



DEPARTMENT OF THE NAVY  
COMMANDER NAVAL AIR FORCES  
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COMNAVAIRFORINST 3510.11C  
N40  
18 DEC 2018

COMNAVAIRFOR INSTRUCTION 3510.11C

From: Commander, Naval Air Forces

Subj: TYPE/MODEL/SERIES AND AIRCRAFT CARRIER READINESS AND RESOURCE  
STANDARDS FOR NAVAL AIR FORCE UNITS

Ref: (a) OPNAVINST 3000.15  
(b) COMUSFLTFORCOM/COMPACFLTINST 3000.15  
(c) COMNAVAIRPACINST/COMNAVAIRLANTINST 3500.1  
(d) COMNAVAIRPAC/COMNAVAIRLANTINST 3500.38  
(e) COMNAVAIRFORINST 4790.2C  
(f) COMPACFLT/COMUSFLTFORCOMINST 3501.3D  
(g) SECDEF MEMORANDUM 17 SEP 2018  
(h) COMNAVAIRFORINST 3500.20D

Encl: (1) HM Readiness Standards  
(2) VAW Readiness Standards  
(3) VRC Readiness Standards  
(4) VAQ (EA-18G) Readiness Standards  
(5) HSM (SH-60R) Readiness Standards  
(6) HSC (MH-60S) Readiness Standards  
(7) HSC (H-60F/H) Readiness Standards  
(8) VFA (F/A-18A-D) Readiness Standards  
(9) VFA (F/A-18E) Readiness Standards  
(10) VFA (F/A-18F) Readiness Standards  
(11) VFA (F-35C) Readiness Standards  
(12) VFC (F-5) Readiness Standards  
(13) VFC (F/A-18) Readiness Standards  
(14) VP Readiness Standards  
(15) VPU Readiness Standards  
(16) VQ(P) Readiness Standards  
(17) VUP (MQ-4C) Readiness Standards  
(18) VQ(T) Readiness Standards  
(19) HSC (MQ-8B) Readiness Standards  
(20) VR Readiness Standards  
(21) NAWDC Readiness Standards  
(22) CVN Readiness Standards

Appendix A: T/M/S Readiness Standards Format Description  
Appendix B: Carrier Readiness Standards Description

Appendix C: Terms and Definitions

Appendix D: Readiness Standards Enclosure Change Request Form

1. Purpose. This instruction promulgates individual type/model/series (T/M/S) and aircraft carrier (CVN) readiness and flight line standards for units of the Naval Air Forces. Units require specific training at specified times for deployment proficiency. To fulfill this goal, units require the availability of qualified personnel, mission essential equipment and mission capable (MC) aircraft to accomplish training and operational events. This instruction provides a list of minimum standards for aircraft T/M/S and CVNs. Specific descriptions of the number of aircraft, amount and type of mission equipment, aircrew and watch-team make-up, and flight hours are delineated within each standard.

2. Cancellation. COMNAVAIRPAC/COMNAVAIRLANTINST 3510.11C.

3. Discussion. This instruction sets forth comprehensive monthly requirements for CVNs, aircraft, mission equipment, aircrew manning, flying hour, and training readiness for Naval Aviation units as they progress through the OFRP. This document seeks to combine these various requirements into a single source for type commanders (TYCOM), type wings, and operational units to reference for planning purposes. Requirements are established using guidance in references (a) through (h). References (a) and (b) describe the overall framework of the OFRP, the construct under which units will attain phased readiness, operational scheduling cycles, and roles and responsibilities in implementing the OFRP. Reference (c) outlines specific training requirements, aircrew manning levels, and resource requirement summaries related to an aviation unit's phase in deployment cycle. Each T/M/S standard in the enclosures is designed to support the execution of the appropriate training and readiness (T&R) matrix described in reference (c) in support of the OFRP readiness profile established in reference (b). Reference (d) establishes readiness reporting procedures. Reference (e) describes the construction of the mission-essential subsystem matrices (MESM) which describes the mission system groupings within the readiness standards. Reference (f) is the fleet training continuum instruction outlining the overall process of achieving deployed readiness by employing a sequenced, integrated, building block approach. Reference (g) references material readiness targets for Services to achieve by the end of FY-19. Reference (h) is the CVN training manual (TRAMAN). The readiness standards enclosures to this instruction may be found on the current readiness sharepoint portal located at [https://usff.navy.deps.mil/sites/nae/current\\_readiness/CR\\_Standards/SitePages/Home2.aspx](https://usff.navy.deps.mil/sites/nae/current_readiness/CR_Standards/SitePages/Home2.aspx). Appendices A and B provide a detailed description of the readiness standards constructs. Appendix C provides general terms and definitions and an overview of mission capable (MC) and mission systems and sets. Appendix D provides documentation for recommended changes to the enclosures of this instruction. The current readiness cross functional team (CR CFT), led by Commander, Naval Air Force, Atlantic (COMNAVAIRLANT), is charged with developing, maintaining, monitoring, and reporting metrics based on the CVN and T/M/S readiness standards.

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#### 4. Methodology

a. General Readiness Standards Construct. Each readiness standard consists of individual columns describing the various conditions of readiness and associated required assets and personnel. Columns are labeled using R+, D+, or A+, where R+ represents a non-deployed status, D+ represents a deployed month, and A+ represents each month for a shore-based (non-deployable) unit. Months are depicted sequentially and a nominal OFRP profile (and related readiness standards) will identify readiness and resource requirements aligned to the OFRP phases, maintenance, basic, integrated/advanced, and sustainment, depicting an OFRP cycle (note that most units do not adhere to the nominal profile exactly). See appendices A and B for detailed definitions of the elements that make up the readiness standards.

b. Overall OFRP Readiness Expectations. The goal of the stakeholders in the CR CFT is to assist each unit, via the type wing, in attaining the required level of training readiness at each milestone event in their execution of the OFRP. To accomplish this, each unit (CVN, squadron, or detachment) is assigned an “R+ month” corresponding to the stated readiness expectations and associated resource requirements. R+ month data is published by Commander, Naval Air Force, U.S. Pacific Fleet (COMNAVAIRPAC) N40 on the COMNAVAIRPAC secure internet protocol router sharepoint under the “N40 force readiness” directorate. Readiness expectation profiles and resources requirements are published in enclosures of this instruction.

c. Personnel Readiness. Personnel standards are established for the following areas: rating, Navy Enlisted Classification (NEC), training and education, and officer. The rating standards identify the skills and experience requirements that were approved by fleet integration executive panel (FIEP).

(1) Aviation Units: Rating and NEC Fit requirements are established and approved by the FIEP. Carrier-based and forward deployed naval forces (FDFNF) units are assessed at 92 percent rating fit and 95 percent rating fill. All other units are assessed at 90 percent rating fit and fill. Current readiness standards are tied to these measures.

(2) CVN units. Rating standards represent a percentage of P9BA (billets authorized 9 months from now) within ratings and pay bands. The percentage is 90 percent (92 percent for OFRP) for continental United States (CONUS) CVNs and 95 percent for the FDFNF CVN. CVN P9BA numbers are fairly stable with minor changes over time due to issues such as people skill sets associated with equipment obsolescence, legacy, and modernization. Pay band is broken down by E1-E4 = apprentice, E5-E6 = journeyman, and E7-E9 = supervisor. Using the machinist's mate (MM) rating as an example, if P9BA calls for 10 MMs at the supervisor level, 40 MMs at the journeyman level, and 100 MMs at the apprentice level, then the entitlement is nine supervisors, 36 journeymen, and 90 apprentices. In situations where the P9BA requirements do not allow for a whole number derivation for 90 or 95 percent, then the standard is one of one, two of two, two of three, three of four, three of five, four of six, etc. NEC standards of 70 percent are based on Navy Enlisted Occupational Classification System (NEOCS) manual rating and pay band prerequisites and requirements. CVN critical NEC standard of 54 percent apply to approximately 92 NECs considered critical to mission area execution. Training and education

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standards are based on rules used to develop Defense Readiness Reporting System Navy (DRRS-N) personnel figure of merit. The percentage is 80 percent and is based on NEC, CINs courses, and F, T, D, etc., schools. Officer standards are 90 percent of BA and based on officer designator.

d. Equipment Readiness. For aviation units, equipment readiness is based on MC aircraft availability. This is calculated using the availability of equipment versus OFRP phase minimum standards for that equipment. Values in the applicable standard are compared to the actual data collected for MC and mission systems and Sets on a monthly basis to determine actual equipment availability. For CVNs, the ready for tasking-equipment (RFT-E) metric reports the phased-based material readiness for Nimitz Class CVNs. Ford Class material readiness is under development and will be added at a later date. A total of 71 systems, components, and/or capabilities, referred to as “elements” are measured and recorded daily for each Nimitz Class CVN not in Chief of Naval Operations (CNO) availability. Carrier incremental availabilities (CIAs) are an exception to this rule because of their shorter duration. Of the 71 monitored elements, 61 are considered mission essential with certain elements designated as “critical” to a carrier’s material readiness. See appendices A and B for an overview of MC and mission systems and sets and CVN equipment readiness descriptions.

e. Supply Readiness (CVN Only). The expected supply readiness is determined by 18 mission areas that fall within either repair parts or provisions. Range and depth of repair parts encompasses 16 mission areas; provisions for jet propellant fuel and food encompass the remaining two mission areas. For CVNs, entitlements for each phase of the OFRP cycle (maintenance, basic, integrated, sustainment) are depicted in the enclosures of this instruction.

f. Training Readiness. References (b) and (c) discuss readiness expectations that the minimum standards set forth by this instruction’s enclosures support. For aviation units, expected levels of overall training readiness for a unit progressing through the OFRP, or units with level readiness expectations are described in the enclosures of this instruction. Training readiness expectations form the “glideslope” COs should be aware of, and strive to meet, throughout the OFRP cycle. The training readiness assessment compares actual training readiness values to the periodic training readiness expectation to determine if a unit is on “glideslope”. Minimum standards for various levels of air combat training continuum (ACTC) are aligned to the progression of training readiness expectations depicted in the enclosures of this instruction. Training readiness expectations are also aligned to the achievement of unit level training events such as advanced readiness program (ARP), comprehensive training unit exercise (COMPTUEX/C2X), and joint task force exercise (JTFEX). Unit level training is indirectly measured through the training readiness assessment. For CVNs, watch-team and unit level training are contributors to training readiness. Watch team readiness is aligned to specific events in the CV-TRAMAN and is measured based on performance and experience. For CVNs, minimum standards for each phase of the OFRP cycle are depicted in the enclosures of this instruction.

g. Ordnance Readiness (CVN Only). Ordnance readiness is determined by the quantity of certain key high valued items for both the CVN and aviation assets, with consideration of a

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weighting factor for each ordnance item. Reference (b) delineates the quantities, by percentage, that should be onboard for each FRTP phase. Specific minimum standards are depicted in the enclosures of this instruction for each phase of the OFRP cycle.

#### 5. Readiness Standards Review Process

a. Review. A review of the readiness standards should be conducted no less frequently than once a year, coincident with the squadron training matrix review and validation process outlined in references (c) and (d) whenever possible. The purpose of the review is to ensure Readiness Standards conform to changes made within guiding documents upon which readiness standards are founded. These include, but are not limited to:

(1) Community/CVN Required Operational Capability/Projected Operational Environment (ROC/POE) changes.

(2) Changes in ACTC qualification requirements.

(3) Flying Hour Program changes.

(4) MESM changes.

(5) CV TRAMAN changes.

Additionally, TYCOMs should periodically assess the readiness standards for errors and/or omissions which require corrections. Changes to any of these items may have an impact on all the others and the readiness standards. When changes are made, it is critical to ensure each of these are aligned and the results are documented in the readiness standards.

#### 6. Readiness Standards Change and Approval Process

a. Changes to the basic instruction must be carried out as described below in section 7. Changes to the individual readiness standards enclosures will be approved by the current readiness CFT director and published via the current readiness standards site on the current readiness sharepoint portal. The COMNAVAIRLANT N008, current readiness CFT program director has approval authority over all recommendations which do not affect flying hour program resources. The COMNAVAIRLANT N007, readiness standards and policy (RS&P) coordinator is responsible for coordinating changes, maintaining and publishing the readiness standards enclosures on the sharepoint portal. Recommended changes to the readiness standards must be submitted as follows:

(1) Document recommended changes using appendix D. An electronic copy of appendix D is posted on the current readiness sharepoint portal at [https://usff.navy.deps.mil/sites/nae/current\\_readiness/CR\\_Standards/SitePages/Home2.aspx](https://usff.navy.deps.mil/sites/nae/current_readiness/CR_Standards/SitePages/Home2.aspx). Include an electronic copy of the affected readiness standards with highlighted changes.

(2) When developing changes to the readiness standards, the requestor must work with the individual Type Wing class desks, training, and operations officers, the COMNAVAIRLANT and COMNAVAIRPAC N40 training and readiness offices and flying hour program managers, and any other concerned parties (e.g., reserve force (RESFOR) staffs)). Similarly, changes to CVN readiness standards must be reviewed by the carrier readiness team (CRT) executive steering committee with assistance from COMNAVAIRLANT N7, CV-SHARP program manager, and applicable subject matter experts.

(3) Change recommendations are sent to the lead type wing commander or the CRT lead as appropriate. The lead type wing commander or CRT lead must validate and forward the recommended changes to COMNAVAIRLANT N007.

(4) COMNAVAIRLANT N007 will review the change recommendations and provide them to the current readiness program director for approval, or recommend corrections to the proposed change and forward back to the lead type wing commander with rationale for corrections and suggested improvements.

7. Action. COMNAVAIRPAC and COMNAVAIRLANT echelon commands are responsible for the following actions:

a. Current readiness CFT (COMNAVAIRLANT)

(1) COMNAVAIRLANT N008. Approve changes to the enclosures and appendices in this instruction.

(2) COMNAVAIRLANT N007. Maintain and revise this instruction as required. This instruction, enclosures, and appendices must be administratively coordinated as follows:

(a) Revisions to the main body of this instruction must be submitted to the COMNAVAIRPAC and COMNAVAIRLANT chiefs of staff for review.

(b) Submit revisions to enclosures or appendices to COMNAVAIRLANT N008 for approval. Once approved, post the update to the current readiness sharepoint portal.

(3) Fleet Analysis Support Team (FAST). Assist the type wing commander with periodic reviews of the readiness standards associated with the T/M/S they support. Additionally, the FAST will assist COMNAVAIRLANT N007 with a review of this instruction.

(4) COMNAVAIRPAC/COMNAVAIRLANT N7 Training Managers. Assist the CRT lead with periodic reviews of the CVN readiness standards. Assist COMNAVAIRLANT N007 with a review of this instruction.

b. Type Wing Commander/CRT Lead

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(1) Ensure standards are current and relevant. No less than annually, convene working groups to review the readiness standards associated with their T/M/S or CVNs. Ensure changes to the readiness standards are coordinated through the flight hour program manager, T/M/S class desk, and N7 training managers as appropriate. Submit change proposals as described in section 6 of this instruction.

(2) Support training and maintenance plans to achieve specified readiness goals outlined in the applicable readiness standards.

c. COs and Detachment Officers-in-Charge

(1) COs must use the appropriate readiness standards as a single source document for minimum requirements associated with training readiness, sortie, flight hours, aircrew, and aircraft.

(2) Per references (c) and (d), plan, develop, and execute training plans to achieve the prescribed level of readiness using the appropriate readiness standards enclosure.

(3) Submit change proposals as described in section 6 of this instruction.

8. Change Recommendations. COMNAVAIRLANT N007, assisted by the fleet analysis support team or the N7 training managers, will conduct periodic reviews of this instruction. CVN, carrier air wing (CVW), type wing, and squadron COs are encouraged to submit change recommendations for future revisions of this instruction. Any discrepancies noted should be reported to COMNAVAIRLANT N007 for resolution. Where disagreement is found to exist between this instruction and other wing, squadron, or unit documents, the provisions of this instruction must take precedence.

9. Records Management

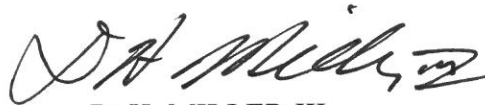
a. Records created as a result of this instruction, regardless of format or media, must be maintained and dispositioned for the standard subject identification codes (SSIC) 1000, 2000, and 4000 through 13000 series per the records disposition schedules located on the Department of the Navy/Assistant for Administration (DON/AA), Directives and Records Management Division (DRMD) portal page at <https://portal.secnav.navy.mil/orgs/DUSNM/DONAA/DRM/Records-and-Information-Management/Approved%20Record%20Schedules/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 notice or the records disposition schedules, please contact your local records manager or the DON/AA DRMD program office.

10. Review and Effective Date. Per OPNAVINST 5215.17A, COMNAVAIRPAC and COMNAVAIRLANT N40 will review this instruction annually around the anniversary of its

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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 10 years after effective date unless reissued or canceled prior to 10-year anniversary date, or an extension has been granted.



D. H. MILLER III

Releasibility 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>



APPENDIX A

T/M/S READINESS STANDARDS FORMAT DESCRIPTION

- 1 This enclosure describes the current readiness standards page layout, definitions, and formulation.
2. Readiness Standards Overview. Current readiness standards characterize phase-based and level-readiness goals, as well as standards for flight hours, aircraft, and aircrew manning in order to support the OFRP. Where OFRP phased-based readiness does not apply, readiness standards will represent the required readiness goals. Readiness standards have a common basic methodology for calculating standards. Each readiness standard is unique in that they are based on the number of authorized aircraft and combat crew requirements as described in the appropriate ROC/POE and Commander, Naval Air Forces (COMNAVAIRFOR) readiness expectations. Each T/M/S may have several readiness standards configurations depicting varying authorized aircraft requirements and Combat Crew compliments.

a. The readiness standards use the OFRP phases as a basis for construction. Four major phases constitute the OFRP cycle as described in references (a) and (b). These phases are:

- (1) Maintenance Phase.
- (2) Basic Phase (Unit-Level Training).
- (3) Integrated/Advanced Phase.
- (4) Sustainment Phase.

b. The process of progressive training as required by OFRP is defined in reference (c). The execution of the training and readiness model for each T/M/S is geared toward creating major combat operation (MCO) ready units. To differentiate between units in the sustainment phase which are deployed, current readiness employs a phase designated as “deploy phase.” Certain units do not adhere to an OFRP schedule and are differentiated from OFRP based units through the term “other.” This term includes, but is not limited to, fleet replacement squadrons (FRS) and Chief of Naval Air Training (CNATRA) squadrons. Current Readiness Standards will use the following phase terminology:

- (1) Maintenance Phase.
- (2) Basic Phase.
- (3) Integrated Phase/Advanced Phase.
- (4) Sustainment Phase.

(5) Deploy Phase.

(6) Other.

c. Not all activities require the use of every phase and not all units' training and deployment schedules conform to an OFRP schedule (e.g., FDNF). Each T/M/S will construct a readiness standard profile containing applicable phases.

d. Each readiness standard consists of individual monthly columns describing the expected training readiness demanded for that month and resources required to produce the training readiness rating. Columns are labeled using 'R+', 'D+', or 'A+' where 'R' represents a non-deployed status, 'D' a deployed status, and 'A' represents shore based unit requirements (FRS, Adversary, etc.). The labels and placement of the readiness standard columns do not necessarily suggest that a unit will step through each readiness month. A unit may repeat a month many times and skip others within their own individual FRTTP cycle.

e. Each readiness standard explicitly describes the flight hour funding required to produce the required training readiness rating in a given month. This funding is described as a programmed percentage of 100 percent training hours.

3. Readiness Standard File Format. Readiness standards and related elements are microsoft excel spreadsheets containing the following elements:

a. Inventory. This tab contains an inventory of all tabs in the file and hyperlinks to each tab and important information within the tabs.

b. Log. This tab contains a record of changes.

c. Readiness Standards. Each file contains tabs for each aircraft and aircrew configuration required to represent the configuration of the units represented in the ROC/POE, or special case configurations required by the T/M/S. The content of the standard is described in paragraph 4 below.

d. Mission System to Mission Essential Tasks (MET) Matrix. These tabs outline METs which require aircraft and mission system support and their corresponding systems. This matrix is used to align systems to NTAs and capability areas in DRRS-N AMFOM.

e. Mission Systems. This tab contains the mission system groups and corresponding components within the group. It is built from the MESM for the T/M/S and is used to populate mission system grouping items in the Aviation Management Supply and Readiness Reporting (AMSRR) system.

4. Readiness Standard Elements. Readiness standards are comprised of six elements: resource summary, OFRP phase and month, training resource elements, aircraft standards, aircrew

manning and crews and DRRS-N AMFOM standards. Where it applies, values described in this section are derived from authoritative source documents. See each definition for source document information.

a. Resource Summary. The resource summary is a set of entering arguments extracted from guiding source documents. They are used in conjunction with the monthly “training readiness elements” values to form the basis for “flying hours”, “simulator hours”, and “aircraft standards” values.

(1) Primary Aircraft Authorization (PAA). Defined by the appropriate ROC/POE. Aircraft authorized to a unit for performance of its operational mission. The primary authorization forms the basis for the allocation of operation resources to include manpower, support equipment, and flying hour funds. This number is used as the basis for the “flightline %” calculations.

(2) Crews. The maximum number of crews authorized as derived from the appropriate ROC/POE and reference (c).

(3) Equivalent Sortie Length (ESL). Developed individually for each T/M/S and is the nominal duration of a single training sortie. ESL is defined in the T/M/S specific training and readiness (T&R) matrix enclosure of reference (c).

(4) 100% T&R Matrix. Total apportioned hours-per-crew per-month (H/C/M). For United States Navy units, this is defined in the T/M/S specific Resource Summary page of reference (c).

(5) 100% Training Hours. A value calculated in the readiness standard. This represents the maximum monthly training flight hours. Formula: (crews x 100% T&R matrix).

(6) 100% Training Sorties. A value calculated in the readiness standard. This represents the maximum monthly training sorties. Formula: (100% training hours/ESL).

(7) Ashore Support Hours and Afloat Support Hours. These values are negotiated between the TYCOM and respective T/M/S type wing. Mission essential support hours (MESH) are not required by T&R but necessary to operate. This includes, but is not limited to, all hours flown in support of functional check flights (FCF), plane guard, and tanking or surveillance mission requirements.

(8) Simulator Support Hours. Derived from the COMNAVAIRPAC Naval Aviation Simulator Master Plan (NASMP) and the simulator roadmap. Hours which should be executed in a simulator, in addition to the flying hours, in order to support unit training requirements.

(9) Tactical Hard Deck. The flight hour funding percentage which results in the minimum safe H/C/M.

(10) Simulator Fidelity %. Derived from the T&R matrices of reference (c). Average percentage of a community's T&R matrix flight hours that can be flown in a simulator.

b. OFRP Phase and Month. This section outlines the month-by-month phase description and the timing for key readiness events throughout the OFRP.

(1) OFRP Mode. Identifies the specific phase of the OFRP for groupings of months.

(2) R+ Month. Contains a sequential month type identifier, 'R+' (readiness), 'D+' (dDeployed) or 'A+' (shore units) and a numerical month identifier (e.g., 1-36). Used as lookup key in the current readiness database.

(3) OFRP. Used to programmatically identify an individual column within the matrix.

(4) Mission. This contains a description of the OFRP month which can include the phase or actual event such as POM or COMPTUEX/C2X. Afloat Months are annotated here to identify Afloat Support Hour requirements.

c. Training Resource Elements.

(1) Average Training Readiness (ATR) Standard. These values are historical averages utilized by CR as a monitor tool of overall training readiness units should achieve given the monthly flying hour funding, scheduled training evolutions, and expected aircrew manning requirements in terms of the DRRS-N. These values include the Training Readiness Standard and upper and lower control limits.

(2) % of T&R Matrix. These values are negotiated between the TYCOM and T/M/S type wing and describe the percentage of flying hour funding required, expressed as a percentage of the "100% T&R matrix" value.

(3) Training Sortie Standard. A value calculated in the readiness standard. Represents the number of training sorties required for the month. Formula: (100% training sorties x % of T&R matrix).

(4) Training Hours Standard. A value calculated in the readiness standard. Monthly training hours required to complete all training and deadness requirements. Formula: (ESL x training sortie standard).

(5) Ashore Support Hours. Each squadron is entitled to FCF support hours regardless of their embarked or deployed status.

(6) Afloat Support Hours. Granted during months when the squadron is expected to be embarked in support of events like tailored ships' training availability (TSTA) final evaluation problem (FEP), COMPTUEX, JTFEX, fleet battle problem (FBP), and when deployed.

(7) Total Hours Standard. A value calculated in the readiness standard. The monthly flight hours required to support the training readiness standard and training sorties. This includes FCF and ashore support hours. Formula:  $((\text{training sortie standard} \times \text{ESL}) + \text{support hours})$ .

(8) Simulator Contribution. A value calculated in the readiness standard. Training flight hours that can be or should be flown in a simulator. There are many different kinds of simulators and all contribute to the generation of readiness. This simulator contribution captures the contribution to training flight hour requirements only. These hours are calculated for any month where a squadron is predicted to be at home station. Formula: minimum of  $(\text{training hours standard} \times \text{sim fidelity } \%)$  or  $(\text{training hours standard} - (100\% \text{ training hours} \times \text{tactical hard deck } \%))$ .

(9) Allocated Flight Hours. A value calculated in the readiness standard. Flight hours granted to a squadron. Formula:  $(\text{total hours standard} - \text{simulator contribution})$ .

(10) Simulator Support Hours. Hours executed in a simulator in addition to the total hours standard T&R baseline in order to support unit training requirements. Simulator contribution should not be confused with simulator contribution hours. They are separate entities. Simulator contribution represents those flying hours that can be accomplished in a simulator, while simulator support hours are in addition to total flying hours or total flying hours accomplished in the simulator. Examples of simulator support hours are red air, air combat training continuum (ACTC) syllabus events, Strike Fighter Advanced Readiness Program (SFARP) /EWARP/HARP/Advanced Readiness Program (ARP) events, PMCF/FCF qualification, extra practice, etc. Formula:  $(\text{total hours standard} - \text{simulator contribution})$ .

#### d. Aircraft Standards

(1) Flightline Percentage. This is a percentage of PAA required on a unit's flightline to achieve its training or mission requirements during each phase of the OFRP. A unit must never be limited by these tiers and TYCOMs must strive to equip all units with 100 percent of ROC/POE PAA levels at all time if resources permit. Per OFRP phase, flightline percentages are as follows:

- (a) Maintenance: 70%.
- (b) Basic: 80%.
- (c) Integrated/Advanced: 90%.
- (d) Deploy/Sustain: 100%.

(2) MC Percentage. A percentage used to form the MC standard. MC % represents 80% of the listed Flightline %. Formula:  $(\text{Flightline } \% \times .8)$ .

(3) Flightline Standard. A value calculated in the readiness standard. The minimum average number of aircraft per month required to be on a unit's flightline to support its training plan or mission requirements. For FRS units this number is provided through the production planning factors (PPF) process. For Naval Aviation Warfighting Development Center (NAWDC), Naval Test Pilot School (TPS), and test squadrons, flightline standard is set to PAA. Formula: (Flightline % x PAA).

(4) MC Standard. A value calculated in the readiness standard. It is the minimum number of a unit's flightline standard that need to be MC in order for that unit to successfully conduct its training plan or mission requirements. For FRS, NAWDC, TPS, and Test Squadrons, MC Standard is set to 75 percent of Flightline Standard. Formula: (MC % x Flightline Standard).

e. Integrated Mission Systems

(1) Ready <Type> Mission Systems. These are systems integrated to the aircraft and identified in the appropriate aircraft type MESM. These values may be calculated in the Readiness Standard or specifically set by the T/M/S team based on T&R and operational tasking requirements if calculated values are not appropriate. The number of ready < type > mission systems required being available and ready in order to complete the training and tasking sorties required to meet T&R objectives or operational goals.

f. Non-Integrated Mission Systems

(1) Assigned <Type> Mission Sets (if applicable). These systems sets are items not integrated to the aircraft, but are required in support of the aircraft mission (i.e. ATFLIR, ARS, Pods, Guns, etc). This value is set by the T/M/S team and is the minimum number of assigned sets to support the 'ready < type> mission sets' requirement. This standard should be driven by the requirement for this equipment weighed against the T/M/S T&R, NTA requirements. This term does not typically apply to systems integrated to the aircraft, but may be used in cases where system components are not available on a one-to-one basis.

(2) Ready <Type> Mission Sets (if applicable). These values may be calculated in the readiness standard based on assigned <type> mission sets or specifically set by the T/M/S team based on T&R and operational tasking requirements if calculated values are not appropriate. The number of Mission Sets required being available and ready in order to complete the training or tasking sorties required to meet T&R objectives or operational goals. Standards for ready <type> mission sets are generally 75% of the standard for assigned <type> mission sets.

g. Aircrew Manning and Crews. Elements within this section are driven by the requirements in the experience factor (Ef) section of the reference (c) T&R matrices enclosures. These values may be calculated in the readiness standard based on T&R values or specifically set by the T/M/S team based on T&R and operational tasking requirements if calculated values are not appropriate.

(1) <Pilot, NFO, Aircrew> Upper Limit. This is the M+1 manning value for the given crew station.

(2) <Pilot, NFO, Aircrew> Lower Limit. The minimum number of personnel required to form enough Combat Crews to meet the current month's ATR.

(3) ACTC Level (X). The required ACTC qualified manning to meet current month's ATR. ACTC manning levels relating to specific readiness ratings are listed in reference (c).

(4) Other T/M/S Specified Aircrew Qualifications. The required number of qualified personnel to meet current month's ATR. Manning levels relating to specific readiness ratings are listed in reference (c).

(5) Required Skilled Crews. The number of skilled crews required to meet the current month's ATR. Skilled crew levels relating to specific readiness ratings are listed in reference (c).

h. DRRS-N AMFOM Standards. These standards serve as the foundation for the AMFOM calculation based on the desired threshold and authorized allowance during different phases of the OFRP described in the Aircraft Standard section. The numbers in the matrix are entered in the AMFOM Mapper for each unit configuration.

APPENDIX B

CARRIER READINESS STANDARDS DESCRIPTION

1. This enclosure describes the carrier readiness standards and refers to COMNAVAIRFORINST 3500.20D CH of 3 30 June 2014, referred to as the CVN TRAMAN.
2. CV-SHARP Overview. The Carrier Sierra Hotel Aviation Readiness Program (CV-SHARP) is the CVN training readiness management tool that supports the development and sustainment of the CVN's training readiness.
  - a. The system is based on team training event completions (with individual training visibility) logged in CV-SHARP and then rolled up to a unit level training readiness depiction. This functionality provides the CO with detailed information on the depth and sustainability of the crew's training readiness in terms of teams and the individual Sailor.
  - b. CV-SHARP also serves as the sole authoritative source to populate the DRRS-N Training "T-Pillar" Readiness data.
  - c. Details of team types and number of required teams are dictated by TYCOM-designated subject matter experts (SME).
3. CV-SHARP NETWORK. COMNAVAIRPAC N7 manages DRRS-N T-Pillar, CVN METL (Mission Essential Tasks List) and CV-SHARP. Although closely linked, each serves a unique role in carrier training and readiness and has its own data set and rules. Further information can be found at the CNAP N7 SharePoint site.
  - a. DRRS-N measures and reports the readiness of Navy forces to accomplish assigned missions through the construct of a METL. The CVN METL defines capabilities the CVN will need to achieve mission success covering all the Personnel, Equipment, Supply, Training, and Ordnance (PESTO) resources. Each PESTO pillar maps their resource requirements to DRRS-N warfare areas.
  - b. T-Pillar data, in fulfillment of CVN METL requirements, populates DRRS-N and reflects the ship's overall training readiness.
  - c. CV-SHARP is the CVN interface that captures and provides event completion information upline to DRRS-N via T-Pillar population. This data is captured in capabilities-based calculation in terms of performance (P) and experience (E) factors accomplished through sub-events.
  - d. CV-SHARP also includes other training requirements of interest to the Commanding Officer, above and beyond DRRS-N reporting, to assist in proper resourcing levels entitlement determinations, and overall readiness of the crew.



4. OFRP. The OFRP is managed by TYCOMs during the maintenance and basic unit level training phases for CONUS-based units. For FDNF, Commander, U.S. SEVENTH Fleet (COMSEVENTHFLT), in conjunction with the TYCOM, manages the training cycle. Required CVN training events are set forth in the Training and Readiness Matrix found in appendices I and II of the CVN TRAMAN.

a. A notional CONUS-based OFRP for CSG and CVN consists of four phases: maintenance, basic unit level training, integrated training, and sustainment, which can continue through one or more deployments. This results in defined progressive levels of employable capability for Naval forces. The FDNF CVN has different training opportunities available compared to CONUS units, and therefore, remains within the Sustainment Phase. In addition, the FDNF CVN must adhere to the C7F Training Program Instruction.

b. Figure 1-1 (Training Events during the OFRP Cycle) illustrates a phase-based training accomplishment notional standard. Amplifying information can be found in the CVN TRAMAN.

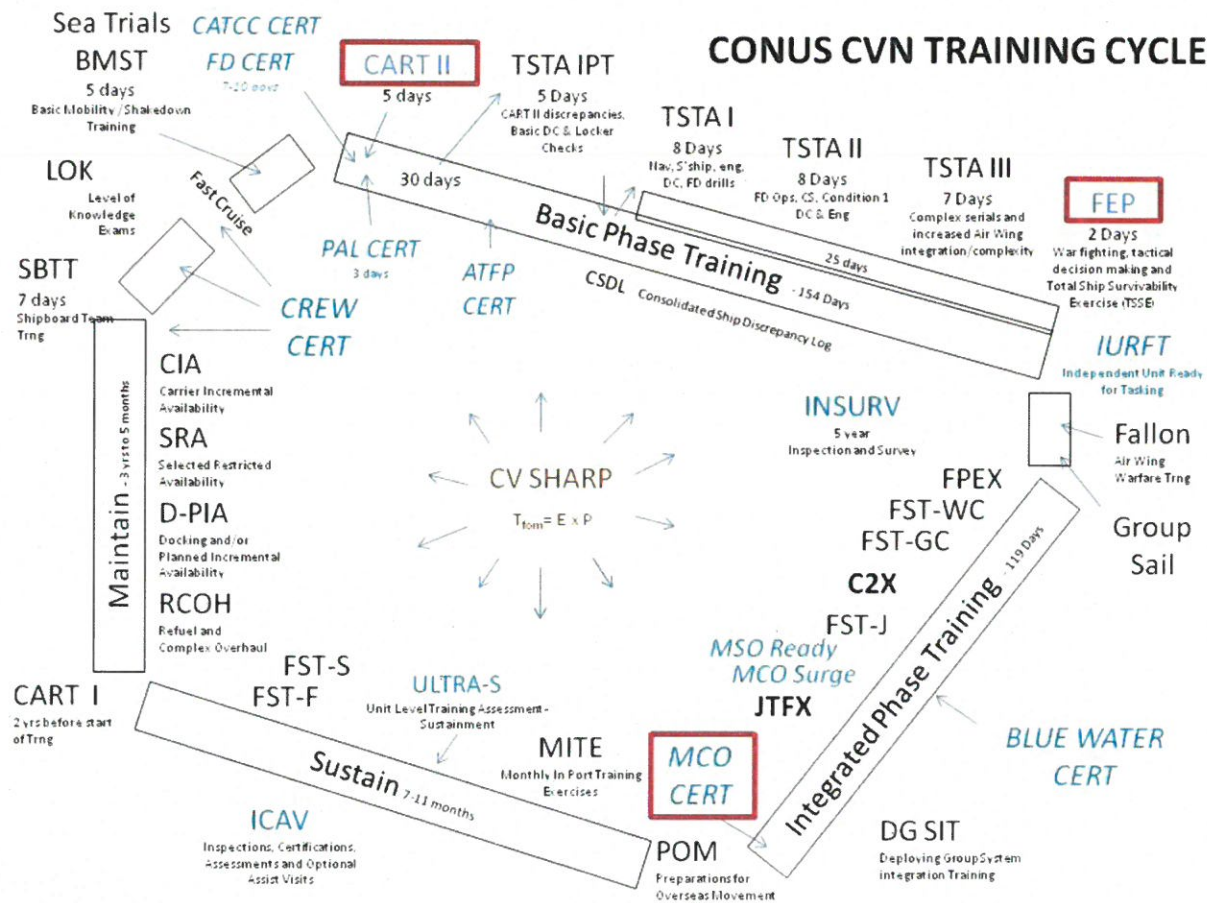


Figure 1-1 Schematic of Training Events During the OFRP Cycle

5. Calculations. Individual training sub-events, which represent the minimum amount of training and assessment required during the major phases within the OFRP, can be found in Appendix I of the CV-TRAMAN. The syllabus and grading criteria for all training events are set out in the TACs which must be used for both training and assessment of each event.

a. Training requirements consist of Experience (training) and Performance (assessment). Generating a training Schedule of Events (SOE) must take into account both requirements. It is important to recognize that while individual sub-events can be trained separately, they are all part of the integrated performance of the ship. Therefore, the individual sub-events need to be conducted as part of integrated drill packages in order to achieve the conditions necessary to demonstrate satisfactory performance. Details of the minimum integration necessary for a performance grade are indicated in the “integration” column of the figure in Appendix I (CV-TRAMAN) and in the corresponding TACs.

b. A ship will not be considered ready to move on to the next OFRP phase until both E and P requirements in these tables have been completed; TYCOM/CSG Mitigation Plan is required otherwise. E levels will fluctuate daily according to the learn/maintain/degrade periodicities, underway training opportunities and personnel turnover. However, on average, a ship should maintain a steady upward progression until attaining Sustainment Phase E requirements.

(1) TYCOM requirements for individual schools are not listed in this Appendix. They can be found in the Fleet Training Management Planning System (FLTMPS).

(2) Nuclear engineering training requirements are not provided in this document. Nuclear engineering training requirements are governed by NAVSEA S9213-41-MAN-000(C) Engineering Department Manual for Naval Nuclear Propulsion Plants and COMNAVAIRFORINST C1512.3, Nuclear Power Training Manual.

## 6. Definitions

a. Sub-Event. A particular evolution as classified in CV-SHARP.

b. Title. A brief description of the event. Each Sub-Event is supported by an associated TAC, published on the CNAF SharePoint site. The TAC describes, in detail, what needs to be accomplished, by whom and how the event is assessed.

c. Assessment. COMNAVAIRFORINST 3500.20D CH 3 of 30 June 2014 criteria include the required conditions and standards to be achieved.

d. Phase. The training requirements for each Sub-Event are broken down by OFRP phase. In each phase, ‘E’ and ‘P’ columns with requirements are annotated. Each Phase stands alone so a ship only needs to conform to the training requirements applicable to the phase it is currently executing. ‘E’ levels and ‘P’ scores carry forward from one phase to the next. Events in a

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previous phase do not need to be rescheduled. The periods of time and responsibility for training in each column used can be found in Appendix I of the CV-TRAMAN.

e. Experience 'E' Requirement. In each OFRP Phase, the E number indicates the level required to be achieved and maintained by all required watch teams. To achieve an E level for a sub-event, it is required to be conducted for training.

f. Performance 'P' Requirement. Performance scores are reported as a percentage for the unit. Each 'P' score overwrites the previous 'P' score and remains valid until the Performance periodicity expires. If a 'P' event is not repeated within the Performance periodicity, the 'P' score will degrade to zero.

7. Reporting Training Readiness. The figures submitted for 'E' and 'P' are factored to provide a training readiness figure that is passed to DRRS-N ( $P \times E$ ) which represents the ship in the best possible light.

a. Experience achieved by watch teams is aggregated for readiness reporting by notional teams to indicate the highest possible E levels the ship could achieve in the MCO required watch teams (which may be less than the number of ship's formed watch teams). The sub-event "E" is calculated by averaging the lowest notional Team E from each participating team type. Sub-event "E" is aggregated first by MET and then by mission area; this "E" is the figure passed to DRRS-N.

b. The Performance score achieved by the unit for each sub-event is rolled up so the achieved Performance score passed to DRRS-N represents a Performance band as follows:

(1) P achieved  $\geq 90\%$  - Performance of 100% passed to DRRS-N.

(2) P achieved 80%-89% - Performance of 90% passed to DRRS-N.

(3) P achieved  $< 80\%$  - Actual Performance passed to DRRS-N.

c. The combined ExP for each PRMAR is then displayed in DRRS-N as the Training Figure of Merit (Tfom). The threshold level color for the Tfom score in DRRS-N is:

(1)  $> 80\%$  - Green.

(2)  $> 60\%$  -  $< 80\%$  - Yellow.

(3)  $< 60\%$  - Red.

NOTE: As DRRS-N depicts readiness with respect to MCO-ready status, it is expected unit readiness will depict Red and Yellow starting in the Maintenance Phase and progress to Green as the Integrated Phase concludes.

d. CO's comments will support all DRRN-S reports and can be informed by all three scores of P, E, and Training Readiness to substantiate the actual readiness of a unit.

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APPENDIX CTERMS AND DEFINITIONS

1. This enclosure provides definitions describing aviation and CVN equipment resources and measurements.
2. Equipment Availability. Availability, at the appropriate time, of a properly configured set of aircraft with specific systems and CVN availability is a key contributor to the accomplishment of OFRP readiness objectives. T/M/S Leads, unit commanders, and the maintenance and logistics chain must be aware of the information outlined in enclosures (1) through (21) in order to meet or exceed monthly aircraft and mission system minimum standards.
3. Equipment Resource Standards. Enclosures (1) through (21) establish squadron and CVN minimum equipment levels, also known as “standards”, for each month in a unit’s schedule. Standards are calculated based on predicted readiness goals for each R+ month, (i.e., R+1, R+2, etc.). The R+ Month for each CVW is applicable to all units in that Air Wing. Similarly, separate profiles are built for FDNF and all deploying units not directly tied to an air wing (i.e., VP, HSL, HSC, etc.).

4. USN Aviation Unit Specific Terms and Definitions

- a. Mission Capable

- (1) MC is defined in reference (e). MC is a “Material condition of an aircraft that can perform at least one and potentially all of its missions. MC Hours = EIS Hours - NMC Hours.” MC in this sense is not used in this document, but describes its current status as on the moment it was reported in the AMSRRWeb application.

- (2) To properly determine MC numbers, each aircraft is assessed daily (or as required) and assigned a material condition (MATCON) code using the AMSRRWeb application. MC is then calculated on a monthly basis by averaging the actual daily MC reported in the AMSRRWeb. Average Daily MC is compared to the MC Standard for the given month. If there is a shortage of MC compared to the requirement, an MC Deficit is calculated. This calculation is performed at the unit level. Three numbers (Average Daily MC, MC Standard, and MC Deficit) are then summarized by Type Wing and T/M/S.

- (3) See the Mission Capable Aircraft, Basis for Measurement for specific information regarding metric calculation, sample panels and data sources.

- b. Mission Systems and Mission Sets

- (1) Mission Systems and Mission Sets are integrated aircraft components, or groups of components, and non-integrated ‘bolt-on’ equipment necessary to complete training or tasking sorties. Integrated aircraft components are generally described as “mission systems”, non-integrated systems are described as “mission sets”.

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(2) Mission System descriptions are aligned with the MESM, meaning each EOC Code group in the MESM represents a Mission System (i.e., Ready Shipboard Mission Systems, ready anti-submarine warfare (ASW) mission systems, ready basic Mission Systems, etc.). These systems are typically resourced and integrated with the aircraft on an on-for-one basis.

(3) Equipment that is not integral to the aircraft, i.e., TFLIR, M-299, or UEU's, are considered mission sets. These items are typically not resourced on a one-for-one basis with the aircraft. There may be many, or less than one, of these components per assigned aircraft. Because the inventory of these items is different than the aircraft inventory, these items must have both an Assigned and Ready number. Occasionally, certain integrated Mission Systems are resourced at less than one-to-one per airframe. The Mission Set logic will apply to these systems.

(4) Availability of Mission Systems and Sets is a key component in generating and sustaining aircrew training readiness and mission accomplishment. Mission System and Set Availability is a measure of the number of Ready Mission Systems and Assigned and Ready Sets (if appropriate) available for use by a unit.

(5) Line items within enclosures (1) through (21) use the following format for system description: Mission Systems: "Ready <Type> Mission Systems", "Assigned <Type> Sets", and "Ready <Type> Sets". "<Type>" is used as a placeholder for the actual system name, i.e., Ready "Shipboard" Mission Systems.

(6) See the Mission System Availability, Basis for Measurement for specific information regarding metric calculation, sample panels and data sources.

## 5. CVN Specific Terms and Definitions:

### a. RFT-E

(1) RFT-E metric reports the phased-based material readiness for Nimitz Class Aircraft Carriers. A total of 71 systems, components, and capabilities, referred to as 'elements' are measured and recorded daily for each Nimitz Class Carrier not in CNO availability. CIAs are an exception to this rule because of their shorter duration. Of the 71 monitored elements, 61 are considered Mission Essential with certain elements designated as critical to a Carrier's Material Readiness.

(2) Once outside an availability, the RFT-E metric is used to determine the material readiness of a carrier's systems and equipment as one key indicator to the overall mission readiness of the ship. The RFT-E entitlement is zero impaired days as measured against the differing levels of equipment required by the carrier as it progresses through the work up and training cycles associated with the various phases of the OFRP. The goal is 100% RFT Months. RFT-E metrics cover the entire maintenance and operational cycle allowing for transparency and monitoring of E-Pillar performance against established "entitlements".

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(3) Outside of CNO availabilities, a carrier is considered fully Ready for Tasking during any month in which no critical elements are impaired, nor any combination of mission essential elements in the same category are impaired, for more than 25% of the underway days for that month. CVNs with impaired critical elements or combinations of mission essential elements impaired in the same category for more than 25% of the underway days for the month are characterized as having an impaired RFT Month. Each such CVN is plotted in yellow below the zero line. Any CVN which fails to respond to a given tasking that is directly attributable to a material condition issue is designated as a "Fail to Sail" and is plotted in Red below the zero line.

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<i>CNAF 3510.11 Readiness Standards Enclosure Change Request Form</i>	
<i>Revision 1.0</i>	
<b>Instructions:</b>	
Describe the proposed change in the appropriate space below and forward this, with the Readiness Standard changes to the RS&P Assistant Coordinator via the T/M/S Current Readiness representative.	
Name/Rank/Organization	Change Request Submitted
<b>Originator:</b> <small>(RS&amp;P Metrics Team Use)</small>	<b>Date:</b>
<b>Change Request Number:</b>	Change Request Disposition
<b>Standard Name:</b>	<b>Date:</b>
	Check One <input type="checkbox"/> New Standard <input type="checkbox"/> Revised Standard
<b>Reason For Change Request:</b>	
<b>Summary of Changes:</b>	
<i>RS&amp;P Use Only</i>	
Change Request Approved/Disapproved	CNAFINST 3510.11C Change Number:
<b>Date:</b>	
Check One <input type="checkbox"/> Approved <input type="checkbox"/> Disapproved (reason below)	