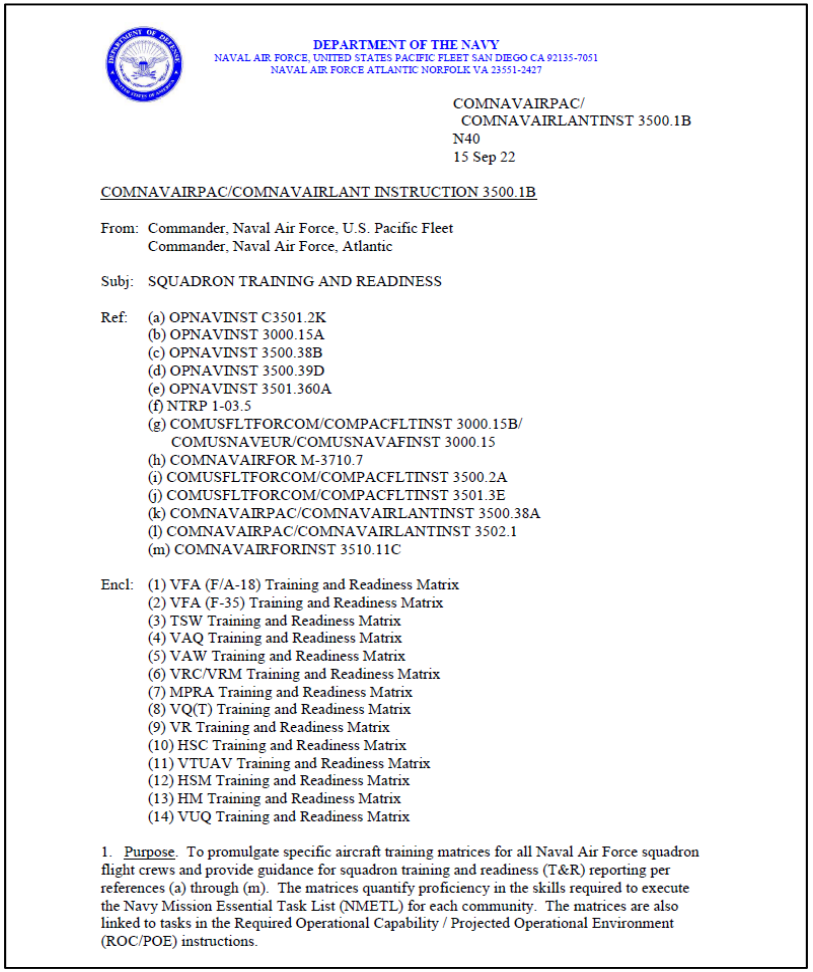

PXO Course

01 January 2023

Agenda

This T&R course will cover the following topics

- General Policy Guidance
- T&R Matrix Format
- T&R Matrix Review/Validation
- NCEA
- Readiness Expectations/Calculations
- Reporting Requirements



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
(l) 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. Purpose. 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.

Summary of 2022 Changes

- Phase I Changes (Sept 2022)
  - New method for calculating TFOM (Training Figure of Merit)
  - Partial Credit allowed for Squadron and Detachment requirements section (E*f*)
  - Training Progression and skilled crews factor into the Performance score (P*f*)
  - P_f no longer capped at 80 when E_f is less than 100
  - Training Hour Calculation accounts for all flight hours flown plus sim hours up to the Sim Fidelity percentage
  - ARP and AWF are now based on individual aircrew completion
  - NATOPS Check, Instrument Check, and Emergency Procedures (Flights and Simulators) shall only be mapped to “NTA 1.1.2.3.3 Conduct Flight Operations

- Phase II Changes (In work)
  - TFOM Goals for the end of each FRTP phase

Policy Overview

- Current Training and Readiness policy is delineated in CNAP/CNAL 3500.1B (Squadron Training and Readiness), dated 15 Sept, 2022
- This instruction includes the following references:

Chapters

1 – General Guidance
2 – Squadron Training Matrix Format Description
3 – Squadron Training Matrix Review and Validation Process
4 – Squadron Readiness Expectations and Calculations
5 – Training and Readiness Reporting Requirements

Appendices

Appendix A – T&R Matrix Format
Appendix B – T&R Matrix and NMETL Submission Checklist
Appendix C – Reserved for Interim Matrices
Appendix D – Equivalent Sortie Length Matrix
Appendix E – Number of Authorized Aircrew
Appendix F – FRTP Ordnance Expenditure Plan /Ordnance Category Delineation

Enclosures (Matrices)

(1) VFA (FA-18)
(2) VFA (F-35)
(3) TSW
(4) VAQ
(5) VAW
(6) VRC/VRM
(7) MPRA
(8) VQ(T)
(9) VR
(10) HSC
(11) VTUAV
(12) HSM
(13) HM
(14) VUQ

General Policy Guidance

(Chapter 1)

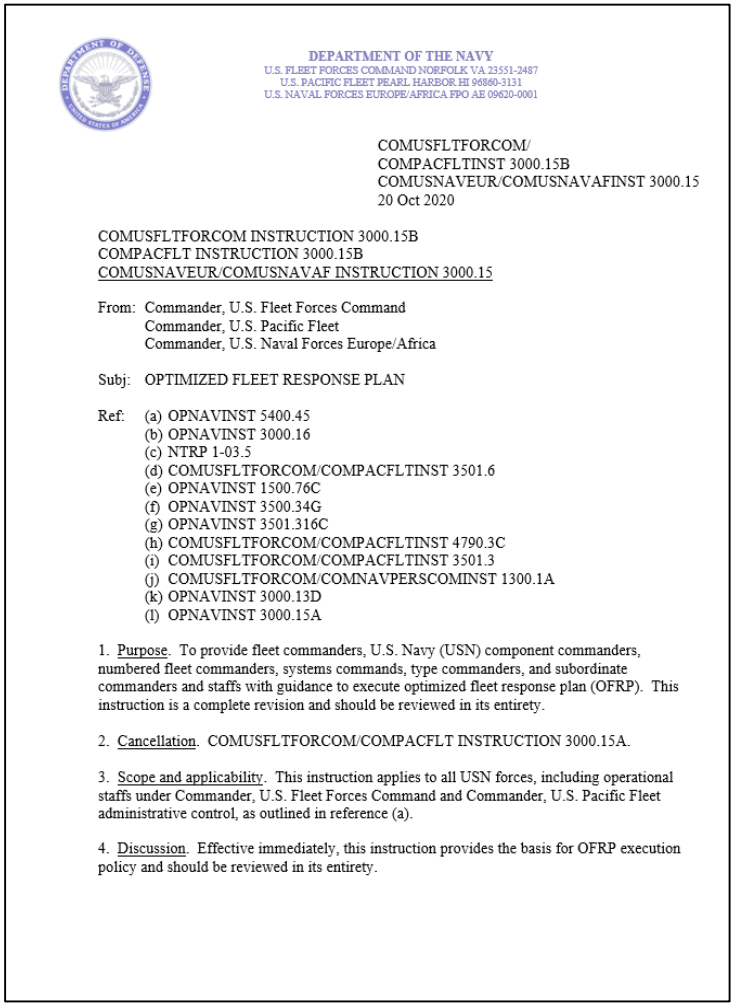



OFRP - Overview

- Policy
  - USFFC/CPF Instruction 3000.15B (20 Oct 2020)/OFRP
  - USFFC/CPF Instruction 3501.3E (30 Apr 2021)/FTC
- Purpose
  - Provides a standard force generation construct using a predictable and repeatable process
- Phases

Phase	CVW	EXP	FDNF
Maintenance	✓	✓	
Basic	✓	✓	
Advanced	✓	✓	
Integrated	✓	ESG	
Sustain/Deploy	✓	✓	✓

OFRP is the framework, Fleet Response Training Plan (FRTP) is the workup cycle, and the Fleet Training Continuum (FTC) provides the guidance to execute fleet training



DEPARTMENT OF THE NAVY
U.S. FLEET FORCES COMMAND NORFOLK VA 23551-2487
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U.S. NAVAL FORCES EUROPE/AFRICA FPO AE 09620-0001

COMUSFLTFORCOM/
COMPACFLTINST 3000.15B
COMUSNAVEUR/COMUSNAVAFINST 3000.15
20 Oct 2020

COMUSFLTFORCOM INSTRUCTION 3000.15B
COMPACFLT INSTRUCTION 3000.15B
COMUSNAVEUR/COMUSNAVAF INSTRUCTION 3000.15

From: Commander, U.S. Fleet Forces Command
Commander, U.S. Pacific Fleet
Commander, U.S. Naval Forces Europe/Africa

Subj: OPTIMIZED FLEET RESPONSE PLAN

Ref: (a) OPNAVINST 5400.45
(b) OPNAVINST 3000.16
(c) NTRP 1-03.5
(d) COMUSFLTFORCOM/COMPACFLTINST 3501.6
(e) OPNAVINST 1500.76C
(f) OPNAVINST 3500.34G
(g) OPNAVINST 3501.316C
(h) COMUSFLTFORCOM/COMPACFLTINST 4790.3C
(i) COMUSFLTFORCOM/COMPACFLTINST 3501.3
(j) COMUSFLTFORCOM/COMNAVPERSCOMINST 1300.1A
(k) OPNAVINST 3000.13D
(l) OPNAVINST 3000.15A

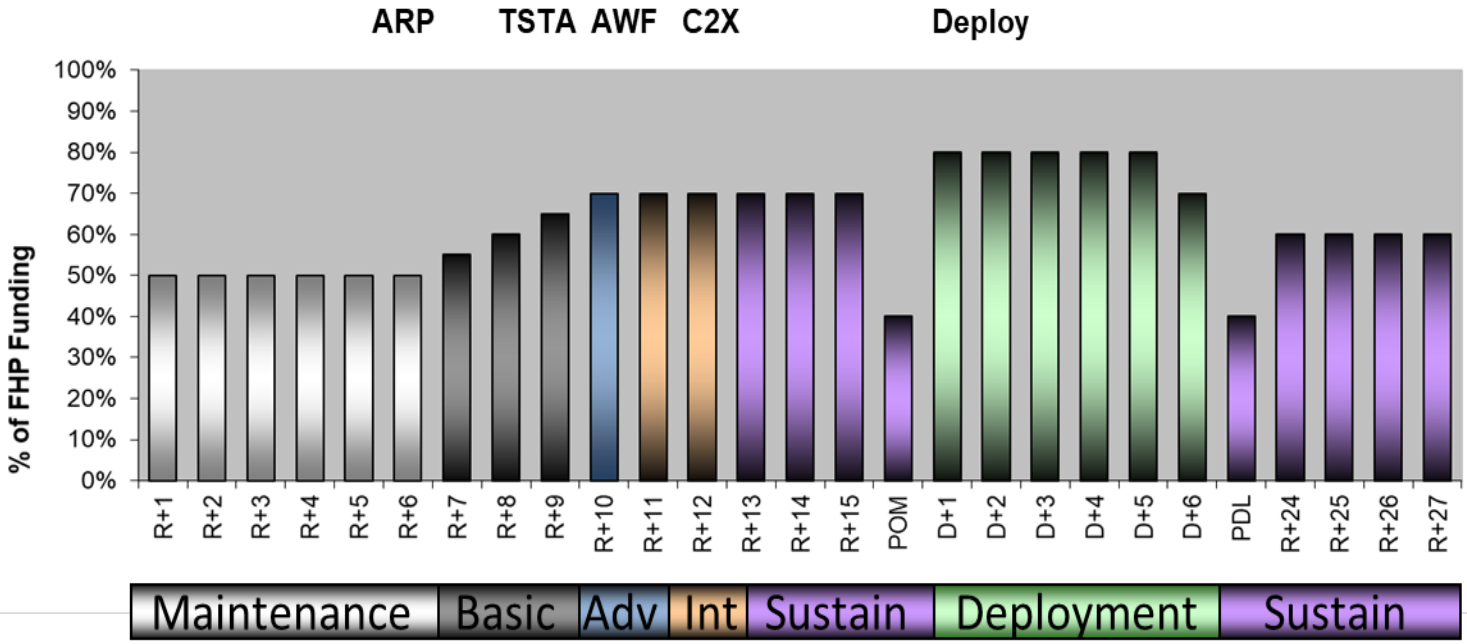
1. Purpose. To provide fleet commanders, U.S. Navy (USN) component commanders, numbered fleet commanders, systems commands, type commanders, and subordinate commanders and staffs with guidance to execute optimized fleet response plan (OFRP). This instruction is a complete revision and should be reviewed in its entirety.

2. Cancellation. COMUSFLTFORCOM/COMPACFLT INSTRUCTION 3000.15A.

3. Scope and applicability. This instruction applies to all USN forces, including operational staffs under Commander, U.S. Fleet Forces Command and Commander, U.S. Pacific Fleet administrative control, as outlined in reference (a).

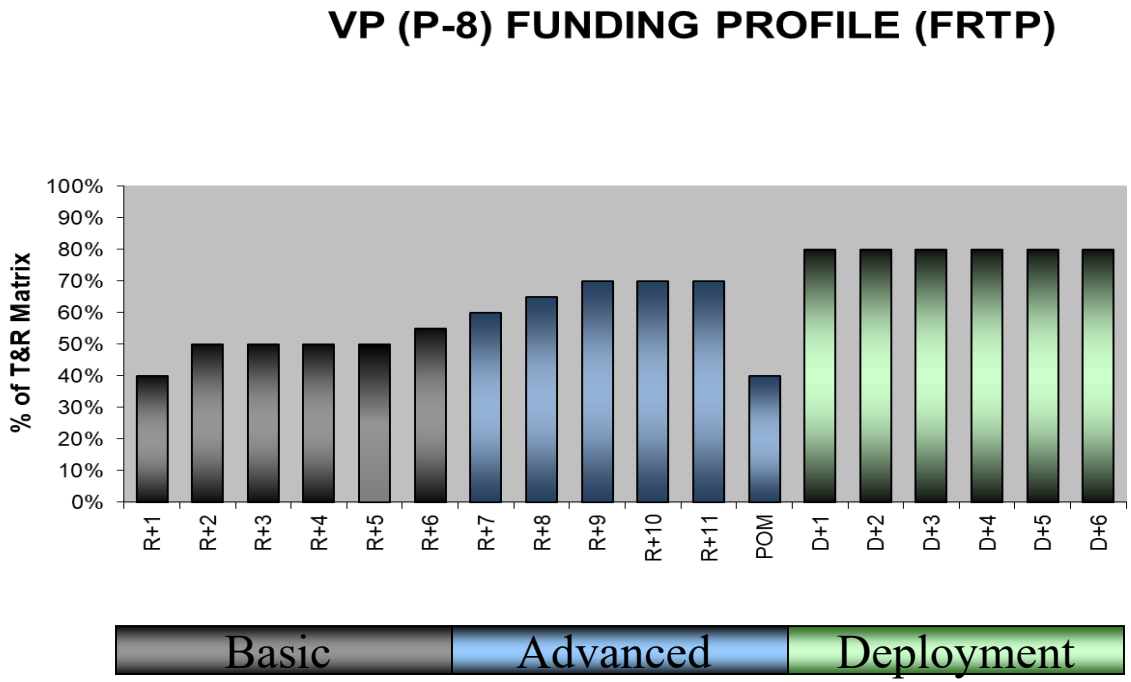
4. Discussion. Effective immediately, this instruction provides the basis for OFRP execution policy and should be reviewed in its entirety.

Training Phases – CVW FRTP Cycle



- The objective of the ORFP is to have a 36 month FRTP cycle
- This 27-month funding profile can be adapted to any duration of an FRTP cycle
- TSTA occurs in R+9 (End of Basic Phase) and AWF occurs in R+10 (Advanced Phase)
- C2X completion marks the end of the Integrated phase
- If a second deployment is required, there will be a SUSTEX event at the 120-day mark in the post (first) deployment Sustain Phase.

Training Phases – Alternate FRTP Cycle



- Non-CVW units (EXP, FDNF etc) will have FRTP cycles based on their employment plans
- The P-8 example (shown above) shows an 18 month FRTP Cycle with only 3 phases

Wing Training Manuals (WTM)

Wing Training Manual provides community-specific details for each training task in the T&R matrix including:

- Detailed description of each flight task
- Prerequisites
- Training objectives aligned with T/M/S NMETLs
- Requirements for completion
- Pass/fail criteria
- The Measures of Performance (MOP) and Measures of Effectiveness (MOE) shall be used to evaluate each task. Debrief sheets will be included when applicable.

FDNF Units

- FDNF Units include:
  - CVW-5 Squadrons
  - HSM-51
  - HSC-25
  - HSM-79

- Due to the dynamic schedule and OPLAN requirements, FDNF units are required to maintain higher levels of readiness
  - Normally Sustain and Deploy phases only
  - Higher Flight Hour funding to maintain higher readiness
  - All FDNF ordnance is considered End-to-End
  - All FDNF units have a fixed two-year FRTP cycle

Reserve Units

- Reserve Units Include:
  - TSW (VFC-12, VFC-111, VFC-13, VFC-204, VAQ-209)
  - VR (C-40/C-130)
  - MSW (VP-62, VP-69, HSC-85, HSM-60)
- HM reserve components use the active component HM matrix
- Reserve matrices …
  - Use the same format and methodology as their Active Component counterparts
  - Tend to have higher periodicities due to greater experience levels
  - FHP funded by number of aircraft vice number of crews

T&R Matrix Format

(Chapter 2)




T&R Matrix Overview

T&R matrices have a standardized format across all communities

- Aligned to the FRTP
  - Advanced Readiness Program (ARP)
  - Air Wing Fallon
  - Embarked Operations (ISATT/TSTA/C2X)
  - Expeditionary Operations (ORE/CERTEX)
- Incorporates training resources
  - Flight/SIM Hour Execution
  - ACTC syllabus
  - Simulators
  - NCEA Ordnance
  - Aircrew Qualifications
  - Critical Schools
- Each matrix contains at least 3 tabs
  - T&R matrix
  - ACTC Mapping Page
  - FRS Baseline page

T&R Matrix Elements

Mission Essential Tasks (NTAs) | **E_f = Squadron/Det Requirements** | **P_f = Flight Tasks** | **Notes Section**

VFA FA-18E
10 PAA AR
21 SEP 22

Squadron Requirements (Ef) — Designations (Note E); FRTP Events (Note 1); High Training Value (HTV) Ordnance (Note 2); End-to-End (E2E) Ordnance (Notes 3, 4)

MISSION ESSENTIAL TASKS		Training Hour Execution (Note D)	≥ L4 Pilots	≥ L3 Pilots	≥ L2 Pilots	≥ L1 Pilots	JHMCS Qual - Pilots	CVW STK LEAD	SFARP	CVW FALLON	COMPTUEX	20MM EXPEND	LG ROUND PER CREW ONBOARD	Mk-80 LIVE PER CREW ONBOARD	PILOTS WITH HVY LGB EXPEND	PILOTS WITH GPS-GUIDED BOMB EXPEND	TOWED DECOY EXPEND	IR MSL EXPEND	RDR MSL EXPEND	JSOW EXPEND	HARM / AARGM EXPEND	MAVERICK EXPEND	REQUIRED SKILLED CREWS
NTA 1.1.2.3.3	Conduct Flight Operations	SAT	5	7	12	15	12																15
NTA 3.2.1.1	Attack Surface Targets	SAT	5	7	12	15	12	3	15	15	SAT												15
NTA 3.2.2	Attack Enemy Land Targets	SAT	5	7	12	15	12	3	15	15	SAT	1500	10	4	12	12						1	15
NTA 3.2.3	Attack Enemy Aircraft and Missiles (Offensive Counter Air)	SAT	5	7	12	15	12	3	15	15	SAT						6	2	2				15
NTA 3.2.4	Suppress Enemy Air Defenses (SEAD)	SAT	5	7	12	15	12		15	15	SAT									1	1		15
NTA 3.2.5	Conduct Electronic Attack	SAT	5	7	12	15	12		15	15	SAT												15
NTA 3.2.6	Interdict Enemy Operational Forces and Targets	SAT	5	7	12	15	12	3	15	15	SAT												15
NTA 3.2.7	Intercept, Engage, Neutralize Enemy Aircraft and Missiles (Defensive Counter Air)	SAT	5	7	12	15	12	3	15	15	SAT						6	2	2				15
NTA 4.2.1.2	Conduct Aerial Refueling	SAT	5	7	12	15	12			15	SAT												6
NTA 6.2	Rescue and Recover	SAT	5	7	12	15	12			15	SAT	1500											15

Flight Tasks (Pf)

NTA	MOB 101 BASIC FLIGHT / CURRENCY / FCF	MOB 102 NVD / NVCD	MOB 103 FCLP	MOB 104 CVN RECOVERY	MOB 105 EMERGENCY PROCEDURES	MOB 106 NATOPS CHECK / OCF / CRM	MOB 107 INSTRUMENT CHECK	MOB 401 AERIAL REFUELING	MOB 402 ARS / TANKER OPERATIONS	AAW 301 BFM	AAW 302 BLUE A/A FUNDAMENTALS (AAW 302a/302b	AAW 303 DCA/OCA PART-TASK TRAINING	AAW 304 DIVISION DCA/OCA WITH 4+ LIVE RE	ASU 301 ASuW FUNDAMENTALS / SSC	EW 301 SEAD	STW 301 A/S FUNDAMENTALS	STW 302 SACT	STW 303 LAND STAND-OFF / SPECIALIZED A/S W	STW 304 MARITIME STAND-OFF	STW 305 CLOSE AIR SUPPORT (CAS) / FAC(A) / AR	STW 306 AIR INTERDICTION / PRE-PLANNED S	STW 307 LFE (STW 307a/307b/307c) (Note 5	CCC 501 JOINT / MULTI-NATIONAL EXERCISES / OP	CCC 502 5TH GENERATION INTEGRATION
NTA 1.1.2.3.3	X	X	X	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
NTA 3.2.1.1		X	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
NTA 3.2.2		X														X	X	X		X	X	X		
NTA 3.2.3		X								X	X	X	X									X	X	X
NTA 3.2.4		X													X		X	X						X
NTA 3.2.5		X															X					X		
NTA 3.2.6		X														X	X	X	X	X	X	X	X	
NTA 3.2.7		X								X	X	X	X									X	X	X
NTA 4.2.1.2		X						X	X															
NTA 6.2		X														X	X				X	X		

	MOB 101	MOB 102	MOB 103	MOB 104	MOB 105	MOB 106	MOB 107	MOB 401	MOB 402	AAW 301	AAW 302	AAW 303	AAW 304	ASU 301	EW 301	STW 301	STW 302	STW 303	STW 304	STW 305	STW 306	STW 307	CCC 501	CCC 502	
Periodicity	60	60	365	180	270	396	396	180	180	180	180	90	365	365	365	180	180	365	365	180	365	270	540	365	
Flight Only Iterations - Pilot	8	2	4	6	0	0	0	3	3	8	4	0	4	2	4	4	4	4	4	4	4	4	1	1	
Flight Only Hours per Task	1.5	1.5	1.0	1.0	0.0	0.0	0.0	1.0	1.0	1.5	1.5	0.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	
Sim or Flight Iterations - Pilot	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	2	
Sim or Flight Hours per Task	0.0	0.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.0	1.0	
Sim Only Iterations - Pilot	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	
Sim Only Hours per Task	0.0	0.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.0	0.0	
Total Monthly Flight Only Hours (Pilot)	6.0	1.5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.1	0.1	19.4
Total Monthly Sim or Flight Hours (Pilot)	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.7	3.3	0.0	0.1	0.3	0.7	0.3	0.2	0.2	0.7	0.3	0.3	0.1	[illegible]	[illegible]
Total Monthly Sim Only Hours (Pilot)	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	[illegible]	0.2

100% T&R Hours: **27.0**
Sim Fidelity: 28.0%

MET to flight task mapping + task periodicity

Flight/sim hours

100% T&R Hours

Notes:
General:

A. Baseline flight hour requirements by R+ month are defined in the T/M/S Readiness and Resource Standards (COMNAVAIRFORINST 3510.11C) at:
https://usff.navy.deps.mil/sites/nae/current_readiness/CR_Standards/SitePages/Home2.aspx

B. R+ month assignments by squadron are posted on SIPRNET at:
https://cffo.fleetforces.navy.smil.mil/comnavairfor/N40/FHP/default.aspx

C. Squadron Requirements section denotes the experience factor (Ef) for the [illegible] CNAP/CNALINST 3500.1 Section 5.3 for waiver guidance. The Flight Tasks, [illegible] section, delineates the flight tasks required to form skilled crews. See CNAP/[illegible] Training Figure of Merit (TFOM) calculation methodology using Ef and Pf.

D. Training Hour Execution represents the minimum flight and sim time a squ[illegible] over a moving 90-day interval. All flight hours flown and sim hours, up to the [illegible] aircrew and visitors in the squadron's SHARP database will contribute to the [illegible] execution calculation. CNAP/CNALINST 3500.1 section 4.4 provides detailed guidance.

E. Once an individual aircrew achieves a specific ACTC level, the designation will remain current until the aircrew departs the squadron. ACTC levels are not associated with the FRTP cycle, so they transfer with individual aircrew. ACTC levels for each aircrew MUST be accurately represented in SHARP for readiness calculations to be reliable.

T/M/S Specific:

1. The SFARP and CVW Fallon columns represent the total number of aircrew who have completed the events during the current FRTP and is affected by aircrew turnover. COMPTUEX is reported for the entire unit as SAT/UNSAT; completion of COMPTUEX results in a SAT until the end of the FRTP cycle, regardless of aircrew turnover.

2. High Training Value (HTV) Ordnance expended are tied to the individual, and no longer count toward a squadron's readiness when the active aircrew departs the squadron or is no longer an active aircrew in the squadron. When a visitor expends ordnance out of a squadron's NCEA, the visitor's contribution shall not contribute to the squadron's readiness. HTV ordnance expenditures by active aircrew remain valid until the end of the FRTP in which it was expended.

3. End-to-End Ordnance (E2E) is attributed wholly to the squadron, since it re[illegible] planning, weapon building, loading, arming and delivery. Therefore, readines[illegible] aircrew who expended an E2E weapon transfers from the squadron. E2E ord[illegible] valid until the end of the FRTP in which it was expended.

4. For CVW 5: CVW 5 squadrons fall under C7FINST 3501.1 series (Seventh [illegible] requires formal strike group certification every 24 months. CVW 5 ordnance, [illegible] ordnance, will be treated as End-to-End ordnance for T&R reporting purposes [illegible] 3500.1 series, CVW Fallon will be credited for CVW 5 units when completing [illegible] credited upon completion of Exercise Valiant Shield or equivalent.

5. See Task to Sub-Task List below. Completion of any combination of sub-tasks fulfills the parent task requirement.

6. F/A-18 Combined Wing Training Manual (CSFWPINST 3500.7E/CSFWLINST 3500.7E) delineates specific aircrew requirements and applicable reporting guidelines. CSFWP/L INST 3500.7E/ at
https://cpf.navy.deps.mil/sites/cnap-cmds/CSFWP/CSFWP%20Instructions/Forms/csfwpinstructions.aspx

Gen Notes

TMS Notes

Task to Sub-Task Matrix

Task	Sub-Task
AAW 302 BLUE A/A FUNDAMENTALS	AAW 302a SEM AAW 302b PT DEF/TACINT
STW 307 LFE	STW 307a CVW STRIKE STW 307b WASEX STW 307c CSAR

Sub Tasks

Readiness Standards VFA FA-18E 10 Plane ARS
PAA = 10
Crew/Seat Ratio = 1.50
Crews = 15
ESL = 1.5
100% T&R Matrix = 27.0
Sim Fidelity % = 28.0%
Crew composition: 1 Pilot

Standards

- 80 - 100
- 60 - 79
- 0 - 59

Training Figure of Merit (TFOM) = (E_f x P_f)/ 100

T&R Matrix Review and Validation

(Chapter 3)




T&R Matrix Review and Validation

- T&R matrices are developed by the Type Wings and their weapons schools
  - METs are based on the approved ROC/POE and tactical doctrine
  - Flight tasks support the METs
- Fleet inputs to the T&R go through your Type Wings
  - Matrices are updated routinely to meet operational demands and reflect the most current tactics, weapons, and training
- Type Wings work through the TYCOM for matrix review and approval
- The WTM and ACTC Syllabus feed the requirements in the Matrix. All must be updated together to ensure alignment

Lead Type Wings for each Matrix

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	COMACCLOGWING
VRC	C-2A	
VUQ	MQ-25	
VRM	CMV-22B	COMVRMWING
MPRA	P-8/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	
HSM (CVW/EXP)	MH-60R	COMHELMARSTRIKEWINGPAC
HM	MH-53E	COMHELSEACOMBATWINGLANT

Non-Combat Expenditure Allocation (NCEA)

(Appendix F)




The Appendix F: How it's used

- CNAP and CNAL NCEA Director use the Appendix F to calculate a Wing's Fiscal Year Test and Training Requirement (TTR). The actual requirements are per the T&R Matrix.
- The TTR calculation references the Master Aviation Plan (MAP). The request is based on each unit's work-up cycle within the Fiscal Year (including EXPED).
- The numbers collected are essentially a requirements wish list provided to USFF and OPNAV N98.
- NCEA is allocated from USFF based on available inventory, the TTR, and an average of the previous three years of expenditures. If an item is in low inventory or no longer produced/funded CNAF will likely receive less NCEA than the calculated requirement.
- Allocations from CNAF are given to Carrier Air Wings and Type Wings who in turn allocate NCEA to their squadrons.
- The App F is updated by the CNAL/CNAP NCEA Director as necessary to accurately represent T&R Requirements.

The Appendix F: Ordnance Categories

- End-to End (E2E)
  - Validates full kill chain
    - Ordnance Loading
    - Aircrew planning and tactics
    - Weapon reliability
  - RDR / IR Missile, JSOW, LMAV, HARM, Harpoon, Towed Decoy, etc.
  - Remains with unit throughout the FRTP

All FDNF* ordnance is considered E2E FDNF ordnance expires two years after expenditure

- High Training Value (HTV)
  - Training / Skill Based Ordnance
  - Calculated as an average per C.O.B. crews
  - Leaves with Aircrew

The Appendix F: Examples

CNAL/CNAPINST 3500.1B App F HSC NCEA Requirements		High Training Value (HTV)									
		20 mm	2.75 (note 5)	Mk-25 Smoke	Mk-58 Smoke (note 4)	Smokey SAMs	Chaff	Flares	AGM-114 HELLFIRE	APKWS	Mk-64/65 Disp Assembly
HSC CVW 7 CREWS	HARP	8,064	251	28	14	21	88	88	3	14	
	TSTA (note 3)	3,024	91	28	14						
	FALLON	5,950	78				88	88	2	14	
	C2X (note 2)	3,024	91	28	14				2		
	ULT (note 2)	1,260	33	28	14		88	88			
	Sustain	1,260	33	28	14		88	8	2	10	
PAA 5	Deploy (note 3)	6,048	182	84	42			70			

Per the MAP, A notional FY contains HARP + TSTA + FALLON

TTR: 17,038 20mm Linked, 420 x UGR, 56 x Mk-25, 28 x Mk-58, 21 x Smoky Sams, 176 C/F, 5 Hellfire, 28 APKWS, etc.

Allocation: 14,000 20mm Linked, 420 UGR, 56 x Mk-25, 28 x Mk-58, 21 x Smoky Sams, 150 C/F, 3 Hellfire, 20 APKWS, etc.

Address Shortages via Augment after 50% expenditure. If an item is inventory constrained full allocation may not be possible.

Appendix F Updates

- Current Update (Jan 2023)
  - VFA: Towed Decoy to E2E to match T&R Matrix Change. F35 Heavy Inert numbers matched to Live/LGB/JDAM numbers.
  - HSC: Removed 8 PAA
  - HSM: Correct Hellfire numbers, remove EXTORP, and adjust REXTORP numbers.
  - MPRA: Add HAAWC, updated Sonobuoy requirements per community input.

NCEA Inventory Constrained Assets

Definition of a constrained asset

1. Inventory is below Total Munitions Requirements (TMR)
2. No funding for additional procurement
3. No longer in production
4. Expending constrained assets incurs risk

NCEA Inventory Constrained Assets

- Where we see it:
  - AGM-114 Hellfire[1]
  - AIM-120
  - APKWS[2] / Rockets (Mk-66 Motors)
  - Sonobuoys[3]
  - Harpoon (MPRA)
  - 500-lb Live GP, Fins, Fuzes
  - JSOW-C
  - 25mm TP[4]
  - SDB-II[5]

1: No future funding; USN did not purchase follow-on (JAGM)

2: Production Funding expires in several years

3: Production cannot keep-up with expenditure

4: Lull in funding/inventory vs. increased demand

5: Upcoming weapons are not being funded for NCEA

Inventory Constrained Assets: How it affects Readiness

		VFA FA-18F 12 PAA AR 21 SEP 22	Training Hour Execution (Note E)	Squadron Requirements (Ef)																										
				Designations (Note E)														FRTP Events (Note 1)			High Training Value (HTV) Ordnance (Note 2)					End-to-End (E2E) Ordnance (Notes 3, 4)					
				≥ L4 Pilots	≥ L4 WSOs	≥ L3 Pilots	≥ L3 WSOs	≥ L2 Pilots	≥ L2 WSOs	≥ L1 Pilots	≥ L1 WSOs	JHMCS Qual - Pilot	JHMCS Qual- WSO	CVW STK LEAD	FAC(A) - Pilot	FAC(A) - WSO	Rescue Mission Commander (RMC) - Pilot	Rescue Mission Commander (RMC) - WSO	SFARP	CVW FALLON	COMPTUEX	20MM EXPEND	LG ROUND PER CREW ONBOARD	Mk-80 LIVE PER CREW ONBOARD	CREWS WITH HVY LGB EXPEND	CREWS WITH GPS-GUIDED BOMB EXPEND	TOWED DECOY EXPEND	IR MSL EXPEND	RDR MSL EXPEND	JSOW EXPEND	HARM / AARGM EXPEND	MAVERICK EXPEND
MISSION ESSENTIAL TASKS	NTA 1.1.2.3.3	Conduct Flight Operations	SAT	5	5	8	8	13	13	17	17	13	13																	
	NTA 3.2.1.1	Attack Surface Targets	SAT	5	5	8	8	13	13	17	17	13	13	3					34	34	SAT									
	NTA 3.2.2	Attack Enemy Land Targets	SAT	5	5	8	8	13	13	17	17	13	13	3					34	34	SAT	1500	10	4	12	12					1
	NTA 3.2.3	Attack Enemy Aircraft and Missiles (Offensive Counter Air)	SAT	5	5	8	8	13	13	17	17	13	13	3					34	34	SAT						6	2	2			
	NTA 3.2.4	Suppress Enemy Air Defenses (SEAD)	SAT	5	5	8	8	13	13	17	17	13	13						34	34	SAT									1	1	
	NTA 3.2.5	Conduct Electronic Attack	SAT	5	5	8	8	13	13	17	17	13	13						34	34	SAT											
	NTA 3.2.6	Interdict Enemy Operational Forces and Targets	SAT	5	5	8	8	13	13	17	17	13	13	3					34	34	SAT											
	NTA 3.2.7	Intercept, Engage, Neutralize Enemy Aircraft and Missiles (Defensive Counter Air)	SAT	5	5	8	8	13	13	17	17	13	13	3					34	34	SAT						6	2	2			
	NTA 3.2.8.1	Organize Fire Support Assets	SAT	5	5	8	8	13	13	17	17	13	13		4	4			34	34	SAT											
	NTA 4.2.1.2	Conduct Aerial Refueling	SAT	5	5	8	8	13	13	17	17	13	13							34	SAT											
	NTA 6.2	Rescue and Recover	SAT	5	5	8	8	13	13	17	17	13	13				3	3		34	SAT	1500										

Inventory Constrained Assets: How it affects Readiness

		VP (P-8) 7 PAA 21 SEP 22	Training Hour Execution (Note D)	Designations (Note E) ≥ ACTC L4 Pilot	≥ ACTCL3 Pilot	≥ ACTC L2 Pilot	≥ ACTC L1 Pilot	≥ ACTC L4 NFO	≥ ACTC L3 NFO	≥ ACTC L1 NFO	≥ ACTCL4 AAW	≥ ACTCL3 AAW	≥ ACTCL1 AAW	≥ ACTCL4 EWO	≥ ACTCL3 EWO	≥ ACTCL1 EWO	FRTP Events (Note 1, 2) ADVANCED READINESS PROGRAM (ARP)	OPERATIONAL READINESS EVALUATION (ORE)	High Training Value (HTV) Ordnance (Note 3, 4) LIGHTWEIGHT TORPEDO EXPEND - UNIT	# OF PILOT >= L3 LIGHTWEIGHT TORPEDO EXPEND	# OF PILOT >= L2 LIGHTWEIGHT TORPEDO EXPEND	# OF NFO >= L3 LIGHTWEIGHT TORPEDO EXPEND	# OF NFO >= L1 LIGHTWEIGHT TORPEDO EXPEND	# OF EWO >= L3 LIGHTWEIGHT TORPEDO EXPEND	# OF EWO >= L1 LIGHTWEIGHT TORPEDO EXPEND	# OF AAW >= L3 LIGHTWEIGHT TORPEDO EXPEND	# OF AAW >= L1 LIGHTWEIGHT TORPEDO EXPEND	End-to-End (E2E) Ordnance (Note 3) HARPOON MSL EXPEND	MINE EXPEND	HAAWC EXPEND
MISSION ESSENTIAL TASKS	NTA 1.1.2.3.3	Conduct Flight Operations	SAT	3	12	24	36	3	12	24	3	12	24	3	12	24													
	NTA 1.4.1	Conduct Mining	SAT	3	12	24	36	3	12	24				3	12	24	96	SAT										40	
	NTA 1.4.8.2	Conduct Maritime Counter Drug Operations	SAT	3	12	24	36	3	12	24	3	12	24	3	12	24													
	NTA 2.2.1	Collect Target Information	SAT	3	12	24	36	3	12	24	3	12	24	3	12	24	96	SAT											
	NTA 2.2.3	Perform Tactical Reconnaissance and Surveillance	SAT	3	12	24	36	3	12	24				3	12	24	96	SAT											
	NTA 2.2.3.1	Search Assigned Areas	SAT	3	12	24	36	3	12	24	3	12	24	3	12	24	96	SAT											
	NTA 3.2.1.1	Attack Surface Targets	SAT	3	12	24	36	3	12	24	3	12	24	3	12	24	96	SAT									1		
	NTA 3.2.1.2	Attack Submerged Targets	SAT	3	12	24	36	3	12	24	3	12	24	3	12	24	96	SAT	20	10	20	10	20	10	20	10	20			1
	NTA 4.2.1.2	Conduct Aerial Refueling	SAT	3	12	24	36																						
	NTA 5.4.1.2	Exercise Tactical Command and Control	SAT	3	12	24	36	3	12	24	3	12	24	3	12	24	96	SAT											
	OP 2.3.2	Collect Operational Information	SAT	3	12	24	36	3	12	24	3	12	24	3	12	24	96	SAT											

Inventory Constrained Assets: How it affects Readiness

		HSC MH-60S 5 PAA - CVW 21 SEP 22	Training Hour Execution (Note D)	Squadron/Detachment Requirements (Ef)																									
				Designations (Note E)																		FRTP Events (Note 2)			High Training Value (HTV) Ordnance (Notes 1, 4, 5, 6)						
				MRWMC	≥ Level 4 Pilot	≥ Level 3 Pilot	≥ Level 2 Pilot	≥ Level 1 Pilot	≥ PR/SOF 4 Pilot	≥ PR/SOF 3 Pilot	≥ PR/SOF 2 Pilot	≥ PR/SOF 1 Pilot	Mountain Flying School Pilot (Note 3)	Aerial Gunnery Instructor (AGI)	≥ Level 3 Aircrewman	≥ Level 2 Aircrewman	Aerial Gunner (AG)	≥ Level 1 Aircrewman	≥ PR/SOF 3 Aircrewman	Mountain Flying School Aircrewman (Note 3)	HARP	CVW FALLON	COMPTUEX	Pilot with LIVE EW SACT Completed	Pilot with Live 20-mm Expended (Note 4(a))	Pilot with Live APKWS Expended (Note 4(b))	Pilot with Live Hellfire Expended (Note 4(c))	Pilot with Live UGR Expended (Note 4(d))	AG Aircrewmen with GAU-21 Qualification (Note 4(e))	AG Aircrewmen with M-240 Qualification (Note 4(f))
MISSION ESSENTIAL TASKS	NTA 1.1.2.3.3	Conduct Flight Operations	SAT				9	18								9		18											
	NTA 1.1.2.4	Conduct Tactical Insertion and Extraction	SAT	1	1	2	4	18	1	2	2	4	2	2	1	2	4	18	2	1	36	36	SAT	2						4
	NTA 1.4.6	Conduct Maritime Interception	SAT	1	2	3	9	18						2	1	18	18	18			36	36	SAT	2						14
	NTA 2.2.1	Collect Target Information	SAT				9	18							1	18		18			36	36	SAT	2						
	NTA 3.2.1.1	Attack Surface Targets	SAT	1	2	3	9	18						2	1	18	18	18			36	36	SAT	2	7	7	7	7	14	14
	NTA 3.2.2	Attack Enemy Land Targets	SAT	1	1	2	4	18						2	1	4	4	18			36	36	SAT	2	2	2	2	2	4	4
	NTA 4.6.5	Provide Vertical Replenishment	SAT				9	18								9		18											
	NTA 4.8.1	Support Peace Operations	SAT				9	18								18	18	18			36									14
	NTA 6.2	Rescue and Recover	SAT				9	18								9		18											
	NTA 6.2.2.2	Perform Combat Search and Rescue (CSAR)	SAT	1	1	2	4	18	1	2	2	4	2	2	3	4	4	18	2	1	36	36	SAT	2						4

Readiness Expectations and Calculations

(Chapter 4)




Readiness Expectations

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.

- CSG / CVW - based units are expected to be 80 (green) in TFOM at the end of the Integrated Phase (Post C2X)
- Independent deploying units are expected to be 80 (green) in TFOM at the end of the Advanced Phase (post ISATT, ORI, ORE, CERTEX etc)
- Units not deployed in sustainment may fall below 80 TFOM but must be recoverable to 80 TFOM within 30 days of notification to deploy.

Average 90-day Training Hours Calculation

- The Training Hour calculation represents the minimum training hours a squadron or detachment is required to execute over a moving 90-day interval
- Two components
  - Training Hour Execution Requirement (THreq)
    - = Training flight and simulator hour requirements for each assigned R+ month over the respective 90-day period
    - MESH (Afloat and Ashore) support hours are not included
  - Training Hours Executed (THexe)
    - = All flight hours executed over the 90-day period
    - = All simulator hours executed up the simulator contribution percentage over the 90-day period
    - Includes all hours flown by both active aircrew and visitors
    - Includes MESH

Average 90-day Training Hours Sample

Ref: Chapter 4 paragraph 4

Readiness Standards VFA FA-18E 10 Plane Non- ARS
PAA = 10
Crew/Seat Ratio = 1.50
Crews = 15
ESL = 1.5
100% T&R Matrix = 27.0
Sim Fidelity % = 28.0%

FRTP Mode	Maintenance	Maintenance	Maintenance	Maintenance	Maintenance	Maintenance	Basic	Basic	Basic	Advanced	Integrated	Integrated
R+Month	R+1	R+2	R+3	R+4	R+5	R+6	R+7	R+8	R+9	R+10	R+11	R+12
FRTP	1	2	3	4	5	6	7	8	9	10	11	12
Mission	ULT & Depot Mx				ARP to TSTA III					C2X to FLN		
Training Resource Elements												
Average Training Readiness (ATR) Standard	0.00	0.00	0.00	0.00	0.00	0.05	2.05	2.05	12.05	37.05	80.00	80.00
% of T&R Matrix	50%	50%	50%	50%	50%	50%	55%	60%	65%	70%	70%	70%
Flying Hours												
Training Sortie Standard	135	135	135	135	135	135	149	162	176	189	189	189
Training Hours Standard	202.5	202.5	202.5	202.5	202.5	202.5	222.8	243.0	263.3	283.5	283.5	283.5
Ashore Support Hours Total	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
Afloat Support Hours Total	-	-	-	-	-	-	-	-	15.0	-	15.0	15.0
Total Hours Standard	217.5	217.5	217.5	217.5	217.5	217.5	237.8	258.0	293.3	298.5	313.5	313.5
Simulator Contribution	(40.5)	(40.5)	(40.5)	-	(40.5)	(40.5)	(60.8)	(68.0)	-	-	-	-
Allocated Flight Hours	177.0	177.0	177.0	217.5	177.0	177.0	177.0	190.0	293.3	298.5	313.5	313.5
~~Flight Hour Execution Standard (90 Day Avg)~~	~~229.5~~	~~216.0~~	~~202.5~~	~~202.5~~	~~202.5~~	~~202.5~~	~~209.3~~	~~222.8~~	~~243.0~~	~~263.3~~	~~276.8~~	~~283.5~~

MESH (ashore/afloat support hours) is not factored into the T&R baseline hours but does count towards total flight hours when calculating the 90-day average.

		Requirement per Current Readiness Standards (reference (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**	

TFOM Calculations

- **Training Figure of Merit (TFOM) equation = (P*f* x E*f*)/100**

P*f* = MAX (Skilled Crews + Training Progression) / 2 or Skilled Crews

Training Progression = $\frac{Executed\ Tasks\ by\ crews\ onboard}{Required\ Tasks\ by\ crews\ onboard} * \frac{Crews\ onboard}{Crews\ required}$

E*f* = (Average of all individual Ef items for a given MET) x 100

- Incorporating training progression shows progress achieved in all phases
- Puts more emphasis on skilled crews
- Skilled crews based on fully funded crews vice 80% of funded crews
- P*f* is no longer capped when E*f* is less than 100

A unit should only achieve 100 TFOM if all funded crews are skilled and all required resources are executed

Reporting Requirements

(Chapter 5)




SHARP Data Management

SHARP

SHARP 7.0

- Single Navy database
- Updated for modern browsers
- Improved list management
- Expanded reports

Sierra Hotel Aviation Readiness Program

- Single data capture tool for squadron and detachment training, qualifications, and training readiness reporting
- Only data source to calculate the TFOM values required in the DRRS-S training standard for squadrons and detachments
- Reports module provides current training status and analysis tools for tracking and reporting training readiness
- SHARP 7 Afloat currently on all CVNs.

SHARP Reports and DRRS-S

There are two SHARP reports that provide a comprehensive picture of the E_f and P_f elements that make up TFOM

- Current Readiness Assessment Report (CRA)
  - Submitted every 15 days or as required
  - Explains the squadron requirements (E_f)
- Crews report
  - Can be run for any date
  - Explains the skilled crews (P_f)
- These reports also provide a basis for CO's training comments in DRRS-S

UNCLASSIFIED ** UNDER DEVELOPMENT**

Readiness Assessment

VAQ-139 05-27-2022 CVW - VAQ EA-18G 5 Plane CVW R+8

Submitted 05-27-2022 15:52:27

NTA	NTA Description	Calculated Readiness Factors Overall TFOM = 19: TFOM	Pf	Ef	Training Progression
NTA 1.1.2.3.3	Conduct Flight Operations	34	34	100	67
NTA 2.2.3	Perform Tactical Reconnaissance and Surveillance	20	23	89	45
NTA 3.1.7	Employ Counter-Targeting	14	18	77	36
NTA 3.2.1	Attack Enemy Maritime Targets	18	22	84	43
NTA 3.2.2	Attack Enemy Land Targets	22	25	86	49
NTA 3.2.4	Suppress Enemy Air Defense (SEAD)	18	21	86	42
NTA 3.2.5	Conduct Electronic Attack	17	19	88	38
NTA 3.2.7	Intercept, Engage, Neutralize Enemy Aircraft and Missiles (Defensive Counter Air)	14	17	84	33
NTA 3.2.9	Conduct Non-lethal Engagement	23	26	88	51
NTA 5.5.4	Conduct Electronic Warfare Support (ES)	19	21	89	42
NTA 6.1.2.2	Conduct Deception in Support of Tactical Operations	16	18	88	36

NTA	Skilled Crews			Flight Hour Execution			ACTC LEVEL >= 4			ACTC LEVEL >= 3			ACTC LEVEL >= 2		
	STD	ACT		STD	ACT		STD	ACT		STD	ACT		STD	ACT	
NTA 1.1.2.3.3	9	0	0	143	140	98	3	7	100	7	12	100	10	16	100
NTA 2.2.3	9	0	0	143	140	98	5	7	100	9	12	100	14	16	100
NTA 3.1.7	9	0	0	143	140	98	5	7	100	9	12	100	14	16	100
NTA 3.2.1	9	0	0	143	140	98	5	7	100	9	12	100	14	16	100
NTA 3.2.2	9	0	0	143	140	98	5	7	100	9	12	100	14	16	100
NTA 3.2.4	9	0	0	143	140	98	5	7	100	9	12	100	14	16	100
NTA 3.2.5	9	0	0	143	140	98	5	7	100	9	12	100	14	16	100
NTA 3.2.7	9	0	0	143	140	98	5	7	100	9	12	100	14	16	100
NTA 3.2.9	9	0	0	143	140	98	5	7	100	9	12	100	14	16	100
NTA 5.5.4	9	0	0	143	140	98	5	7	100	9	12	100	14	16	100
NTA 6.1.2.2	9	0	0	143	140	98	5	7	100	9	12	100	14	16	100

NTA	ACTC LEVEL >= 1 (PILOT)			ACTC LEVEL >= 1 (EWO)			NVD QUALIFIED AIRCREW			JHMCS-1			JHMCS-2		
	STD	ACT		STD	ACT		STD	ACT		STD	ACT		STD	ACT	
NTA 1.1.2.3.3	9	9	100	9	10	100									
NTA 2.2.3	9	9	100	9	10	100	14	14	100	14	13	93			
NTA 3.1.7	9	9	100	9	10	100	14	14	100	14	13	93			
NTA 3.2.1	9	9	100	9	10	100	14	14	100	14	13	93			
NTA 3.2.2	9	9	100	9	10	100	14	14	100	14	13	93	9	11	100
NTA 3.2.4	9	9	100	9	10	100	14	14	100	14	13	93	9	11	100
NTA 3.2.5	9	9	100	9	10	100				14	13	93			
NTA 3.2.7	9	9	100	9	10	100	14	14	100	14	13	93	9	11	100
NTA 3.2.9	9	9	100	9	10	100				14	13	93			
NTA 5.5.4	9	9	100	9	10	100	14	14	100	14	13	93			
NTA 6.1.2.2	9	9	100	9	10	100				14	13	93			

NTA	CVW STK LEAD			ARP			CVW FALLON			COMPTUEX			RADAR MISSILE EXPEND			ARM EXPEND		
	STD	ACT		STD	ACT		STD	ACT		STD	ACT		STD	ACT		STD	ACT	
NTA 1.1.2.3.3																		
NTA 2.2.3				18	17	94	18	19	100	1	0	0						
NTA 3.1.7				17	17	14	18	19	100	1	0	0	1	0	0	2	2	100
NTA 3.2.1	1	2	100	18	17	94	18	19	100	1	0	0	1	0	0	2	2	100
NTA 3.2.2	1	2	100	18	17	94	18	19	100	1	0	0	1	0	0	2	2	100
NTA 3.2.4	1	2	100	18	17	94	18	19	100	1	0	0	1	0	0	2	2	100
NTA 3.2.5				18	17	94	18	19	100	1	0	0						
NTA 3.2.7	1	2	100	18	17	94	18	19	100	1	0	0	1	0	0			
NTA 3.2.9				18	17	94	18	19	100	1	0	0						
NTA 5.5.4				18	17	94	18	19	100	1	0	0						
NTA 6.1.2.2				18	17	94	18	19	100	1	0	0						

Note: Pf Contributor; Ef Contributor

Sample SHARP CRA Report

SHARP Readiness Reports — Main | Flights | Scheduler | Library | Reports | Setup

REPORT DATE: 07/18/2019 — REPORTING UNIT: VAW-123 — REPORTS REFRESHED: a few seconds ago — CUSTOM MATRIX: VAW VAW E-2C (HE2K) CVW 9 JAN 19 — Options

Personnel | Additional Tasks | Unit NTAs | Unit Tasks | Personnel NTAs | Personnel Tasks | Crews | Requirements | Training Progression

NTA: NTA 1.1.2.3.3 - Conduct Flight Operations — Refresh — Show Composition Slot — Export to Excel — Show Composition — Legend

Crew Number	Crew Member	Designation Group	Designation	Task % Complete	CCC 201 AIRCRAFT BASIC C...	CCC 202 SECURE / ANTI-JA...	CCC 220 DENIED ENVIRONM...	EW 204 EMCON LAUNCH AN...	MOB 202 BASIC FLIGHT OPE...	MOB 204 AIRWAYS NAVIGAT...	MOB 216 CRM / NATOPS CH...	MOB 212 DAY CV RECOVERY	MOB 210 DAY CQ	MOB 213 NIGHT CV RECOVE...	MOB 214 FORMATION FLIGHT	MOB 217 INSTRUMENT CHECK	MOB 215 EMERGENCY PRO...	MOB 205 NON PRECISION A...	MOB 206 PRECISION APPRO...	MOB 207 CASE 1/2/3 LAUNC...
1	ANDREWS	NFO	E-2C NFO Lvl 1	100%	52	88	259	273	29	N/A	389	N/A	N/A	N/A	N/A	N/A	212	N/A	N/A	N/A
	DAVIS	NFO	E-2C NFO Lvl 1	100%	49	138	300	300	26	N/A	394	N/A	N/A	N/A	N/A	N/A	211	N/A	N/A	N/A
	GINNANE	NFO	E-2C NFO Lvl 3	100%	55	129	265	272	25	N/A	394	N/A	N/A	N/A	N/A	N/A	211	N/A	N/A	N/A
	HINSON	Pilot	E-2C PILOT Lvl 1	100%	61	146	307	307	31	152	338	32	307	32	32	338	206	122	122	32
	WORTHINGTON	Pilot	E-2C PILOT Lvl 5	100%	88	178	363	363	58	178	394	88	363	88	88	394	211	178	178	88
Pool	CO	NFO	E-2C NFO Lvl 5	100%	53	88	259	259	30	N/A	311	N/A	N/A	N/A	N/A	N/A	46	N/A	N/A	N/A
	CAMPBELL	NFO	E-2C NFO Lvl 5	100%	52	97	336	274	30	N/A	283	N/A	N/A	N/A	N/A	N/A	142	N/A	N/A	N/A
	FRANKLIN	NFO	E-2C NFO Lvl 5	100%	46	136	259	274	25	N/A	389	N/A	N/A	N/A	N/A	N/A	206	N/A	N/A	N/A
	FREVOLA	NFO	E-2C NFO Lvl 2	100%	55	143	245	273	30	N/A	96	N/A	N/A	N/A	N/A	N/A	212	N/A	N/A	N/A
	HARRISON	NFO	E-2C NFO Lvl 1	100%	33	123	259	267	25	N/A	311	N/A	N/A	N/A	N/A	N/A	205	N/A	N/A	N/A
	KOVALEVICH	NFO	E-2C NFO Lvl 3	100%	42	88	259	273	16	N/A	394	N/A	N/A	N/A	N/A	N/A	211	N/A	N/A	N/A
	XO	NFO	E-2C NFO Lvl 4	100%	69	159	344	344	39	N/A	375	N/A	N/A	N/A	N/A	N/A	192	N/A	N/A	N/A
	MCCORMICK	NFO	E-2C NFO Lvl 2	100%	31	74	320	259	12	N/A	135	N/A	N/A	N/A	N/A	N/A	93	N/A	N/A	N/A
	MCINTYRE	NFO	E-2C NFO Lvl 2	100%	52	123	320	259	26	N/A	179	N/A	N/A	N/A	N/A	N/A	206	N/A	N/A	N/A
	RESAVY	NFO	E-2C NFO Lvl 5	100%	46	136	308	308	17	N/A	339	N/A	N/A	N/A	N/A	N/A	156	N/A	N/A	N/A
	BLANKENSHIP	NFO	E-2C NFO Lvl 1	100%	47	129	336	267	25	N/A	247	N/A	N/A	N/A	N/A	N/A	156	N/A	N/A	N/A
	SOUZA	NFO	E-2C NFO Lvl 1	100%	46	136	218	273	31	N/A	345	N/A	N/A	N/A	N/A	N/A	169	N/A	N/A	N/A
	WIGHTMAN	NFO	E-2C NFO Lvl 2	100%	46	121	259	274	25	N/A	277	N/A	N/A	N/A	N/A	N/A	142	N/A	N/A	N/A

Sample SHARP Crews Report

New CRA Report Format

UNCLASSIFIED

Readiness Assessment

HSC XX 12-03-2022 CVW - HSC MH-60S CVW 5 ACFT 9 Crew R+9

Submitted 12-03-2022 13:42:41

Calculated Readiness Factors

Overall TFOM = 47

NTA	NTA Description	TFOM	Pf	Ef	Training Progression
NTA 1.1.2.3.3	Conduct Flight Operations	100	100	100	91
NTA 1.1.2.4	Conduct Tactical Insertion and Extraction	31	35	89	70
NTA 1.4.6	Conduct Maritime Interception	33	39	84	67
NTA 2.2.1	Collect Target information	30	40	74	68
NTA 3.2.1.1	Attack Surface Targets	26	32	82	65
NTA 3.2.2	Attack Enemy Land Targets	32	36	88	71
NTA 4.6.5	Provide Vertical Replenishment	100	100	100	81
NTA 4.8.1	Support Peace Operations	33	33	99	54
NTA 6.2	Rescue and Recover	61	61	100	67
NTA 6.2.2.2	Perform Combat Search and Rescue (CSAR)	31	35	89	69

NTA	Skilled Crews STD	ACT		Flight Hour Execution STD	ACT		MRWMC STD	ACT		Pilots >= Level 4 STD	ACT		Pilots >= Level 3 STD	ACT	
NTA 1.1.2.3.3	9	9	100	160	160	100									
NTA 1.1.2.4	2	0	0	160	160	100	1	1	100	1	6	100	2	10	100
NTA 1.4.6	9	1	11	160	160	100	1	1	100	2	6	100	3	10	100
NTA 2.2.1	9	1	11	160	160	100									
NTA 3.2.1.1	9	0	0	160	160	100	1	1	100	2	6	100	3	10	100
NTA 3.2.2	2	0	0	160	160	100	1	1	100	1	6	100	2	10	100
NTA 4.6.5	9	9	100	160	160	100									
NTA 4.8.1	9	1	11	160	160	100									
NTA 6.2	9	5	56	160	160	100									
NTA 6.2.2.2	2	0	0	160	160	100	1	1	100	1	6	100	2	10	100

NTA	Pilots >= Level 2 STD	ACT		Pilots >= Level 1 STD	ACT		Pilots >= PR/SOF 4 STD	ACT		Pilots >= PR/SOF 3 STD	ACT		Pilots >= PR/SOF 2 STD	ACT	
NTA 1.1.2.3.3	9	18	100	18	26	100									
NTA 1.1.2.4	4	18	100	18	26	100	1	6	100	2	8	100	2	15	100
NTA 1.4.6	9	18	100	18	26	100									
NTA 2.2.1	9	18	100	18	26	100									
NTA 3.2.1.1	9	18	100	18	26	100									
NTA 3.2.2	4	18	100	18	26	100									
NTA 4.6.5	9	18	100	18	26	100									
NTA 4.8.1	9	18	100	18	26	100									
NTA 6.2	9	18	100	18	26	100									
NTA 6.2.2.2	4	18	100	18	26	100	1	6	100	2	8	100	2	15	100

NTA	Pilots >= PR/SOF 1 STD	ACT		Mountain Flying School Pilots STD	ACT		Aerial Gunnery Instructor (AGI) STD	ACT		Aircrew >= Level 3 STD	ACT		Aircrew >= Level 2 STD	ACT	
NTA 1.1.2.3.3													9	16	100
NTA 1.1.2.4	4	19	100	2	5	100	2	4	100	1	8	100	2	16	100
NTA 1.4.6							2	4	100	1	8	100	18	16	89
NTA 2.2.1										1	8	100	18	16	89
NTA 3.2.1.1							2	4	100	1	8	100	18	16	89
NTA 3.2.2							2	4	100	1	8	100	4	16	100
NTA 4.6.5													9	16	100
NTA 4.8.1													18	16	89
NTA 6.2													9	16	100
NTA 6.2.2.2	4	19	100	2	5	100	2	4	100	3	[illegible]	[illegible]	4	16	100

NTA	Aerial Gunner (AG) STD	ACT		Aircrew >= Level 1 STD	ACT		Aircrew >= PR/SOF 3 STD	ACT		Mountain Flying School Aircrewmen STD	ACT		HARP – COMPLETE STD	ACT	
NTA 1.1.2.3.3				18	24	100									
NTA 1.1.2.4	4	22	100	18	24	100	2	9	100	1	1	100	36	37	100
NTA 1.4.6	18	22	100	18	24	100							36	37	100
NTA 2.2.1				18	24	100							36	37	100
NTA 3.2.1.1	18	22	100	18	24	100							36	37	100
NTA 3.2.2	4	22	100	18	24	100							36	37	100
NTA 4.6.5				18	24	100									
NTA 4.8.1	18	22	100	18	24	100							36	37	100
NTA 6.2				18	24	100									
NTA 6.2.2.2	4	22	100	18	24	100	2	9	100	1	1	100	36	37	100

NTA	CVW FALLON – COMPLETE STD	ACT		COMPTUEX STD	ACT		Pilot with LIVE EW SACT Completed STD	ACT		Pilot with Live 20-mm Expended STD	ACT		Pilot with Live APKWS Expended STD	ACT	
NTA 1.1.2.3.3															
NTA 1.1.2.4	36	0	0	1	0	0	2	1	50						
NTA 1.4.6	36	0	0	1	0	0	2	1	50						
NTA 2.2.1	36	0	0	1	0	0	2	1	50						
NTA 3.2.1.1	36	0	0	1	0	0	2	1	50	7	5	71	7	3	43
NTA 3.2.2	36	0	0	1	0	0	2	1	50	2	5	100	2	3	100
NTA 4.6.5															
NTA 4.8.1															
NTA 6.2															
NTA 6.2.2.2	36	0	0	1	0	0	2	1	50						

NTA	Pilot with Live Hellfire Expended STD	ACT		Pilot with Live UGR Expended STD	ACT		AG Aircrewmen with GAU-21 Qualification STD	ACT		AG Aircrewmen with M-240 Qualification STD	ACT	
NTA 1.1.2.3.3												
NTA 1.1.2.4										4	22	100
NTA 1.4.6										14	22	100
NTA 2.2.1												
NTA 3.2.1.1	7	6	86	7	6	86	14	22	100	14	22	100
NTA 3.2.2	2	6	100	2	6	100	4	22	100	4	22	100
NTA 4.6.5												
NTA 4.8.1										14	22	100
NTA 6.2												
NTA 6.2.2.2										4	22	100

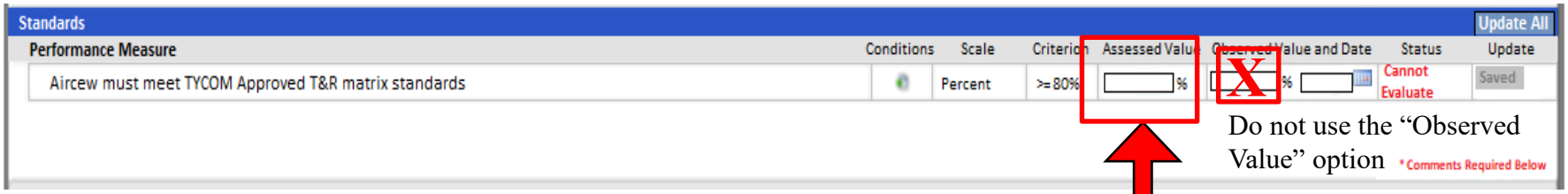
Overall and MET TFOM scores calculated

Training Progression score

Partial credit shown for each Ef item

ARP and AWF display number of aircrew complete

T&R - Calculations for DRRS-S



$$TFOM = (P_f \times E_f)/100$$

- DRRS-S has a training standard that is based on achieving deployed TFOM (80 or higher) for each MET
- The MET TFOM score from the CRA report provides the input for the DRRS-S training standard

T&R Matrix Waivers

- A waiver shall be submitted as outlined below when the following squadron/detachment requirements have not been completed
  - When ARP is not completed per the NAWDC or type wing ARP instruction
  - When CVW Fallon is not completed per the NAWDC required syllabus
  - When a required certification event is not completed
- CVW Commanders shall initiate waiver requests for squadrons under their operational control
- Type Wing Commanders shall initiate waiver requests for squadrons not attached to a CVW and all detachments under their administrative control
- Waiver format example included in T&R instruction
- Waivers are submitted to the CNAP or CNAL N40 for approval
- **Expect CNAP or CNAL to deny ordnance waivers to highlight inventory and funding shortfalls to higher authorities**
- Explaining an inventory shortfall in DRRS-S Comments is the preferred method of conveying impacts to readiness.

TFOM Goals – Phase II

Sample
VFA FA-18E
10 PAA

Mission Essential Tasks		Squadron Requirements (E_r): Training Hour Execution (Note 1)	Designations (Note 2): ≥ L4 Pilots	≥ L3 Pilots	≥ L2 Pilots	≥ L1 Pilots	JHMCS Qual - Pilots	CVW STK LEAD	FRTP Events (Note 3): SFARP	CVW FALLON	COMPTUEX	High Training Value (HTV) Ordnance (Note 4): 20MM EXPEND	LG ROUND PER CREW ONBOARD	Mk-80 LIVE PER CREW ONBOARD	PILOTS WITH HVY LGB EXPEND	PILOTS WITH GPS-GUIDED BOMB EXPEND	PILOTS WITH TOWED DECOY EXPEND	End-to-End (E2E) Ordnance (Notes 5, 6): IR MSL EXPEND	RDR MSL EXPEND	JSOW EXPEND	HARM / AARGM EXPEND	MAVERICK EXPEND	REQUIRED SKILLED CREWS
NTA 1.1.2.3.3	Conduct Flight Operations	SAT	5	7	12	15	12																15
NTA 3.2.1.1	Attack Surface Targets	SAT	5	7	12	15	12	3	15	15	SAT												15
NTA 3.2.2	Attack Enemy Land Targets	SAT	5	7	12	15	12	3	15	15	SAT	1500	10	4	12	12						1	15
NTA 3.2.3	Attack Enemy Aircraft and Missiles (Offensive Counter Air)	SAT	5	7	12	15	12	3	15	15	SAT						6	2	2				15
NTA 3.2.4	Suppress Enemy Air Defenses (SEAD)	SAT	5	7	12	15	12		15	15	SAT									1	1		15
NTA 3.2.5	Conduct Electronic Attack	SAT	5	7	12	15	12		15	15	SAT												15
NTA 3.2.6	Interdict Enemy Operational Forces and Targets	SAT	5	7	12	15	12	3	15	15	SAT												15
NTA 3.2.7	Intercept, Engage, Neutralize Enemy Aircraft and Missiles (Defensive Counter Air)	SAT	5	7	12	15	12	3	15	15	SAT						6	2	2				15
NTA 4.2.1.2	Conduct Aerial Refueling	SAT	5	7	12	15	12			15	SAT												6
NTA 6.2	Rescue and Recover	SAT	5	7	12	15	12			15	SAT	1500											15

Mission Essential Tasks	Flight Tasks (P_r): MOB 101 BASIC FLIGHT / CURRENCY / FCF	MOB 102 NVD / NVCD	MOB 103 FCLP	MOB 104 CVN RECOVERY	MOB 105 EMERGENCY PROCEDURES	MOB 106 NATOPS CHECK / OCF / CRM	MOB 107 INSTRUMENT CHECK	MOB 401 AERIAL REFUELING	MOB 402 ARS / TANKER OPERATIONS	AAW 301 BFM	AAW 302 LUE A/A FUNDAMENTALS (AAW 302a/302b) (NOTE 7)	AAW 303 DCA/OCA PART-TASK TRAINING	AAW 304 DIVISION DCA/OCA WITH 4+ LIVE RED AIR	ASU 301 ASUW FUNDAMENTALS / SSC	EW 301 SEAD	STW 301 A/S FUNDAMENTALS	STW 302 SACT	STW 303 LAND STAND-OFF / SPECIALIZED A/S WEAPONS	STW 304 MARITIME STAND-OFF	STW 305 CLOSE AIR SUPPORT (CAS) / FAC(A) / AR / SCAR	STW 306 AIR INTERDICTION / PRE-PLANNED STRIKE	STW 307 LFE (STW 307a/307b/307c) (NOTE 7)	CCC 501 OINT / MULTI-NATIONAL EXERCISES / OPERATIONS	CCC 502 5TH GENERATION INTEGRATION	TFOM Goals (End of FRTP Phase): Maintenance	Basic	Advanced	Integrated	Sustainment
NTA 1.1.2.3.3	X	X	X	X	X	X	X	X																					
NTA 3.2.1.1	X	X			X	X	X							X		X	X		X			X	X						
NTA 3.2.2	X	X			X	X	X									X	X	X		X	X	X							
NTA 3.2.3	X	X			X	X	X			X	X	X	X									X	X	X					
NTA 3.2.4	X	X			X	X	X								X		X	X						X					
NTA 3.2.5	X	X			X	X	X										X					X							
NTA 3.2.6	X	X			X	X	X									X	X	X	X	X	X	X	X						
NTA 3.2.7	X	X			X	X	X			X	X	X	X									X	X	X					
NTA 4.2.1.2	X	X			X	X	X	X	X																				
NTA 6.2	X	X			X	X	X									X	X				X	X							

	MOB 101	MOB 102	MOB 103	MOB 104	MOB 105	MOB 106	MOB 107	MOB 401	MOB 402	AAW 301	AAW 302	AAW 303	AAW 304	ASU 301	EW 301	STW 301	STW 302	STW 303	STW 304	STW 305	STW 306	STW 307	CCC 501	CCC 502	
Periodicity	60	60	365	180	270	396	396	180	180	180	180	90	365	365	365	180	180	365	365	180	365	270	540	365	
Flight Only Iterations - Pilot	8	2	4	6	0	0	0	3	3	8	4	0	4	2	4	4	4	4	4	4	4	4	1	1	
Flight Only Hours per Task	1.5	1.5	1.0	1.0	0.0	0.0	0.0	1.0	1.0	1.5	1.5	0.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	
Sim or Flight Iterations - Pilot	0	0	0	0	1	0	0	0	0	0	4	10	0	1	4	4	2	2	2	4	4	3	1	2	
Sim or Flight Hours per Task	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Sim Only Iterations - Pilot	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Sim Only Hours per Task	0.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Monthly Flight Only Hours (Pilot)	6.0	1.5	0.3	1.0	0.0	0.0	0.0	0.5	0.5	2.0	1.0	0.0	0.5	0.2	0.5	1.0	1.0	0.5	0.5	1.0	0.5	0.7	0.1	0.1	19.
Total Monthly Sim or Flight Hours (Pilot)	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.7	3.3	0.0	0.1	0.3	0.7	0.3	0.2	0.2	0.7	0.3	0.3	0.1	0.2	7.
Total Monthly Sim Only Hours (Pilot)	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0

100% T&R Hrs [illegible]
Sim Fidelity [illegible]

Readiness Standards VFA FA-18E 10 Plane ARS
PAA = 10
Crew/Seat Ratio = 1.50
Crews = 15
ESL = 1.5
100% T&R Matrix = 27.0
Sim Fidelity % = 28.0%
Crew composition: 1 Pilot

End of Phase TFOM goals

Keys to Success

- OPS needs to have a plan to complete training and execute ordnance expenditures for the entire FRTP
- Understand the expectations throughout your FRTP cycle
- Quarterly flight hour funding is tied to the expected level of readiness - Fly your hours to achieve expected readiness
- The resourcing plan is designed to get you to at least to a minimum TFOM score of 80 prior to deployment
- Reference SHARP reports to explain TFOM degradations in DRRS-S Comments
- SHARP Management is critical
  - Logging matters! Especially in skills that cross multiple NTAs
  - Log your simulators – they count towards readiness and training hour execution
  - Training Officer/AOPS must be proficient in SHARP
  - T&R and ACTC should be the primary flight schedule drivers

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QUESTIONS?