

CHAPTER 6
TACS AND T AND R MATRIX

1. Training and Assessment Overview. This chapter breaks out individual training sub-events that represent the minimum training and assessment required during OFRP major phases. The syllabus and grading criteria for all training events are set out in the TACs that must be used for both training and assessment of each event. Nothing in this chapter prevents a CO from conducting additional training above the minimum requirement if resources are available and deemed necessary. Training requirements consist of experience (training) and performance (assessment). Generating an 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 ship performance. Therefore, individual sub-events need to be conducted as part of integrated drill packages 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 T and R Matrix. Ships will maintain a steady upward progression until attaining sustainment phase E requirements.

Note 1: TYCOM requirements for individual schools are not listed in the T and R Matrix. They can be found in the FLTMPs.

Note 2: Nuclear engineering training requirements are not provided in this document. Nuclear engineering training requirements are governed by EDM, OPNAVINT 9210.2C, and COMNAVAIRFORINST C1512.3F.

2. TACs

a. TACs (also known as sub-events) are the practical means to carry out policy defined in the CVN TRAMAN. They are individual instructions that will be referenced via the COMNAVAIRPAC, N7 HIP: <https://cpf.navy.deps.mil/sites/cnap/default.aspx>.

b. TACs are a critical tool because the description of what and how to train is also the assessment checklist. It is an "open book" examination for units. If the unit uses the TAC to train for experience, they are training to performance that will be considered satisfactory assessed by TAC standards.

c. TACs have three main functions: Train the trainers, assessment, and reporting.

(1) External trainers will use the TACs to conduct training of the ship's training teams.

(2) An external organization (such as an ATG) will use TACs to carry out assessment of the training conducted.

(3) The frequency and periodicity of TACs required to be assessed for performance (for P) are listed in the T and R Matrix. The results of these assessments are reported via CV-SHARP and inform DRRS-S.

d. TACs are to be used for both training and assessment to standardize both these elements. TYCOM nominated SMEs are custodians of appropriate TACs and ensure both the content and periodicities are relevant and accurate.

e. When an event is scheduled for experience the training team will check the current experience level of the watch teams and provide an appropriate training environment. In consultation with the ship's CO, the training team can use any level of simulation they deem fit for a training event. The complexity of the training environment is set at the discretion of the training team at a level that is commensurate with the training needs of that team (crawl-walk-run). However, careful consideration will be given to ensuring all teams are prepared to meet the conditions set out in the TAC (which includes integration identified in the T and R Matrix and represents the MCO standard). To gain E credit, a complete watch team must be present for the event and must be trained to complete all the standards specified in the TAC (MOP). Use of the TAC to record interventions required during training is encouraged as this provides valuable feedback on the competency of the watch standers. Recorded interventions will be used to inform follow-on training. Once training is completed, the event is logged for experience (E) in CV-SHARP, and all individuals in that team gain E credit.

f. When a sub-event is required to be assessed for performance P, the external agency assessing the event is required to use the TAC for grading. To achieve a valid "P" score, the ship must demonstrate its ability to meet the MOPs under the conditions set in the TAC. Unless otherwise stated, the passing score for all TACs is 80 percent. In the event a TAC is failed, a course of action will be devised between the COMCARSTRKGRU, TYCOM, and the ship to mitigate the failure based on resource and ATG availability. If the assessment scenario does not meet the conditions set in the TAC, no P grade will be recorded. Integration of most sub-events is required. The ship's training teams will take care to ensure the watch standers are ready to conduct the sub-event as part of an integrated drill package (as indicated in the integration column of these tables and the conditions section of the TACs). The P score is tied to an entire unit and, therefore, the assessment of all teams is not necessary for performance of that sub-event. Details of how many teams must be assessed are specified in the associated TAC. If assessment of more than one team is required, the P score will be an average of all required teams that were assessed. During a performance event, the assessing agency will use the TAC to score each MOP as "achieved" or "not achieved." If "achieved," the full weighted score is awarded (no partial scores), if the MOP is "not achieved," the score awarded for that MOP is zero. During a performance event, interventions are permitted at any time by both the ship's training team and any qualified assessor and an overall score will still be awarded, but the score for the MOP that required intervention will be zero. Therefore, training and assessment teams will only intervene during an assessed event to progress an event that has stalled or if a hazard develops that could lead to a personnel or equipment casualty. Once the performance event is completed, scores awarded for each MOP will be added, the sum divided by the maximum achievable points and the result multiplied by 100.

g. An example of an extract from a TAC is shown in figure 6-1.

h. TACs are re-published twice a year. Planned publication dates are 1 February and 1 August annually.

i. The results of TACs assessed for P scores are entered into a database that is accessed aboard each unit. This data is collected and processed by a civilian sub-contracted firm that manages the software used to inform DRRS-S.

j. The complex software program that collates data from all CVNs requires significant advance notice to implement changes or new TACs. For this reason, SMEs are to submit proposed changes to TACs at a specified time several months prior to publication.

Note: this may change in the future due to software updates.

k. TYCOM nominated SMEs have the dominant role in the TAC change process. They receive proposals for change from the fleet, consult appropriate commands and eventually propose and submit changes to the TYCOM.

(1) The change process is detailed in a Microsoft PowerPoint presentation found on the COMNAVAIRPAC HIP: <https://cpf.navy.deps.mil/sites/cnap/default.aspx>. Other specific instructions that diverge from the standing change instructions will be implemented by the TYCOM to the SMEs.

(2) Units are to submit proposed changes to the TACS to COMNAVAIRPAC and COMNAVAIRLANT N7, SMEs, or an ATG representative when aboard for assessment.

(3) Changes from the most recent re-publication will be annotated within the TACs in red, and only changes from the most recent publication will be highlighted. Deletions cannot be highlighted in red.

l. Serials that must be carried out together are nominated in the integration column of the T and R Matrix. References to integration in the TACs are superseded by direction in the T and R Matrix.

COMNAVIAIRFORINST 3500.20E
16 Jan 20

CV-SHARP Task ID
Short numerical and alphabetical title (used in CV-SHARP) and for quick reference.

TAC Name
Title and description of TAC and sub-event.

Purpose and Intent
Outlines the primary aim of this TAC. May include references to other publications.

Resources
May include time, personnel, facilities and equipment requirements.

Conditions
Conditions that must be met to assess the TAC for P. These conditions need not be met when exercised for E.

Sl. No.	Assessor	Organization (ATG/etic)		Date	Event (TST/AC2X/etic)	Score			CMAF GSST TAC-AAW		AUG 2017 edition		
		Task Name	Purpose / Intent			Resources	Conditions	Team Types	Teams for E	Teams for P		Individuals	Measure of Performance
1	AAW 1001	Analyze & Plan for an AAW Mission / Task	To ensure that the Air Defense watch team, equipment, and organization conducts proper AAW mission planning.	As required for the complexity of the event Personnel: As applicable to conduct the entire mission successfully	During every training and real world event, at sea or pier side with installed training systems. Day or night during safe weather conditions. *Must be completed within 24 hours of a mission event for Condition II or I watch team.	AC	2	2	N/A	Were watch standers knowledgeable with onboard Combat Direction Center Systems like: SDDS, 360 degree self-defense weaponry, Link 11/16/JREAP, Internal/External Communications, and applicable Air and Surface Search Radar parameters, Weapons Firing Doctrine, Identification systems, Electronic Warfare?			10
2	AAW 1001	Analyze & Plan for an AAW Mission / Task	REFS: CVM CLASS TACTICAL MANUAL, ATP I VOL I and II, CO Standing Orders, CO Battle Orders, TAO Hand book, Anti-Surface Warfare Commanders Manual, Anti-Air Warfare Manual, Fleet Air Defense, Navy Surface Warfare Manual, Surface Warfare Section tactics, Air Defense Planning Guide, CS-23 Tactical Warfare Manual, JSA, Int, FVR-2, FVR-3, Strike and Air Warfare, TACAFAC Employment Against Maritime Threats, FAC/FAC Defense Procedures, Fleet (AOR) or CSG OPTASKS, Naval Strike and Warfare Manual, Surface ship surveillance, Surface ship OTH-T and SUW Tactics, Surface ship aviation tactics, ASW TACAD, Operational Reports, TAC Air Employment against Maritime Threats, FAC/FAC Defense Procedures	As applicable to conduct the entire mission successfully		CDC	2	2		Has an UCSOT event been conducted within 30 days according to ships 3M reporting? Are all assignments for divisional personnel listed on the Watch Quarter and Station BR (WQSB)?			5
3	AAW 1001	Analyze & Plan for an AAW Mission / Task		Facilities/Equipment: BFTT SDDS Ridars Weapons CS equipment EW/INTEL/SUPPLOT		CDC AIR	2	2		Is WQSB posted/readily available and up-to-date? Are Commanding Officer's Standing Orders and Battle orders current and signed by current CO?			5
4	AAW 1001	Analyze & Plan for an AAW Mission / Task				WEAPONS	2	2		Are there qualified and sufficient watch standers for (2) CDC watch teams for Condition II according to SDDS MK2 NTSP or IAW CO's Battle Orders?			5
5	AAW 1001	Analyze & Plan for an AAW Mission / Task				CS-CSOOW	3	2		Is CDC Watch Log being maintained?			5
6	AAW 1001	Analyze & Plan for an AAW Mission / Task				EW-Module(Cond III)	3	2		Is there an approved list of abbreviations/acronyms posted on the inside cover of each log?			5
7	AAW 1001	Analyze & Plan for an AAW Mission / Task				Mission Planning AAW/ASU	1	1		Are Contact Report Templates (Check/print) IAW current OPORD/OPTASK on station?			5

Team Types
These are the teams allocated to this specific TAC. One of these will be nominated as the "Primary Team Type."

Teams for E
This is the minimum number of teams of each type the CVN must have aboard and built within CV-SHARP.

Teams for P
This is the number of teams that will be assessed for performance (P) during an assessment.

Measures of Performance
These are the specific instructions on how to complete this serial and details the specifics of the training and how it will be graded for P.

Weight
This weighting assists in grading the TAC when assessed for P. A higher weight indicates more influence of that MOP on the P score.

Figure 6-1 Example of TAC

3. T and R Matrix. An explanation of T and R Matrix columns is found in subparagraphs 3(a) through 3(m).

a. Sub-Event. The sub-event is the number for a particular evolution as classified in CV-SHARP.

b. Title. The title is a brief description of the event. Each sub-event is supported by an associated TAC. The TAC describes in detail what needs to be accomplished, by whom and how the event is assessed. Assessment criteria includes the conditions and standards that are required to be achieved and is published on the COMNAVAIRPAC HIP:
<https://cpf.navy.deps.mil/sites/cnap/default.aspx>.

c. Phase. The training requirements for each sub-event are broken down by OFRP phase (see details of the content of each phase in chapter 3). 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 executing currently. E levels and P scores carry forward from one phase to the next. Previous phase events do not need to be rescheduled.

d. Maintenance Phase - In port. This is the period of time from the commencement of maintenance until the start of crew "prep." During this time, the ship's training team will oversee the conduct of all training. All assessments will be conducted by TYCOM teams unless specified otherwise in the TAC.

e. Maintenance Phase – Crew "Prep." Includes: SBTT COI, crew cert phases I, II, and III (as applicable), fast cruise, flight deck certification phases I and II (as applicable) and sea trials. During this time ATG will train the ship's training teams in the execution of training and conduct assessments to ensure the ship is safe to proceed to sea. In some cases, the P requirement is annotated "#," and this indicates that an alternative assessment agency normally conducts this assessment.

f. Basic Phase. This is the period of time when basic phase ULT will be conducted. E and P levels for each element of basic phase are indicated separately.

Note 1: The latest P grade achieved during basic phase (regardless of when it was conducted) will comprise the basic phase score that will remain valid for readiness reporting until its periodicity expires or it is re-graded.

Note 2: Because of the unique operating nature, there is no TSTA and FEP requirement for FDNF; all training requirements are a continuum of evolutions scheduled on either a cyclic or periodicity basis.

g. Integrated Phase. This is the period of time when strike group integrated training takes place under the direction of Commander, Strike Group Training (Pacific and Atlantic).

h. COMPTUEX. This column indicated the first part of integrated training and does not necessarily require a COMPTUEX to be completed. In any event the E and P levels required in this column must be completed before the ship can commence the final phase of integrated training.

i. SRA. FDNF undergoes an annual SRA period. During this time the E levels may degrade to roughly 80 percent of the sustainment requirement as described in the SRA column. The P requirement indicated in the SRA column specifies the minimum number of events that must be graded for P at the end of the SRA to ensure that the ship is safe to return to sea for subsequent CORE training.

j. CORE. The P requirement indicated in the CORE column specifies the minimum number of events that must be graded for P by the end of CORE training. CORE P grades will be assessed under MCO conditions. Further P grades will be required during ULTRA-S. ULTRA-S events will be scheduled and conducted on an "as required" basis that depends on the P periodicity (in the operational sustainment column). A P grade achieved during crew "prep" cannot be used to replace the operational sustainment requirement for P conducted during CORE and ULTRA-S as these events must be graded under MCO conditions.

k. Sustainment. This is the period of time from the end of integrated phase training to the start of maintenance when the ship sustains the training readiness levels achieved. This period of time includes an annual ULTRA-S when ATG will be available to re-grade P events that are due to expire before the next scheduled ULTRA-S. This column indicates:

- (1) The E level to be maintained.
- (2) The E periodicity (days until it expires).
- (3) The P periodicity (days until it expires).

Note: The (long term) replacement FDNF CVN will require a tailored training plan to meet basic and intermediate phase requirements prior to assuming FDNF sustainment phase status.

l. Integration. The sub-events in the column must be conducted as part of an integrated drill package with the sub-event being graded for performance. Sub-events required for integration do not need to be graded, but they must be conducted to meet the performance conditions.

m. Primary Team Type and Department. Each sub-event has a single primary team type although most sub-events are executed by multiple team types. The department column indicates the department from which the primary team type's originated.

4. Requirements for E and P. To determine the E and P requirements, a ship references the tables in the column that correlate to the OFRP phase in which the ship is operating. Each OFRP phase column specifies an E level and P requirement, as applicable. P requirements will be annotated with ("Y" (yes) and "N" (no)).

a. E Requirement. In each OFRP phase column, the E number indicates the required level to be achieved and maintained by all required watch teams. To achieve an E level for a sub-event, the event must be conducted for training. Sub-events represent training events only and are not a reflection of "watches logged." When team training has been conducted and E is logged in CV-SHARP, the watch team gains E credit, and the "currency clock" within CV-SHARP begins. See chapter 2 for details in determining how E levels are calculated and maintained. For scheduling purposes, the unit will identify the E requirement and the current ship's achieved E, and plan to schedule sufficient training to bring all watch teams up to the required E level by the end of that phase. E levels will degrade over time and as individuals leave watch teams. Therefore, WTRPs must make allowances for sufficient training for both qualified and watch standers under instruction to prevent E degradation resulting from personnel turnover.

Note: E is gained each time an event is conducted for performance. So when scheduling training, all assessed events can be included in the plan to achieve sufficient experience. Experience is cumulative so the E level achieved in one column carries over to the next column.

b. P Requirement. In each OFRP phase column, a "Y" and "N" indicates if the sub-event requires an assessment of P. P scores are reported as a percentage for the unit. Each P score overwrites the previous P score and remains valid until the P periodicity expires. If a P event is not repeated within the P periodicity, the P score will degrade to zero.

Note: A pictorial overview of the T and R Matrix is provided in figure 6-2 following paragraph 5 of this chapter.

5. Reporting Training Readiness. The figures submitted for E and P are factored to provide a training readiness figure (P multiplied by E) that is passed to DRRS-S that 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. However, that 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-S.

b. The P score achieved by the unit for each sub-event is rolled up so that the achieved P score passed to DRRS-S represents a P band as found in paragraphs 5b(1) through 5b(3):

COMNAVAIRFORINST 3500.20E
16 Jan 20

(1) P achieved greater than or equal to 90 percent equals a P score of 100 percent passed to DRRS-S.

(2) P achieved 80 to 89 percent equals a P score of 90 percent passed to DRRS-S

(3) P achieved less than 80 percent equals an actual P score passed to DRRS-S.

c. The combined E multiplied by P for each primary mission area is then displayed in DRRS-S as the TFOM. The threshold level color for the TFOM score in DRRS-S is green if greater than or equal to 80 percent, yellow if greater than or equal to 60 to 79 percent, and red if less than 60 percent.

Note: As DRRS-S 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 (P, E, and TFOM) to substantiate the actual readiness of a unit.

e. The TACs and the T and R Matrix are separate from the CVN TRAMAN. They can be found under Directorates/N7/TRAMAN at COMNAVAIRPAC HIP:
<https://cpf.navy.deps.mil/sites/cnap/default.aspx/>.

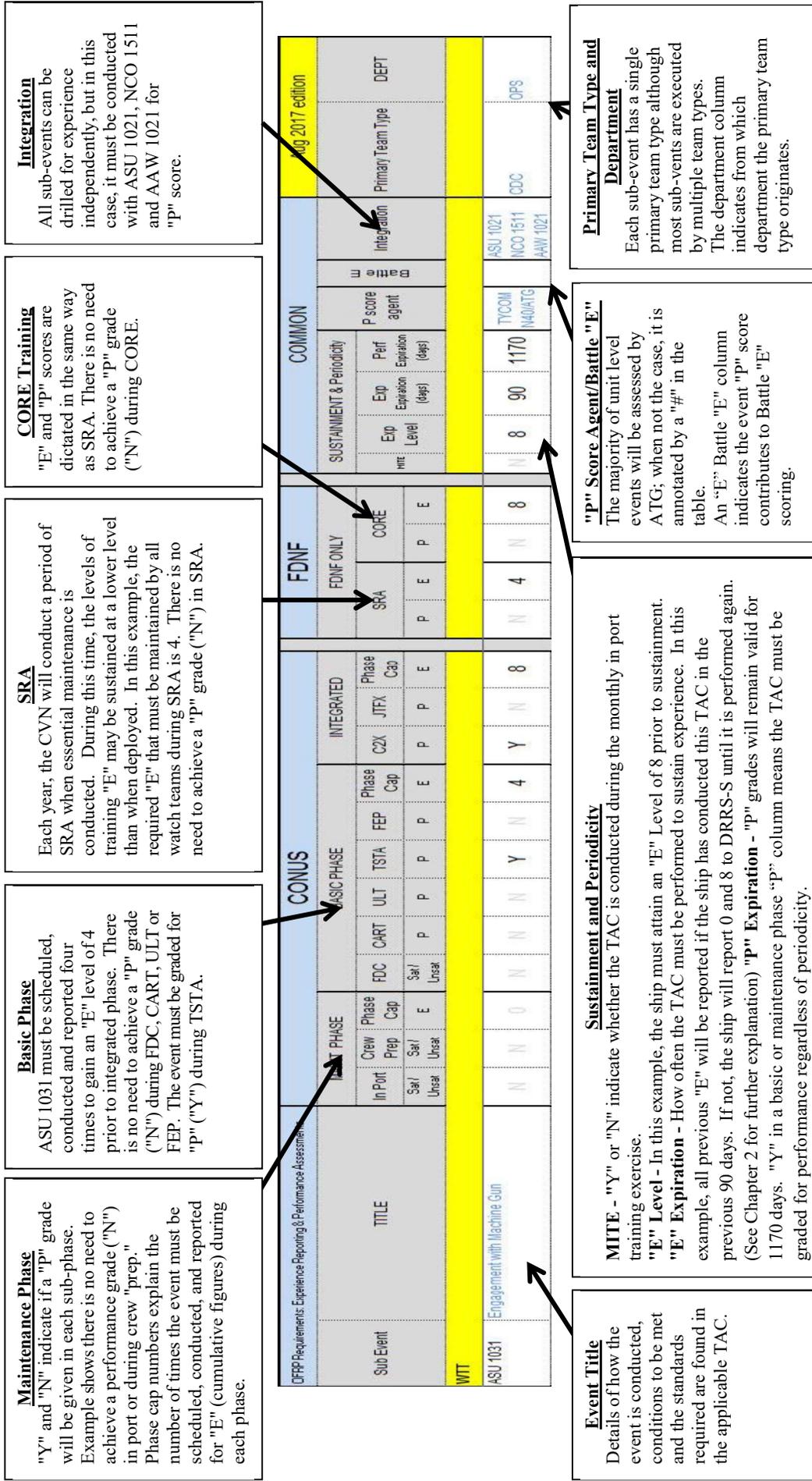


Figure 6-2 Example for the T and R Matrix