

Post Mission Assessment for Tactical Training - Trend Analysis

Software User Manual



DISTRIBUTION STATEMENT B: DISTRIBUTION AUTHORIZED TO U.S. GOVERNMENT AGENCIES ONLY; CDRL A002; 12 APRIL 2013. OTHER REQUESTS FOR THIS DOCUMENT SHALL BE REFERRED TO NAVAIR.

For Official Use Only
This document contains information exempt from mandatory disclosure under the FOIA.

Exemption(s) apply.

Disclaime

This document is based upon information believed to be accurate and reliable. Neither InnovaSystems International, LLC., nor its agents make any warranty, express or implied, as to the accuracy of the information or the opinions expressed. We shall have no liability for any errors of fact or judgment or for any damages resulting from reliance upon this information.

Use of any trademarks in this report is not intended in any way to infringe on the rights of the trademark holder.

Software User Manual

Post Mission Assessment for Tactical Training and Trend Analysis (PMATT-TA)

Increment 1B; Version 1

CDRL A002

April 2013

Prepared by InnovaSystems International 2385 Northside Drive, Suite 300 San Diego, CA. 92108

In Subcontract Number 0774-1629 to Aptima, Inc. 12 Gill Street. Suite 1400 Woburn, Massachusetts 01801

Prepared For

NAVAL AIR SYSTEMS COMMAND NAVAL AIR WARFARE CENTER TRAINING SYSTEMS DIVISION

12350 Research Parkway Orlando, FL 32826

Contract #: N61340-11-C-0041

DISTRIBUTION AUTHORIZED TO U.S. GOVERNMENT AGENCIES ONLY; CDRL ITEM # A002; 12 APRIL 2013. OTHER REQUESTS FOR THIS DOCUMENT SHALL BE REFERRED TO NAVAIR.

For Official Use Only
This document contains information exempt
from mandatory disclosure under the FOIA.
Exemption(s) apply.

Document Title: PMATT-TA Software User Manual

Software Version: PMATT-TA 1.1 Document ID: PMATT-TA.CD.SUM-001 Document Release Date: 12 April 2013 Contract Number: N61340-11-C-0041

Release Notes

General

 This is the first official release of the Software User Manual for the prototype software application Post Mission Assessment for Tactical Training and Trend Analysis (PMATT-TA). Prepared by InnovaSystems International for Naval Air Warfare Center Training Systems Division. This Page Intentionally Left Blank.

Table of Contents

Preface	i
Document Conventions	ii
Related Documentation	ii
System Requirements	ii
Chapter 1: Scope	1-1
1.1 Software Application	
1.1.1 Background	1-1
1.1.2 Conclusion	1-1
Chapter 2: Getting Started	2-1
2.1 Accessing PMATT-TA	2-2
2.1.1 Login	2-2
2.2 Home / Dashboard View	2-3
2.2.1 Header Menu	2-4
2.2.1.1 Log Off	2-4
2.2.1.2 Edit Profile	2-5
2.2.1.3 Change Password	2-6
2.2.2 Events / Qualifications Panel	2-7
2.2.3 User Profile Panel	2-8
2.2.4 Scoreboard Chart	2-8
2.2.5 Announcements Panel	2-9
Chapter 3: Events	3-1
3.1 Events List	3-2
3.1.1 Sorting Columns	3-2
3.1.2 Filtering Within Columns	3-3
3.1.3 Grouping by Columns	3-4
3.1.4 Paging	3-6
3.1.4.1 Drop Down Selector	3-6
3.1.4.2 Page to Older / Newer Records	3-6
3.1.4.3 Page to Oldest / Newest Record	3-6
3.1.4.4 Refresh Button	3-6
3.2 Create a New Event	3-7
3.2.1 Drop-Down Date / Time Picker	3-8
3.3 Edit an Event	3-8
3.3.1 Event Details Page	3-9
3.3.1.1 Event Details Identification Header	3-9
3.3.1.2 Sets Menu	3-10
3.3.1.3 Information Detail Workspace	3-11

3.4 Purple Message Sets	3-12
3.4.1 Mandatory Sets	3-12
3.4.1.1 EXER or OPER: Exercise / Operation Identification (choose one)	3-12
3.4.1.2 MSGID: Message Identification	3-14
3.4.1.3 MISSN: Mission	3-15
3.4.1.4 EVENTINFO	3-17
3.4.1.5 ALT	3-19
3.4.1.6 ACFTID: Aircraft Identification	3-20
3.4.1.7 AREA: Area	3-21
3.4.1.8 LINK: Data Link	3-22
3.4.1.9 CREW: Aircrew	3-24
3.4.1.10 MET: Meteorological Information	3-25
3.4.2 Optional Sets	3-28
3.4.2.1 CONTACTS: Contact Information	3-28
3.4.2.2 Contact Details	3-31
3.4.2.3 BUOY: Sonobuoy Information	3-45
3.4.2.4 REF: Referenced Message Information	3-50
3.4.2.5 IFF: Identification Friend or Foe / Selective Identification Feature	3-52
3.4.2.6 EQUIPMAL: Equipment Malfunction	3-53
3.4.2.7 EXPEND:	3-54
3.4.2.8 SWAP:	3-56
3.4.2.9 REMARKS:	3-57
3.4.3 Misc Sets	3-58
3.4.3.1 NONCOI Set	3-58
3.4.3.2 NARR Set	3-58
3.4.3.3 FILES Set	3-58
3.5 Export Purple Message	3-59
Chapter 4: Reports	4-1
4.1 Report Control Ribbon	4-2
4.2 Contacts By Crew	
4.3 Qual Readiness vs. Difficulty by Squadron	
4.4 Qual Readiness vs. Difficulty by Crew	
4.5 Readiness by Qualification	
4.6 Sorties and Qualifications Passed by Crew	
4.7 SUB SUMRY Contact Held Percentage, by Crew	
4.7.1 SUB SUMRY (Table Collapsed)	
4.7.2 SUB SUMRY (Table Expanded)	
4.8 SUB Time to Attack	
4.9 SUB Average Engagement Time	
4.9.1 SUB Average Engagement Time Table	
4.10 SUB Average Gained / Lost Time	
4.11 Report Builder	
Chapter 5: Qualifications	5-1
5.1 Crew Qualification Metrics	
U.I OTOW WIGHTIGHTOS	5-2

	5.1.1 Measure of Performance (MOP)	5-3
	5.1.2 Measure of Difficulty (MOD)	5-3
	5.1.3 Measures of Readiness (MOR)	5-3
	5.2 Qualification Gradesheet	5-4
	5.2.1 Gradesheet MOP	5-6
	5.2.2 Gradesheet MOD	5-6
	5.3 Qualifications for Event #	5-7
	5.3.1 Qualifications Drop-Down List	5-7
	5.3.2 Delete a Qualification	5-8
	5.3.3 Paging Through Qualification Records	5-8
	5.4 Qualification Gradesheet Wizard	5-9
	5.4.1 Deleting a Qualification Attempt	5-9
	5.4.2 Saving Qualifications	5-9
	5.5 Qualification Management	
	5.5.1 Create a New Qualification	
	5.5.2 Edit a Qualification	5-11
	5.5.3 Skills Management	5-12
	5.5.3.1 Create a New Skill	5-13
	5.5.3.2 Edit a Skill	5-13
	5.5.3.3 Skill Details	5-14
	5.5.4 Qualification Skills Detail	5-15
	5.5.5 Edit Qualification Skill	5-16
	5.5.6 Weight and Display Order Assignment	
	5.5.7 Reorder Skills	5-17
Cha	apter 6: Administration	6-1
	6.1 Announcements	6-2
	6.1.1 New Announcement	
	6.1.2 Edit Announcement	6-4
	6.2 Qualifications Management	6-4
	6.3 User Administration	
	6.3.1 Create a New User	6-6
	6.3.2 User Details	6-7
	6.3.3 Roles	6-7
	6.3.3.1 Role Permissions	6-8
	6.4 Rules Management (Prototype)	6-9
Apı	pendix A:	A-1
Ind	IDV	I_1

This Page Intentionally Left Blank.

List of Figures

Chapter 1: Scope

Chapter 2: Getting Started	
Figure 2-1: Login Screen	2-2
Figure 2-2: Incorrect Password Prompt	2-2
Figure 2-3: The Home / Dashboard View	2-3
Figure 2-4: Header Menu (Overview)	2-4
Figure 2-5: Header Menu (expanded) showing all tabs and links	2-4
Figure 2-6: Edit Profile User Details Tab	2-5
Figure 2-7: Change Password Prompt	2-6
Figure 2-8: Events / Qualifications Panel showing Latest Events Tab	2-7
Figure 2-9: Events / Qualifications Panel showing Latest Qualifications Tab	2-7
Figure 2-10: User Profile Panel	
Figure 2-11: Scoreboard Chart	
Figure 2-12: Announcements Panel	
Chapter 3: Events	
Figure 3-1: Events List	3-2
Figure 3-2: Filter Criteria Prompt	3-3
Figure 3-3: Drop-Down List of Operators	3-3
Figure 3-4: Events List Customization Header	3-4
Figure 3-5: Events List Customization (Before)	
Figure 3-6: Events List Customization (After)	
Figure 3-7: Events List Customization with Multiple Column Headings	
Figure 3-8: Page Controls	
Figure 3-9: New Event Prompt	
Figure 3-10: Drop-Down Calendar and Clock	
Figure 3-11: Edit Event Prompt	
Figure 3-12: Event Details Page (EVENTINFO Set)	
Figure 3-13: Event Details Identification Header	
Figure 3-14: Sets Menu	
Figure 3-15: Information Detail Workspace (EXER/OPER Set)	
Figure 3-16: EXER Set	
Figure 3-17: OPER Set.	
Figure 3-18: MSGID Set	
Figure 3-19: MISSN Set	
Figure 3-20: EVENTINFO Set	
Figure 3-20: LVEIVIIVI 6 Set	
Figure 3-21: ACFTID Set	
Figure 3-23: AREA Set	
Figure 3-24: LINK Set	
Figure 3-25: NEW LINK Prompt	
Figure 3-26: CREW Set	
Figure 3-28: MET Set	
Figure 3-29: NEW MET Prompt	3-25

Figure 3-30: Contacts List Map	3-28
Figure 3-31: New Contact Prompt	
Figure 3-32: TMPOS List Showing New TMPOS Button	3-30
Figure 3-33: Contact Details (Showing SUB)	3-31
Figure 3-34: ATTACK Tab	3-33
Figure 3-35: New ATTACK Prompt	3-34
Figure 3-36: Contact Details Showing TMPOS Tab	3-35
Figure 3-37: Insert TMPOS Prompt	3-35
Figure 3-38: Edit TMPOS Prompt	3-36
Figure 3-39: SUB Details Showing SIGNA Tab	3-37
Figure 3-40: NEW SIGNA Prompt	3-38
Figure 3-41: ODR Tab	3-40
Figure 3-42: LOFAL Tab	3-41
Figure 3-43: SUMRY Tab	3-42
Figure 3-44: ACTRNG Tab	3-43
Figure 3-45: UNITGEN Tab	3-44
Figure 3-46: BUOY Set	3-45
Figure 3-47: New Buoy Prompt	3-46
Figure 3-48: Buoy Details Tab	
Figure 3-49: BATHY Tab	3-48
Figure 3-50: AMBTN Tab	
Figure 3-51: New AMBTN Prompt	
Figure 3-52: REF Set	3-50
Figure 3-53: New REF Prompt	
Figure 3-54: IFF Set	
Figure 3-55: NEW IFF Prompt	
Figure 3-56: EQUIPMAL Set	
Figure 3-57: NEW EQUIPMAL Prompt	
Figure 3-58: EXPEND Set	
Figure 3-59: New EXPEND Prompt	
Figure 3-60: SWAP List	
Figure 3-61: New SWAP Prompt	
Figure 3-62: REMARKS Set	
Figure 3-63: NON-COI Set	
Figure 3-64: NARR Set	
Figure 3-65: FILES Set	
Figure 3-66: Export Purple Alert	
Figure 3-67: Formatted Purple Message displayed in Notepad	3-59
Chapter 4: Reports	
•	
Figure 4-1: Report Control Ribbon	
Figure 4-2: Display Zoom Selector	
Figure 4-3: Export Format Options	
Figure 4-4: Reports Contacts by Crew (Graph)	
Figure 4-5: Reports Contacts by Crew (Table)	
Figure 4-6: Qual Readiness vs. Difficulty by Squadron	
Figure 4-7: Qual Readiness vs. Difficulty by Crew	
Figure 4-8: Readiness by Qualification	
Figure 4-9: Sorties and Qualifications Passed by Crew	
Figure 4-10: Reports SUB SUMRY Contact Held Percentage, by Crew (Graph)	
Figure 4-11: SUB SUMRY Contact Held Percentage, by Crew (Table collapsed)	
Figure 4-12: SUB SUMRY Contact Held Percentage, by Crew (Table expanded)	4-114 4-12
FIGURE 4-13, REDOUS 2018, TIME TO MIJACK	Δ-17

Figure 4-14: SUB Average Engagement Time	4-13
Figure 4-15: SUB Average Engagement Time Table (Collapsed)	
Figure 4-16: SUB Average Engagement Time Table Expanded	
Figure 4-17: SUB Average Gained / Lost Time Filter Entry Bar	
Figure 4-18: SUB Average Gained / Lost Time	
Figure 4-19: Report Builder	
Chapter 5: Qualifications	
Figure 5-1: Qualification Gradesheet (Top)	5-4
Figure 5-2: Qualification Gradesheet (Bottom)	
Figure 5-3: Gradesheet MOP Tab (Top)	
Figure 5-4: Gradesheet MOP Tab (Bottom)	
Figure 5-5: Gradesheet MOD Tab	
Figure 5-6: Qualifications for Event # Page	
Figure 5-7: Qualifications Drop-Down List	
Figure 5-8: Delete Button Prompt	
Figure 5-9: Qualification Page Controls	
Figure 5-10: Qualification Gradesheet Wizard (Showing ASU-203)	
Figure 5-11: Qualification Management Master List	5-10
Figure 5-12: New Qualification Prompt	5-11
Figure 5-13: Edit Qualification Prompt	5-11
Figure 5-14: Skill Management Screen	
Figure 5-15: New Skill Prompt	
Figure 5-16: Edit Skill Prompt	
Figure 5-17: Skill Details Page	
Figure 5-18: Qualification Skills Detail	
Figure 5-19: Edit Qualification Skill	
Figure 5-20: Skill Assessment Weight and Display Order Assignment	
Figure 5-21: Reorder Skills	5-17
Chapter 6: Administration	
Figure 6-1: Announcement List	6-2
Figure 6-2: New Announcement Prompt	6-3
Figure 6-3: Edit Announcement Prompt	6-4
Figure 6-4: User Administration List	6-5
Figure 6-5: New User Prompt	6-6
Figure 6-6: User Details Tab	
Figure 6-7: Roles Tab	6-7
Figure 6-8: Rules Management Definitions	
Figure 6-9: Rules Management Criteria	
Figure 6-10: Rules Engine Criteria Controls	6-10

This Page Intentionally Left Blank.

PMA.CD.SUM-001 Preface

Preface

Identification

The Post Mission Assessment for Tactical Training and Trend Analysis (PMATT-TA) is a web-based application to allow P-3C, P-8A, and future platform flight crews to enter debriefing information for the generation of the RAINFORM PURPLE post mission report, to complete post mission summary reports for aircrew qualifications, and to allow trend analysis by the Commander, Patrol and Reconnaissance Group (CPRG).

System Overview

The development of the PMATT-TA software began in response to the NAWCTSD Statement of Work for Increment 1: Initial Design, Development, and Implementation of a Prototype Post Mission Assessment for Tactical Training and Trend Analysis dated 19 July 2011. This SOW was produced in response to a Commander, Patrol and Reconnaissance Group (CPRG) Statement of Urgent Need (dated 17 June 2010), P-8A Specification (TR-4375), and the #3 Enabler from the MPRA Naval Air Requirements Group (NARG), requesting a "best of breed" solution for a centralized database and web-based interface to support post mission assessment and trend analysis for the maritime patrol community.

In response to these requirements, Aptima, Inc. and InnovaSystems International, LLC are combining forces to provide this "best of breed" solution from two related work efforts currently underway. These are the aviation readiness reporting and aviation data warehouse capabilities provided by InnovaSystems and the P-8A automated Performance Measurement (PM) work by Aptima.

Aptima and InnovaSystems continue to collaborate to determine how to best incorporate the P-8A automated PM data, associated technologies (e.g., ASA, PM Engine, Human Performance Markup Language (HPML)), and the trend analysis requirements into the overall PMATT-TA design.

The software was designed and developed at InnovaSystems' headquarters in San Diego, California beginning in September 2011 and is continuing still as of February 2013.

Document Overview

This Software User Manual defines application layout and workflow as it pertains to Iteration 1-B1 of PMATT-TA for the P-3C platform.

Each major section of the software has its own dedicated chapter featuring amplifying information, walkthroughs, and helpful hints.

Document Conventions

The following table describes the conventions used throughout this manual.

Convention	Description
Bold	Used to display buttons or menu options.
Emphasis	References to sections within this document.
	Provide further information about tasks.
	Shortcuts for accomplishing tasks quickly.
	Provide important warning about tasks.
0	Tool Tip Help. Mouse over this icon to receive instant popup information and advice about a field or other object.
Menu Feature	This convention is used to denote successive selections. For example, as a shorthand for "click Menu, then click Feature".

Related Documentation

This section lists the titles of all related documentation.

Title	Number	Date
USMTF User Formats Maritime Mission Analysis Summary Report (PURPLE)	G330.PURPLE.UF.Markup_1	3/31/2006
Commander Patrol and Reconnaissance Group VP Wing Training Manual	COMPATRECONGRUINST 3500.25E	7/01/2010

System Requirements

The following table identifies the minimum hardware and software requirements.

Туре	Required
Web Browser	Internet Explorer 6+ (Preferred 8 or 9)
Resolution	800x600 (required) 1024 x 768 (optimal)
Connectivity	Access to SIPRNet/DoD classified (Secret) network
Additional Details	-Cookie support/JavaScript required -Pop-up windows must be allowed

Chapter 1: Scope

1.1 Software Application

1.1.1 Background

Previously, the P-3 community had been using the software called *Purple Creator* in order to expedite the formatting and generation of Rainform Purple messages. Its sole output was a .txt file. While effective in its scope of debriefing reporting, the data that users would painstakingly enter couldn't be leveraged for any other use.

Similarly, the software used to track qualification criteria, called *QM3*, was implemented on disparate, isolated systems and even compelled the users to enter much of the same data already entered in *Purple Creator*. Furthermore, the rules by which it determined eligibility for qualifications were hard-coded into the program, making them extremely difficult to modify or update.

1.1.2 Conclusion

By basing the design of PMATT around a centralized and normalized database, the time required for data-entry by the user will effectively be halved. More importantly, the data will be perpetually stored, universally accessible and can then be referenced in various ways in order to create reports and trends that can inform and illuminate in ways that were formerly unavailable.

This Page Intentionally Left Blank.

Chapter 2: Getting Started

This chapter will introduce the methods used to access PMATT and will also describe the main components of its User Interface.

You will learn how to:

- Login to PMATT
- Navigate the User Interface
- Edit profile information
- Change your password

2.1 Accessing PMATT-TA

2.1.1 Login



Caution: Make sure you have obtained a User name from your Instructor, Debriefing Officer, or Wing Commander before attempting to log on to this software.

The actual web address is subject to change. Current reference build exists at: http://pmatt.innovasi.com/

Upon navigating to the project site, the *Login* screen will appear:

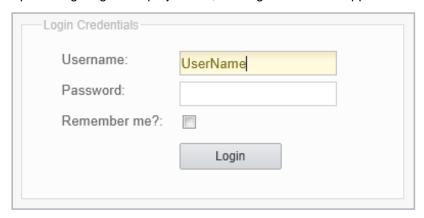


Figure 2-1: Login Screen

- In the Username field, enter the user name assigned by your Instructor, Debriefing Officer, or Wing Commander.
- In the Password field, enter your secret password.
- If you are a frequent user and would like the browser to remember your user name, check the *Remember Me?* box.
- Click the **Login** button to submit your credentials.
- If your credentials are not valid, a prompt will popup below the Login button.

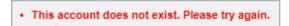


Figure 2-2: Incorrect Password Prompt



Caution: Please read the **Terms of Service** at the bottom of the Login screen. Your usage of PMATT is contingent upon agreement of these conditions. Also note the software minimum requirements necessary to run PMATT.

2.2 Home / Dashboard View

Upon successful Login, the Home / Dashboard view will appear:

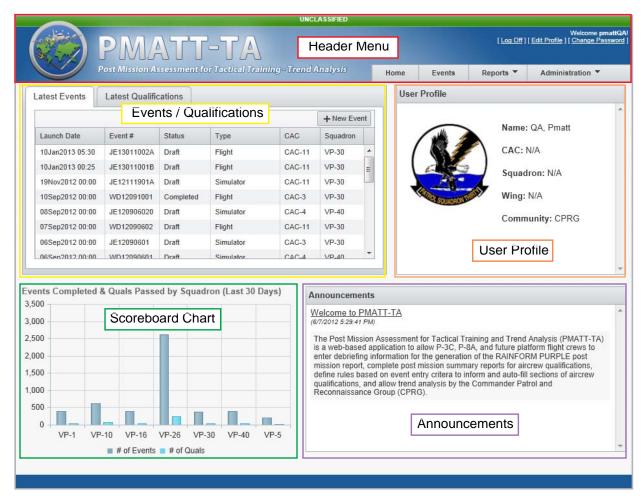


Figure 2-3: The Home / Dashboard View

The Home / Dashboard view is composed of the five regions:

1. Header Menu

Contains the navigation and access controls of PMATT.

2. Events / Qualifications Panel

Displays the 25 most recent events flown or qualifications attempted.

3. User Profile Panel

Displays the info and status of the current user.

4. Scoreboard Chart Panel

Displays an overview of accomplishments for each Squadron or Wing.

5. Announcements Panel

Conveys important news, advisories, or instructions.

2.2.1 Header Menu

The Header Menu is the navigation controller of PMATT. It will always display at the top of the screen regardless of the current page.



Figure 2-4: Header Menu (Overview)

The Header Menu contains tabs that direct to the main functions of PMATT as well as links that handle access rights. The tabs representing the main functions are:

Home

The root menu and display summary from which all functions can be accessed.

Events

Create, track and manage all information from flights or simulations.

Reports

View, reference and filter data to produce custom charts and diagrams.

Administration

Allows certain users with appropriate permissions to create or edit announcements, as well as manage qualifications, users, and rules.

The Header Menu also contains links that enable you to edit your profile, change your password and log out of the application.



Figure 2-5: Header Menu (expanded) showing all tabs and links

2.2.1.1 Log Off

You can log off from PMATT from any page by clicking the **Log Off** link which is found in the in the upper-right corner of the screen.



Caution: Clicking **Log Off** will not conjure an alert seeking to verify your intention. It will simply deposit you back to the *Login* screen.

2.2.1.2 Edit Profile

Click the **Edit Profile** link to modify any personal information, Community, Wing, or Squadron affiliation, Crew Member Role, or to browse for and upload a User Profile Image. Only administrators will have access to the *Roles* Tab.

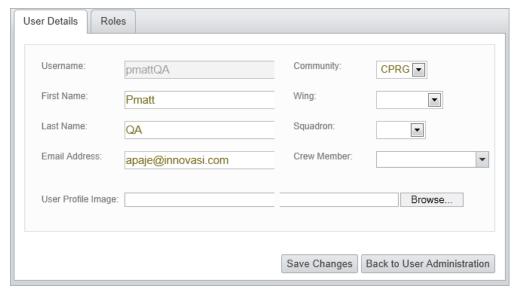


Figure 2-6: Edit Profile -- User Details Tab

Click the **Browse** button to open Windows Explorer on the local machine. Locate the image file you wish to use, then click **Open** to upload the image.

Clicking the **Back to User Administration** button will navigate to the User Administration list if you have access permission (see Section 6.3: User Administration on page 6-5).

Click the **Save Changes** button to register any modifications.

2.2.1.3 Change Password

You can change your password at any time by clicking the **Change Password** link which can always be found in the upper-right corner of any page.



Figure 2-7: Change Password Prompt

Enter your current and new passwords into the respective fields.



Note: Please note that passwords must be at least 6 characters in length.

Click Change Password to register the update.

2-6

2.2.2 Events / Qualifications Panel

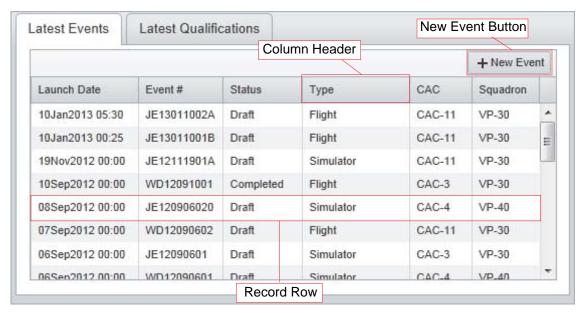


Figure 2-8: Events / Qualifications Panel showing Latest Events Tab

The Events / Qualifications panel, in the upper left quadrant of the *Home* page, contains both the *Latest Events* and *Latest Qualifications* tabs. Both are simple grids showing the latest 25 record rows.



Tip: From the *Latest Events* tab, click the **New Event** button, found in the upper-right corner of the panel, in order to bring up the *New Event Prompt* and begin entering flight or simulator information (see Section 3.2: Create a New Event on page 3-7).

Clicking on any record row from either tab will drill down into the details of that particular event or qual.

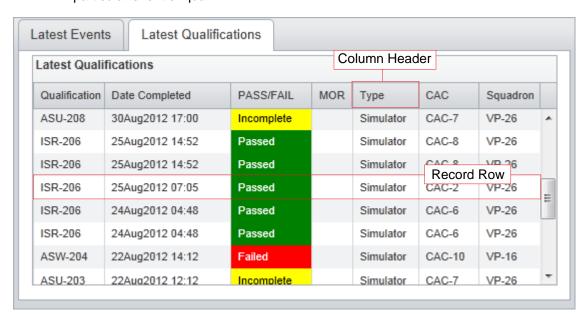


Figure 2-9: Events / Qualifications Panel showing Latest Qualifications Tab

2.2.3 User Profile Panel



Figure 2-10: User Profile Panel

The User Profile Panel will dynamically render all pertinent identifying information of the current user including profile image, Combat Air Crew / Squadron / Wing information, and individually tracked statistics. It will also display the user's preferred profile image.

2.2.4 Scoreboard Chart

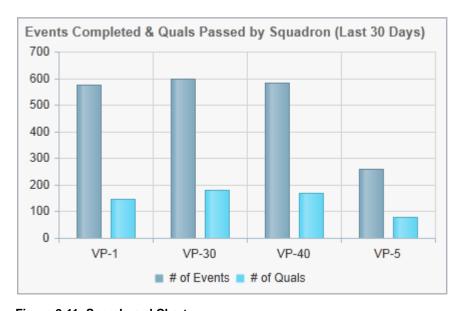


Figure 2-11: Scoreboard Chart

The Scoreboard Chart graphically illustrates Combat Air Crew / Squadron / Wing achievements in a variety of metrics, and will also serve as leaderboard for friendly yet direct competitive comparisons. Positioning the mouse over any bar in the chart will display a popup of the exact point value.

2.2.5 Announcements Panel

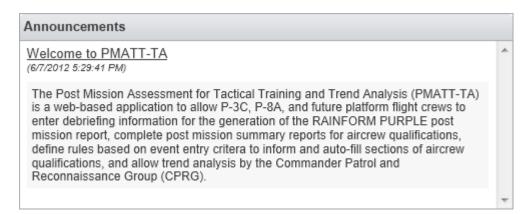


Figure 2-12: Announcements Panel

The Announcements will be an administrator / CPRG entered set of data featuring whatever important news, information or points of interest are to be disseminated to the Crew. The metadata includes title, date, description, order, and start / expiration dates.

For instructions on creating or modifying announcements, see Section 6.1: Announcements on page 6-2.

When there are multiple messages in the queue, the vertical scroll bar feature will allow the user to view current and older announcements. However, once the expiration date has been reached, the announcement will no longer display on the *Home / Dashboard*.

This Page Intentionally Left Blank.

Chapter 3: Events

Events in PMATT represent every flight or simulation carried out by any Aircrew. It is by the creation and completion of an event that flight data can be captured, accounted for, and subsequently applied to a Rainform Purple message output or a qualification satisfaction.

This event data also populates the trending reports of PMATT and ultimately informs the User Scoreboard.

In this chapter you will learn how to:

- Navigate event data using filtering, sorting, grouping and paging.
- Create a new event or edit an existing one.
- Fill out all the mandatory and optional sets to generate a Rainform Purple message.

Events List Chapter 3: Events

3.1 Events List

Clicking on the *Events* Tab in the Header Menu (See *Figure 2-5*) will navigate to the *Events* List of PMATT. The familiar tabular design of the *Events List* arranges individual event data in horizontal rows with supporting fields (Crew, Squadron, Wing, and status of completion) arrayed in columns. However, one unique aspect about PMATT is the filtering, sorting, grouping and paging of these columns into custom displays.

By default, the list displays the most recent flights or simulations carried out.

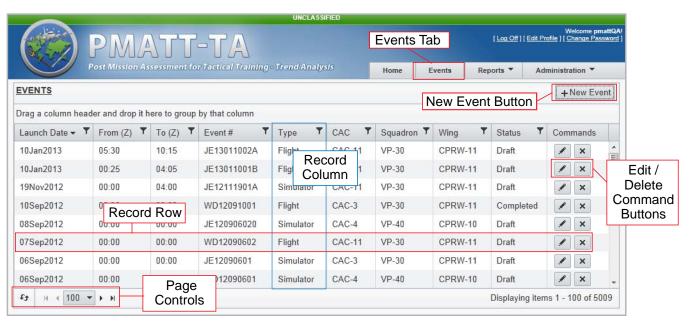


Figure 3-1: Events List

Clicking on any Event record row will take the user to that particular *Event Details* page (see Section 3.3.1: Event Details Page on page 3-9).

Clicking the **New Event** button launches the *New Event Prompt* (see Section 3.2: Create a New Event on page 3-7).

Depending on user role, events can be edited and deleted using the respective and Command buttons. (see Section 3.3: Edit an Event on page 3-8).

Older records can be accessed via the Page Controls in the bottom-left of the frame (see Section 3.1.4: Paging on page 3-6).

3.1.1 Sorting Columns

Almost every column in PMATT can be sorted. Simply click within the column header and all

data in the table will be reordered in ascending order (A-Z,1-100), indicated by the triangle icon. Click again for descending order (Z-A,100-1, newest-oldest), indicated by the triangle icon, or click once more for the default order in which no icon displays.

PMATT-TA Software User Manual (SUM)

Chapter 3: Events Events Events

3.1.2 Filtering Within Columns

Almost every column in PMATT contains a filter, denoted by the icon. Clicking on the filter icon drops down the Filter Criteria Prompt.

Like a miniature query builder, the Filter Criteria Prompt allows the user to pare back undesired data within a specific column and return only relevant selections.

Each prompt can filter by up to two clauses with each clause containing one drop-down list of operators and one blank value field.

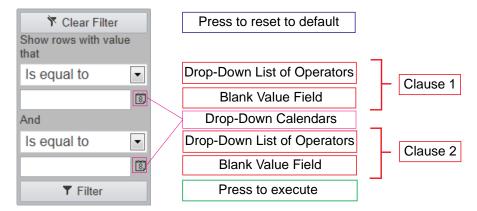


Figure 3-2: Filter Criteria Prompt

Choose an operator from the Clause 1 drop-down list, and type in the value (name) which is of interest.



Note: Columns that contain dates or times will feature a drop-down calendar within the Filter Criteria Prompt to help expedite selection. To learn how to use drop-down calendars, see see Section 3.2.1: Drop-Down Date / Time Picker on page 3-8.

Here are a sample of operators available from the drop-down list. Other columns differ slightly.

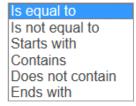


Figure 3-3: Drop-Down List of Operators

Use only Clause 1 for general filtration and add Clause 2 for greater specificity.

Click the Filter button to implement the filtering.

For example, if you are only interested in Squadron VP-26, choose *Contains* from the drop-down menu and type in *VP-26* into the blank value field. Upon clicking the **Filter** button, only results containing VP-26 will be displayed.

Events List Chapter 3: Events

3.1.3 Grouping by Columns

PMATT features a flexible table display that can group data criteria.

Directly above the column headings (e.g. Launch Date, Event # etc.) is the *Events List Customization Header*.

Drag a column header and drop it here to group by that column

Figure 3-4: Events List Customization Header

By positioning the mouse over a column heading, clicking and holding the left button, dragging the heading over the *Customization Header*, and releasing the button (i.e. dragging and dropping), you can group the list into nested hierarchies of whichever data set you find most interesting.

For example, this is the default Events List:

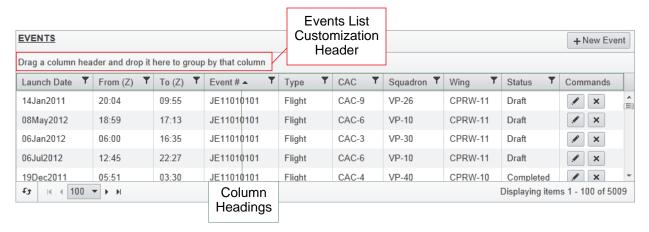


Figure 3-5: Events List Customization (Before)

Chapter 3: Events Events Events

By dragging and dropping the *Event* # column header into the *Event List Customization Header*, the list is now grouped by Event number and rendered as:

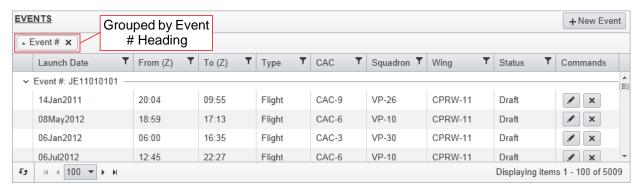


Figure 3-6: Events List Customization (After)

Add as many column headings to the Customization Header as you like. Use the button contained within the column heading to remove the grouping.

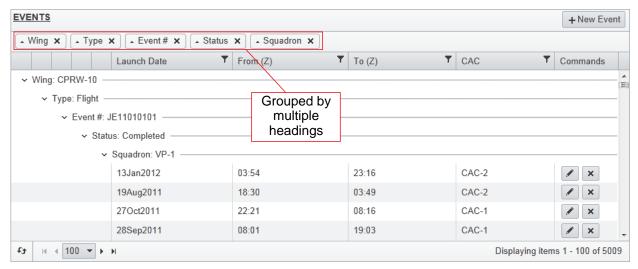


Figure 3-7: Events List Customization with Multiple Column Headings

These customizations are only persistent throughout the current session, and will be set back to default upon reload.

Events List Chapter 3: Events

3.1.4 Paging

While the default setting for any list only displays the most recent events, a series of controls, located in the bottom left-hand corner of the window, allow you to reference archival data.

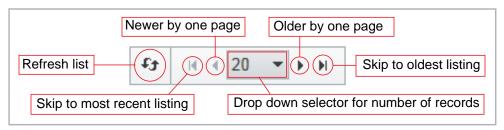


Figure 3-8: Page Controls

3.1.4.1 Drop Down Selector

The drop-down selector determines how many records will display on the screen at a time. All controls will reference this selection during navigation.

3.1.4.2 Page to Older / Newer Records

PMATT will display the latest records as numbers 1-25 by default. By clicking the button,

PMATT will display the slightly older records numbered 26-50. Conversely, clicking the button will page from older records towards more recent listings, all in denominations chosen by the drop-down selector.

3.1.4.3 Page to Oldest / Newest Record

For more drastic navigation, clicking the button will jump to the very earliest records available, and will jump to the most recent.

3.1.4.4 Refresh Button

Clicking the Refresh button will collect any more recent records that may have been entered into memory during the current session and will regenerate the display.

Chapter 3: Events Create a New Event

3.2 Create a New Event

By clicking on the **New Event** button in either the top-right corner of the *Event* page or the top right corner of the *Events / Qualifications* panel on the *Home* page, the *New Event* prompt will emerge.

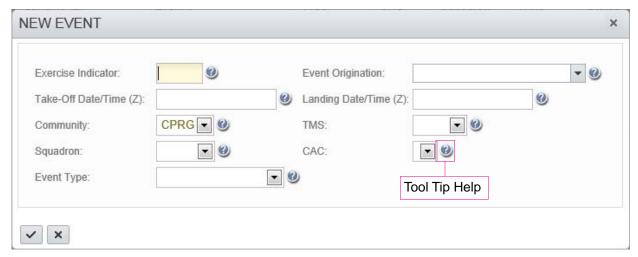


Figure 3-9: New Event Prompt

Enter all pertinent information into the respective appropriate field.



Tip: Remember to hover your cursor over the Tool Tip Help popup, immediately adjacent to the relevant field, to receive information and advice about valid formats and example entries.

Both the Take-Off and Landing Date / Times are supported by drop-down date / time pickers. Click within the field to conjure the drop-down. For details on using the date / time picker, see Section 3.2.1: Drop-Down Date / Time Picker on page 3-8

The Event Origination is chosen from a drop-down menu and is used to generate the Event #, based on rules provided by CPRG (e.g. JE12012401).

Similarly, the *Community, TMS, Squadron, CAC, and Event Type* fields also feature drop-down lists in order to save time entering data. Click on the down-arrow icon within the field and choose your selection from the list. The field will auto-fill.

The information supplied in this prompt will then populate the Event Details Identification Header (see Section 3.3.1.1: Event Details Identification Header on page 3-9).

After filling out the fields, click the **Insert** button to confirm and submit the Event information, or click the **Cancel** button to void the Event creation.

Edit an Event Chapter 3: Events

3.2.1 Drop-Down Date / Time Picker

All entry fields in PMATT involving date or time are supported by a drop-down date / time picker that allows for expedited selection.

Simply click within an empty date / time field, wait for the drop-down graphic, then select the appropriate date or time and the field will auto-complete.

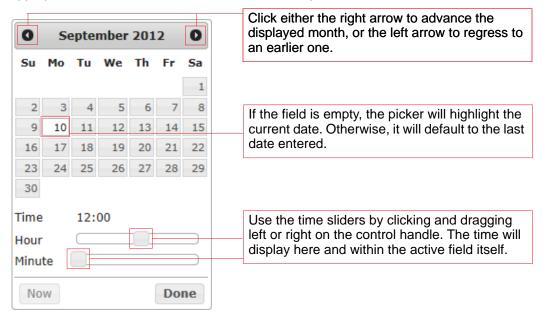


Figure 3-10: Drop-Down Calendar and Clock

3.3 Edit an Event

On any row in the Event List page, click the button to bring up the Edit Event prompt.



Figure 3-11: Edit Event Prompt

Modify the fields as necessary and click the button to confirm the modifications, or click the button to cancel them.

Chapter 3: Events Edit an Event

3.3.1 Event Details Page

By clicking on any event record row in the *Latest Events* panel, or within the *Events* list page, the *Event Details* page will display.

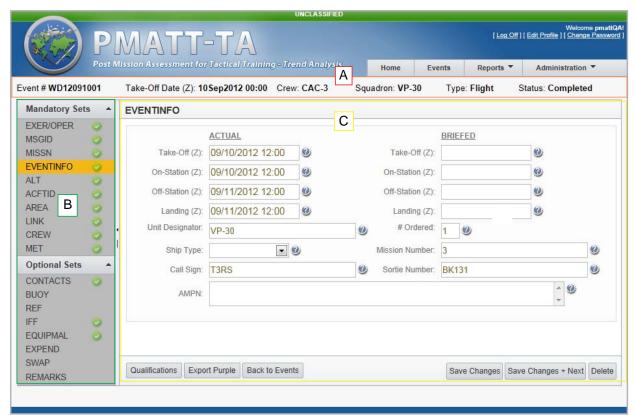


Figure 3-12: Event Details Page (EVENTINFO Set)

This page is composed of three sections:

- A. Event Details Identification Header
- B. Sets Menu
- C. Information Detail Workspace

3.3.1.1 Event Details Identification Header

This section contains all unique identifying information for each flight or simulation, along with an assigned *Event #*, and will remain displayed at the top of the *Events Details* page while the various categories in the Sets Menu are being filled.



Figure 3-13: Event Details Identification Header



Note: Notice the *(Z)* immediately following the each *date / time* label. This indicates that time is displayed in zero meridian "Zulu" format (Greenwich Mean Time (GMT) / Coordinated Universal Time (UTC)).

Edit an Event Chapter 3: Events

3.3.1.2 Sets Menu

The Sets Menu contains all the fields necessary to complete the Rainform Purple Message. The data may also be applied toward Qualifications.

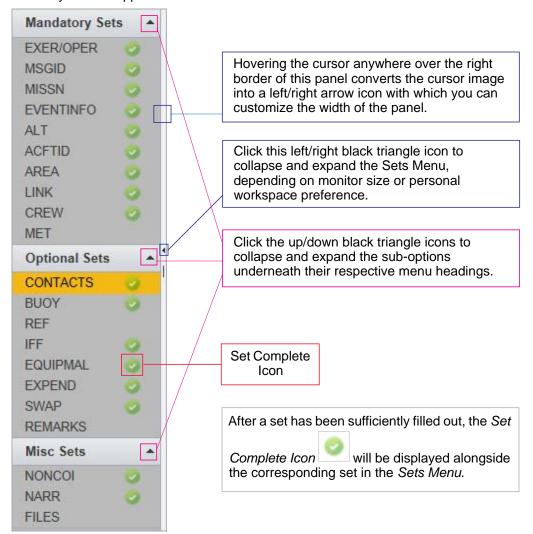


Figure 3-14: Sets Menu

The Sets Menu is divided into three sections:

1. Mandatory Sets

These fields are required by the Rainform Purple Message format and must be filled out in order to generate a valid message. Also, *Qualifications* for a flight event will be inaccessible until the Mandatory sets are completed in full.

2. Optional Sets

These are context-dependent factors and may be included as warranted.

3. Misc Sets

This optional set contains NONCOI, which registers any vessels that were not contacts-of-interest, NARR which inserts event data into a narrative template summary, and FILES which allows users to upload supporting artifacts that append to the Event.



Note: Use the black triangle icon controls to configure the workspace to your preference. Click the right/ left-pointing triangle icon along the right side of the Sets Menu to collapse and expand the list, and use the up/down icons to hide or reveal the sub-options beneath the menu headers.

Chapter 3: Events Edit an Event

3.3.1.3 Information Detail Workspace

The Information Detail Workspace displays all fields within the active set.

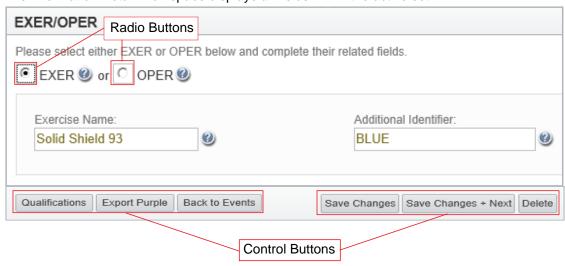


Figure 3-15: Information Detail Workspace (EXER/OPER Set)

Every set contains different fields. The details of each are enumerated in the subsequent Sections in this Chapter (see Section 3.4: Purple Message Sets on page 3-12).

Control buttons, by which to manage the Event, are located within the footer region. They include:

1. Qualifications

This button will remain greyed out until all of the Purple mandatory sets have been filled out and saved.



Once enabled, click to open the New Qualifications Wizard (see Section 5.4: Qualification Gradesheet Wizard on page 5-9).

2. Export Purple

Click here to have all event info compiled into Rainform Purple format and saved to your local machine as a .txt file.

A Windows alert will ask if you wish to open, save or cancel the file export.

For details on exporting Purple Messages, see Section 3.5: Export Purple Message on page 3-59.

3. Back to Events

Click here to return to the Events List page (see Section 3.1: Events List on page 3-2).

4. Save Changes

Click here to save any entries completed thus far. Uncompleted events will maintain 'Draft' status.

5. Save Changes + Next

At the completion of a Purple set, click this button to save all changes and to advance to the next Purple set.

6. Delete

Click here to delete the event.

3.4 Purple Message Sets

The Purple Message is used to disseminate post-mission summary and management information by a maritime unit or operational control authority. It provides a comprehensive summary of the activities of a mission or event. It is normally submitted immediately following the debriefing and the mission (event) analysis. It may include details of the mission environment, task time, area coverage, equipment status, crew training, as well as intelligence on contacts gained during the mission (event).

Purple Message Sets encompass all of the fields necessary to generate a Rainform Purple message and may also be used to satisfy qualification requirements. They are composed of two sections: (A) Mandatory Sets, and (B) Optional Sets.

3.4.1 Mandatory Sets

3.4.1.1 EXER or OPER: Exercise / Operation Identification (choose one)

The Exercise Identification (EXER) set is used when a message applies to tasks or reports in connection with a designated joint, training, or special exercise. The EXER set is also used when not involved in a designated exercise, i.e., operating independently, to report drill/constructive events. The EXER set shall not be used when reporting real-world events that occur in the course of an exercise, i.e., actual collision at sea, aircraft accident, etc.

Click either the EXER or OPER radio button [to choose between an exercise or an operation.



Figure 3-16: EXER Set

3.4.1.1.1 EXER Set

The EXER set provides the designated code name or nickname, if the message supports an exercise.

1. **Exercise Name:** Enter the unique code name or nickname assigned to a joint exercise or plan.

Allowable entries: [Literal]. code name, nickname, or designation assigned by the appropriate authority.

Example: / Solid Shield 93

2. Additional Identifier: Enter a code, if applicable, as an additional identifier.

For more information on allowable entries, see Section A.1.1: Exercise Additional Identifier on page A-1.

Example: / EXIDD:BLUE

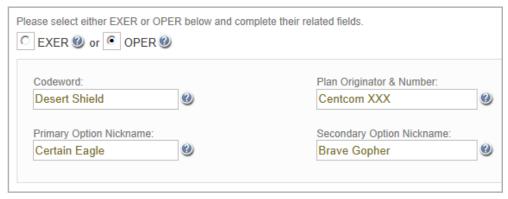


Figure 3-17: OPER Set

3.4.1.1.2 OPER Set

The OPER set provides the designated code name or nickname, if the message supports an operation.

 Codeword: Enter the unique operation name, nickname or codeword that identifies a specific operation.

Allowable entries: [Literal]

Example: /Desert Shield

2. **Plan Originator and Number:** Enter the official identifier of a military establishment which is responsible for a specific operation plan, and the identification number assigned to that specific operation plan.

Expressed as follows:

Plan originator

Allowable entries: [Literal] description, (E.G., II MAF; CTF77; I CORPS; 7TH AF; OR CTG76.05).

Mandatory space

Allowable entries: [Literal]. A mandatory space is required and a blank will appear in the position.

Operation plan number

Allowable entries: [Literal]. An alphanumeric or literal symbol identifying a particular item of a sequence or series.

Example: /Centcom XXX

3. **Primary Option Nickname:** Enter the nickname of an option or alternative of an operational plan or order.

Allowable entries: [Literal].

Example: / Certain Eagle

4. **Secondary Option Nickname:** Enter the secondary nickname of an option or alternative of an operational plan or order.

Allowable entries: [Literal].

Example: /Brave Gopher

3.4.1.2 MSGID: Message Identification

The MSGID set provides the message identification and originator.



Figure 3-18: MSGID Set

- Message Type: Enter the message identifier or an identifier of the message, standard and baseline.
- 2. **Originator:** Enter the identifier of the originator of the message.

Allowable entries: [Literal]. Description, literal (e.g., II MAF; CTF77; I CORPS; 7TH AF; OR CTG76.05).

Example: /1ST FW-DO

3. **Serial Number:** Enter the serial number assigned to a specific message. The originating command may develop the message serial number by any method.

Example: /1201003

- 4. **Month:** Enter the name of a specific month which is one of the twelve parts into which a year is divided as defined by the Gregorian calendar.
- Qualifier: Select a qualifier code which caveats a message status from the dropdown list.

See Appendix A.4.1.1: Qualifier on page A-31 for a legend of codes.

Example: /DEV

6. **Serial Number of Qualifier:** Enter a number assigned serially to identify the sequential version of a message qualifier for a basic message.

Example: /2

7. **AMPN:** Use this free-form text field to amplify or clarify any explanations.

3.4.1.3 MISSN: Mission

The MISSN set explains the purpose of the mission or event.

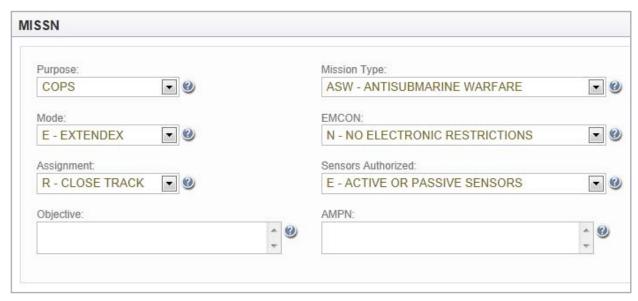


Figure 3-19: MISSN Set

1. Purpose: Enter the reason for a mission.

a. COPS: Contingency Operations

b. SOPS: Scheduled Operations

c. TRNG: Training Example: /SOPS

2. **Mission Type:** Enter the designator of a type of mission.

Example: /ASW

See Appendix A.2.1.1: Mission Type Designator on page A-2

Enter a set of guidelines which establish parameters for the conduct of a particular mission.

3. Mode

C - COVERT

E - EXTENDEX: Extended ASW Operation

O - OVERT

X - OTHER: Explain OTHER in subsequent AMPN field.

4. EMCON

- I INTERMITTENT OR SELECTIVE USE OF ELECTRONICS
- L UNRESTRICTED LINE OF SIGHT ONLY
- N- NO ELECTRONIC RESTRICTIONS
- O INTERMITTENT OR SELECTIVE USE OF LINE OF SIGHT ONLY
- S ELECTRONIC SILENCE
- X- OTHER: Explain OTHER in subsequent AMPN field.

5. Assignment

- A ATTACK
- C- CONTACT
- L LOCATE
- P SERVICES
- R CLOSE TRACK
- S ATTACK SOLUTION
- T TRACK

6. Sensors Authorized

- A ACTIVE SENSORS ONLY
- E ACTIVE OR PASSIVE SENSORS
- P PASSIVE SENSORS ONLY
- 7. **Objective:** Enter the mission goal expressed in plain language.

Example: /Locate U-571

8. **AMPN:** Use this free-form text field to amplify or clarify any comments.

3.4.1.4 EVENTINFO

The EVENTINFO set combines information historically captured within the FORCE and EVTASK sets. This hybrid set provides the mission itinerary times, both briefed and actually executed, as well as identifying information about the force that has completed the mission.

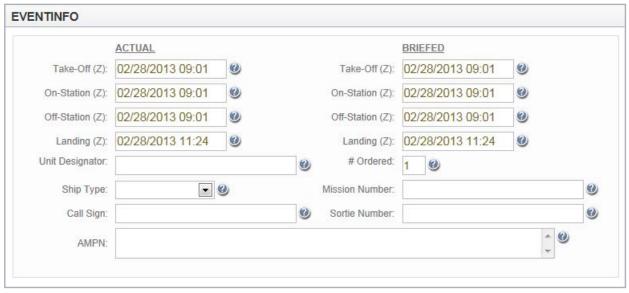


Figure 3-20: EVENTINFO Set

The top half of EVENTINFO Set contains two columns, *Actual* and *Briefed*, in which all fields are controlled by a drop-down date / time picker. (For details on using the date/time picker, *see Section 3.2.1: Drop-Down Date / Time Picker on page 3-8.*) Please document if there were any discrepancies between the planned event schedule and its actual execution. The four mission phases captured by these columns are:

- 1. Take-Off: Enter the departure day-time using the drop-down calendar and clock.
- 2. **On-Station:** Enter the on-station day-time using the drop-down calendar and clock.
- 3. Off-Station: Enter the off-station day-time using the drop-down calendar and clock.
- 4. **Landing:** Enter the arrival day-time using the drop-down calendar and clock.

The lower half of EVENTINFO mostly captures information about the tasked unit or force.

1. **Unit Designator:** Select the unit designation of a military unit from the drop-down list.

Example: /VP8

See Appendix A.3.1.1: Unit Designator on page A-4

2. Number Ordered: Enter the number of aircraft tasked.

Allowable entries: (0 through 999)

Example: /1

3. Ship Type: Select the naval ship type code from the drop-down list.

Example: /P3C3

For code details, see Section A.3.1.2: Ship Type Identification on page A-4.

- 4. **Sortie / Mission Number:** Enter the mission or sortie number using one of the following:
 - a. Mission number

Allowable entries: [Literal]. A through Z, 0 through 9, blanks and the special characters (hyphen, parentheses, period, comma) are appropriate entries, to include any combination thereof.

Example: /MSNNO:NAV12345

b. Sortie number

Allowable entries: [Literal]. A through Z, 0 through 9, blanks and the special characters (hyphen, parentheses, period, comma) are appropriate entries, to include any combination thereof.

Example: /BK131

Call Sign: Enter the identification of the aircraft involved with the tasked force using the unit call sign.

Allowable entries: [Literal]. Current call signs assigned will be used as the character code.

Example: /Callsign:T3RS

6. **AMPN:** Use this free-form text field to amplify or clarify any comments.

3.4.1.5 ALT

The ALT set designates the altitude of the tasked sorties.

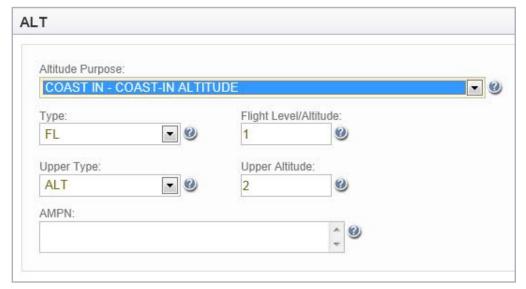


Figure 3-21: ALT Set

- A. Mandatory
 - Altitude Purpose ID: Enter the type of altitude designated from the drop-down menu.

See Appendix A-4: ALT Set (Designated Altitude Purpose) on page A-32.

Example: /Out

- 2. Flight Level Type: Choose between ALT and FL from the drop-down menu.
 - a. ALT: A term which qualifies airspace based on local altimeter setting.
 - b. FL: A term which qualifies airspace based on standard altimeter setting (pressure altitude).
- 3. Flight Level/Altitude: Enter the lower band limit in hundreds of feet: (FL is 180-999, ALT is 000-999)
- **4. Upper Flight Level Type:** Choose between **ALT** and **FL** from the drop-down menu.
- **5. Upper Altitude:** Enter the upper band limit in hundreds of feet: (FL is 180-999, ALT is 000-999)
- **6. AMPN:** Use this free-form text field to amplify or clarify any comments.

3.4.1.6 ACFTID: Aircraft Identification

The ACFTID set reports the post-mission summary that is the result of an aircraft mission. This set provides the aircraft identification, navigation accuracy, and special configuration.



Figure 3-22: ACFTID Set

- A. Mandatory
 - Type or Name: Select the type and model number of an aircraft from the dropdown menu.
- B. Optional
 - 1. **Side or ID Number:** Enter the identification or side number of the aircraft of concern using one of the following:
 - a. Aircraft identification number:

Allowable entries: [Literal]. The tail, side, bort or wing number of an individual aircraft.

Example: /NM12345

b. Aircraft side number:

Allowable entries: [Literal] A combination of the letters that appears on the tail and the numbers that appear on the nose of the aircraft.

Example: /1234

2. Bureau Number: Enter the aircraft Bureau Number (BUNO) assigned to an aircraft by the manufacturer.

Allowable entries: [Literal] An alphanumeric or literal symbol identifying a particular item of a sequence or series.

Example: /LH123

- Navigation Error (NM) Sign: Enter the difference, given as a linear measurement, between an actual position and an intended position. Units are Nautical Miles (NM).
- **4. Special Configuration:** Enter any equipment installed on an aircraft, ship, or weapon which is not normally associated with that particular model.

Example: /FLIR

3.4.1.7 AREA: Area

The AREA set describes the geographic search or operating area to be covered by the mission.



Figure 3-23: AREA Set

- **A. Area Name:** Enter the designator of the area or the successive points outlining the area concerned using one of the following:
 - 1. Point Name:
 - 2. Location, Lat/Long, Degrees
 - 3. Geographic Location, Lat/Long, Minutes
 - 4. Geographic Location, Lat/Long, Seconds
 - 5. Location, Abbreviated GEOREF, Minutes
 - 6. Location, GEOREF, Minutes
 - 7. Location, Abbreviated GEOREF, Centiminute
 - 8. Location, GEOREF, Centiminute
 - 9. Location, UTM 1000-Meter
 - 10. Geographic Location, UTM 100-Meter
 - 11. Geographic Location, UTM 10-Meter
 - 12. Location, UTM 1-Meter
 - 13. Location, Verified Lat/Long, Degrees
 - 14. Location, Verified Lat/Long, Minutes
 - 15. Geographic Location, Verified Lat/Long, Seconds
 - 16. True bearing and distance in NM from reference point
 - 17. Bearing (true) and distance (NM) from reference point
 - 18. Location, verified, Lat/Long, Deciseconds
 - 19. Verified true bearing and distance from reference point
 - 20. Q-Route Position
 - 21. Location, verified, Lat/Long, Thousandths of a minute
- **B. AMPN:** Use this free-form text field to amplify or clarify any comments.

3.4.1.8 LINK: Data Link

The LINK set reports the data link performance during the mission.

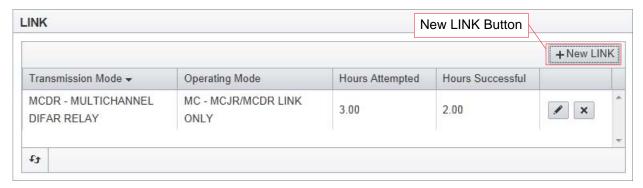


Figure 3-24: LINK Set

- **A. Transmission Mode:** The data link transmission mode in use.
- **B.** Operating Mode: The operating mode of the data link.
- **C.** Hours Attempted: The elapsed time in a task attempt to the nearest tenth of an hour.
- **D.** Hours Successful: The elapsed time during a successful operation to the nearest tenth of an hour.

Click the **New LINK** button to open the *NEW LINK* prompt.

Click the edit button to edit the LINK info.

Click the cancel button to delete the record.



Note: If there are multiple entries in the list, you will be able to sort the data by clicking on the relevant column heading. For a refresher on sorting, see Section 3.1.1: Sorting Columns on page 3-2.



Figure 3-25: NEW LINK Prompt

A. Transmission Mode: Select the data link transmission mode from the drop-down menu.

- 1. HF High Frequency
- 2. MCDR Multichannel DIFAR Relay
- 3. MCJR Multichannel Jezebel Relay
- 4. SHR Super High Frequency
- 5. UHF Ultra High Frequency
- 6. VHF Very High Frequency
- B. Operating Mode: Select the operating mode of the data link from the drop-down menu.
 - 1. MC MCJR / MCDR Link Only
 - 2. NC Net Control
 - 3. PU Picket Unit
 - 4. RS Radio Silence
- C. Hours Attempted: Enter the elapsed time in a task attempt to the nearest tenth of an hour.
- D. Hours Successful: Enter the elapsed time during a successful operation to the nearest tenth of an hour.
- **E.** Time to Establish Link: Enter time to establish communication link measured to the nearest tenth of an hour.
- F. Transmit / Receiver (T/R) Indicator: Select an indication of the presence or absence of data on a link using the drop-down list.
 - 1. N No Success
 - 2. R Receive Only
 - 3. T Transmit Only
 - 4. TR Transmit / Receive
- G. Data Accuracy: Select the data link transmission or reception accuracy using the dropdown list.
 - 1. G Good Accuracy
 - 2. P Poor Accuracy
- **H.** Transmission Quality: Select the average quality of data link signals transmitted during the period being reported using the drop-down list.
- Reception Quality: Select the average quality of data link signals received during the period being reported using the drop-down list.
- **J. AMPN:** Use this free-form text field to amplify or clarify any comments.

3.4.1.9 **CREW**: Aircrew

The CREW set reports flight crew data for the mission.

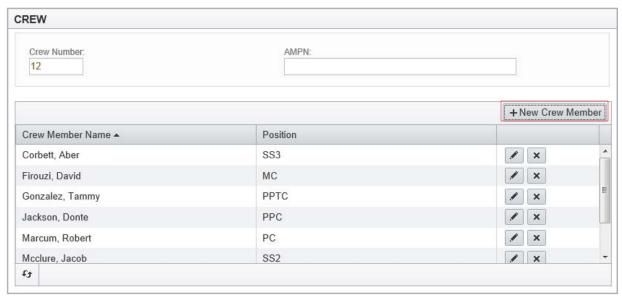


Figure 3-26: CREW Set

- A. Crew Number: Enter an identification number assigned to a specific aircrew.
- B. AMPN: Use this free-form text field to amplify or clarify any comments.

Click the **New Crew Member** button to conjure the *New Crew Member* prompt.

3.4.1.9.1 New Crew Member Prompt



Figure 3-27: New Crew Member Prompt

A. **Crew Member:** Start typing into the field or click the drop-down arrow and suggested matches emerge in a drop-down list.

B. Position:

- PC: Plane Commander
- TC: Tactical Coordinator
- NC: Navigator / Communication
- SS1: Sensor Station Number 1
- SS2: Sensor Station Number 2
- SS3: Sensor Station Number 3
- DBO: Debriefing Officer

3.4.1.10 MET: Meteorological Information

The MET set reports observed significant weather conditions encountered during the mission.



Figure 3-28: MET Set

- A. Flight Level: Lists the height expressed as pressure altitude in hundreds of feet.
- B. Wind Direction: Lists the observed or forecasted wind direction.
- C. Wind Speed: Lists the magnitude of the average wind speed in knots.
- D. **Visibility:** Lists the greatest distance, in a given direction, at which it is just possible to see and identify an object with the unaided eye, measured in units of Nautical Miles (NM).
- E. **Weather:** Lists the code for the most significant weather encountered as specified by the world meteorological organization.
- F. **Turbulence:** Lists the code that indicates the degree of turbulence.
- G. **Date:** Lists the day and time of the weather occurrence.

Click the **New MET** button to bring up the NEW MET prompt.

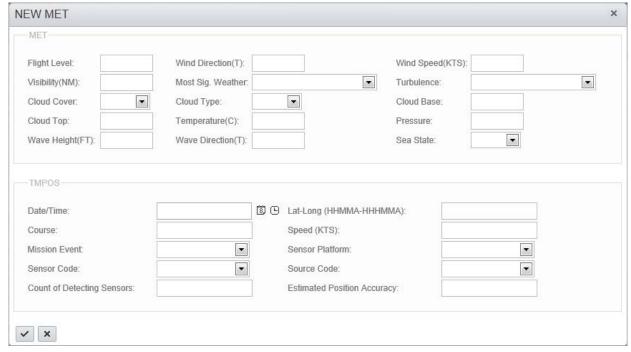


Figure 3-29: NEW MET Prompt

A. MET

- 1. Flight Level: Enter the height expressed as pressure altitude in hundreds of feet.
- 2. Wind Direction: Enter the observed or forecasted wind direction.
- 3. Wind Speed (KTS): Enter the magnitude of the average wind speed in knots.
- Visibility (NM): Enter the greatest distance, in a given direction, at which it is just possible to see and identify an object with the unaided eye, measured in units of Nautical Miles (NM).
- 5. **Most Sig. Weather:** Enter the code for the most significant weather encountered as specified by the world meteorological organization.
- **6. Turbulence:** Enter the code that indicates the degree of turbulence.
- 7. Cloud Cover: Enter the amount of cloud cover, expressed in eighths.
- 8. Cloud Type: Enter the name of the predominant cloud type.
 - a. AC Altocumulus
 - b. AS Altostratus
 - c. CC Cirrocumulus
 - d. CS Cirrostratus
 - e. CI Cirrus
 - f. CB Cumulonimbus
 - g. CU Cumulus
 - h. NS Nimbostratus
 - i. SC Stratocumulus
 - j. ST Stratus
- 9. Cloud Base: Enter the altitude at the base of the cloud layer.
- **10. Cloud Top:** Enter the altitude of the top of the cloud layer.
- 11. Temperature (C): Enter a temperature measured in degrees Celsius.
- 12. Pressure: Enter the barometric pressure at the specified time and location.
- **13. Wave Height (FT):** Enter the vertical distance between a wave crest and the troughs on either side of it.
- 14. Wave Direction (T): Enter the compass direction from which a sea wave originates.
- **15. Sea State:** Enter the code which describes water turbulence and wave height with associated wind speed.

B. TMPOS

The TMPOS set provides the time, position, and other pertinent information concerning the observed weather.

- Date/Time: Select the date and time of the observed weather event using the dropdown calendar and clock.
- 2. Lat-Long: Enter the location of a point on the earth's surface.
- 3. Course: Enter the apparent course of the observed weather.
- 4. Speed (KTS): Enter the rate of motion of the observed weather event in knots.
- 5. Mission Event: Enter the code to indicate the mission event that transpired.
- **6. Sensor Platform:** Enter the kind of platform on which a sensor is used to gather electronic and acoustic data.
- 7. **Sensor Code:** Enter the code to designate the type of maritime sensor.
- **8. Source Code:** Enter a code for a command, unit, system, system characteristic, or procedure originating, passing, or amplifying information.
- 9. Count of Detecting Sensors: Enter the number of sensors on a platform detecting the same weather event.
- Estimated Position Accuracy: Enter the estimated accuracy of an observed weather event.

3.4.2 Optional Sets

3.4.2.1 CONTACTS: Contact Information

The CONTACTS Set in PMATT collectively displays all contacts encountered in a tabular list and corresponding map. Contacts can include submarines, naval, merchant, or fishing vessels, aircraft, pleasure craft or something otherwise unknown. Clicking on a row will plot the lat-long coordinates onto the map overview.

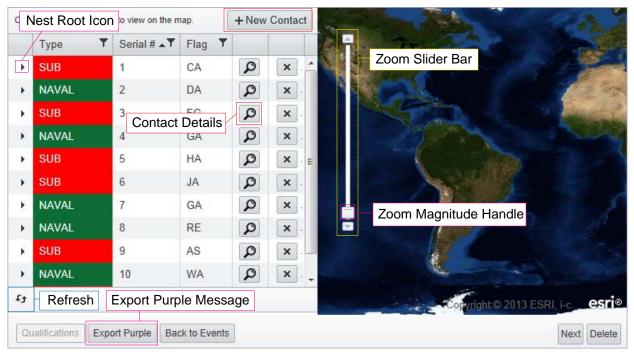


Figure 3-30: Contacts List Map

Clicking the **New Contact** button will open the *New Contact* prompt.

Click on the **Nest Root** icon, which can be found at the left edge of any contact row, and a nested log list will expand underneath the contact heading, showing all the TMPOS details for the contact. For an example, see *Figure 3-32: TMPOS List Showing New TMPOS Button on page 30*.

Click on the Contact Details button to navigate to the Contact Details page.

Click and drag the Zoom Magnitude Handle on the Zoom Slider Bar to narrow or widen the scope of your map view. You can also click and drag to a location on the map itself and zoom in and out with your mouse scroll wheel.

Click Refresh to enter into memory any newer records that may have been created during the current session, or to register any modifications you may have made.

Click **Export Purple** to format and save your Event as a USMTF Purple Message. An alert will ask you if you'd like to open or save the file. Select **Save As** and browse to a convenient folder location.

Click **Next** to save and progress onto the next set, BUOY.

Click **Delete** if you wish to erase a record. An alert will ask you to confirm your intention. Click **OK** to delete or **Cancel** to escape.

3.4.2.1.1 Creating a New Contact

Clicking on the **New Contact** button will open the *New Contact* prompt. This prompt captures mostly general information regarding contact type, date / time and position. Additional specific information will be asked for once the contact type has been more accurately defined.

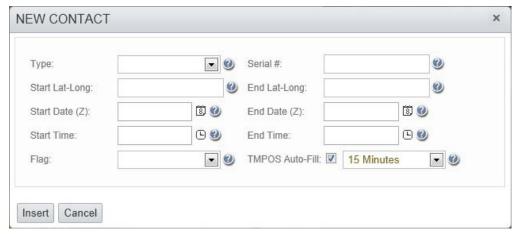


Figure 3-31: New Contact Prompt

- A. **Type:** Choose the type of contact tracked (SUB, NAVAL, etc.).
- B. Serial #: Enter the serial number for the vessel.
- C. Start Lat-Long: Expressed as (HHMMA#-HHHMMA#).
- D. End Lat-Long: Expressed as (HHMMA#-HHHMMA#).
- E. Start Date (Z): The date (in Zulu Standard) when tracking of contact started.
- F. End Date (Z): The date (in Zulu Standard) when tracking of contact ended.
- G. **Start Time:** The time at which tracking of contact started.
- H. **End Time:** The time at which tracking of contact ended.
- I. Flag: The contact's country of origin. Choose an entry from the drop-down list.
- J. **TMPOS Auto-Fill:** Click the check box next to this entry to have PMATT auto-generate a new TMPOS record for whichever time increment is selected from the drop-down list.

Click **Insert** to register the new contact, or click **Cancel** to void the entry.

3.4.2.1.2 Create a New TMPOS

Clicking on the nest root icon, found at the left edge of each record row, will display a nested list of all TMPOS entries for that contact. The TMPOS set provides the specific time, position, course, speed, and other information pertinent to the contact.

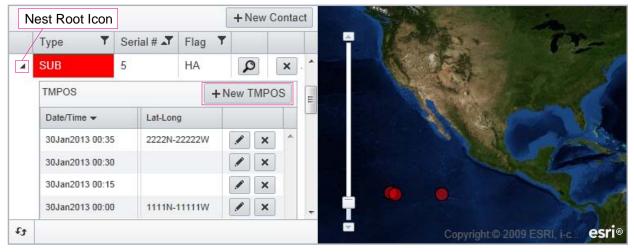


Figure 3-32: TMPOS List Showing New TMPOS Button

For more information about creating or modifying TMPOS info, please see Section 3.4.2.2.4: TMPOS Tab on page 3-35.

3.4.2.2 Contact Details

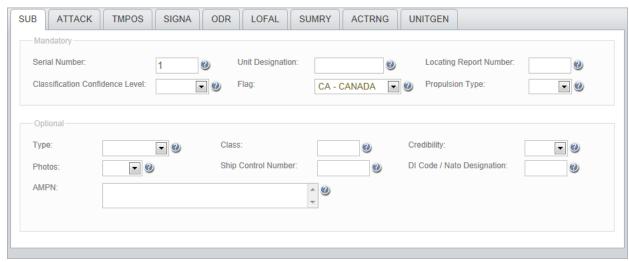


Figure 3-33: Contact Details (Showing SUB)

By clicking on the magnifying glass icon from the CONTACTS set page, the *Contact Details* page will display. The *Contact Details* screen, depending on type, can contain up to nine tabs:

1. (CONTACT) Depends on Type

This tab location, and all of its sub-options, will alter depending upon which type of contact is chosen (SUB, FISHCTC, NAVAL, etc).

2. ATTACK

The ATTACK set reports an attack on a contact.

3. TMPOS

The TMPOS set provides the time, position, and other information pertinent to the contact.

4. SIGNA

The SIGNA set reports a significant acoustic contact that did not vary in frequency while the contact was held.

5. ODR

The ODR set reports the observable detection range.

6. LOFAL

The LOFAL set measures operator performance during the prosecution of a submarine contact.

7. SUMRY

The SUMRY set reports the duration of the contact.

8. ACTRNG

The ACTRNG set provides readily accessible detection ranges for active sensors.

9. UNITGEN

The UNITGEN set identifies the unit gaining the initial contact.

3.4.2.2.1 SUB Tab

The SUB set reports information on special interest and/or enemy submarines in the multiple contacts section.

A. Mandatory

- 1. **Serial Number:** Enter the sequential number of the multiple contacts by type within a single message.
- Unit Designation: Enter the designation of the unit reporting the submarine contact.
- Locating Report Number: Enter the locating report number or "NRIF" (not reported in flight).
- Classification Confidence Level: Select the code, using the drop-down menu, for the identification and the probable accuracy of that identification of the maritime contact being reported.
- 5. **Flag:** Select the country of the world, using the drop-down menu, to which an individual, military equipment, unit, or facility belongs.
- 6. **Propulsion Type:** Select the type of propulsion plant used in the submarine contact being reported by using the drop-down menu.

B. Optional

1. **Type:** Select the type of submarine contacted using the drop-down menu.

Example: /SSN

2. Class: Enter the class name of submarine contacted.

Example: /SIERRA

- Credibility: Select the level of credibility of certain stated information by using the drop-down menu.
- 4. **Photos:** Select an indication of whether or not photographs were taken of a specific contact using the drop-down menu.
- 5. **Ship Control Number:** Enter an alphanumeric identifier assigned to a contact by the naval operations intelligence center.
- 6. **Discrete Identifier (DI) Code / Nato Designation:** Enter the four digit discrete identifier used in maritime reporting of tracks which are not identified as "friend" or "unknown, assumed friend".
- 7. **AMPN:** Use this free-form text field to amplify or clarify any comments.

Click **Save Changes** to register any entries.

Click **Back to Event** to return to the *Event Details* page.

3.4.2.2.2 ATTACK Tab

The ATTACK tab reports an attack on a contact.



Figure 3-34: ATTACK Tab

- A. Date/Time: Lists the day and time at which the attack occurred.
- B. Ordnance Type: Lists the ordnance/weapon type used.
- C. Results: Lists the results of an attack by own forces.
- D. Attack Method: Lists the tactical situation under which attack is conducted.
- E. **Range:** Lists the range from the weapon water entry point to the target, or range from weapon release point to target.
- F. Bearing: Lists the relative bearing from the target to the weapon water entry point.
- G. Heading: Lists the heading of the aircraft at the time of weapon release.
- H. Lat-Long: Lists the coordinates for the location of the attack as a point on the surface of the Earth.

Click the **New ATTACK** button to open the NEW ATTACK prompt.

3.4.2.2.3 New ATTACK Prompt

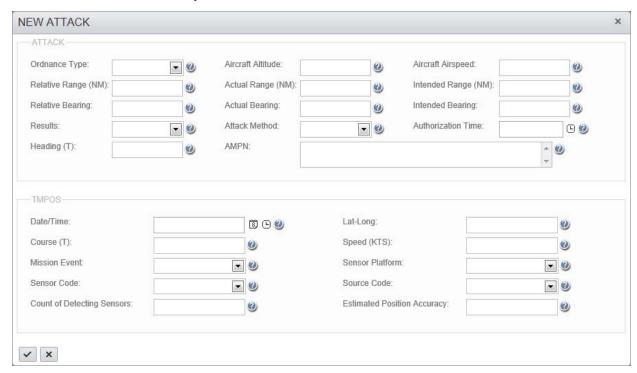


Figure 3-35: New ATTACK Prompt

A. ATTACK

- 1. **Ordnance Type:** Select the code for the ordnance/weapon type used in unique maritime applications using the drop-down menu.
- 2. Aircraft Altitude: Enter the aircraft altitude for the attack.
- 3. Aircraft Airspeed: Enter the aircraft airspeed for the attack.
- 4. **Relative Range (NM):** Enter the relative range from the weapon water entry point to the target, or range from weapon release point to target.
- 5. Actual Range (NM): Similar to Relative Range, but enter the actual range.
- 6. **Intended Range (NM):** Similar to Relative Range, but enter the intended range.
- Relative Bearing: Enter the relative bearing angle (0-359) measured clockwise from the target to the weapon water entry point.
- 8. Actual Bearing: Similar to Relative Bearing, but enter the actual bearing.
- Intended Bearing: Similar to Relative Bearing, but enter the intended bearing.
- 10. **Results:** Select the results of an attack by own forces using the drop-down menu.
- 11. **Attack Method:** Select the tactical situation under which attack is conducted using the drop-down menu.
- Authorization Time: Select the time of attack authorization using the drop-down clock.
- 13. **Heading (T):** Enter the heading of the aircraft at the time of weapon release.
- 14. **AMPN:** Use this free-form text field to amplify or clarify any comments.

B. TMPOS

The TMPOS entries are uniform throughout the application. For more detail regarding TMPOS field descriptions, see Section 3.4.2.2.4: TMPOS Tab on page 3-35.

3.4.2.2.4 TMPOS Tab

This tab is the main method for capturing info about a contact's time and position. Although this tab features a **New TMPOS** button, the same button can be found in any nested table under a contact record row in the CONTACTS set. They both will conjure the very same prompt and register the data to the same location. Hence, you could enter new TMPOS data either here or within the nested table in the CONTACTS Map view. Use whichever method you prefer.

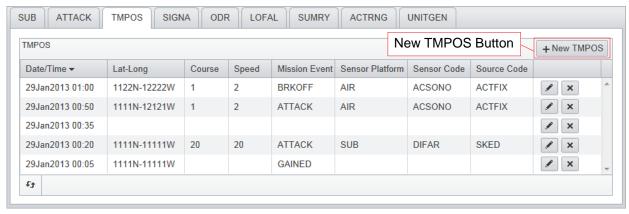


Figure 3-36: Contact Details Showing TMPOS Tab

The method for editing TMPOS info is also identical in both the Contacts view and TMPOS tab list. Click the pencil icon button to bring up the *Edit TMPOS* prompt.

Click the **New TMPOS** button to bring up the *Insert TMPOS* prompt.

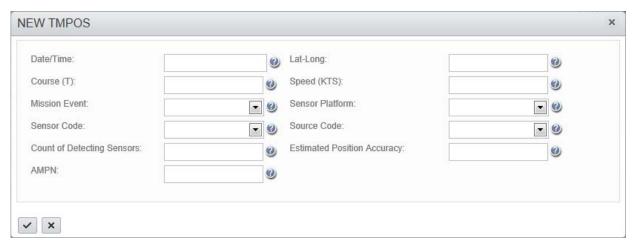


Figure 3-37: Insert TMPOS Prompt

- A. Date / Time: Enter the date and time using the drop-down date / time picker.
- B. Lat-Long: Enter the location of a point on the earth's surface (HHMMA#-HHHMMA#).
- **C.** Course (T): Enter the true course of the contact, using bearing in degrees or angular measurement (000-999).
- **D. Speed (KTS):** Enter the rate of motion for a contact in knots.
- **E. Mission Event:** Select the code using the drop-down list to indicate the mission that transpired. For details, see Section A.6.3.1: Mission Event on page A-41.
- **F. Sensor Platform:** Select from the drop-down list the kind of platform on which a sensor is used to gather electronic and acoustic data.

G. Sensor Code: Select the code using the drop-down list to designate the type of maritime sensor.

- **H. Source Code:** Select the code using the drop-down list for a command, unit, system, system characteristic, or procedure originating, passing, or amplifying information.
- Count of Detecting Sensors: Enter the number of sensors on a platform detecting the same target.
- J. Estimated Position Accuracy: Enter the estimated accuracy of a position fix.
- **K. AMPN:** Use this free-form text field to amplify or clarify any comments.

Click the Confirm button to register insertions.

Click the Cancel button to void any insertions.

Upon clicking the pencil icon button, the Edit TMPOS prompt will display.

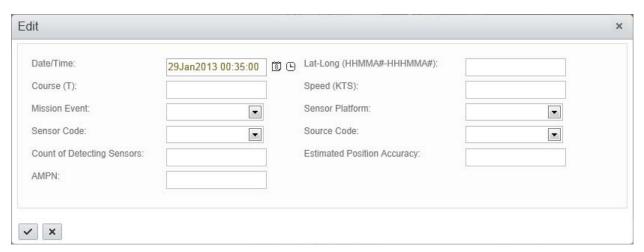


Figure 3-38: Edit TMPOS Prompt



Tip: Use either the TMPOS tab within Contact Details page or the nested table in the CONTACTS Set page to enter or edit time and position information.

3.4.2.2.5 SIGNA Tab

The SIGNA tab lists the reports of a significant acoustic contact that did not vary in frequency while the contact was held.



Figure 3-39: SUB Details Showing SIGNA Tab

- A. **Date/Time:** Lists the date and time during which a SIGNA contact was held.
- B. Acoustic Source: Lists the origin of an acoustic signal.
- C. **Frequency:** Lists the frequency of an emitted acoustic signal to the nearest one thousandth Hertz.
- D. **Harmonic:** Lists a whole multiple of a fundamental frequency.
- E. **Revolutions Per Minute (RPM):** Lists the number of times an object revolves per minute.
- F. **Turns Per Knot:** Lists the correlation of the number of propeller revolutions to the speed of a vessel through the water.

Click the **New SIGNA** button to open the NEW SIGNA prompt.

Click the pencil icon button to edit that particular record row.

Click the Delete button to erase the record row. An alert prompt will ask you to verify your intention. Click **OK** to delete the record, or click **Cancel** to void the action.

3.4.2.2.6 New SIGNA Prompt

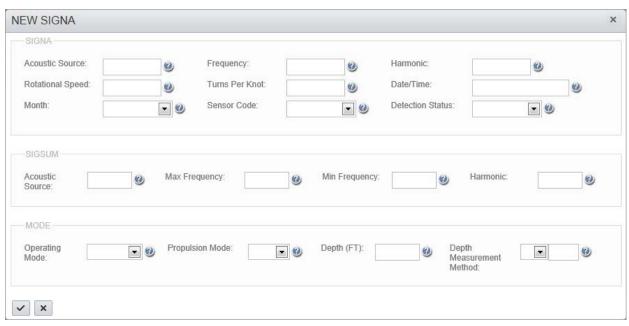


Figure 3-40: NEW SIGNA Prompt

A. SIGNA

1. Acoustic Source: Enter the origin of an acoustic signal.

Example: UNKNOWN

Frequency: Enter the frequency of an emitted acoustic signal to the nearest one thousandth hertz.

Example: 1234.123

3. Harmonic: Enter a whole multiple of a fundamental frequency.

Allowable entries: [Literal] A 1 to 3 digit harmonic combination separated by a hyphen and listed in descending order of predominance (e.g., 1-2-3, 12-3, 123-4-5).

Example: 5

- 4. Rotational Speed: Enter the number of times an object revolves per minute.
- 5. **Turns Per Knot:** Enter the correlation of the number of propeller revolutions to the speed of a vessel through the water.
- 6. **Date/Time:** Enter the date and time during which a SIGNA contact was held.
- 7. **Month:** Select the name of a specific month from the drop-down list.
- 8. **Sensor Code:** Select the code from the drop-down list to designate the type of maritime sensor.
- Detection Status: Select the code from the drop-down list for the status of the detection of an acoustic signature.

B. SIGSUM

- 1. Acoustic Source: Enter the origin of an acoustic signal.
- 2. **Max Frequency:** Enter the maximum frequency to the nearest one thousandth hertz of an emitted acoustic signal.
- 3. **Min Frequency:** Enter the minimum frequency to the nearest one thousandth hertz of an emitted acoustic signal.
- 4. Harmonic: Enter a whole multiple of a fundamental frequency.

C. MODE

- Operating Mode: Enter the operations or maneuvers in which a submarine is engaged.
- 2. **Propulsion Mode:** Enter the means by which submarine propulsion power is generated.
- 3. **Depth (FT):** Enter the distance below the surface of the water at which an object, or the bottom, is located (in feet).
- 4. **Depth Measurement Method:** Enter the plain language designation of the device, procedure or method used to determine the depth of an underwater contact.

3.4.2.2.7 ODR Tab

The ODR set reports the observable detection range.

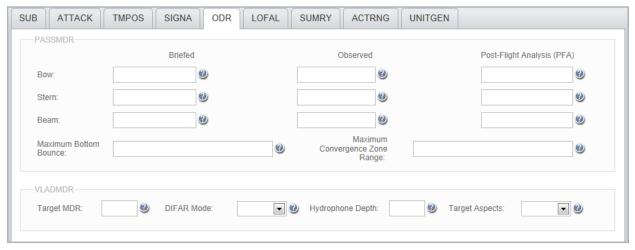


Figure 3-41: ODR Tab

- A. **PASSMDR:** The PASSMDR (passive median detection range) set provides readily accessible detection ranges for passive sensors. This set records differences between Briefed, Observed, and Post-Flight Analysis (PFA) measurements.
 - 1. **Bow:** Enter the median actual horizontal range from the bow at which an underwater contact can be detected.
 - 2. **Stern:** Enter the median actual detection range from the stern at which an underwater contact can be detected.
 - Beam: Enter the median actual detection range from the beam at which an underwater contact can be detected.
 - Maximum Bottom Bounce: Enter the maximum bottom bounce range in nautical miles.
 - 5. **Maximum Convergence Zone Range:** Enter the maximum convergence zone range in nautical miles.
- B. **VLADMDR:** The VLADMDR (variable line array DIFAR median detection range) set provides readily accessible detection ranges for statistics and analysis.
 - Target MDR: Enter the median actual detection range from the target at which an underwater contact can be detected.
 - 2. **DIFAR Mode:** Select the code using the drop-down list to indicate if bottom bounce or convergence zone is present.
 - 3. **Hydrophone Depth:** Enter the depth to which a hydrophone is lowered in a variable line array DIFAR.
 - 4. Target Aspects: Select the target aspect to the receiver using the drop-down list.

3.4.2.2.8 LOFAL Tab

The LOFAL set measures operator performance during the prosecution of a submarine contact.



Figure 3-42: LOFAL Tab

- Investigated Sub: Check the box to indicate if the aircrew investigated a possible submarine contact.
- B. Called Sub: Check the box to indicate if the aircrew called a submarine detection.
- C. **PFA Available:** Check the box to indicate if postflight analysis was available.
- D. **Warranted:** Check the box to indicate if postflight analysis indicated that a contact investigation was warranted.
- E. **Confirmed Sub:** Check the box to indicate if postflight confirmed the aircrew's call of a submarine detection.
- F. **Detected Sub:** Check the box to indicate if postflight resulted in a submarine detection.

3.4.2.2.9 SUMRY Tab

The SUMRY set reports the duration of the contact on the subsurface contact.

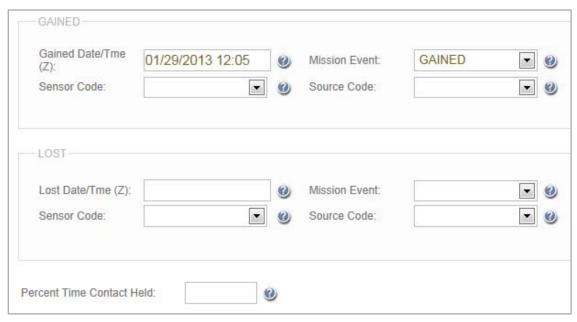


Figure 3-43: SUMRY Tab

A. GAINED

- Gained Date/Time (Z): Select the day and time contact was gained using the dropdown date picker.
- 2. **Mission Event:** Select the code using the drop-down list to indicate the mission event that transpired.
- 3. **Sensor Code:** Select the sensor code in contact at the time contact was initially gained using the drop-down list.
- 4. **Source Code:** Select the source code in contact at the time contact was initially gained using the drop-down list.

B. LOST

- 1. **Lost Date/Time (Z):** Select the day and time contact was lost or turned over using the drop-down date picker.
- 2. **Mission Event:** Enter the code to indicate the mission event that describes the contact loss or turnover.
- 3. **Sensor Code:** Select the sensor code in contact at the time contact was lost using the drop-down list.
- 4. **Source Code:** Select the source code in contact at the time contact was lost using the drop-down list.
- 5. **Percent Time Contact Held:** Enter the percentage of time a contact was held.

3.4.2.2.10 ACTRNG Tab

The ACTRNG set provides readily accessible detection ranges for active sensors.

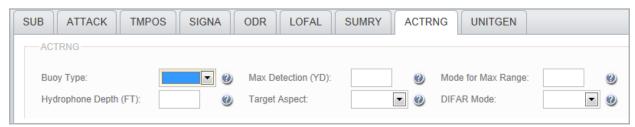


Figure 3-44: ACTRNG Tab

- A. **Buoy Type:** Select the type of expendable underwater acoustic detection and meteorological device using the drop-down menu.
- B. **Max Detection (YD):** Enter the maximum active detection range of a target measured in units of yards.
- C. **Mode for Max Range:** Enter the type of modulation utilized for maximum detection range of a target.
- D. **Hydrophone Depth (FT):** Enter the depth to which a hydrophone is lowered in units of feet (ft).
- E. **Target Aspect:** Select the target aspect to the receiver using the drop-down menu.
- F. **DIFAR Mode:** Select the code using the drop-down menu to indicate if bottom bounce (BTMB) or convergence zone (CZ) is present.

3.4.2.2.11 UNITGEN Tab

The UNITGEN set identifies the unit gaining the initial contact.

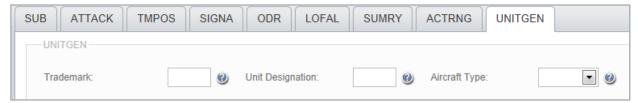


Figure 3-45: UNITGEN Tab

- A. **Trademark:** Enter a unique naval operations designator assigned to a target by the unit gaining contact and by senior operational commanders.
- B. Unit Designation: Enter the unit designation of a military unit.
- C. **Aircraft Type:** Select the aircraft or unit having initial contact using the drop-down menu.

3.4.2.3 BUOY: Sonobuoy Information

Similar to the CONTACTS set, the BUOY set features a split screen view with half showing the time/position table and half showing a plotted map view.

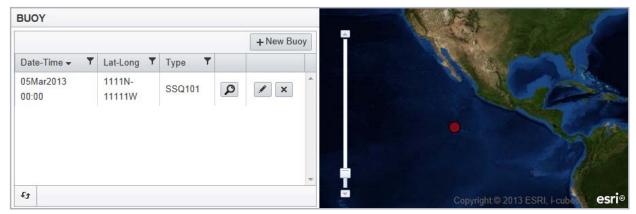


Figure 3-46: BUOY Set

This set comprises a table list with three columns:

- A. **Date-Time:** Lists the day and time on which the buoy was dropped.
- B. Lat-Long: Lists the location of a point on the earth's surface.
- C. **Type:** Lists the type of expendable underwater acoustic detection and meteorological device, normally air delivered.



Tip: Notice that the column headings in this list can be sorted and filtered in the same manner as the rest of the application. For a refresher, see *Chapter 3.1.1:* Sorting Columns and Chapter 3.1.2: Filtering Within Columns.

Click on a record row to see those coordinates plotted onto the map.

Click the **New Buoy** button to conjure the *New Buoy* dialog.

Click the hourglass icon button to display the *Buoy Details* page.

Click the pencil icon button to open the *Edit Buoy* dialog.

Click the delete x button to erase the record.

3.4.2.3.1 New Buoy Prompt

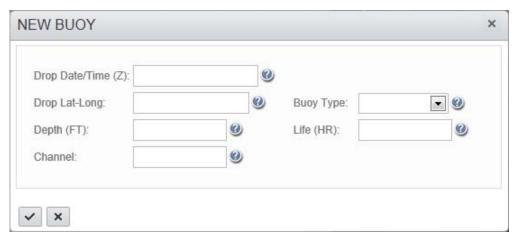


Figure 3-47: New Buoy Prompt

- A. **Drop Date/Time (Z):** Select the day of the sonobuoy drop using the drop-down date/ time picker.
- B. **Drop Lat-Long:** Enter the coordinates for the location of the drop as a point on the surface of the Earth. Expressed as (HHMMA#-HHHMMA#).
- C. **Buoy Type:** Select the type of expendable underwater acoustic detection and meteorological device using the drop-down list.
- D. Depth (FT): Enter the depth to which a hydrophone is lowered using units of feet.
- E. Life (HR): Enter the period of time (in hours) for which a sonobuoy is set to operate.
- F. Channel: Enter a specific sonobuoy channel setting.

Chapter 3: Events Purple Message Sets

3.4.2.3.2 Buoy Details Tab



Figure 3-48: Buoy Details Tab

A. BUOY

The BUOY sub-section of the BUOY Details tab contains all the info initially entered upon creating a new buoy record. For more details on BUOY field descriptions, see Section 3.4.2.3.1: New Buoy Prompt on page 3-46.

B. SONOPATN

The SONOPATN set reports the particulars of a sonobuoy pattern using the buoys in the above BUOY set.

- 1. **Tracking Type:** Select the code for the sonobuoy tracking type.
- 2. Pattern Type: Select a specific sonobuoy channel setting.
- 3. **Row Orientation:** Enter the direction in which a longitudinal axis points in relation to true, magnetic, or grid north, or measured relative to an object.
- 4. **Buoys/Row:** Enter the number of sonobuoys laid in a row.
- Buoys Spacing: Enter the distance between adjacent sonobuoys in a row or pattern.
- 6. **Row Spacing:** Enter the distance between adjacent rows of sonobuoys in a pattern.
- 7. **Number of Rows:** Enter the number of rows in a sonobuoy pattern.
- 8. **Buoy Total:** Enter the total number of sonobuoys in the pattern.
- 9. **MDR Spacing:** Enter a value for sonobuoy spacing expressed as a multiple of the computed median detection range (MDR).
- Detection Probability: Enter the probability of target detection expressed to the nearest percent.
- 11. **CZ Min Range:** Enter the least range from an acoustic sensor to the boundaries of a convergence zone (CZ), expressed in nautical miles.
- 12. **CZ Max Range:** Enter the greatest range from an acoustic sensor to the boundaries of a convergence zone (CZ), expressed in nautical miles.
- Wedge Angle: Enter the direction of walk or wedge angle in the sonobuoy pattern described.
- 14. **AMPN:** Use this free-form text field to amplify or clarify any comments.

Purple Message Sets Chapter 3: Events

3.4.2.3.3 BATHY Tab

The BATHY set reports all bathythermograph information for use with the buoy set.

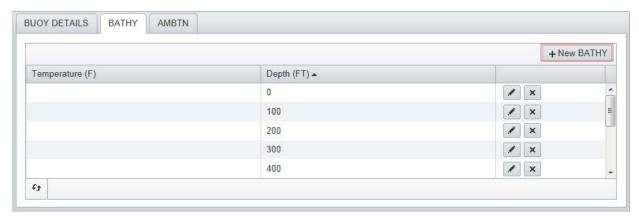


Figure 3-49: BATHY Tab

- A. **Temperature (F):** Enter the ambient water temperature (in Fahrenheit) as measured by a bathythermograph.
- B. **Depth (F):** Enter the distance below the surface of the water (in units of feet) at which an object, or the bottom, is located.

Click the **New BATHY** button to insert a new row at the top of the list.

After entering info into the two fields within the new row, click either to confirm the entry, or click to delete the entry.

Click to edit the record row.

Chapter 3: Events Purple Message Sets

3.4.2.3.4 AMBTN Tab

The AMBTN set reports ambient noise information associated with the use of sonobuoys in the buoy set. All readings are reported in hertz (hz) and decibels (db) using the micro-pascal reference level.

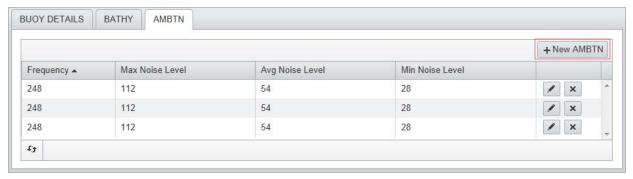


Figure 3-50: AMBTN Tab

- A. **Frequency:** Lists the acoustic frequency of interest to the nearest hertz.
- B. **Max Noise Level:** Lists the maximum intensity of naturally occurring underwater background noise.
- C. Avg Noise Level: Lists the average intensity of naturally occurring underwater background noise.
- D. Min Noise Level: Lists the minimum intensity of naturally occurring underwater background noise.

Click the **New AMBTN** button to conjure the *New AMBTN* prompt.

3.4.2.3.5 New AMBTN Prompt

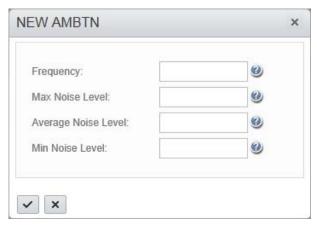


Figure 3-51: New AMBTN Prompt

See the AMBTN field descriptions above for guidance on filling out the AMBTN prompt.

Purple Message Sets Chapter 3: Events

3.4.2.4 REF: Referenced Message Information

The REF set provides both USMTF and non-USMTF references.



Figure 3-52: REF Set

- A. Serial ID: Lists the alphabetic identifier that distinguishes an individual communication.
- B. **Type:** Lists the type of document referenced.
- C. **Originator:** Lists the identifier of the originator of the message.
- D. Reference Date (Z): Lists the date and/or time of the referenced message/document.
- E. **Serial #:** Lists the serial number assigned to a reference.
- F. **Special Notation:** Lists the caveat that indicates special actions, restrictions, guidance, or information relating to an item, action, message, document, equipment, etc.
- G. **NASIS Code:** Lists the Navy Accession Security Information System code or filing number of the document being referenced.

Chapter 3: Events Purple Message Sets

3.4.2.4.1 New Ref

Click the **New REF** button in the upper-right-hand corner of the REF window to open the New REF prompt.

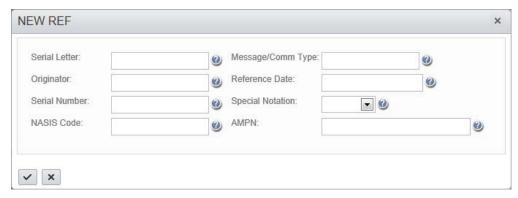


Figure 3-53: New REF Prompt

- Serial Letter: Enter an alphabetic identifier that distinguishes an individual communication.
- B. Message/Comm Type: Enter the type of document referenced.
- C. Originator: Enter the identifier of the originator of the message.
- D. **Reference Date:** Select the date and time of the referenced message/document using the drop-down calendar and clock.
- E. **Serial number:** Enter the serial number assigned to a reference.
- F. **Special Notation:** Lists the caveat that indicates special actions, restrictions, guidance, or information relating to an item, action, message, document, equipment, etc.
 - 1. NOTAL: The referenced item was not provided to all concerned. Unless noted otherwise, the referenced item was provided only to addees of the reference, and has not or will not be provided to others.
 - 2. PASEP: The referenced item was not provided directly and was or will be provided by separate action.
- G. **NASIS Code:** Enter the Navy Accession Security Information System code or filing number of the document being referenced.
- H. **AMPN:** Use this free-form text field to amplify or clarify any comments.

Purple Message Sets Chapter 3: Events

3.4.2.5 IFF: Identification Friend or Foe / Selective Identification Feature

The IFF set establishes specific identification procedures for the tasked event.

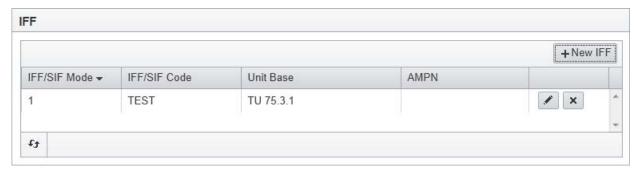


Figure 3-54: IFF Set

- A. IFF / SIF Mode: Lists an IFF/SIF mode.
- B. IFF / SIF Code: Lists an IFF/SIF code.
- C. Unit Base: Lists the unit or base designated to provide the IFF or SIF support functions.
- D. **AMPN:** Lists any free-form text comment amplifications or clarifications.

Click the **New IFF** button to bring up the *NEW IFF* prompt.

As always, click x to delete the entry, or click for to edit the record row.

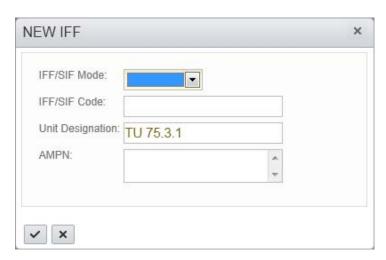


Figure 3-55: NEW IFF Prompt

- A. IFF / SIF Mode: Select an IFF/SIF mode combination using the drop-down menu.
- B. IFF / SIF Code: Enter an IFF/SIF code combination.
- C. **Unit Designation:** Enter the unit or base designated to provide the IFF or SIF support functions.
- D. **AMPN:** Enter any free-form text comment amplifications or clarifications.

Chapter 3: Events Purple Message Sets

3.4.2.6 EQUIPMAL: Equipment Malfunction

The EQUIPMAL set reports equipment malfunctions that caused operational delays, affected performance, or reduced mission capability.



Figure 3-56: EQUIPMAL Set

- **A. Equipment Name:** Lists the literal name or nomenclature of any equipment which is not operating properly.
- B. Malfunction Date/Time: Lists the day-time of equipment malfunction.
- C. Repair Date/Time: Lists the day-time of equipment repair.

Click the Edit button to edit EQUIPMAL info.

Click the Cancel

button to delete the record.

Click **New EQUIPMAL** button to open *NEW EQUIPMAL* prompt.

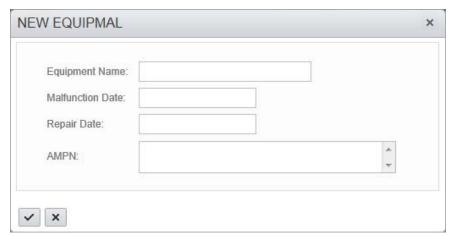


Figure 3-57: NEW EQUIPMAL Prompt

- **A.** Equipment Name: Enter the literal name or nomenclature of any equipment which is not operating properly.
- **B. Malfunction Date:** Select the day-time of equipment malfunction using the drop-down date/time picker.
- **C. Repair Date:** Select the day-time of equipment repair using the drop-down date/time picker.

AMPN: Use this free-form text field to amplify or clarify any comments.

Purple Message Sets Chapter 3: Events

3.4.2.7 **EXPEND**:

The EXPEND set reports item expenditures and reliability during the mission.



Figure 3-58: EXPEND Set

The EXPEND list captures the following information:

- A. Ordnance Type: Lists the name, trademark, or abbreviation of item expended
- B. **Sonobuoy Type:** Lists the type of sonobuoy expended.
- C. **Number Expended:** Lists the total number of units expended.
- D. Number of Failures: Lists the number of units which failed.
- E. Category: Lists the reason for expenditure of ordnance or sensors.

Table 3-1: Expenditure Category

Code	Expenditure Category	
С	Air fleet exercise allowance	
В	Air operational allowance	
А	ASW air crew training allowance	
D	Non accountable items	
F	Other	
E	Special project allowance	

Click the **New EXPEND** button to conjure a *New Expend* prompt.

Chapter 3: Events Purple Message Sets



Figure 3-59: New EXPEND Prompt

- A. **Ordnance Type:** Using the drop-down list, select the name, trademark, or abbreviation of item expended
- B. **Sonobuoy Type:** Using the drop-down list, select the type of sonobuoy expended.
- C. **Number Expended:** Enter the total number of units expended.
- D. Number of Failures: Enter the number of units which failed.
- E. **Expenditure Category:** Using the drop-down list, select the code for expenditure of ordnance or sensors. For descriptions of the codes, consult *Table 3-1* above.
- F. **AMPN:** Use this free-text region to supply any amplifying information or comments.

Purple Message Sets Chapter 3: Events

3.4.2.8 SWAP:

The SWAP set provides the information for a tactical exchange / turnover of units when an on station relief occurs.



Figure 3-60: SWAP List

- Type: Lists the type of tactical exchange which is effected when on-station relief occurs.
- B. Date/Time (Z): Lists the day-time of swap.
- C. Platform Type: Lists any one of several classes of vehicles, ships, aircraft, etc.
- D. **Platform Call-Sign:** Lists the call sign of another friendly platform.
- E. **Turnover Method:** Lists the method by which the tactical exchange of information occurred.
- F. Contact Method: Lists the code for the method by which the contact was exchanged.

Click the **New SWAP** button to conjure the *New SWAP* prompt.

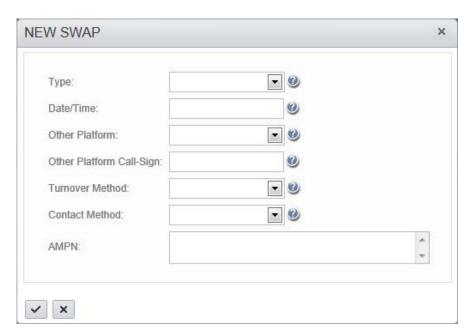


Figure 3-61: New SWAP Prompt

Please consult the descriptions above for guidance on filling out the *New SWAP* prompt.

Chapter 3: Events Purple Message Sets

3.4.2.9 **REMARKS**:

The REMARKS set is used for free text information and is of unlimited length.

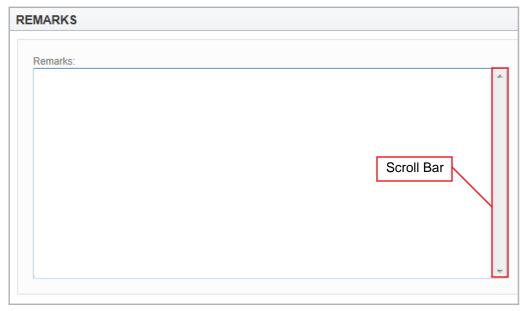


Figure 3-62: REMARKS Set

Enter any additional information that wasn't addressed by another set.

If the document is lengthy, click and drag on the scroll bar on the right of the panel to navigate to whichever position in the document.

Purple Message Sets Chapter 3: Events

3.4.3 Misc Sets

3.4.3.1 NONCOI Set

This optional set registers any vessels encountered during an event that are not contacts of interest (Non-COI).



Figure 3-63: NON-COI Set

For Search Area Size, enter the search area size in Nautical Miles.

For the remaining six sets (submarines, naval vessels, aircraft, fishing vessels, merchant ships, and unknown vessels), enter the total number for each type encountered.

3.4.3.2 NARR Set

The narrative is a machine-generated text report. It constructs a brief synopsis of the event using Set data.

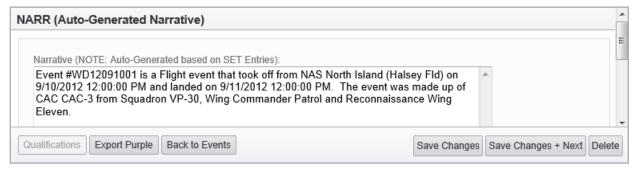


Figure 3-64: NARR Set

Be sure to double-check the machine's language and make any edits necessary.

3.4.3.3 FILES Set

Occasionally the need will arise to append supporting artifacts to the Event. Use the FILES set to browse your local machine for certain files to upload.



Figure 3-65: FILES Set

Click the **Browse** button to open an Explorer window on your local machine. Locate the supporting files and click **Open**.

Notice that valid file extensions are restricted to the MS Office family, various common photo formats, and standard text and .pdf formats.

Click Save Changes and you're done with the Sets!

Chapter 3: Events Export Purple Message

3.5 Export Purple Message

Upon clicking the **Export Purple** button, found in the footer region of every *Event* page, the Purple Set data will be formatted into a USMTF Purple Message. This will be compiled to a .txt file, and a download alert will be generated on your native machine, asking if you wish to open, save, or cancel the download.



Figure 3-66: Export Purple Alert

Click **Open** to view the message straightaway without designating a save folder. The message will open automatically in your machine's local *Notepad* application. You can designate a save location from within *Notepad* by choosing **File | Save as...**

Alternately, you can execute the **Save As...** command directly from the alert by clicking on the drop-down arrow within the **Save** button.

Click Cancel to void the export.

Upon opening the .txt file, the message should look something like this:

```
File Edit Format View Help

OPER/DESERT SHIELD/CENTCOM XXX/CERTAIN EAGLE/BRAVE GOPHER//
MSGID/ABSTAT, USMTF, 2005/ABSTAT, USMTF, 2005/1201003/SEP/DEV/2//
REF/-/--/-//
TIMPD/101200Z4/111200Z5/SEP/2012/SEP/2012//
MISSN/COPS/ASW/ENRE/-//
FORCE/VP-30/1/P3C3 /T3RS/BK131//
EVTASK/101200Z4/101200Z4/111200Z5/111200Z5/3//
ACFTID/P3C1/NM12345/LH123/3/TAR POD//
IFF/TU 75.3.1/B:1-TEST//
ALT/COAST IN/ALT1-FL2//
AREA/1234//
EQUIPMAL/ABC/1/10/2013 12:00:00 AM/1/10/2013 12:00:00 AM//
```

Figure 3-67: Formatted Purple Message displayed in Notepad

Export Purple Message Chapter 3: Events

This Page Intentionally Left Blank.

Chapter 4: Reports

Clicking the *Reports* Tab on the Navigation Header Menu will conjure a drop-down menu by which one can access a multitude of graphs and diagrams populated with the latest data. These will also be customized according to user credentials and personal preference.

Report Control Ribbon Chapter 4: Reports

4.1 Report Control Ribbon

Report criteria is defined within the Report Control Ribbon. This is currently powered by SQL Server Reporting Services (SSRS).

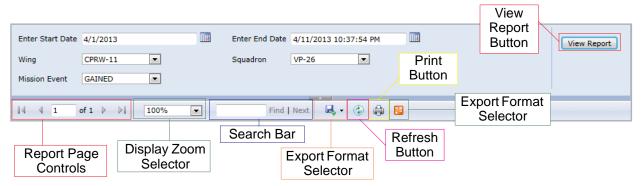


Figure 4-1: Report Control Ribbon

- **A.** Enter Start Date: Either type directly into the text field, or click on the drop-down calendar icon to establish the earliest relevant date.
- B. Enter End Date: Use above method to do the same for latest relevant date.
- **C.** Wing: Use the drop-down list to select the Wing.
- **D. Squadron**: Click the drop-down list to select the Squadron.
- **E. Mission Event:** Select the code that represents mission event. For details on code definitions, see Section A.6.3.1: Mission Event on page A-41.

While dynamically configuring itself to include or exclude certain fields pertinent to specific reports, the report ribbon should typically display the following controls:

A. Report Page Controls

Allows for navigation of multiple pages of archival data.

B. Display Zoom Selector

This drop-down menu features several options for rendering the display size of the report.

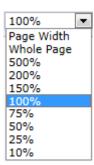


Figure 4-2: Display Zoom Selector

C. Search Bar

Enter keywords here to rapidly locate specific text within the data.

Click **Find** to search for the first instance of the entry within the report. If the search finds multiple valid entries, click **Next** to jump to the next instance.

Chapter 4: Reports Report Control Ribbon

D. Export Format Selector

Displays a drop-down menu for selecting any number of export options.

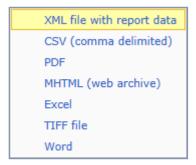


Figure 4-3: Export Format Options

E. Refresh

Click to update data filtration if any parameters have been modified. Refresh also collects any new data entered into memory since the start of the current session.

F. Print

Make an analog document by committing your data to paper and ink.

G. Export to Data Feed

Exports information to .atomsvc format for use with PowerPivot for Excel or SharePoint.

Contacts By Crew Chapter 4: Reports

4.2 Contacts By Crew

The following graphs are merely proofs of concept meant to demonstrate potential designs. The data in these reports contain only a fraction of projected workload and do not reflect actual accurate mission data.

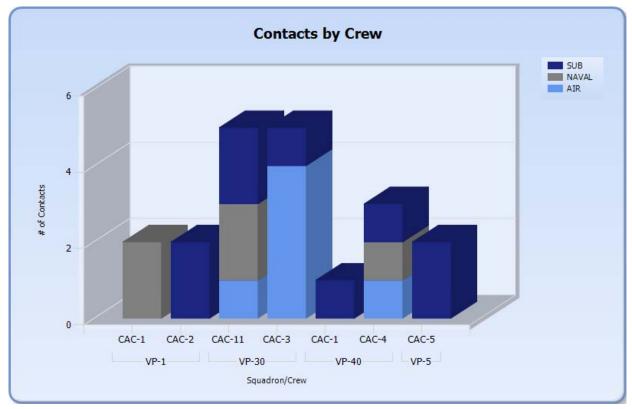


Figure 4-4: Reports -- Contacts by Crew (Graph)

Presentation can take a number of forms including graphs, tables and diagrams. This report contains a color-coded bar chart displaying the different contact types that were encountered by each Combat Air Crew and their collective squadrons.

The start and end date filters from the Control Ribbon determine the span of time. The filters allow the selection of one or more crews to inform the report.

Top Aircraft	Contacts	Top Sub	Contacts	Top Naval	Contacts	Ship Type
SU27	4	SIERRA I	3	⊞ AD	2	DESTROYER TENDER
TU204	1	AKULA	2	⊕ AF	2	STORES SHIP
737	1	INDIA	2	⊞ AAV	1	ASSAULT VEHICLE, AMPHIBIOUS
Total Contacts	6	Total Contacts	7	Total Contacts	5	

Figure 4-5: Reports -- Contacts by Crew (Table)

4.3 Qual Readiness vs. Difficulty by Squadron

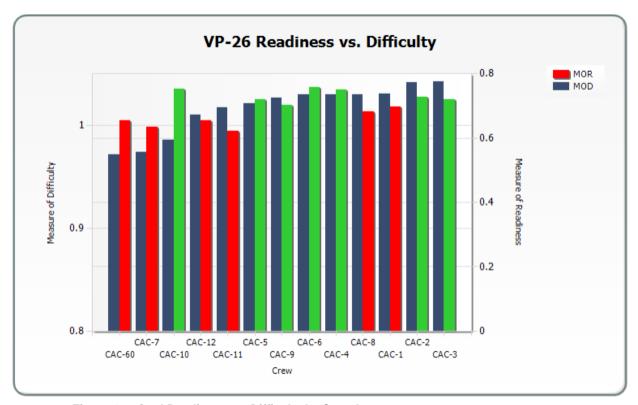


Figure 4-6: Qual Readiness vs. Difficulty by Squadron

This report compares the measure of readiness (MOR) and the measure of difficulty (MOD) for all the different Aircrews of VP-26.

4.4 Qual Readiness vs. Difficulty by Crew

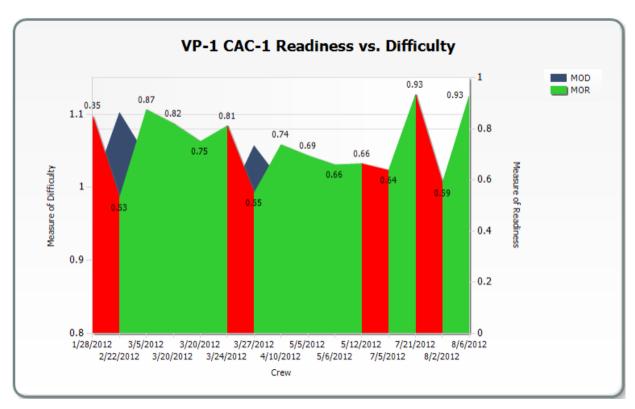


Figure 4-7: Qual Readiness vs. Difficulty by Crew

This report compares the measure of readiness (MOR) and the measure of difficulty (MOD) for an individual Aircrew over time.

4.5 Readiness by Qualification

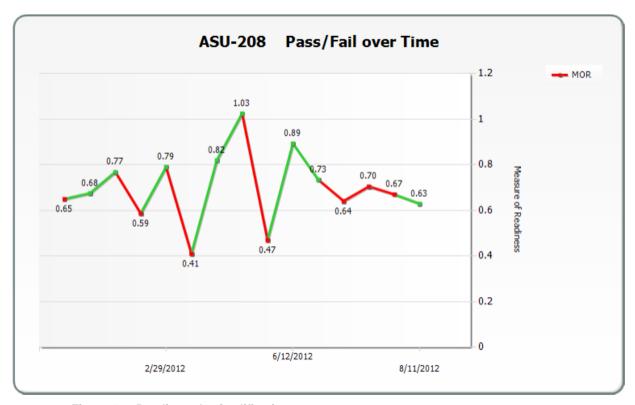


Figure 4-8: Readiness by Qualification

This report charts the overall qualification pass-or-fail trend for a crew as deduced by the measure of readiness.

4.6 Sorties and Qualifications Passed by Crew

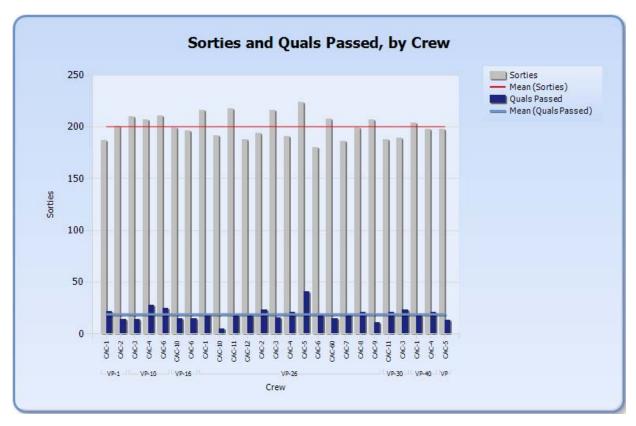


Figure 4-9: Sorties and Qualifications Passed by Crew

This report shows a comparative bar graph for various crews' achievements in the ratio of sorties flown to Qualifications passed.

4.7 SUB SUMRY Contact Held Percentage, by Crew

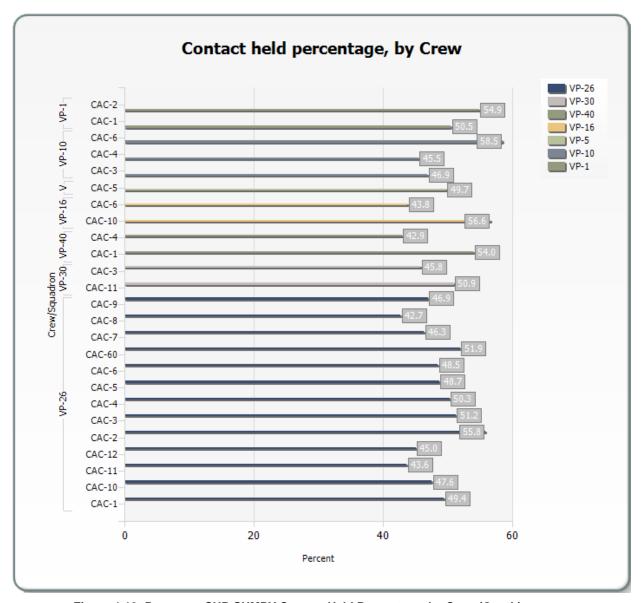


Figure 4-10: Reports -- SUB SUMRY Contact Held Percentage, by Crew (Graph)

This report represents a percentage of overall mission time that various Aircrews were able to maintain a SUB Contact.

4.7.1 SUB SUMRY (Table Collapsed)

Squadron	Crew	Held Percentage
+ VP-1	Squadron Average	52.6
 V P-10	Squadron Average	50.8
■ VP-5 Plus-sign Icon	Squadron Average	49.7
⊕VP-16	Squadron Average	49.5
 UP-40	Squadron Average	48.5
± VP-30	Squadron Average	48.3
 UP-26	Squadron Average	48.2
CPRG Average		49.1

Figure 4-11: SUB SUMRY Contact Held Percentage, by Crew (Table collapsed)

Clicking on expandable controls will "drill-down" into greater granular detail.

Here's a tabular view of the same information as above but collapsed within a nested hierarchy.

Click the plus-sign icon at the left edge of a Squadron row to expand the hierarchy underneath the squadron heading.

4.7.2 SUB SUMRY (Table Expanded)

Here's an expanded and itemized view of the same table as above.

Squadron	Crew	Held Percentage
□ VP-1	CAC-2	54.9
	CAC-1	50.5
Minus-sign Icon	Squadron Average	52.6
□VP-10	CAC-6	58.5
	CAC-3	46.9
	CAC-4	45.5
	Squadron Average	50.8
□ VP-5	CAC-5	49.7
	Squadron Average	49.7
□ VP-16	CAC-10	56.6
	CAC-6	43.8
	Squadron Average	49.5
□ VP-40	CAC-1	54.0
	CAC-4	42.9
	Squadron Average	48.5
□ VP-30	CAC-11	50.9
	CAC-3	45.8
	Squadron Average	48.3
□ VP-26	CAC-2	55.8
	CAC-60	51.9
	CAC-3	51.2
	CAC-4	50.3
	CAC-1	49.4
	CAC-5	48.7
	CAC-6	48.5
	CAC-10	47.6
	CAC-9	46.9
	CAC-7	46.3
	CAC-12	45.0
	CAC-11	43.6
	CAC-8	42.7
	Squadron Average	48.2
CPRG Average		49.1

Figure 4-12: SUB SUMRY Contact Held Percentage, by Crew (Table expanded)

Click the minus-sign icon to collapse the hierarchy.

SUB Time to Attack

Chapter 4: Reports

4.8 SUB Time to Attack

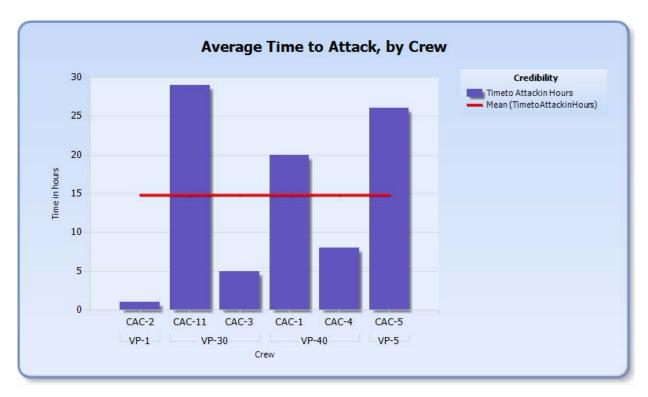


Figure 4-13: Reports -- SUB Time to Attack

This report charts shows the differences in individual time, as well as computing the collective average time, that various Aircrews take to attack a contact.

4.9 SUB Average Engagement Time

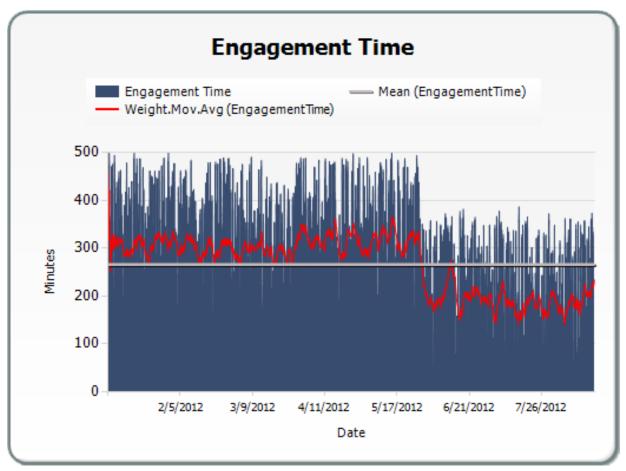


Figure 4-14: SUB Average Engagement Time

4.9.1 SUB Average Engagement Time Table

This report contains a couple of different views that illustrate engagement duration over time.

	Average Engagement Time (min)
⊕ CPRW-11	266
⊕ CPRW-10	259
All Wings Average	265

Figure 4-15: SUB Average Engagement Time Table (Collapsed)

	Average Engagement Time (min)
□ CPRW-11	266
VP-5	270
VP-26	269
VP-16	264
VP-30	263
VP-10	255
□ CPRW-10	259
VP-1	270
VP-40	248
All Wings Average	265

Figure 4-16: SUB Average Engagement Time Table Expanded

4.10 SUB Average Gained / Lost Time

The Report Control Ribbon will auto-configure filter options depending upon available data.



Figure 4-17: SUB Average Gained / Lost Time Filter Entry Bar

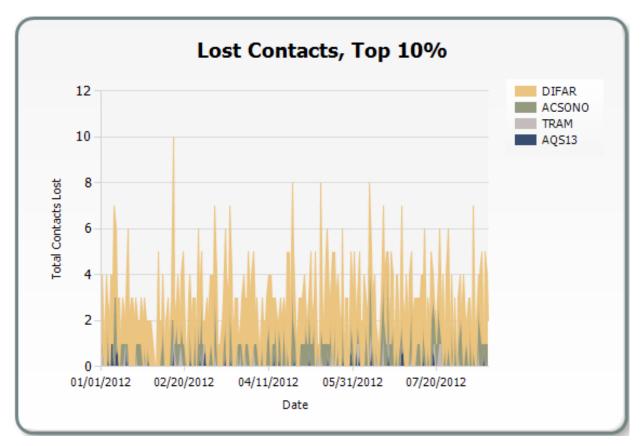


Figure 4-18: SUB Average Gained / Lost Time

This report shows what sensor platform was active at time of contact loss.

Report Builder Chapter 4: Reports

4.11 Report Builder

The reporting capabilities and trending insights of PMATT will improve when fortified with real-world data.

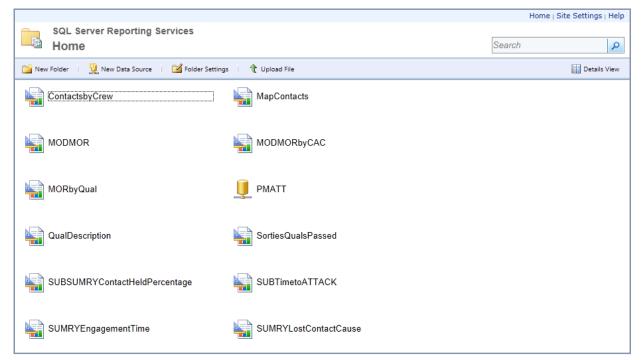


Figure 4-19: Report Builder

Additionally, PMATT features a Report Builder by which one can modify the report parameters, or even create a new report.

The pre-existing reports of PMATT are stored here and a user with suitable permissions can modify them by selecting which data criteria to track in a report.

Click on a pre-built report to view the current filter criteria. Modify as necessary, and click **View Report** to see the changes.

Chapter 5: Qualifications

PMATT-TA captures crew qualification metrics based upon the CPRG Wing Training Manual.

A read-only report which displays the Latest Qualifications is available in the Events / Qualification Panel on the Dashboard.

While these record rows can be clicked in order to display further detail, they are not editable. A valid Flight Event must be completed, or a Simulator Event must be created, in order to access the Qualifications.

Once these criteria have been satisfied, Qualifications are accessible from the Qualifications button on the bottom of the *Events Details* page.

If you're an administrator, you can create, modify and configure qualifications via the *Qualification Management* menu selection on the *Administration* tab within the Dashboard Header menu.

5.1 Crew Qualification Metrics

The Qualifications in PMATT-TA are informed by the Commander Patrol Reconnaissance Group VP Wing Training Manual. The current version is COMPATRECONGRUINST 3500.25E dated 01 July 2010.

List of Qualifications:

- ASW 201 DIESEL / LITTORAL ASW
- ASW 202 NUCLEAR / OPEN OCEAN ASW
- ASW 203 ASW COORDINATED OPERATIONS
- ASW 204 RANGE TORPEX
- ASW 205 IEER (EXTENDED ECHO RANGING)
- ASW 206 AIRBORNE ACOUSTIC INTELLIGENCE
- ASW 207 CREW ASW PROFICIENCY
- ASW 210 IEER -- ATTACK (IMPROVED EXTENDED ECHO RANGING)
- ASW 211 ASW ACTIVE/ PASSIVE SEARCH
- ASU 201 ASU JOINT / COMBINED OPERATIONS
- ASU 203 HARPOON MISSILEX
- ASU 204 MAVERICK MISSILEX
- ASU 205 SLAM-ER MISSILEX
- ASU 206 MINEX
- ASU 209 COORDINATED SLAM-ER MISSILEX
- ISR 201 MARITIME SURVEILLANCE
- ISR 202 LITTORAL / OVERLAND RECONNAISSANCE
- ISR 203 EMITTER RECOGNITION
- ISR 204 EW COLLECTION / SEI (SPECIFIC EMITTER RECOGNITION)
- ISR 205 AIR TO AIR INTERCEPT / COUNTER DRUG OPERATIONS
- ISR 206 OVERLAND SAR RECONNAISSANCE
- C2W 201 COMBAT ARRIVAL / DEPARTURE

5.1.1 Measure of Performance (MOP)

The MOP is based on objective goal accomplishment and good practice emphasizing procedural proficiency. The minimum standard is 70% (competent). A score of 85% or higher will denote that an aircrew is considered procedurally proficient in that area. MOPs are encapsulated in the aircrew gradesheets and are derived from NMETL standards.

- 1. Each qualification has an associated gradesheet, which is further divided into sub-areas.
- 2. Each gradesheet contains one or more critical sub-areas, in which aircrews are required to score a minimum of 70% in order to be awarded the qualification. Failure to achieve 70% in a 'critical' sub-area will constitute an automatic failure of the qualification.

5.1.2 Measure of Difficulty (MOD)

The MOD is based on NMETL conditions and is a modifier used to adjust the final assessment score based on factors beyond crew control, including environmental factors, mission constraints or operations in a threat environment.

More difficult missions will increase the final assessment score while missions of little or no difficulty will reduce the final score.

•

5.1.3 Measures of Readiness (MOR)

The Measure of Readiness is the crew's final grade, and is determined by multiplying the MOP and MOD. An MOR of less than 70% results in a failure of the task and the crew will not receive the associated readiness. A crew receiving an MOR of 85% or greater is considered tactically proficient in that area.

5.2 Qualification Gradesheet

Clicking upon any record row from within the *Latest Qualifications* panel on the *Home/Dashboard*, or from within the *Qualifications for Event #* page, will open the *Qualification Gradesheet*.

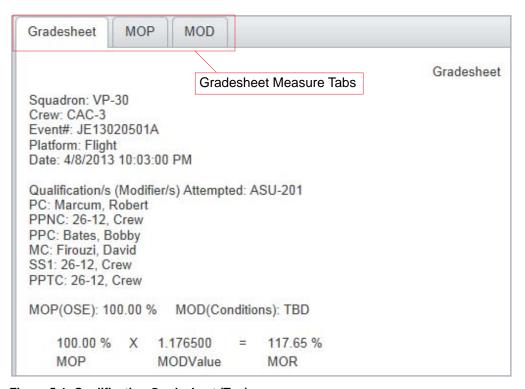


Figure 5-1: Qualification Gradesheet (Top)

The Gradesheet is the result summary for a qualification attempt. It calculates an overall score, called the Measure of Readiness (MOR), which multiples the scores achieved in the Measure of Performance (MOP) and Measure of Difficulty (MOD) Sub-categories.

To view the isolated results achieved for the MOD or MOP, click on whichever tab to view an itemized, non-editable list.

SUB AREAS:
Brief/Tactical Planning/Preflight = 140.00 / 140.00 (100.00%)
Transit/Onstation = 120.00 / 120.00 (100.00%)
Search = 120.00 / 120.00 (100.00%)
Coordinated Operations = 30.00 / 30.00 (100.00%)
Attack Procedures = 95.00 / 95.00 (100.00%)
Turnover/Offstation = 50.00 / 50.00 (100.00%)
Records and Charts = 50.00 / 50.00 (100.00%)
Crew Coordination and Safety of Flight = 30.00 / 30.00 (100.00%)
PASS/FAIL: Passed
DBO Comments:
DBO Signature/Date
PPMC Comments:
Comments:
CO Signature/Date
Print Gradesheet

Figure 5-2: Qualification Gradesheet (Bottom)

The bottom half of the gradesheet displays the itemized sub-area scores that comprise the overall score.

Also displayed are the Pass/Fail result and regions for the DBO to comment upon and sign-off on the qualification.

Click Print Gradesheet to commit your score to ink and paper.

5.2.1 Gradesheet MOP

The Gradesheet MOP tab displays all Skill Description questions and Assessment answers in an exhaustive list, grouped by Domain and Objective Area.

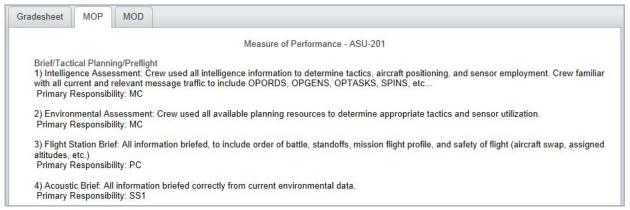


Figure 5-3: Gradesheet MOP Tab (Top)

This report is not editable, but it can be printed out.

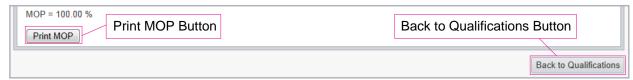


Figure 5-4: Gradesheet MOP Tab (Bottom)

Click Print MOP to commit your report to ink and paper.

Click **Back to Qualifications** to return to the *Qualifications for Event #* page.

5.2.2 Gradesheet MOD

Although containing a much smaller question set than MOP, the MOD tab behaves similarly with no capability to edit, but the ability to print using the **Print MOD** button.

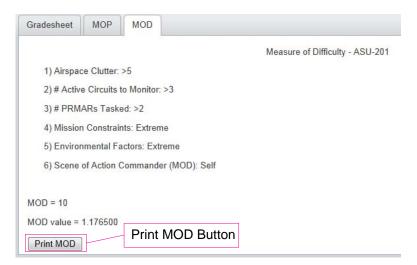


Figure 5-5: Gradesheet MOD Tab

5.3 Qualifications for Event

Upon successful completion of all Event Purple Sets, or the creation of a valid Simulator Event, the **Qualifications** button on the bottom panel of the Information Details Workspace will become unlocked and will no longer be greyed-out.



Clicking the Qualifications Button will direct you to the Qualifications for Event # list page.

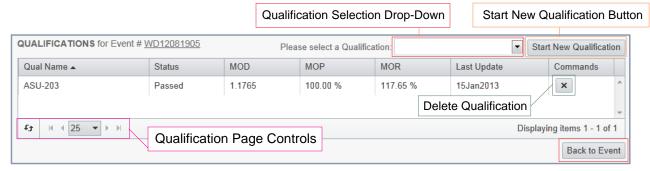


Figure 5-6: Qualifications for Event # Page

This page lists all applicable qualifications pertaining to the specific Event. Clicking on a record row will conduct you toward the Qualification Gradesheet which shows an itemized summary of all qualification sub-areas.

To begin a new Qualification, click the down arrow within the **Qualification Selection Drop-Down** List and choose a qualification.

5.3.1 Qualifications Drop-Down List

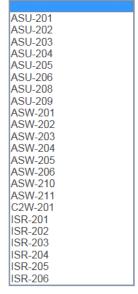


Figure 5-7: Qualifications Drop-Down List

Once the qualification has been selected / highlighted, click the **Start New Qualification** button to enter the Qualification Gradesheet Wizard.

5.3.2 Delete a Qualification

Click the (Delete Qualification) button to erase the record row from the list. A prompt will ask you to verify your intention.

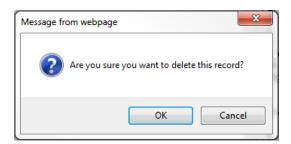


Figure 5-8: Delete Button Prompt

Click **OK** to delete or **Cancel** to return to the list.

5.3.3 Paging Through Qualification Records

Identical in function to the Event Page Controls, the Qualification Page Controls allow paging through multiple records.

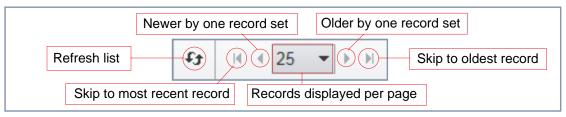


Figure 5-9: Qualification Page Controls

The drop-down selector determines how many records will display on the screen at a time. All controls will reference this selection during navigation. The records toward the bottom of the list in the larger denominations can be accessed by the scroll bar on the right edge of the Events List frame.

For example, PMATT will display the latest records as numbers 1-25 by default. By Clicking the button, PMATT will display the slightly older records numbered 26-50. Conversely, clicking the button will page from older records towards more recent listings, all in denominations chosen by the drop-down selector.

For more drastic navigation, clicking the button will jump to the very earliest records available, and will jump to the very latest.

Clicking the will refresh the display and collect any more recent records that may have been entered into memory during the current session.

5.4 Qualification Gradesheet Wizard

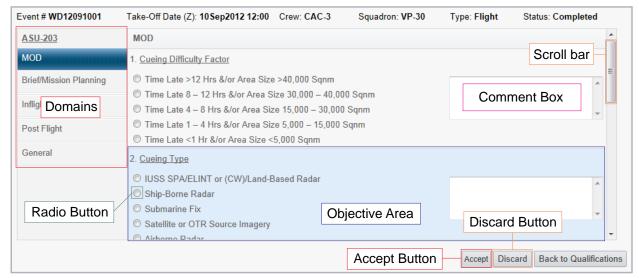


Figure 5-10: Qualification Gradesheet Wizard (Showing ASU-203)

Upon creating a new qualification, the first screen encountered will be the Qualification Gradesheet Wizard showing the Measure of Difficulty (MOD) domain.

To progress through the wizard, click the radio button next to the most accurate selection from the list under each numbered Objective Area. If further comments are necessary, enter them in the comment box.

After completing all Objective Areas in the domain, click the **Accept** button to save the input and to advance to the next screen / domain. If you click **Accept** without filling in all required fields, you will be prevented from progressing and a red validation alert will highlight any required Objective Area fields. To advance, simply choose the most correct answer for the field and click **Accept** once more.

5.4.1 Deleting a Qualification Attempt

Because there is no 'Back' button with which to amend prior entries, it is imperative to be as accurate as possible in filling out the qual. If a mistake has been made in one of the previous domains, the only recourse is to click the **Discard** button.



Caution: Clicking the **Discard** button will void all progress entered thus far into the qualification attempt and will erase the qual from the Qualifications List. Use this only if you wish to completely cancel the qual and start anew.

5.4.2 Saving Qualifications

If you cannot complete the entire qual in one sitting, click the **Back to Qualifications** button. Your qual will be saved with an *incomplete* status. Previously validated selections will be saved, but you may have to click Accept a few times to advance the wizard to the current screen.

5.5 Qualification Management

The Qualifications Management menu selection displays a list of all the available Qualifications.



Note: The following functions are only available to those holding Administrator/CPRG Security Credentials.

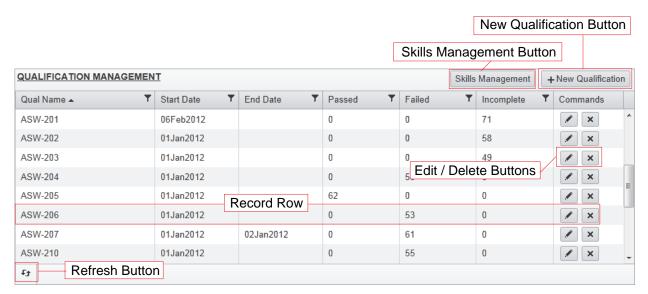


Figure 5-11: Qualification Management Master List

To create a new qualification, click on the **New Qualification** button to bring up the *New Qualification* prompt. For details, see *Section 5.5.1: Create a New Qualification on page 5-11*.

Click the **Skills Management** button to open the *Skills Management* page whereupon one can modify the Skill Description, Skill Type, or even the Domain or Objective area to which the Qual belongs.

Clicking on any record row will open the *Qualification Skills* page which displays all skills that comprise a particular qual.

Clicking the button will bring up the Edit Qualification prompt.

Clicking the button will bring up an advisory window asking if you really wish to delete the record.

Use the Refresh Button to update any records that may have been entered during the current session.

5.5.1 Create a New Qualification

Clicking on the **New Qualification** button from the *Qualification Management* page brings up the *New Qualification* prompt.

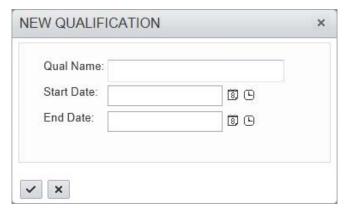


Figure 5-12: New Qualification Prompt

In addition to the requirement for flexibility and ease of modification, PMATT was built with the ultimate aim of expansion into new platforms and Type/Model/Series. The *New Qualification Prompt* is the starting point for the generation of new Qualifications into PMATT. Enter a succinct and unique moniker into the Qual Name field. Use the Start and End date / time fields to set the period of time in which the Qualification will become and stay valid.

Click the check mark to save new the new Qualification or click the black X to cancel.

5.5.2 Edit a Qualification

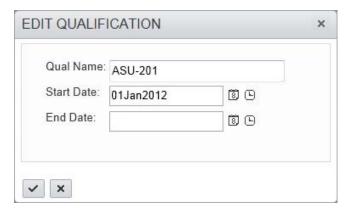


Figure 5-13: Edit Qualification Prompt

Information regarding Qual Name and start and end dates is accessible for further

modification after Qual creation by clicking the pencil logo button from the main Qualifications Management page.

5.5.3 Skills Management

From this screen, one can drill-down into a row to modify skill descriptions or assign those skills to a particular qual. As per usual, the column headings are able to be grouped, filtered, and sorted.

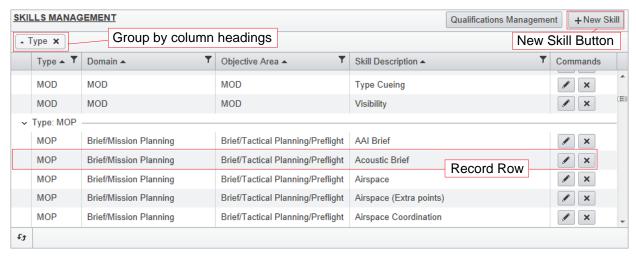


Figure 5-14: Skill Management Screen

Click on a record row to open the *Skill Details* page. For more information, see *Section 5.5.3.3: Skill Details on page 5-14.*

Click the New Skill button to conjure the New Skill prompt.

Click the pencil icon button to conjure the Edit Skill prompt.

Click the Delete button to erase the record row. An alert prompt will ask you to verify your intention. Click **OK** to delete the record, or click **Cancel** to void the action.

5.5.3.1 Create a New Skill

Clicking on the **New Skill** button from the *Skill Management* page will open the *New Skill* prompt.

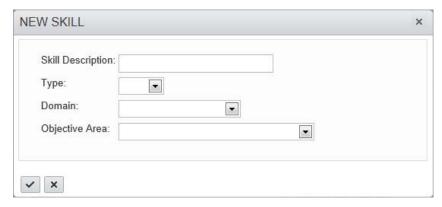


Figure 5-15: New Skill Prompt

- A. **Skill Description:** Write the title or purpose of the skill to be measured.
- B. **Type:** Using the drop-down list, select between measure of difficulty (MOD) and measure of performance (MOP).
- C. **Domain:** Using the drop-down list, select the domain under which the new skill will belong (E.g. Inflight, Post Flight).
- D. **Objective Area:** Using the drop-down list, select the objective area under which the new skill will belong.

Click the Confirm button to register insertions.

Click the Cancel

button to void any insertions.

5.5.3.2 Edit a Skill

Clicking the pencil icon button from the *Skills Management* page will conjure the *Edit Skill* prompt.



Figure 5-16: Edit Skill Prompt

For guidance on correctly filling out or modifying these fields, please see See Section 5.5.3.1: Create a New Skill above.

5.5.3.3 Skill Details

Clicking on a record row from the Skills Management page will open the Skill Details page.

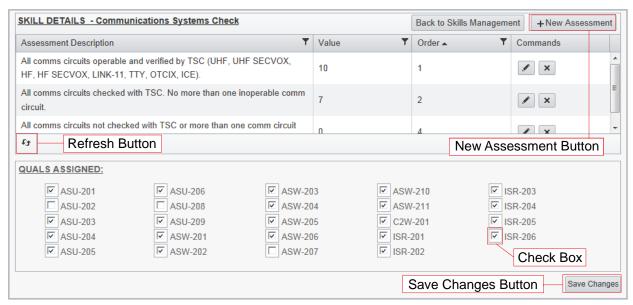


Figure 5-17: Skill Details Page

Clicking the **New Assessment** button will create a new record row at the top of the list. Notice also that the pencil icon edit button will convert into a confirm button.

In that blank row, write a new assessment description, ascribe a point value, and assign a display order by typing directly into the textbox field.

After satisfactorily writing the new assessment and ascribing its points and display order, click the confirm button to save the changes.

Alternately, click the delete button to void any insertions. If typing in a new assessment, clicking this button will simply jettison all info entered. Otherwise, clicking the delete button on an already existing assessment will throw an alert prompt seeking to confirm the intention of deleting the record.

Clicking the Refresh button will collect any more recent records that may have been entered into memory during the current session and will regenerate the display.

Using the *Quals Assigned* panel below *Skill Details*, check the box next to the qual name to which the skill currently under consideration should be assigned. Check as many boxes as applicable.

After all selections have been made, click **Save Changes** to register your modifications.

5.5.4 Qualification Skills Detail

Grouping Criteria

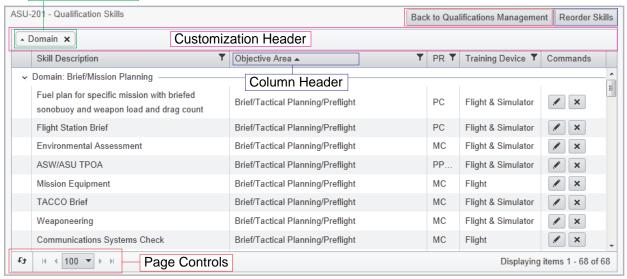


Figure 5-18: Qualification Skills Detail

Clicking on any Qualification row in the *Qualifications Management* list will open up the corresponding *Qualification Skills* page.

Clicking on a record row will open that skill's Weight and Display Order page. (see Section 5.5.6: Weight and Display Order Assignment on page 5-16)

PMATT standard controls function here as well. The information on this page can be sorted, filtered, grouped and paged. See *Section 3.1.1*, *Section 3.1.2*, *Section 3.1.3*, and *Section 3.1.4* respectively.

If the skill itself needs amending, clicking the button will bring up the Edit Qual Skill prompt. (see Section 5.5.2: Edit a Qualification on page 5-11)

Clicking the button will bring up an advisory window asking if you really wish to delete the record.

To return to the *Qualifications Management* page, click the **Back to Qualifications Management** button.

Additionally, if Debriefing Officers wish to alter the order in which skills appear under certain Quals, they can click the **Reorder Skills** button.

5.5.5 Edit Qualification Skill

Clicking the button on any record row from the *Qualification Skills* page will bring up the *Edit Qual Skill* prompt.



Figure 5-19: Edit Qualification Skill

From this prompt, one can only modify the Skill Description, alter the crew position under whose responsibility the qualification applies, or designate whether the Qualification is required to be executed in flight, in the simulator, or both.

Click the Confirm button to register modifications.

Click the Cancel button to void any modifications.

5.5.6 Weight and Display Order Assignment

Clicking on a record row from the *Qualification Skills* page will open that skill's *Weight and Display Order* page.



Figure 5-20: Skill Assessment Weight and Display Order Assignment

Enter point values for each assessment in the Weight field.

Assign a sequence for assessments to appear by entering values in the *Display Order* fields.

Click Save Changes to register any modifications.

5.5.7 Reorder Skills

Clicking the **Reorder Skills** button from within the *Qualification Skills* page will navigate to the *Reorder Skills* page.

Should Debriefing Officers wish to rearrange the sequence of skills within a qualification, they can simply drag and drop a skill row and place it in the queue wherever they please.

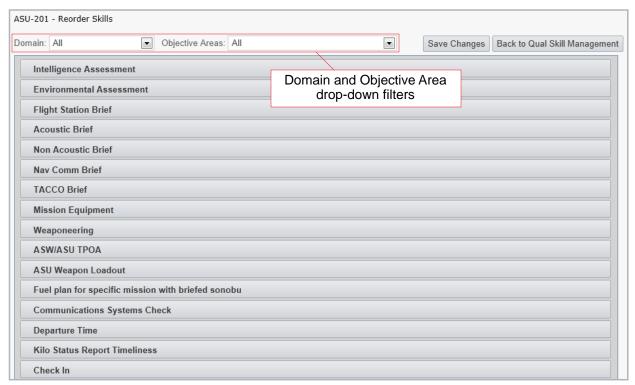


Figure 5-21: Reorder Skills

By default, this page displays skills for all Domains and Objective Areas. Use the drop-down lists near the top of the page to filter out only the Domain and Objective area you wish to view.

Click **Save Changes** to register any modifications.

This Page Intentionally Left Blank.

Chapter 6: Administration

Only CPRG and designated Staff Officers will have access to the **Administration** tab. With the power to create and manage users, qualifications and rules, as well as generate announcements, CPRG will be the ultimate commander of PMATT.

This section contains information on:

- Announcements
- Qualifications Management
- User Accounts
- Rules Engine

6.1 Announcements

When CPRG determines there is some important news to share, he can disseminate it via *Announcements*. There is a read-only dedicated region available to all permission levels in the lower-right quadrant of the *Home* page (see Figure 2-3: The Home / Dashboard View on page 3).

Actual creation and management of the *Announcements* commences by clicking the right-most **Administration** tab in the Header Menu of the *Home* Page. When presented with the drop-down list, click **Announcements**.

The Announcements List will display:



Figure 6-1: Announcement List

The Announcement List captures the following fields:

- A. Announcement Start: Lists the date/time when the announcement becomes valid.
- B. Announcement End: Lists the date/time when the announcement will no longer be valid.
- C. **Title:** Lists the headline or subject summary of the announcement.
- D. **Updated:** Lists the last date/time that an announcement was modified.
- E. **Community:** Lists to which community the message is relevant.
- F. Created By: Lists the username of the person who created the announcement.

The Announcement List features a drop-down calendar by which one can filter the displayed announcements by date. Click the calendar icon next to the **From:** field to set the filter start date. A drop-down calendar will display. (For a refresher on using drop-down date/time pickers, see Section 3.2.1: Drop-Down Date / Time Picker on page 3-8.) Similarly, Click the calendar icon next to the **To:** Field to set the filter end date. The page refreshes automatically.

Use the Page Controls to navigate archival records. (For a refresher on Page Controls, see Section 3.1.4: Paging on page 3-6.)

Click the **New Announcement** button to conjure the New Announcement prompt.

Click the pencil icon button to edit that particular record row.

Click the Delete button to erase the record row. An alert prompt will ask you to verify your intention. Click **OK** to delete the record, or click **Cancel** to void the action.

6.1.1 New Announcement

Clicking the **New Announcement** button from the *Announcements List* will conjure the *New Announcement* prompt.

CPRG can post pertinent news items to PMATT's front page using the form shown below.



Figure 6-2: New Announcement Prompt

- A. Title: Write the headline or subject summary of the announcement in this field.
- B. **Announcement Body:** Craft the message within this text form. If necessary, use the vertical scroll bar along the right side to traverse lengthy missives.
- C. **Start Date:** Use the drop-down date picker to select the date/time when the announcement becomes valid.
- D. **End Date:** Similarly, Use the drop-down date picker to select when the announcement will no longer be valid.
- E. **Community:** Using the drop-down list, select to which community the message is relevant.

Click the Confirm button to register insertions. The freshly created announcement will appear at the top of the *Announcements List*.

Click the Cancel button to void any insertions.



Caution: Clicking the Cancel button will not conjure an alert seeking to verify your intention. It will simply jettison any progress you might have made without saving, and will return you to the *Announcement List*.

6.1.2 Edit Announcement

Clicking the pencil icon within any record row of the *Announcement List* will conjure the *Edit Announcement* prompt. Please Consult *Section 6.1.1: New Announcement* above for guidance on filling out the fields.

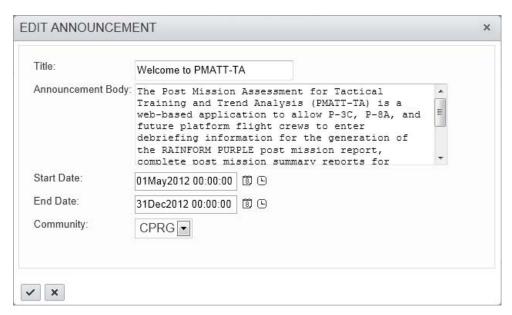


Figure 6-3: Edit Announcement Prompt

6.2 Qualifications Management

Please See Appendix 5.5: Qualification Management on page 5-10.

6.3 User Administration

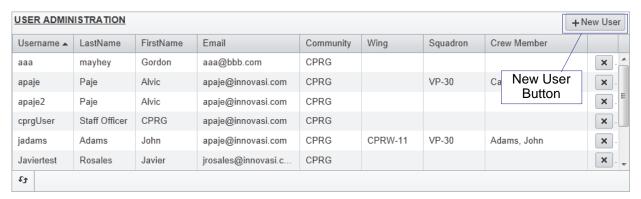


Figure 6-4: User Administration List

CPRG has the authority to create and manage Users in PMATT. After successful Login with appropriate credentials, the **User Accounts** submenu will be available in the **Administration** tab. Upon clicking it, CPRG will be directed to *User Administration* page.

The columns captured here include:

- **A. Username:** Lists the invented moniker for a particular crew member.
- B. Last Name: Lists the surname / family name of the crew member.
- C. First Name: Lists the given name / forename of the crew member.
- **D.** Email: Lists the electronic mail contact address for the crew member.
- **E.** Community: Lists the overarching group to which the crew member belongs.
- **F.** Wing: Lists the division of the community to which the crew member belongs.
- **G. Squadron:** Lists the particular squadron to which the crew member belongs.
- H. Crew Member: Roster of all crew members.

Click the **New User** button to conjure the *New User* Prompt. For details on creating new users, see Section 6.3.1: Create a New User on page 6-6.

Click the Delete button to erase the particular crew member from the list. An alert prompt will ask you to verify your intention. Click **OK** to delete the user, or click **Cancel** to void the action.

Click Refresh to enter into memory any newer records that may have been created during the current session, or to register any modifications you may have made.

6.3.1 Create a New User

Clicking on the **New User** button will bring up the New User prompt.



Figure 6-5: New User Prompt

Fill in all fields with pertinent information by either typing directly into the text box, or by using the drop-down lists and clicking on the relevant selection.

- A. **Username:** Invent a moniker for a particular crew member.
- B. **Password:** Invent a unique security code to access the user profile. The characters you choose will not display, but will be represented by black dots.
- C. Confirm Password: Re-type the unique security code to assure a match with previously entered obscured code.
- D. **First Name:** Enter the given name / forename of the crew member.
- E. Last Name: Enter the surname / family name of the crew member.
- F. **Email:** Enter the electronic mail contact address for the crew member.
- G. **Community:** Using the drop-down list, select the overarching group to which the crew member belongs.
- H. **Wing:** Using the drop-down list, select the division of the community to which the crew member belongs.
- I. **Squadron:** Using the drop-down list, select the particular squadron to which the crew member belongs.
- J. Crew Member: If the newly-created user will also be a member of a flight crew, select the crew member name using the drop-down list.

Click Insert to save and register the new user, or click Cancel to void the attempt.

6.3.2 User Details

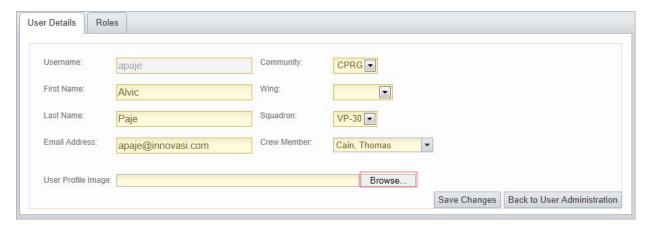


Figure 6-6: User Details Tab

From the *User Details* tab, CPRG can modify any information previously entered upon creation of a new User.

If you wish to customize your profile with an image, click the **Browse** button to open your computer's file Explorer, locate a suitable image file, and click **Open** to upload.

Click the Save Changes button to register your modifications.

6.3.3 Roles

Various users have various permissions in the PMATT application.



Figure 6-7: Roles Tab

From the *Roles* tab, CPRG can assign specific levels of access based upon the permissions bestowed by certain roles.

Click the check box next to the access level you wish to bestow upon the chosen user.



Caution: While multiple selections are supported, be sure to check at least one box.

6.3.3.1 Role Permissions

The different roles and their respective access rights are described below:

Roles	Access Permissions
	Full administrative rights. Can create new Users, create new Announcements, view all data, override entries.
CPRG Staff Officer	Setup / configuration pages (Gradesheet creation, Rules creation, etc.)
	2. Reporting / Analysis tools
	3. Review Purple / Qual data for squadrons under Group
	Can manage permissions for all subordinate security levels.
CPRW Staff Officer	1. Reporting / Analysis tools
	2. Review Purple / Qual data for squadrons under Wing
Tactical Support Center (TSC)	Debriefing Officer is the primary persona responsible for entering Rainform Purple and Quals data into PMATT. Can override gradesheet values auto-populated by PMATT.
Debriefing Officer	1. Purple / Qual data entry forms.
	2. Reporting Analysis tools.
Squadron Training Officer	Primary persona responsible for entering Users and managing squadron-level permissions. Can create New Users but only view data from assigned Combat Air Crews.
3	1. Reporting / Analysis tools
	2. Review squadron Purple / Qual data
Weapons School Evaluator	1. Purple / Qual data read only
Weapons School Evaluator	2. Reporting Analysis tools.
	Read-only access. Limited report customizing.
Squadron Mission	1. Purple / Qual data entry forms (read only)
Commander (Crew)	2. Reporting Analysis tools (to determine own crew strengths/weaknesses)

Table 6-1: Roles and Access Permissions

6.4 Rules Management (Prototype)

PMATT-TA features a built-in Qualification Rules Management Engine. Initially drawing its inspiration from the gradesheet, the Rules Engine allows for the creation of computable assessment values based upon human-language definitions. It achieves this by starting with the concept of a *Measured Value*, which can be a real-world object, such as a vessel, and ascribes to it certain criteria in a structured, query format (using operators grouped into clauses), whereupon a computer can deduce if a Crew member has fulfilled the necessary achievements or not.

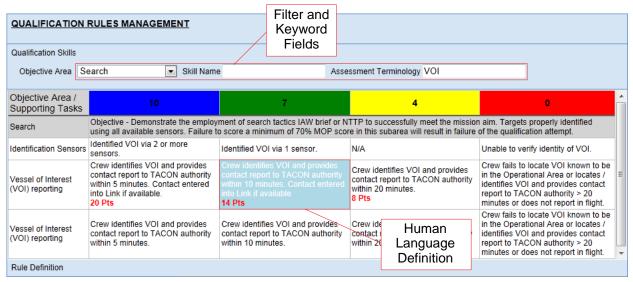


Figure 6-8: Rules Management Definitions

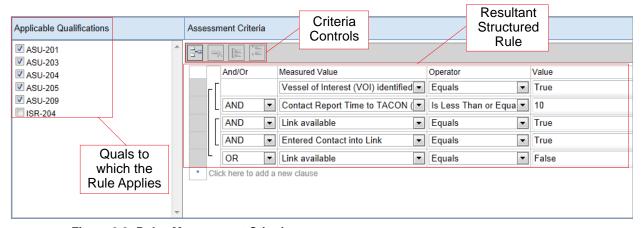


Figure 6-9: Rules Management Criteria

The Rules Management function is still a proof-of-concept as of this date of publication. It is expected to reach full operational capacity within PMATT Increment 2.

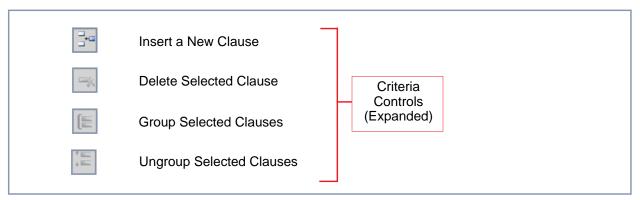


Figure 6-10: Rules Engine Criteria Controls

Appendix A:

A.1 EXER Set

A.1.1 Exercise Additional Identifier

Use the table below as a key of allowable entry codes for the optional Exercise Additional Identifier. within the EXER set.

Exercise Additional Identifier	Code
Message addressed to players to control the exercise	Control
Message addressed to umpires only	Umpire eyes only
Message between blue players	Blue
Message between orange players	Orange
Message for distaff or diconstaff only	Distaff
Message for test or practice not related to the exercise	Drill
Message interception not for use in direction finding	Noduf
Message not part of play but affecting the exercise	No play
Message originated by a commander assigned a purple role	Purple
Message originated by an umpire	Umpire

Table A-1: EXER set (Exercise Additional Identifier)

A.2 MISSN Set

A.2.1 Mandatory

A.2.1.1 Mission Type Designator

Code	Mission Type Designator
AD	Antiair warfare
АН	Overt search, overt identification, overt shadow
AQ	Area air operations
ASUW	Antisurface warfare/antisurface vessel operations
ASW	Antisubmarine warfare
ATTACK	Attack
ВА	To deter
BARR	Barrier (abbreviated)
CODE	Data item
COMM	Comm relay/SSN direct support
СР	Overt search, covert identification, overt shadow
DB	To deter, detect and destroy
DESTROY	Destroy
DS	Direct air support
ED	To detect and destroy
FE	Detect and destroy (abbreviated)
FUEL	Refueling (including HIFR)
HR	Overt search, covert identification, covert low shadow
IG	Detect and report
INTCOL	Intelligence collection
INVST	Investigate
JK	Detect passively and report
KM	Detect, localize, and report
LCHRCR	Launch/recovery
LN	Deter, detect, and destroy
LOCATE	Locate
LOCK	Lock out/in
LOG	Logistics
MINE	Mining
MINEOP	Mining operations
MISC	Training and maintenance

MO	Detect, track, and report (Jezebel)
NV	Overt search, covert identification, covert high shadow
ОТН	Over-the-horizon
OTR	Other
PARPRO	Parpro
PQ	Detect, track, and report (radar)
QT	Deter, detect, track, and report
RECON	Reconnaissance
RECTNG	Reconnaissance (training)
SAR	Search and rescue/plane guard
SARX	Search and rescue (exercise)
SASW	Simulated antisubmarine warfare
SCRN	Screen
SEARCH	Search
SR	Search and rescue
SRCH	Area search (abbreviated)
STRIKE	Strike
SURTNG	Surveillance, training
SURV	Surveillance
SV	Air surveillance
SX	Covert search, covert identification, covert low shadow
TC	Deter, detect and destroy (das)
TRACK	Track
TRAIN	Training
TRNSP	Transport
WETDRY	Wet/dry
WZ	Covert search, covert identification, covert high shadow
ZY	Deter, detect, and report

Table A-2: MISSN Set (Mission Type Designator)

A.3 EVENTINFO Set

A.3.1 Mandatory

A.3.1.1 Unit Designator

- a. VP-1
- b. VP-4 Skinny Dragons
- c. VP-5 Mad Foxes
- d. VP-8 Fighting Tigers
- e. VP-9 Golden Eagles
- f. VP-26 The Tridents
- g. VP-30
- h. VP-40 The Fighting Marlins
- i. VP-45
- j. VP-46 The Grey Knights
- k. VP-47 The Golden Swordsmen
- I. VP-62
- m. VP-69
- n. VPU-2

A.3.1.2 Ship Type Identification

CODE	DATA ITEM	EXPLANATION
AA	Auxiliary type ship, general	General designator for all naval auxiliary ship types.
AAR	Auxiliary rescue craft	Vessel designed for local rescue operations inshore or offshore.
AAV	Assault vehicle, amphibious	Tracked or wheeled vehicle designed to carry assault troops in amphibious operations.
AB	Depot ship/tender	Usually a large ship designed to provide support and depot facilities to other vessels of a specific type.
ABU	Buoy tender	Ship 40 meters or more employed for the placing and tending of buoys and aids to navigation in coastal and adjoining waters.
ABUD	Buoy tender, heavy lift	Same as for ABU but with heavy lift capability.
ACM	Auxiliary-mine warfare support ship	
AD	Destroyer tender	Ships of any size but usually large, employed primarily to furnish facilities and services for the support and repair of destroyer type ships.
ADG	Deperming ship	Ship designed for deperming operations.

AE	Ammunition ship	Ship about 120 meters or more capable of transporting 5000 or more tons of ammunition and capable of providing underway replenishment of ammunition.
AEL	Ammunition ship, small	Same as for AE but between 40-120 meters handling less than 5000 tons of ammunition.
AEM	Missile support ship	Ship larger than 40 meters employed primarily to transport missiles.
AET	Ammunition ship, transport	Ship capable of transporting 5000 or more tons of ammunition but lacking sophisticated underway replenishment capabilities.
AETL	Ammunition ship, transport, small	Same as for AET but handling less than 5000 tons of ammunition.
AF	Stores ship	Ship 60 meters or more capable of underway replenishment of ships with refrigerated and dry provisions. May carry ammunition and pol but main emphasis is on dry provisions.
AFDB	Large auxiliary floating drydock	Floating dock capable of docking ships of all sizes.
AFDL	Small auxiliary floating drydock	Floating dock capable of docking small ships.
AFDM	Medium auxiliary floating drydock	Floating dock capable of docking small ships.
AFL	Stores ship, small	Same as for AF but under 60 meters.
AFS	Combat stores ship (naval)	Large ship, usually over 165 meters capable of underway alongside replenishment of ships with refrigerated and dry provisions, technical spares, ammunition, and general stores. May carry POL but main emphasis is on mixed replenishment.
AFT	Stores ship, transport	Same as for AET but used for transporting refrigerated and dry provisions, technical spares and general stores.
AG	Miscellaneous auxiliary	Ship 40 meters or more employed in general or multi- purpose functions of support, training, R&D, or a testing nature.
AGB	Icebreaker	Armed ship in size range 70 meters or more used primarily for icebreaking duties.
AGBL	Icebreaker, small	Same as for AGB but under 70 meters.
AGBN	Icebreaker, nuclear powered	Same as for AGB but with nuclear power.
AGCL	Communications ship, small	Small auxiliary optimized for communications duties.
AGDS	Deep submergence support ship	Ship with special facilities to support deep submergence diving operations.
AGE	Research ship	Ship 49 meters or more used to conduct tests, experiments and/or research.

AGEH	Research ship, hydrofoil	
_		Ohio EE madana an mana waxa liba wax
AGF	Auxiliary flag or command ship	Ship 55 meters or more used to provide afloat communications facilities and accommodation for a force commander and his operations staff.
AGFF	Research ship, frigate	
AGH	Instrumentation ship, hydroacoustic range	Ship specially fitted with instrumentation for hydroacoustic range operations.
AGI	Intelligence collector	Ship specially fitted for and primarily employed in the collection of electronic intelligence.
AGM	Missile range instrumentation ship	Ship employed at sea to provide telemetry and recover missiles.
AGMS	Support ship, missile range	Ship employed in missile range support operations.
AGOB	Oceanographic research ship, polar	Same as for AGOR but specially fitted for ice operations. Must have icebreaker bow.
AGOR	Oceanographic research ship	Ship which conducts multi-discipline research at sea in oceanographic radiomagnetics, meteorology and oceanography.
AGOS	Surveillance ship, ocean	
AGP	Patrol/torpedo boat support ship, tender	Ship of any size employed primarily to furnish facilities and services for the support and repair of small patrol craft, the primary function being support.
AGR	Radar picket ship, unarmed	Unarmed surface ship employed for radar picket duty. Any armed ship so employed would be typed DDR, FFR or PPR.
AGS	Survey ship	Ship 40 meters or more employed to conduct hydrographic and limited oceanographic surveys.
AGSA	Survey ship, polar	Ship used for surveying arctic/antarctic areas.
AGSC	Survey ship, coastal	Same as for AGS but only in coastal and inshore waters.
AGSL	Launching ship, satellite	Ship employed in monitoring satellite launching operations.
AGSS	Auxiliary research submarine	
AGT	Service ship, target	Ship employed in servicing surface targets.
AGTT	Service ship, torpedo-target	Ship employed in servicing torpedoes and subsurface targets.
АН	Hospital ship	Ship of at least 40 meters which provides 3rd line medical and surgical care. Declared to and protected by the ICRC (int. Committee of the red cross/red crescent (TU ships only)) and marked accordingly.
AK	Cargo ship, naval	Ship at least 80 meters employed to transport general cargo and provisions. No underway replenishment facilities.

AKL	Cargo ship, light, naval	Same as for AK but in size range 40-80 meters.
AKR	Cargo ship, RO/RO, naval	Ship at least 40 meters overall designed to transport vehicles, guns and tanks in a non-combatant situation. Must have roll-on/roll-off capability for vehicles.
AKS	Stores ship, issue, naval	Ship 40 meters or more used to provide supplies and services.
AKSL	Stores ship, issue, small, naval	Same as for AKS but less than 40 meters.
AKV	Aircraft ferry/cargo ship	Same as for AK but employed to transport aircraft and aircraft spares.
ALS	Light ship	Ship actually moored or anchored in a fixed position showing navigational aiding light(s).
AN	Cable, net laying ship	Ship equipped for cable or net laying.
ANL	Cable/net laying ship, small	Same as for an but smaller.
AO	Oiler/tanker, general	General designator for oilers.
AOE	Combat support ship, fast (naval)	Large ship over 230 meters, capable of speeds of 25 knots or more and/or providing rapid and simultaneous underway replenishment of ships at sea with pol, ammunition, refrigerated and dry provisions, spare parts and general stores. Primary emphasis is on pol replenishment.
AOG	Gasoline tanker	
AOL	Oiler, small, naval	Ship in size range 60-100 meters capable of furnishing underway replenishment of POL products.
AOR	Oiler replenishment (naval)	Ship of at least 140 meters capable of providing rapid replenishment of POL and solid store products.
AORL	Oiler, replenishment, small, naval	Same as for AOR but in size range 40-140 meters.
AOS	Special liquid ship	Ship 40 meters or more designed to transport a special kind of propellant or other non-nuclear associated liquid cargo.
AOSR	Radiological liquid ship	Ship 40 meters or more designed to transport radioactive liquids.
AOT	Oiler-transport	Ship usually exceeding 120 meters capable of transporting pol products but not specially fitted to provide underway replenishment.
AOTL	Oiler, transport, small	Same as for AOT but in size range 40-120 meters.
AP	Personnel transport	Ship of at least 120 meters employed to transport troops, their supplies and equipment.
APB	Barracks ship	Self-propelled ship of any size employed as a mobile base facility and support ship for the crews of other vessels (usually small craft). Has no repair facilities.

APCR Primary casualty receiving ship to primary casualty receiving ship to provide 3rd line medical and surgical care. Not declared by ICRC/red crescent (TU ships only). May be armed and carrying secure communications. APCT Casualty transport ship Ship of at least 40 meters whose primary purpose is sustaining post operative casualties during transport out of theatre. Not declared by ICRC/red crescent (tu ships only). May be armed and carrying secure communications. APL Barracks craft Same as for AP but also with capability of providing barrack facilities. AQ Merchant cruise/raider, armed AR Repair ship Ship of at least 120 meters or more employed as a mobile repair facility providing limited support to various types of ships. Not a lifting ship. Repair primary function, support secondary. ARB Repair ship, battle damage Same as for AR but optimized for repair of battle damage. ARC Repair ship, cable Ship 40 meters or more employed to lay, retrieve and maintain submarine cables. ARD Auxiliary repair dock Dry dock with repair facilities for all ship sizes. ARD Auxiliary repair dock Dry dock with repair facilities for all ship sizes. ARH Repair ship, heavy hull Same as for AR but optimized for extensive repairs to ships hulls. ARL Repair ship, small Same as for AR but optimized for extensive repairs to ships hulls. ARR Repair ship, small Same as for AR but optimized for extensive repairs to radiological installations and facilities. ARS Salvage ship Ship optimized to provide mobile repair facilities and possible limited support to smaller boats. ARS Salvage ship, lifting Same as for ARS but must have heavy lifting capability. ARV Aircraft repair ship Ship of at least 120 meters or more which provides mobile base facilities and support for submarines. ASL Submarine tender Ship of at least 120 meters or more which provides mobile base facilities and support for submarines. ASUB Submarine tender, small Same as for as but between 40-120 meters. ASVB Space vehicle recovery ship Ary ship equipped to recov			
sustaining post operative casualties during transport out of theatre. Not declared by ICRC/red crescent (tu ships only). May be armed and carrying secure communications. APL Barracks craft Same as for AP but also with capability of providing barrack facilities. AQ Merchant cruise/raider, armed AR Repair ship Ship of at least 120 meters or more employed as a mobile repair facility providing limited support to various types of ships. Not a lifting ship. Repair primary function, support secondary. ARB Repair ship, battle damage Same as for AR but optimized for repair of battle damage. ARC Repair ship, cable Ship 40 meters or more employed to lay, retrieve and maintain submarine cables. ARD Auxiliary repair dock Dry dock with repair facilities for all ship sizes. ARDM Drydock, auxiliary, repair, medium Same as for AR but optimized for extensive repairs to ships hulls. ARL Repair ship, heavy hull Same as for AR but optimized for extensive repairs to ships hulls. ARL Repair ship, small Ship 40-120 meters capable of providing mobile repair facilities and possible limited support to smaller boats. ARR Repair ship, radiological Ship optimized to provide mobile repairs to radiological installations and facilities. ARS Salvage ship Ship at least 40 meters used to provide mobile salvage, repairs, diving and rescue services. ARSD Salvage ship, lifting Same as for ARS but must have heavy lifting capability. ARV Aircraft repair ship Ship of any size used to repair helicopters, aircraft and aircraft engines. AS Submarine tender Ship of at least 120 meters or more which provides mobile base facilities and support for submarines. ASU Submarine tender, small Same as for as but between 40-120 meters. ANY Space vehicle recovery ship Any ship equipped to recover space capsules	APCR	Primary casualty receiving ship	to provide 3rd line medical and surgical care. Not declared by ICRC/red crescent (TU ships only). May
barrack facilities. AQ Merchant cruise/raider, armed AR Repair ship Ship of at least 120 meters or more employed as a mobile repair facility providing limited support to various types of ships. Not a lifting ship. Repair primary function, support secondary. ARB Repair ship, battle damage Same as for AR but optimized for repair of battle damage. ARC Repair ship, cable Ship 40 meters or more employed to lay, retrieve and maintain submarine cables. ARD Auxiliary repair dock Dry dock with repair facilities for all ship sizes. ARDM Drydock, auxiliary, repair, medium Same as for AR but optimized for extensive repairs to ships hulls. ARL Repair ship, heavy hull Same as for AR but optimized for extensive repairs to ships hulls. ARL Repair ship, small Ship 40-120 meters capable of providing mobile repair facilities and possible limited support to smaller boats. ARR Repair ship, radiological Ship optimized to provide mobile repairs to radiological installations and facilities. ARS Salvage ship Salvage, repairs, diving and rescue services. ARSD Salvage ship, lifting Same as for ARS but must have heavy lifting capability. ARV Aircraft repair ship Ship of any size used to repair helicopters, aircraft and aircraft engines. AS Submarine tender Ship of at least 120 meters or more which provides mobile base facilities and support for submarines. ASL Submarine tender, small Same as for as but between 40-120 meters. ASR Submarine rescue ship Any ship equipped to rescue personnel entrapped in a sunken submarine.	APCT	Casualty transport ship	sustaining post operative casualties during transport out of theatre. Not declared by ICRC/red crescent (tu ships only). May be armed and carrying secure
ARB Repair ship Ship of at least 120 meters or more employed as a mobile repair facility providing limited support to various types of ships. Not a lifting ship. Repair primary function, support secondary. ARB Repair ship, battle damage Same as for AR but optimized for repair of battle damage. ARC Repair ship, cable Ship 40 meters or more employed to lay, retrieve and maintain submarine cables. ARD Auxiliary repair dock Dry dock with repair facilities for all ship sizes. ARDM Drydock, auxiliary, repair, medium ARH Repair ship, heavy hull Same as for AR but optimized for extensive repairs to ships hulls. ARL Repair ship, small Ship 40-120 meters capable of providing mobile repair facilities and possible limited support to smaller boats. ARR Repair ship, radiological Ship optimized to provide mobile repairs to radiological installations and facilities. ARS Salvage ship Ship at least 40 meters used to provide mobile salvage, repairs, diving and rescue services. ARSD Salvage ship, lifting Same as for ARS but must have heavy lifting capability. ARV Aircraft repair ship Ship of any size used to repair helicopters, aircraft and aircraft engines. ASL Submarine tender Ship of at least 120 meters or more which provides mobile base facilities and support for submarines. ASL Submarine tender, small Same as for as but between 40-120 meters. ASR Submarine rescue ship Any ship equipped to recover space capsules	APL	Barracks craft	, , ,
mobile repair facility providing limited support to various types of ships. Not a lifting ship. Repair primary function, support secondary. ARB Repair ship, battle damage Same as for AR but optimized for repair of battle damage. ARC Repair ship, cable Ship 40 meters or more employed to lay, retrieve and maintain submarine cables. ARD Auxiliary repair dock Dry dock with repair facilities for all ship sizes. ARDM Drydock, auxiliary, repair, medium ARH Repair ship, heavy hull Same as for AR but for medium and small ships. ARL Repair ship, small Ship 40-120 meters capable of providing mobile repair facilities and possible limited support to smaller boats. ARR Repair ship, radiological Ship optimized to provide mobile repairs to radiological installations and facilities. ARS Salvage ship Ship at least 40 meters used to provide mobile salvage, repairs, diving and rescue services. ARSD Salvage ship, lifting Same as for ARS but must have heavy lifting capability. ARV Aircraft repair ship Ship of any size used to repair helicopters, aircraft and aircraft engines. AS Submarine tender Ship of any size used to repair helicopters, aircraft and aircraft engines. ASL Submarine tender, small Same as for as but between 40-120 meters. ASR Submarine rescue ship Any ship equipped to rescue personnel entrapped in a sunken submarine. ASVR Space vehicle recovery ship Any ship equipped to recover space capsules	AQ	Merchant cruise/raider, armed	
ARC Repair ship, cable Ship 40 meters or more employed to lay, retrieve and maintain submarine cables. ARD Auxiliary repair dock Dry dock with repair facilities for all ship sizes. ARDM Drydock, auxiliary, repair, medium ARH Repair ship, heavy hull Same as for AR but for medium and small ships. ARL Repair ship, small Ship 40-120 meters capable of providing mobile repair facilities and possible limited support to smaller boats. ARR Repair ship, radiological Ship optimized to provide mobile repairs to radiological installations and facilities. ARS Salvage ship Ship at least 40 meters used to provide mobile salvage, repairs, diving and rescue services. ARSD Salvage ship, lifting Same as for ARS but must have heavy lifting capability. ARV Aircraft repair ship Ship of any size used to repair helicopters, aircraft and aircraft engines. AS Submarine tender Ship of at least 120 meters or more which provides mobile base facilities and support for submarines. ASL Submarine tender, small Same as for as but between 40-120 meters. ASR Submarine rescue ship Any ship equipped to recover space capsules	AR	Repair ship	mobile repair facility providing limited support to various types of ships. Not a lifting ship. Repair
ARD Auxiliary repair dock Dry dock with repair facilities for all ship sizes. ARDM Drydock, auxiliary, repair, medium Same as for AR but for medium and small ships. medium ARH Repair ship, heavy hull Same as for AR but optimized for extensive repairs to ships hulls. ARL Repair ship, small Ship 40-120 meters capable of providing mobile repair facilities and possible limited support to smaller boats. ARR Repair ship, radiological Ship optimized to provide mobile repairs to radiological installations and facilities. ARS Salvage ship Ship at least 40 meters used to provide mobile salvage, repairs, diving and rescue services. ARSD Salvage ship, lifting Same as for ARS but must have heavy lifting capability. ARV Aircraft repair ship Ship of any size used to repair helicopters, aircraft and aircraft engines. AS Submarine tender Ship of at least 120 meters or more which provides mobile base facilities and support for submarines. ASL Submarine tender, small Same as for as but between 40-120 meters. ASR Submarine rescue ship Any ship equipped to rescue personnel entrapped in a sunken submarine. ASVR Space vehicle recovery ship Any ship equipped to recover space capsules	ARB	Repair ship, battle damage	·
ARDM Drydock, auxiliary, repair, medium ARH Repair ship, heavy hull Same as for AR but optimized for extensive repairs to ships hulls. ARL Repair ship, small Ship 40-120 meters capable of providing mobile repair facilities and possible limited support to smaller boats. ARR Repair ship, radiological Ship optimized to provide mobile repairs to radiological installations and facilities. ARS Salvage ship Ship at least 40 meters used to provide mobile salvage, repairs, diving and rescue services. ARSD Salvage ship, lifting Same as for ARS but must have heavy lifting capability. ARV Aircraft repair ship Ship of any size used to repair helicopters, aircraft and aircraft engines. AS Submarine tender Ship of at least 120 meters or more which provides mobile base facilities and support for submarines. ASL Submarine tender, small Same as for as but between 40-120 meters. ASR Submarine rescue ship Any ship equipped to rescue personnel entrapped in a sunken submarine. ASVR Space vehicle recovery ship Any ship equipped to recover space capsules	ARC	Repair ship, cable	, , , , , , , , , , , , , , , , , , , ,
medium Repair ship, heavy hull Same as for AR but optimized for extensive repairs to ships hulls. Repair ship, small Ship 40-120 meters capable of providing mobile repair facilities and possible limited support to smaller boats. ARR Repair ship, radiological Ship optimized to provide mobile repairs to radiological installations and facilities. ARS Salvage ship Ship at least 40 meters used to provide mobile salvage, repairs, diving and rescue services. ARSD Salvage ship, lifting Same as for ARS but must have heavy lifting capability. ARV Aircraft repair ship Ship of any size used to repair helicopters, aircraft and aircraft engines. AS Submarine tender Ship of at least 120 meters or more which provides mobile base facilities and support for submarines. ASL Submarine tender, small Same as for as but between 40-120 meters. ASR Submarine rescue ship Any ship equipped to rescue personnel entrapped in a sunken submarine. ASVR Space vehicle recovery ship Any ship equipped to recover space capsules	ARD	Auxiliary repair dock	Dry dock with repair facilities for all ship sizes.
ships hulls. ARL Repair ship, small Ship 40-120 meters capable of providing mobile repair facilities and possible limited support to smaller boats. ARR Repair ship, radiological Ship optimized to provide mobile repairs to radiological installations and facilities. ARS Salvage ship Ship at least 40 meters used to provide mobile salvage, repairs, diving and rescue services. ARSD Salvage ship, lifting Same as for ARS but must have heavy lifting capability. ARV Aircraft repair ship Ship of any size used to repair helicopters, aircraft and aircraft engines. AS Submarine tender Ship of at least 120 meters or more which provides mobile base facilities and support for submarines. ASL Submarine tender, small Same as for as but between 40-120 meters. ASR Submarine rescue ship Any ship equipped to rescue personnel entrapped in a sunken submarine. ASVR Space vehicle recovery ship Any ship equipped to recover space capsules	ARDM		Same as for AR but for medium and small ships.
facilities and possible limited support to smaller boats. ARR Repair ship, radiological Ship optimized to provide mobile repairs to radiological installations and facilities. ARS Salvage ship Ship at least 40 meters used to provide mobile salvage, repairs, diving and rescue services. ARSD Salvage ship, lifting Same as for ARS but must have heavy lifting capability. ARV Aircraft repair ship Ship of any size used to repair helicopters, aircraft and aircraft engines. AS Submarine tender Ship of at least 120 meters or more which provides mobile base facilities and support for submarines. ASL Submarine tender, small Same as for as but between 40-120 meters. ASR Submarine rescue ship Any ship equipped to rescue personnel entrapped in a sunken submarine. ASVR Space vehicle recovery ship Any ship equipped to recover space capsules	ARH	Repair ship, heavy hull	· · · · · · · · · · · · · · · · · · ·
radiological installations and facilities. ARS Salvage ship Ship at least 40 meters used to provide mobile salvage, repairs, diving and rescue services. ARSD Salvage ship, lifting Same as for ARS but must have heavy lifting capability. ARV Aircraft repair ship Ship of any size used to repair helicopters, aircraft and aircraft engines. AS Submarine tender Ship of at least 120 meters or more which provides mobile base facilities and support for submarines. ASL Submarine tender, small Same as for as but between 40-120 meters. ASR Submarine rescue ship Any ship equipped to rescue personnel entrapped in a sunken submarine. ASVR Space vehicle recovery ship Any ship equipped to recover space capsules	ARL	Repair ship, small	, , , , , , , , , , , , , , , , , , , ,
Salvage, repairs, diving and rescue services. ARSD Salvage ship, lifting Same as for ARS but must have heavy lifting capability. ARV Aircraft repair ship Ship of any size used to repair helicopters, aircraft and aircraft engines. AS Submarine tender Ship of at least 120 meters or more which provides mobile base facilities and support for submarines. ASL Submarine tender, small Same as for as but between 40-120 meters. ASR Submarine rescue ship Any ship equipped to rescue personnel entrapped in a sunken submarine. ASVR Space vehicle recovery ship Any ship equipped to recover space capsules	ARR	Repair ship, radiological	
ARV Aircraft repair ship Ship of any size used to repair helicopters, aircraft and aircraft engines. AS Submarine tender Ship of at least 120 meters or more which provides mobile base facilities and support for submarines. ASL Submarine tender, small Same as for as but between 40-120 meters. ASR Submarine rescue ship Any ship equipped to rescue personnel entrapped in a sunken submarine. ASVR Space vehicle recovery ship Any ship equipped to recover space capsules	ARS	Salvage ship	·
AS Submarine tender Ship of at least 120 meters or more which provides mobile base facilities and support for submarines. ASL Submarine tender, small Same as for as but between 40-120 meters. ASR Submarine rescue ship Any ship equipped to rescue personnel entrapped in a sunken submarine. ASVR Space vehicle recovery ship Any ship equipped to recover space capsules	ARSD	Salvage ship, lifting	, -
mobile base facilities and support for submarines. ASL Submarine tender, small Same as for as but between 40-120 meters. ASR Submarine rescue ship Any ship equipped to rescue personnel entrapped in a sunken submarine. ASVR Space vehicle recovery ship Any ship equipped to recover space capsules	ARV	Aircraft repair ship	· · · · · · · · · · · · · · · · · · ·
ASR Submarine rescue ship Any ship equipped to rescue personnel entrapped in a sunken submarine. ASVR Space vehicle recovery ship Any ship equipped to recover space capsules	AS	Submarine tender	·
sunken submarine. ASVR Space vehicle recovery ship Any ship equipped to recover space capsules	ASL	Submarine tender, small	Same as for as but between 40-120 meters.
	ASR	Submarine rescue ship	
	ASVR	Space vehicle recovery ship	

AT	Tug, ocean going	General designator for tugs capable of operating in open ocean waters.
ATA	Tug, oceangoing, auxiliary	Seagoing tug employed to tow navy ships and craft. Usually about 40-50 meters.
ATC	Mini-armored troop carrier	
ATF	Tug, oceangoing, fleet	Same as for ATA but equipped to operate with fleets.
ATR	Tug, oceangoing, rescue	Same as for ATA or ATF but extensively equipped for fire fighting and rescue operations.
ATS	Tug, oceangoing, or ship salvage/rescue	Ship which can provide salvage, repair, diving and rescue services, and tow ships and craft.
AU	Fishing vessel, trawler or junk, general	
AV	Seaplane tender	General designator for vessels which have repair and support facilities for aircraft.
AVB	Aviation logistic support ship	Large ship equipped to provide aviation logistic support.
AVM	Aviation tender guided missile supply ship	Ship with supply and support facilities for airborne guided missiles.
AVR	Aircraft rescue vessel	Any ship equipped to rescue personnel trapped in a sunken aircraft. May also have facilities to salvage sunken aircraft.
AVS	Aviation supply ship	Ship equipped to carry and supply aviation stores.
AVT	Auxiliary aircraft landing training ship	Training carrier for command and fleet carrier qualification requirements.
AWT	Water tender, naval	Ship used primarily for transporting potable water.
AWW	Distilling ship, naval	Ship capable of distilling and transporting potable water.
AX	Training ship, naval	Large oceangoing ship designed to serve as a training ship.
AXL	Training ship, small, naval	Same as for AX but not oceangoing.
AXS	Training ship, sail, naval	Naval sail training ship.
AXT	Training ship	
AY		
	Hydrographic/oceanographic vessel	
BB		Capital surface ship designed for surface action with a reasonable compromise between speed, protection and armament which may include guided missiles.
BB BLK	vessel	reasonable compromise between speed, protection
	vessel Battleship, general	reasonable compromise between speed, protection

CA	Cruiser, gun	Cruiser with guns 15 cm (6 inch) or larger as its main armament and with no missile systems.
CAT	Catamaran	A racing sailboat with two parallel hulls.
CATBOAT	Catboat	A single-masted sailing vessel with only a mainsail.
CC	Cruiser, general	General designator for all cruiser type ships of 140 meters or more.
CG	Guided missile cruiser	Cruiser with one or more force guided missile systems as its main armament.
CGF	Fishing ship, cargo	
CGH	Cruiser, helo capability, guided missile	Same as for CG but fitted with a flight deck with a primary mission of operating and maintaining helicopters.
CGHN	Cruiser, guided missile, helo capable, nuclear powered	Same as for CGH but with nuclear power.
CGN	Cruiser, guided missile, nuclear powered	Cruiser with one or more force guided missile systems as its main armament with nuclear power.
CGO	Cargo, dry, break bulk	
СН	Cruiser, helicopter	Same as for CC but fitted with a flight deck with a primary mission of operating and maintaining helicopters.
CHN	Cruiser, aviation, nuclear powered	
CL	Cruiser, light	
CLAA	Cruiser, light, antiaircraft	
CLC	Tactical command ship	
CLH	Cruiser, light, aviation	
CS	Cruiser, small	
СТ	Cruiser, training	
СТН	Cruiser, aviation, training	
CUTTER	Cutter	A single-masted yacht or sailboat carrying two head sails under normal wind conditions.
CV	Aircraft carrier, general	General designator for aircraft carriers. 2. Designator for multi-role aircraft carriers.
CVA	Aircraft carrier, attack	
CVG	Aircraft carrier, guided missile	Same as for CV but fitted with one or more force guided missile systems.
CVGN	Aircraft carrier, guided missile, nuclear powered	Same as for CVG but with nuclear power.

CVH	Helicopter/VSTOL aircraft carrier	Aircraft carrier without arrest gear/catapult operating VSTOL aircraft and/or helicopters which is not an amphibious or minewarfare ship.
CVHG	Aircraft carrier, VSTOL, guided missile	Same as for CVH but fitted with one or more force guided missile systems.
CVHGN	Aircraft carrier, VSTOL, guided missile, nuclear powered	Same as for CVHG but with nuclear power.
CVHN	Aircraft carrier, VSTOL, nuclear powered	Same as for CVH but with nuclear power.
CVL	Aircraft carrier, light	
CVLG	Aircraft carrier, light, guided missile	Same as for CVL but fitted with one or more force guided missile systems.
CVLGN	Aircraft carrier, light, guided missile, nuclear powered	
CVLN	Aircraft carrier, light, nuclear powered	
CVN	Aircraft carrier, nuclear powered	Same as for CV but with nuclear power.
CVS	Aircraft carrier, ASW	Carrier capable of operating VSTOL and/or helicopters in sustained ASW area operations and escort duties.
CVT	Aircraft carrier, training	Same as for CV but used primarily in a training role.
DD	Destroyer, general	General designator for destroyer type ships. Major surface combatant in range of about 95 to 140 meters whole general mission is to conduct operations with strike, ASW and amphibious forces, and to perform screening and convoy duties. May have helicopters not especially fitted for ASW.
DDG	Destroyer, guided missile	Same as for DD but fitted with one more force guided missile systems.
DDGH	Destroyer, helo, guided missile	Same as for DDG and DDH.
DDGN	Destroyer, guided missile, nuclear powered	
DDH	Destroyer, helo capable	Same as for DDG.
DDHGN	Destroyer, aviation, guided missile, nuclear powered	
DDHN	Destroyer, aviation, nuclear powered	
DDM	Destroyer, minelaying	
DDR	Destroyer, radar picket	
DDT	Destroyer, training	Same as for DD but used primarily in a training role.
DE	Destroyer escort	Same as for DD but optimized for escort duties.

DER	Destroyer escort, radar picket	
DHOW	Dhow	Sailing vessel, usually associated with middle eastern countries of specific design. May be powered by engine or sails, usually used for transportation purposes.
DSRV	Deep submergence rescue vehicle	Submersible designed for submarine rescue operations at great depth (more than 300 meters).
DSV	Deep submergence vehicle, commercial	Submersible designed to operate at great depth (more than 300 meters).
FF	Frigate, general	General designator for frigate. A surface combatant in size range of about 75-150 meters. Fitted primarily to fulfill an ASW role. Generally has lighter surface armament than DD.
FFG	Frigate, guided missile	Same as for FF but fitted with one or more force guided missile systems.
FFGH	Frigate, aviation, guided missile	Same as for FFG and FFH.
FFGN	Frigate, guided missile, nuclear powered	
FFH	Frigate, aviation	Same as for FF but fitted with a flight deck with a primary mission of operating and maintaining helicopters.
FFHGN	Frigate, guided missile, aviation, nuclear powered	
FFHN	Frigate, aviation, nuclear powered	Same as for FFG and FFH, nuclear.
FFL	Frigate, small or corvette	Same as for FF but smaller. Classification determined by armament or capability.
FFLG	Corvette, guided missile	Same as for FFL but fitted with one or more force guided missile systems.
FFR	Frigate, radar picket	
FFT	Frigate, training	Same as for FF but used primarily in a training role.
FS	Corvette	Small escort in size range 60 to 100 meters.
FSH	Fishing ship, fish	
НН	Hovercraft, air cushion/ground effect machine, general	
HL	Hovercraft, large	
HOUSBOAT	Houseboat	A flat-bottomed boat with a superstructure resembling a house.
HP	Hovercraft, personnel	
IX	Unclassified miscellaneous unit	Ship, vessel or craft whose designation has not been classified.

KETCH	Ketch	A small, two-masted sailing vessel rigged fore and aft, with the mizzenmast (aftermast) located forward of the rudderpost.
LARC	Lighter, amphibious, re-supply, cargo	A lighter designed to carry cargo for the re-supply of landing forces.
LARCV	Lighter, amphibious, re-supply, vehicle	A lighter designed to carry cargo and vehicles for the re-supply of landing forces.
LC	Landing craft	General desig. For amphibious landing craft.
LCAC	Landing craft, air cushion	High speed (40 knots) assault landing craft capable of travelling over land and water from over-the-horizon distances (12-200nm) using air cushion/gas turbine propulsion.
LCC	Amphibious command ship	Command ship for amphibious task force and landing operations. May carry a limited number of troops and supplies for the headquarters element of the landing force.
LCFS	Landing craft, fire support	Landing craft optimized to provide fire support with guns or rockets during amphibious assaults. Probably does not carry troops.
LCM	Landing craft, mechanized	Landing craft in size range 15-25 meters capable of carrying 1 tank or 50-200 troops. Must have landing ramp.
LCMJ	Landing craft, medium, air cushion	Same as for LCM but is an air cushion or surface effect design.
LCP	Landing craft, personnel	Landing craft in size range 7.5-30 meters overall suitable only for carrying personnel. May be fast and/ or ramped.
LCPA	Landing craft, personnel, armored	Same as for LCP but armored for protection.
LCPL	Landing craft, personnel, large	11 meter landing control boat used primarily to control amphibious seaborn assault waves.
LCT	Landing craft, tank	Same as for LCM but optimized for carrying and landing tanks and vehicles.
LCU	Landing craft, utility	All purpose landing craft in size range 25-55 meters and full load of 120-500 tons with landing ramp/other landing facilities used for handling 2-3 tanks or 300-450 troops.
LCUJ	Landing craft, utility, air cushion	Same as for LCU but is an air cushion or surface effect design.
LCVP	Landing craft, vehicle/personnel	Similar in size to LCP but capable of carrying a light vehicle in place of troops. Must have bow ramp.
LCW	Landing craft, swimmer support	High speed craft utilized primarily for underwater demolition and/or special warfare operations.

LDW	Swimmer delivery vehicle	Amphibious ship designed to transport swimmers.
LFS	Amphibious fire support ship	Landing ship converted for use in amphibious assaults. Armament is usually rocket launchers, but may also have bombardment guns. May or may not carry troops.
LG	Assault craft, gun-equipped	Assault landing craft equipped with guns.
LHA	Amphibious assault ship, general	A large general purpose ship which embarks and lands elements of an assault force in both organic helicopters and organic landing craft. Capable of carrying about 1800 assault troops. Must have internal stowage and ramp, and flooded well capability for vehicles or craft.
LHD	Amphibious assault ship, multi- purpose	A large multi-purpose amphibious ship that embarks and lands elements of a landing force by helicopter, landing craft and amphibious vehicles. Can also conduct sea control and power projection missions with VSTOL aircraft and ASW helicopters.
LKA	Amphibious cargo ship	Ship which carries supplies for amphibious assaults and can land the same in its own organic landing craft.
LL	Amphibious ship, general	General designator for amphibious vessels.
LLB	Assault ship, beaching	Amphibious ship designed for beaching operations.
LLP	Assault ship, personnel	Amphibious ship designed specifically to carry personnel.
LLT	Assault ship, tank	Assault ship optimized for carrying tanks.
LM	Assault craft, missile equipped	Landing craft equipped with other than force guided missiles.
LO	Assault ship, non beaching	
LPD	Amphibious transport, dock	Ship which carries about 1000 troops. Capable of carrying up to 9 LCM. Primarily a troop ship and armored car carrier, with considerable internal berthing space. Must have permanent helicopter platform.
LPH	Amphibious assault ship, helicopter	A large helicopter carrier with the mission of transporting and landing about 1800 assault troops with its organic aircraft. Employment of organic landing craft not a principal function.
LPP	Amphibious transport, personnel	A large ship capable of carrying 1300-1500 assault troops and capable of landing them in its own organic landing craft.
LR	Assault ship, rocket-firing	
LS	Landing ship, general	General designator for an amphibious landing ship.

LSD	Landing ship, dock	Primarily a tank and vehicle carrier but capable of transporting 150-400 assault troops and launching them embarked in organic landing craft without offloading in the landing area. Need not have a helicopter platform.
LSL	Landing ship, logistics	Landing ship capable of carrying initial, second and follow-on echelon equipment, vehicles and troops. Normally ramped, not part of initial assault force.
LSM	Landing ship, medium	Ship in size range 45-85 meters, capable of beaching to land troops and/or tanks. Must have bow doors and/or landing ramp.
LSSC	Light seal support craft	
LST	Landing ship, tank	Ship in size range 85-100 meters employed to transport troops, vehicles and tanks for amphibious assault. Must have bow doors and/or landing ramp.
LSV	Landing ship, vehicle	Ship in size range 45-60 meters overall, intended primarily to carry vehicles. Must have bow doors and/ or landing ramp. Not capable of beaching.
LV	Assault vehicle	Wheeled vehicle designed to carry assault troops.
MC	Mine countermeasures vessel, unspecified	General designator for mine countermeasures vessel with no specification.
MCCS	Mine countermeasures command and support ship	An armed combatant fitted for the command and support of MCM vessels and their equipment.
MCD	Mine countermeasures vessel, diving	A mine countermeasures vessel specially equipped to carry out and support diving operations.
MCJ	Mine countermeasures vessel, hovercraft	A mine countermeasures vessel that is air cushion or surface effect design.
MCMV	Mine countermeasures vessel, general	General designator for mine countermeasures vessels.
MCS	Mine countermeasures support ship	An armed combatant fitted for the control and support of mcm vessels in combat situations. Has limited facilities for repair of MCMVs and their equipment.
MCSL	Mine countermeasures ship, small, general	Same as for MCS but smaller and probably with less capability for support.
MCT	Mine countermeasures craft, training	A vessel used primarily in a mine countermeasures training role.
MF	Minesweeper, fast	
MH	Minehunter, general	Ship equipped with specific equipment to hunt mines.
МНА	Minehunter, auxiliary	Any seagoing ship not designed as a minehunter but converted to such use.
МНС	Minehunter, coastal	Same as for MH but designed to operate in coastal waters.

MHCD	Minehunter, coastal with drone	Same as for MHC but by the use of a drone.
MHI	Minehunter, inshore	Same as for MH but designed for operating in more shallow waters or estuaries.
МНО	Minehunter, ocean	Same as for MH but designed for operating in ocean waters.
MHS	Minehunter/sweeper, general	A minewarfare craft equipped for both hunting and sweeping mines.
MHSC	Minehunter/sweeper, coastal	Same as for MHS but limited to coastal waters.
MHSD	Minehunter/sweeper, with drone	Same as for MHS but by the use of a drone.
MHSO	Minehunter/sweeper, ocean	Same as for MHS but capable of operating in open ocean waters.
MIS	Miscellaneous, mine warfare	
ML	Minelayer, general	A ship with a primary mission of laying mines.
MLA	Minelayer, auxiliary	Any fishing or merchant ship having both capability and mission to lay mines.
MLC	Minelayer, coastal	Minelayer in size range 50 - 85 meters overall.
MLD	Minelayer, fast	
MLI	Minelayer, inshore	Minelayer in size range 25 - 50 meters overall.
MLO	Minelayer, ocean	Large ship over 85 meters used primarily for minelaying.
MLR	Minelayer, river	Small minelayer 15 meters or less suitable only for operations on rivers or in protected roadsteads.
MLS	Minelayer, support ship	A large armed ship (over 90 meters) capable of extensive minelaying, but not capable of speeds over 30 knots, with the facilities for command and control of minewarfare ships and boats in combat environment. Has limited support capability.
MM	Mine warfare vessel, general	General designator for minewarfare vessels.
MMF	Minelayer, fleet	
MON	River monitor, assault	
MS	Minesweeper, small, general	Ship designed to sweep mines.
MSA	Minesweeper, auxiliary	Any seagoing ship not designed as a minesweeper but converted to such use.
MSB	Minesweeper, boat	Minesweeper less than 12.5 meters.
MSC	Minesweeper, coastal	Non-magnetic minesweeper between 40-70 meters.
MSCD	Minesweeper, coastal, with drone	Coastal minesweeper capable of deploying and/or controlling unmanned remote controlled or towed vehicle(s) used for clearing mines.
MSCJ	Minesweeper, coastal, air cushion	Non-magnetic minesweeper between 40-70 meters, air cushion.

MSCK	Minesweeper, coastal, hydrofoil	Non-magnetic minesweeper between 40-70 meters, hydrofoil.
MSCS	Minesweeper, coastal, special	Same as for MSS but for use within coastal waters.
MSCT	Minesweeper, coastal, training	Same as for MSC but used primarily in a training role.
MSD	Minesweeper, drone	Unmanned remotely controlled or towed vehicle capable of clearing mines.
MSF	Minesweeper, fleet	Minesweeper in size range 46 meters or more which cannot be regarded as being non-magnetic.
MSFJ	Minesweeper, fleet, air cushion	Minesweeper in size range 46 meters or more which cannot be regarded as being non-magnetic, air cushion.
MSFK	Minesweeper, fleet, hydrofoil	Same as for MSF but fitted with hydrofoils.
MSI	Minesweeper, inshore	Minesweeper between 20-40 meters. Intended and equipped for inshore minesweeping.
MSIJ	Minesweeper, inshore, air cushion	Minesweeper between 20-40 meters. Intended and equipped for inshore minesweeping, hydrofoil.
MSL	Minesweeping light	A small vessel designed to sweep mines.
MSO	Minesweeper, ocean	Non-magnetic minesweeper 46 meters or more designed for open ocean operations.
MSR	Minesweeper, river	Shallow water minesweeper in size range 12.5 - 25 meters which has been armored to provide protection for crew in close combat situations. In the USN a converted LCM-6 known as MSM.
MSS	Minesweeper, special device	A minesweeper fitted with special tow type minesweeping devices.
MYAC	Motor yacht	Any of various relatively small vessels for pleasure cruises, racing, etc.
NR	Submersible research vehicle	
OTR	Other	Explain in free-text set.
PAX	Passenger, merchant ship	
РВ	Patrol boat, general	Coastal patrol unit intended for a basically coastal guarding function. Includes any coastal patrol ship under 45 meters which cannot qualify as a PG in armament. May be unarmed.
PBA	Patrol boat, air cushion	
PBD	Patrol boat, drone	
PBF	Patrol boat, fast	Same as for PB but capable of at least 35 knots.
PBK	Patrol boat, hydrofoil	Same as for PB but fitted with hydrofoils.
РВО	Patrol boat, offshore	Coastal patrol unit in size 45-60 meters designed for use in offshore waters. May or may not be armed with guns.

PBR	Patrol boat, river/roadstead	Lightly armed unit generally suitable by design only
. 2		for operations in sheltered waters, such as rivers and roadsteads.
PBS	Patrol boat, fire support	
PC	Submarine chaser/escort craft, general	Vessel in size range 35-55 meters designed and fitted primarily for escort duties in ASW role.
PCE	Patrol craft, coastal, escort	Vessel in size range 55-75 meters designed and fitted primarily for ASW role and coastal duty. Improved seakeeping, vice mere large size, distinguishes PCE from PC, and vessels lacking this should be typed as PC.
PCF	Patrol subchaser, fast	Same as for PC but capable of at least 35 knots.
PCFJ	Patrol craft, air cushion, fast	Same as for PCF but is either an air cushion or surface effect design.
PCFK	Patrol craft, hydrofoil, fast	Same as for PCF but fitted with hydrofoils.
PCFS	Patrol craft, fire support	
PCK	Patrol craft, hydrofoil	Same as for PC but fitted with hydrofoils.
PCS	Submarine chaser	Patrol craft optimized for the ASW role.
PCSA	Submarine chaser, air cushion	
PCSH	Submarine chaser, hydrofoil	
PCT	Patrol craft, training	Same as for PC but used primarily in a training role.
PF	Patrol frigate	
PFR	Patrol frigate, radar picket	
PG	Patrol craft, gun equipped, general	Patrol, blockade and surveillance ship in range 45-85 meters overall. Designed to operate in other than open ocean areas. Has special mission of attacking hostile ships. Must have at least 76mm main armament.
PGA	Patrol combatant, air cushion	
PGB	Patrol ship, icebreaker	Any ship designed as an icebreaker but employed primarily in a patrol mission. The icebreaking capability is to facilitate the patrol function through ice, rather than to support the movement of other ships.
PGF	Patrol ship, fast	Same as for PG but capable of at least 35 knots.
PGG	Patrol combatant, guided missile	Same as for PG but fitted with one or more force guided missile systems.
PGGJ	Patrol combatant, guided missile, air cushion	Same as for PGG but is either an air cushion or surface effect design.
PGGK	Patrol combatant, guided missile, hydrofoil	Same as for PGG but fitted with hydrofoils.
PGK	Patrol combatant, hydrofoil	Same as for PG but fitted with hydrofoils.

PGM	Motor gunboat	Same as for PG but fitted with guns and other than force guided missile systems.
PGR	Patrol combatant, reconnaissance	
PGS	Patrol ship, ASW	ASW patrol ship in size range 45 - 85 meters fitted with medium range sonar and ASW weapons.
PHJ	Patrol combatant, hovercraft	A high speed patrol hovercraft which can conduct surveillance screening and special operations and is operated by naval or marine forces.
PHJM	Patrol combatant, hovercraft, guided missile	Same as for PHJ but fitted with other than force guided missile systems.
PHJS	Patrol combatant, hovercraft, minewarfare capable	A high speed patrol hovercraft which is used primarily in minewarfare.
PM	River monitor	
PP	Patrol vessel, general	
PR	Patrol craft, rescue	
PS	Large patrol ship	
PSQ	Patrol ship, offshore	Same as for PBO but in size range over 60 meters.
PT	Patrol craft, torpedo	High speed (35 knots) anti-surface ship patrol craft in size range 20 - 30 meters fitted with torpedoes.
PTG	Attack boat, guided missile	Same as for PT but fitted with a force guided missile system.
PTGJ	Attack boat, guided missile, air cushion	Same as for PTG but is an air cushion or surface effect design.
PTGK	Attack boat, guided missile hydrofoil	Same as for PTG but fitted with hydrofoils.
PTGT	Attack boat, guided missile, training	Same as for PTG but used primarily in a training role.
PTJ	Torpedo boat, air cushion	Same as for PT but is either an air cushion or surface effect design.
PTK	Torpedo boat, motor, hydrofoil	Same as for PT but fitted with hydrofoils.
PTL	Torpedo boat, small	Same as for PT but smaller.
PTLK	Torpedo boat, small, hydrofoil	Same as for PTL but fitted with hydrofoils.
PTT	Torpedo boat, training	Same as for PT but used primarily in a training role.
QJ	Junk	Sail/motor powered vessel, usually associated with china, of wooden construction designed with high bow and poop deck area. Usually used for transportation purposes.
QM	Motor boat, launch	
QQ	Boat, general	

QR	Rowboat	Vessel powered by oars.
QS	Seaplane	Aircraft designed to take-off/land on water.
QW	Sailboat	
RACCRUS R	Racing cruiser	A low-profile, high-powered motor boat.
REF	Refrigerator	
RIV	River/sea	
RUNABOUT	Runabout	A light motor boat.
SCHOON	Schooner	A ship with two or more masts, the after mast being the same height or taller than the forward, rigged fore and aft.
SG	Submarine, guided/cruise missile	
SHIP	Ship	
SK	Submarine hunter/killer	
SLOOP	Sloop	A fore- and aft-rigged, single-masted sailing vessel with a mainsail and jib.
SPA	Space event support	
SPDBOAT	Speedboat	Small, sleek boat capable of high speeds with or without outboard engines.
SR	Submarine, research, manned or unmanned	
SS	Submarine, general	General designator for submarines.
SSA	Submarine, auxiliary	Submarine used mainly in a non-combatant role which has at least a residual combat capability.
SSAN	Submarine, auxiliary nuclear powered	Same as for SSA but with nuclear power.
SSB	Submarine, ballistic missile	Submarine armed with ballistic missiles normally deployed on strategic missions.
SSBN	Submarine, ballistic missile, nuclear	Same as for SSB but with nuclear power.
SSC	Submarine, coastal	Submarine designed primarily for operations in coastal and shallow waters.
SSG	Submarine, attack missile	Submarine fitted with underwater to surface or surface to surface missiles.
SSGN	Submarine, attack, missile, nuclear	Same as for SSG but with nuclear power.
SSK	Submarine, patrol	Long range patrol submarine. May have primary anti- surface or anti-submarine role.
SSLP	Submarine, transport	

SSN	Submarine, attack, nuclear	Nuclear propelled attack submarine with both anti- submarine and anti-surface capability.
SSQ	Submarine, auxiliary, communications	
SSQN	Submarine, auxiliary, communications, nuclear powered	
SSR	Submarine, radar picket	
SST	Submarine, training	Submarine used primarily in a training role but with at least a residual combat capability.
SSU	Submarine, MILCAP unknown	Submarine whose full military capability is unknown or has not been determined.
SSUN	Submarine, MILCAP unknown, nuclear powered	Same as for SSU but with nuclear power.
SSW	Submarine, midget, swimmer	Midget submarine or submersible designed primarily for special operations and operated by naval forces.
SUB	Submarine	
SVC	Service craft	
SWCL	Special warfare craft, light	A light craft specifically designed for special warfare operations.
SWCM	Special warfare craft, medium	Same as for SWCL but larger in size.
TJ	Hovercraft, general	General designator for non-naval hovercraft.
TJC	Hovercraft, transport/cargo	Hovercraft capable of carrying vehicles and cargo. Not fitted to carry passengers.
TJF	Hovercraft, ferry	Hovercraft fitted to carry passengers and/or vehicles.
TJGB	Hovercraft, icebreaker	Hovercraft specially fitted to assist in icebreaking.
TJGS	Hovercraft, scientific research/ survey	Non-military hovercraft specially equipped for research or survey duties.
TJL	Hovercraft, small	
TKR	Liquid cargo	
TM	Merchant ship, general	General designator for non-naval ship designed to transport cargo or passengers. All merchant ship designators below indicate non-naval ships.
TMA	Merchant ship, dry cargo, break bulk	Dry cargo carrying ship capable of handling break bulk cargo.
TMB	Merchant ship, bulk	Ship designed to carry dry cargo in bulk form.
TMC	Merchant ship, container, non- self sustained	Ship designed to carry cargo in loadable and unloadable containers. Not equipped to handle the containers with own equipment.
TMCS	Merchant ship, container, self-contained	Same as for TMC but with own handling equipment.

TMD	Marahant ahin dradaar	Chin decigned to dredge abannals in ones acce
TMD	Merchant ship, dredger	Ship designed to dredge channels in open seas.
TME	Merchant ship, RO/RO	Ship 40 meters or more having capability for roll-on/roll-off cargo.
TMF	Merchant ship, car/passenger ferry	Ship or craft designed to run a ferry service of both cars and passengers.
TMFR	Merchant ship, railroad, car ferry	Same as for TMF but designed to ferry railroad cars.
TMGB	Merchant ship, icebreaker	Ship used primarily for icebreaking.
TMGS	Merchant ship, scientific research/survey	Ship employed to conduct scientific research.
TMH	Merchant ship, heavy lift	Ship fitted with heavy duty crane or derrick for heavy lift.
TMI	Merchant ship, inland waterway	Ship primarily used to transport cargo via inland waterways.
TMK	Merchant ship, cable layer	Ship designed to lay and/or retrieve cables.
TML	Merchant ship, lash	Ship equipped with gantry crane, capable of embarking and disembarking pre-loaded standard sized barge (lash lighters).
TMLS	Merchant ship, seabee	Barge carrying ship with a stern elevator, capable of embarking and disembarking barges of non-standard size.
TMM	Merchant ship, meteorological	Ship designed primarily to monitor meteorological conditions.
TMO	Merchant ship, tanker	Ship designed to transport liquids (or gases).
TMOL	Merchant ship, replenishment, oiler, small	Ship able to provide replenishment to ships at sea of pol and solid store products. Less than 120 meters in size.
TMOR	Merchant ship, replenishment, oiler	Ship able to provide replenishment to ships at sea of pol and solid store products. Over 120 meters in size.
TMOS	Merchant ship, special liquids	Ship 40 meters or more designed to transport a special kind of propellant or other non-nuclear associated liquid cargo.
TMOT	Merchant ship, liquid	Ship designed to transport liquid gas.
TMP	Merchant ship, passenger	Ship designed primarily to transport passengers.
TMR	Merchant ship, refrigerated	Ship designed primarily to transport cargo in refrigerated spaces.
TMS	Merchant ship, space/missile associated	Ship designed or converted primarily to support space and missile programs.
TMT	Merchant ship, tug, ocean-going	Sea-going tug with horsepower of 1000 or more, length usually over 60 meters.
TMTR	Merchant tug, oceangoing rescue	Same as for TMT but extensively equipped for fire fighting and rescue operations.

TMTS	Merchant tug, oceangoing salvage	Sea-going tug which can provide towing, salvage, repair, diving and rescue services to ships and craft.
TMWT	Merchant ship, water tender	Ship designed primarily for transporting potable water.
TMWW	Merchant ship, distilling	Ship capable of distilling and transporting potable water.
TMX	Merchant ship, training	Ship used primarily for training purposes.
TRIHULL	Trimaran	A boat similar to a catamaran, but with three parallel hulls.
TS	Submersible, general, commercial	General designator for non-combatant submersible.
TSG	Submersible, research, commercial	Submersible with no combat capability used in research role.
TSR	Submersible, rescue, commercial	Submersible designed specifically for underwater rescue operations.
TU	Fishing vessel, general	Fishing vessel over 30 meters.
TUB	Fishing vessel base ship	Fishing vessel support ship (other than supplying fuel/water only).
TUC	Fishing vessel, whale catcher	Fishing vessel equipped to engage in whale hunting.
TUF	Fishing vessel factory ship	Fishing vessel equipped to prepare fish or other seafood into commercial products.
TUG	Tug	
TUI	Fishing vessel, inspection	Any ship other than naval used for inspection of fishing vessels.
TUR	Fishing vessel, refrigerated	Fishing vessel equipped with refrigerated holds.
TUS	Fisheries research ship	Vessel equipped to conduct fisheries research.
TUT	Fishing vessel, training	Vessel used to train personnel in fisheries techniques.
TUW	Whale factory ship	Vessel equipped to prepare whales into commercial products.
UNK	Unknown	Ship, vessel or craft whose designation is unknown.
VPB	Patrol boat, police	Same as for PB but police operated.
VPC	Patrol craft, police	Same as for PC but police operated.
VPG	Armed police gunboat	Armed vessel operated by police. Size may vary.
VYDT	Police diving tender	Same as for YDT but police operated.
VYFL	Police launch	Same as for YFL but police operated.
WAG	Miscellaneous auxiliary, coast guard	Coast guard AG.
WAGB	Icebreaker, coast guard	Coast guard armed ship in size range 70 meters or more used primarily for icebreaking duties.
WAGE	Research ship, experimental, coast guard	

WAGL	Buoy tender, coast guard	Coast guard ABU.
WAGOR	Oceanographic research ship, coast guard	
WAGS	Research ship, hydrographic, coast guard	
WAK	Cargo ship, coast guard	Coast guard AK.
WAO	Oiler, coast guard	
WAOT	Oiler, transport, coast guard	
WARC	Cable repair ship, coast guard	Coast guard ARC.
WARS	Salvage and rescue ship, coast guard	
WATA	Ocean tug, coast guard	
WAXT	Training ship, coast guard	
WDD	Destroyer, coast guard	Coast guard DD.
WFF	Frigate, coast guard	Coast guard FF.
WFFL	Corvette, coast guard	Coast guard FFL.
WLCM	Landing craft, medium, coast guard	Coast guard LCM.
WLCP	Landing craft, personnel, coast guard	Coast guard LCP.
WLCPA	Personnel landing craft- armored, coast guard	
WLCU	Landing craft, utility, coast guard	Coast guard LCU.
WLCVP	Vehicle/passenger landing craft, coast guard	
WLFK	Launch, hydrofoil, coast guard	Coast guard YFLK.
WLSM	Landing ship, medium, coast guard	Coast guard LSM.
WLST	Landing ship tank, coast guard	Coast guard LST.
WMM	Minelayer, coast guard	Coast guard MM.
WMSB	Minesweeping boat, coast guard	Coast guard MSB.
WMSF	Minesweeper, fleet, coast guard	Coast guard MSF.
WMSI	Minesweeper, inshore, coast guard	Coast guard MSI.
WPB	Patrol boat, coast guard	
WPBA	Patrol boat, air cushion, coast guard	

WPBH	Patrol boat, hydrofoil, coast guard	
WPBR	Patrol boat, river/roadstead, coast guard	Coast guard PBR.
WPC	Patrol craft, coast guard	Coast guard PC.
WPCF	Patrol craft, fast, coast guard	Coast guard PCF.
WPCFJ	Fast patrol craft, air cushioned, coast guard	Coast guard PCF but is either an air cushion or surface effect design.
WPCS	Submarine chaser, coast guard	
WPCSH	Submarine chaser, hydrofoil, coast guard	
WPCT	Patrol craft, training coast guard	
WPG	Patrol combatant, coast guard	Coast guard PG.
WPGF	Patrol ship, coast guard	
WPM	River monitor, coast guard	
WPSB	Patrol boat, harbor, coast guard	
WPT	Torpedo boat, coast guard	
WPTG	Attack boat, guided missile, coast guard	Coast guard PTG.
WPTL	Torpedo boat, small, coast guard	
WQS	Seaplane, coast guard	Coast guard aircraft capable of operating from water.
WYAG	Service craft, miscellaneous, coast guard	
WYAGE	Experimental service craft, coast guard	Coast guard YAGE.
WYC	Barge, open, coast guard	
WYDT	Diving tender, coast guard	Coast guard YDT.
WYF	Lighter, covered, coast guard	
WYFB	Ferry, coast guard	Coast guard YFB.
WYFDL	Boating drydock, small, coast guard	Coast guard YFDB but less than 60 meters.
WYFL	Launch, coast guard	Coast guard YFL.
WYFU	Transport, utility, harbor, coast guard	
WYGS	Craft, survey, coast guard	Coast guard YGS.
WYH	Craft, ambulance, coast guard	Coast guard craft 40 meters or less employed to transport sick/wounded and/or medical personnel.

WYO	Lighter, fuel, coast guard	Coast guard craft of any design 60 meters or less used to store and transport pol products.
WYON	Barge, fuel, coast guard	
WYPL	Barge, barracks, coast guard	
WYR	Barge, floating, repair workshop, coast guard	Coast guard craft about 30 meters fitted out as a general or special purpose mobile workship.
WYTB	Tug, harbor, large, coast guard	Coast guard YTB.
WYTL	Tug, harbor, small, coast guard	Coast guard harbor tug under 20 meters with total horsepower under 500.
WYTM	Tug, harbor, medium, coast guard	Coast guard YTM.
WYTS	Craft, sail, training, coast guard	Coast guard YTS.
WYW	Lighter, water, coast guard	
WYXT	Craft, training, coast guard	Coast guard YXT.
YAC	Yacht	Vessel with one or more sails as primary source of power.
YAG	Service craft, miscellaneous	Craft, usually under 40 meters overall employed in general or multi-purpose functions of support, training, R&D or test in nature.
YAGE	Service craft, experimental	Same as for YAG used for experimental purposes.
YAGEN	Experimental weapon testing barge	Barge used for experimental weapon testing.
YAGF	Command craft, miscellaneous	Craft 40 meters or less employed as a command ship but not designed for use at sea.
YAGK	Service craft, surface effect, experimental	Same as for YAGE but of surface effect design.
YAGT	Target service craft	Craft 45 meters or less employed as a target in support of gunnery or missile firing training.
YAM	Support barge, missile	Any self-propelled craft specially fitted and employed primarily in support of missile R&D, missile testing, associated training and/or space flights in coastal waters, but not at sea.
YAWL	Yawl	A small, two-masted sailing vessel similar to a ketch but with the mizzenmast (aftermast) located after the rudderpost.
YB	Barge, non-self propelled	A vessel which has no power of its own and must be towed.
YBD	Dock, bow	
YC	Lighter, open	Barge-like vessel used in loading and unloading ships or in transporting loads for short distances.
YCF	Barge, cargo	
	1	

YCK	Lighter, open, cargo	Same as for YC but open and used for transporting cargo.
YCV	Lighter, aircraft transport	Same as for YC but optimized for transporting aircraft.
YD	Floating crane	Barge-like vessels usually non-self-propelled equipped with a crane.
YDG	Vessel, degaussing	Vessel of any size used for degaussing purposes.
YDT	Diving tender	Craft usually 40 meters or less equipped to provide support for divers.
YE	Lighter, ammunition	Craft 40 meters or less used for transporting ammunition.
YEN	Barge, ammunition	
YF	Ferry, lighter, covered	Self-propelled transport craft under 40 meters.
YFB	Ferry boat	Boat or craft designed to provide ferry service in coastal and protecters waters.
YFC	Lighter, covered, dry dock companion	Craft used to support the operations of a dry dock other than workshops.
YFD	Yard floating drydock	General designator for floating drydocks.
YFDB	Dry dock floating, open, large	Non-self-propelled open ended dry dock 200 meters or more.
YFDL	Dry dock floating, open, small	Same as for YFDB but less than 60 meters.
YFDM	Dry dock floating, open, medium	Same as for YFDB but 60 to 200 meters.
YFL	Launch	Small craft less than 20 meters employed in sheltered waters for transporting personnel.
YFLB	Launch, covered, large	Same as for YFL but over 20 meters.
YFLK	Launch, hydrofoil	Same as for YFL but fitted with hydrofoils.
YFLN	Launch, covered	Same as for YFL but with covered areas.
YFND	Drydock companion craft	Craft used to support the operations of a dry dock.
YFNX	Barge, special purpose, non-self propelled	Barge used for various designated special purposes.
YFP	Floating power barge	Craft capable of providing auxiliary power.
YFR	Lighter, covered, refrigerated	Refrigerated cargo transport craft 40 meters or less.
YFRN	Barge, refrigerated	
YFRT	Range tender	Craft used for safety and utility purposes on ranges.
YFT	Lighter, torpedo transport	Self-propelled craft 40 meters or less employed for transporting torpedoes.
YFU	Harbor utility craft	Former LCU employed for general cargo transport purposes.
YG	Lighter, garbage	
YGG	Barge, garbage	Self-propelled craft used for the collection of garbage.

YGS	Survey craft	Small craft used for survey purposes in sheltered waters.
YGT	Floating target	Craft built to simulate a target.
YGTN	Barge, target	Self-propelled craft used to simulate a target.
YH	Ambulance boat	Craft 40 meters or less employed to transport sick/ wounded and/or medical personnel.
YHT	Barge, heating	Craft of any size used to provide heat to moored ships or ship facilities.
YL	Lighter	General designator for lighters.
YLC	Salvage lift craft	Craft of 40 meters or less employed to raise sunken ships. Lift capacity about 60 tons.
YLCN	Barge, salvage lift	
YLG	Barge, garbage ship	Craft, probably self-propelled, used for collecting garbage from ships.
YLWT	Warping tug	Tug used for warping ships in berths.
YM	Floating dredge	Craft employed as a dredge.
YMN	Dredge, non-self propelled	Same as for YM but not self-propelled.
YNC	Net cargo craft	Craft 40 meters or less used to store and transport harbor defense craft.
YNG	Gate craft	Craft used for control or maintenance of harbor defense equipment.
YNR	Research vehicle, nuclear powered	
YNT	Net tender, boom	Craft 40 meters or less used to maintain nets, booms and other harbor defense equipment. May/may not be able to lay and recover same.
YO	Barge, fuel oil	Craft of any design 60 meters or less used to store and transport pol products.
YOG	Barge, gasoline	Craft 60 meters or less used to store and transport clean petroleum products.
YOM	Barge, special liquid	Craft 60 meters or less designed to transport fluids other than POL products or water in harbor areas.
YON	Barge, fuel	
YOS	Barge, oil storage	POL storage barge which cannot be towed around the harbor.
YOSR	Barge, disposal, nuclear waste	Barge specifically designed for the disposal of nuclear waste.
YOSS	Barge, oil storage, submersible	POL storage barge which cannot be towed around the harbor but does sink below the water surface when filled.

YP	Harbor patrol craft	Craft used primarily for training personnel for service aboard patrol types. However, may be armed and used as a harbor patrol craft (PB).
YPB	Floating barracks	Craft used as accommodation for vessels crews.
YPD	Floating pile driver	Craft used as a pile driver.
YPK	Barge, pontoon storage	Craft used to stow pontoons.
YPL	Barge, barracks	
YPT	Torpedo retriever craft	Craft used primarily to retrieve spent torpedoes during exercises. However may be armed and used as a harbor patrol craft as an auxiliary duty.
YR	Repair, floating workshop	Craft about 30 meters fitted out as a general or special purpose mobile workship.
YRB	Barge, repair and berthing	Craft which both serves as a floating workship and has berthing facilities for the assigned personnel. May/may not provide messing facilities as well.
YRBM	Repair, berthing and messing barge	Same as for YRB but does provide messing facilities.
YRC	Cable tender yard craft	Craft under 30 meters used to lay, retrieve and maintain submarine cables.
YRCN	Barge, cable	Craft used to carry cables for laying.
YRD	Drydock, floating workshop	Non-self-propelled drydock with workshop facilities.
YRDB	Dry dock floating, closed, large	Non-self-propelled drydock, closed bow and stern over 200 meters.
YRDH	Floating drydock workshop, hull	Same as for YRD but optimized for hull repairs.
YRDL	Dry dock floating, closed, small	Same as for YRDB but under 60 meters.
YRDM	Dry dock floating, closed, medium	Same as for YRDB but 60-200 meters.
YRG	Tank cleaning craft	Craft equipped for steam cleaning liquid storage tanks or ships.
YRNS	Barge, nuclear ship support	Craft used to transport radioactive materials (see YRR).
YRR	Barge, radiological repair	Barge used to repair and/or service radioactive equipment.
YRRN	Repair barge, nuclear propulsion	Barge optimized to repair nuclear propulsion plants.
YRST	Barge, salvage	Any utility barge used for salvage.
YS	Barge, self-propelled	General designator for self-propelled barges.
YSG	Submersible, research, military	Same as for TSG but military operated.
YSLWT	Side loading warping tug	
YSR	Submersible, rescue, naval	Same as for TSR but military operated.

YSRV	Deep submersible rescue vehicle (military)	Same as for DSRV but military operated.
YSS	Submersible, service, military	
YSV	Deep submergence vehicle, military	Same as for DSV but military operated.
YT	Harbor tug	General designator for craft capable of towing naval ships in sheltered or protected seas.
YTB	Tug, harbor, large	Coastal/harbor tug between 30-40 meters with total horsepower of 1300 or more.
YTD	Diving tender small	Small craft optimized to act as tender for diving operations.
YTL	Tug, harbor, small	Harbor tug under 20 meters with total horsepower under 500.
YTM	Tug, harbor, medium	Harbor tug between 20-40 meters with total horsepower between 500 and 1300.
YTR	Fire/rescue boat, small	Harbor craft extensively equipped for fire fighting. For this type that capability is more important than horsepower alone. Must have several fire monitors.
YTS	Training craft, sail	Sailing craft of any size used for training.
YTT	Torpedo trials craft	Craft used at sea for torpedo trials.
YV	Drone aircraft, catapult control craft	Craft equipped with catapult for the launching of drone aircraft and after launch capable of serving as the control craft for the drone.
YVS	Seaplane service craft	Craft used to rescue, tow, service or support seaplanes.
YW	Barge, water	Craft used to transport and store potable water.
YXR	Hulk or relic	Any unused/historic ship.
YXT	Training craft	General designator for any craft used for training purposes.
YY	Service craft, yard, general	General designator for yard service craft.
ZPB	Patrol boat, customs	Same as for PB but customs operated.
ZPC	Fisheries patrol craft	Same as for PC but fisheries service operated (fisheries patrol craft).
ZPG	Armed customs gunboat	Armed vessel operated by customs. Size may vary.
ZYFL	Customs launch	Same as for YFL but customs operated.
ZYTB	Fire tug	Same as for YTB but operated by customs fire service.
ZYTR	Fire service rescue tender	Same as for YTR but operated by customs fire service.

A.4 MSGID Set

A.4.1 Optional

A.4.1.1 Qualifier

Code	Qualifier	Explanation
AMP	Amplification	Amplifies a previously sent message.
BLK	Block time period	
CHG	Change	Directs a sequential change to a previously sent message.
DEV	Deviation	Indicates a deviation from a previously sent message.
FIN	Final	
FUP	Follow-up	
INI	Initial	
PER	Permanent	Signifies a message that has a long time standing.
REQ	Request	Used to request a particular message from another commander.
UPD	Update	

Table A-3: MSGID Set (Qualifier)

A.5 ALT Set

A.5.1 Altitude Purpose

Code	Designated Altitude Purpose	Explanation
COAST IN	Coast-in altitude	The altitude an aircraft will maintain when crossing a shore line while heading inland.
COAST OUT	Coast-out altitude	The altitude an aircraft will maintain when crossing a shore line while heading out to sea.
СР	Contact point	
EMERG	Emergency altitude	The altitude an aircraft will attempt to maintain while in distress.
IP	Initial-point altitude	The altitude an aircraft will maintain while crossing an initial point.
ONSTA	On-station altitude	The altitude an aircraft will maintain upon reaching the location specified.
OUT	Outbound altitude	
PENETRATE	Penetration altitude	The altitude an aircraft will maintain when entering or leaving controlled airspace.
RTN	Return altitude	

Table A-4: ALT Set (Designated Altitude Purpose)

A.6 CONTACTS

A.6.1 Classification Confidence

- a. ACPOS
- b. CERT
- c. INSUF
- d. NONSUB
- e. POSS1
- f. POSS2
- g. POSS3
- h. POSS4
- i. PROB

A.6.2 Flag

The following Country Codes are available for the Flag field:

CODE	Country Name
AA	ARUBA
AC	ANTIGUA AND BARBUDA
AE	UNITED ARAB EMIRATES
AF	AFGHANISTAN
AG	ALGERIA
AJ	AZERBAIJAN
AL	ALBANIA
AM	ARMENIA
AN	ANDORRA
AO	ANGOLA
AQ	AMERICAN SAMOA
AR	ARGENTINA
AS	AUSTRALIA
AT	ASHMORE AND CARTIER ISLANDS
AU	AUSTRIA
AV	ANGUILLA
AY	ANTARCTICA
ВА	BAHRAIN
ВВ	BARBADOS
ВС	BOTSWANA

BD	BERMUDA
BE	BELGIUM
BF	BAHAMAS, THE
BG	BANGLADESH
BH	BELIZE
BK	BOSNIA AND HERZEGOVINA
BL	BOLIVIA
BM	BURMA
BN	BENIN
во	BELARUS
BP	SOLOMON ISLANDS
BQ	NAVASSA ISLAND
BR	BRAZIL
BS	BASSAS DA INDIA
ВТ	BHUTAN
BU	BULGARIA
BV	BOUVET ISLAND
ВХ	BRUNEI
BY	BURUNDI
CA	CANADA
СВ	CAMBODIA
CD	CHAD
CE	SRI LANKA
CF	CONGO
CG	CONGO (DEMOCRATIC REPUBLIC OF THE)
СН	CHINA
CI	CHILE
CJ	CAYMAN ISLANDS
CK	COCOS (KEELING) ISLANDS
СМ	CAMEROON
CN	COMOROS
СО	COLOMBIA
CQ	NORTHERN MARIANA ISLANDS
CR	CORAL SEA ISLANDS
CS	COSTA RICA
СТ	CENTRAL AFRICAN REPUBLIC
CU	CUBA

CV	CAPE VERDE
CW	COOK ISLANDS
CY	CYPRUS
DA	DENMARK
DJ	DJIBOUTI
DO	DOMINICA
DQ	JARVIS ISLAND
DR	DOMINICAN REPUBLIC
EC	ECUADOR
EG	EGYPT
EI	IRELAND
EK	EQUATORIAL GUINEA
EN	ESTONIA
ER	ERITREA
ES	EL SALVADOR
ET	ETHIOPIA
EU	EUROPA ISLAND
EZ	CZECH REPUBLIC
FG	FRENCH GUIANA
FI	FINLAND
FJ	FIJI
FK	FALKLAND ISLANDS (ISLAS MALVINAS)
FM	FEDERATED STATES OF MICRONESIA
FO	FAROE ISLANDS
FP	FRENCH POLYNESIA
FQ	BAKER ISLAND
FR	FRANCE
FS	FRENCH SOUTHERN AND ANTARCTIC LANDS
GA	GAMBIA, THE
GB	GABON
GG	GEORGIA
GH	GHANA
GI	GIBRALTAR
GJ	GRENADA
GK	GUERNSEY
GL	GREENLAND
GM	GERMANY

GP GUADELOUPE GQ GUAM GR GREECE GT GUATEMALA GV GUINEA GY GUYANA GZ GAZA STRIP HA HAITI HK HONG KONG HM HEARD ISLAND AND MCDONALD ISLANDS HO HONDURAS HQ HOWLAND ISLAND HR CROATIA HU HUNGARY IC ICELAND ID INDONESIA IM MAN, ISLE OF IN INDIA IO BRITISH INDIAN OCEAN TERRITORY IP CLIPPERTON ISLAND IR IRAN IS ISRAEL IT ITALY IV COTE D'IVOIRE IZ IRAQ JA JAPAN JE JERSEY JM JAMAICA JN JAN MAYEN JO JORDAN JQ JOHNSTON ATOLL JU JUAN DE NOVA ISLAND KE KENYA KG KYRGYZSTAN	GO	GLORIOSO ISLANDS
GQ GUAM GR GREECE GT GUATEMALA GV GUINEA GY GUYANA GZ GAZA STRIP HA HAITI HK HONG KONG HM HEARD ISLAND AND MCDONALD ISLANDS HO HONDURAS HQ HOWLAND ISLAND HR CROATIA HU HUNGARY IC ICELAND ID INDONESIA IM MAN, ISLE OF IN INDIA IO BRITISH INDIAN OCEAN TERRITORY IP CLIPPERTON ISLAND IR IRAN IS ISRAEL IT ITALY IV COTE D'IVOIRE IZ IRAQ JA JAPAN JE JERSEY JM JAMAICA JN JAN MAYEN JO JORDAN JQ JOHNSTON ATOLL JU JUAN DE NOVA ISLAND KE KENYA KG KYRGYZSTAN		
GR GREECE GT GUATEMALA GV GUINEA GY GUYANA GZ GAZA STRIP HA HAITI HK HONG KONG HM HEARD ISLAND AND MCDONALD ISLANDS HO HONDURAS HQ HOWLAND ISLAND HR CROATIA HU HUNGARY IC ICELAND ID INDONESIA IM MAN, ISLE OF IN INDIA IO BRITISH INDIAN OCEAN TERRITORY IP CLIPPERTON ISLAND IR IRAN IS ISRAEL IT ITALY IV COTE D'IVOIRE IZ IRAQ JA JAPAN JE JERSEY JM JAMAICA JN JAN MAYEN JO JORDAN JQ JOHNSTON ATOLL JU JUAN DE NOVA ISLAND KE KENYA KG KYRGYZSTAN		
GT GUATEMALA GV GUINEA GY GUYANA GZ GAZA STRIP HA HAITI HK HONG KONG HM HEARD ISLAND AND MCDONALD ISLANDS HO HONDURAS HQ HOWLAND ISLAND HR CROATIA HU HUNGARY IC ICELAND ID INDONESIA IM MAN, ISLE OF IN INDIA IO BRITISH INDIAN OCEAN TERRITORY IP CLIPPERTON ISLAND IR IRAN IS ISRAEL IT ITALY IV COTE D'IVOIRE IZ IRAQ JA JAPAN JE JERSEY JM JAMAICA JN JAN MAYEN JO JORDAN JQ JOHNSTON ATOLL JU JUAN DE NOVA ISLAND KE KENYA KG KYRGYZSTAN		
GV GUINEA GY GUYANA GZ GAZA STRIP HA HAITI HK HONG KONG HM HEARD ISLAND AND MCDONALD ISLANDS HO HONDURAS HQ HOWLAND ISLAND HR CROATIA HU HUNGARY IC ICELAND ID INDONESIA IM MAN, ISLE OF IN INDIA IO BRITISH INDIAN OCEAN TERRITORY IP CLIPPERTON ISLAND IR IRAN IS ISRAEL IT ITALY IV COTE D'IVOIRE IZ IRAQ JA JAPAN JE JERSEY JM JAMAICA JN JAN MAYEN JO JORDAN JQ JOHNSTON ATOLL JU JUAN DE NOVA ISLAND KE KENYA KG KYRGYZSTAN		
GY GUYANA GZ GAZA STRIP HA HAITI HK HONG KONG HM HEARD ISLAND AND MCDONALD ISLANDS HO HONDURAS HQ HOWLAND ISLAND HR CROATIA HU HUNGARY IC ICELAND ID INDONESIA IM MAN, ISLE OF IN INDIA IO BRITISH INDIAN OCEAN TERRITORY IP CLIPPERTON ISLAND IR IRAN IS ISRAEL IT ITALY IV COTE D'IVOIRE IZ IRAQ JA JAPAN JE JERSEY JM JAMAICA JN JAN MAYEN JO JORDAN JQ JOHNSTON ATOLL JU JUAN DE NOVA ISLAND KE KENYA KG KYRGYZSTAN		
GZ GAZA STRIP HA HAITI HK HONG KONG HM HEARD ISLAND AND MCDONALD ISLANDS HO HONDURAS HQ HOWLAND ISLAND HR CROATIA HU HUNGARY IC ICELAND ID INDONESIA IM MAN, ISLE OF IN INDIA IO BRITISH INDIAN OCEAN TERRITORY IP CLIPPERTON ISLAND IR IRAN IS ISRAEL IT ITALY IV COTE D'IVOIRE IZ IRAQ JA JAPAN JE JERSEY JM JAMAICA JN JAN MAYEN JO JORDAN JQ JOHNSTON ATOLL JU JUAN DE NOVA ISLAND KE KENYA KG KYRGYZSTAN		
HA HAITI HK HONG KONG HM HEARD ISLAND AND MCDONALD ISLANDS HO HONDURAS HQ HOWLAND ISLAND HR CROATIA HU HUNGARY IC ICELAND ID INDONESIA IM MAN, ISLE OF IN INDIA IO BRITISH INDIAN OCEAN TERRITORY IP CLIPPERTON ISLAND IR IRAN IS ISRAEL IT ITALY IV COTE D'IVOIRE IZ IRAQ JA JAPAN JE JERSEY JM JAMAICA JN JAN MAYEN JO JORDAN JQ JOHNSTON ATOLL JU JUAN DE NOVA ISLAND KE KENYA KG KYRGYZSTAN		
HK HONG KONG HM HEARD ISLAND AND MCDONALD ISLANDS HO HONDURAS HQ HOWLAND ISLAND HR CROATIA HU HUNGARY IC ICELAND ID INDONESIA IM MAN, ISLE OF IN INDIA IO BRITISH INDIAN OCEAN TERRITORY IP CLIPPERTON ISLAND IR IRAN IS ISRAEL IT ITALY IV COTE D'IVOIRE IZ IRAQ JA JAPAN JE JERSEY JM JAMAICA JN JAN MAYEN JO JORDAN JQ JOHNSTON ATOLL JU JUAN DE NOVA ISLAND KE KENYA KG KYRGYZSTAN		
HM HEARD ISLAND AND MCDONALD ISLANDS HO HONDURAS HQ HOWLAND ISLAND HR CROATIA HU HUNGARY IC ICELAND ID INDONESIA IM MAN, ISLE OF IN INDIA IO BRITISH INDIAN OCEAN TERRITORY IP CLIPPERTON ISLAND IR IRAN IS ISRAEL IT ITALY IV COTE D'IVOIRE IZ IRAQ JA JAPAN JE JERSEY JM JAMAICA JN JAN MAYEN JO JORDAN JQ JOHNSTON ATOLL JU JUAN DE NOVA ISLAND KE KENYA KG KYRGYZSTAN		
HO HONDURAS HQ HOWLAND ISLAND HR CROATIA HU HUNGARY IC ICELAND ID INDONESIA IM MAN, ISLE OF IN INDIA IO BRITISH INDIAN OCEAN TERRITORY IP CLIPPERTON ISLAND IR IRAN IS ISRAEL IT ITALY IV COTE D'IVOIRE IZ IRAQ JA JAPAN JE JERSEY JM JAMAICA JN JAN MAYEN JO JORDAN JQ JOHNSTON ATOLL JU JUAN DE NOVA ISLAND KE KENYA KG KYRGYZSTAN		
HQ HOWLAND ISLAND HR CROATIA HU HUNGARY IC ICELAND ID INDONESIA IM MAN, ISLE OF IN INDIA IO BRITISH INDIAN OCEAN TERRITORY IP CLIPPERTON ISLAND IR IRAN IS ISRAEL IT ITALY IV COTE D'IVOIRE IZ IRAQ JA JAPAN JE JERSEY JM JAMAICA JN JAN MAYEN JO JORDAN JQ JOHNSTON ATOLL JU JUAN DE NOVA ISLAND KE KENYA KG KYRGYZSTAN		
HR CROATIA HU HUNGARY IC ICELAND ID INDONESIA IM MAN, ISLE OF IN INDIA IO BRITISH INDIAN OCEAN TERRITORY IP CLIPPERTON ISLAND IR IRAN IS ISRAEL IT ITALY IV COTE D'IVOIRE IZ IRAQ JA JAPAN JE JERSEY JM JAMAICA JN JAN MAYEN JO JORDAN JQ JOHNSTON ATOLL JU JUAN DE NOVA ISLAND KE KENYA KG KYRGYZSTAN		
HU HUNGARY IC ICELAND ID INDONESIA IM MAN, ISLE OF IN INDIA IO BRITISH INDIAN OCEAN TERRITORY IP CLIPPERTON ISLAND IR IRAN IS ISRAEL IT ITALY IV COTE D'IVOIRE IZ IRAQ JA JAPAN JE JERSEY JM JAMAICA JN JAN MAYEN JO JORDAN JQ JOHNSTON ATOLL JU JUAN DE NOVA ISLAND KE KENYA KG KYRGYZSTAN		
IC ICELAND ID INDONESIA IM MAN, ISLE OF IN INDIA IO BRITISH INDIAN OCEAN TERRITORY IP CLIPPERTON ISLAND IR IRAN IS ISRAEL IT ITALY IV COTE D'IVOIRE IZ IRAQ JA JAPAN JE JERSEY JM JAMAICA JN JAN MAYEN JO JORDAN JQ JOHNSTON ATOLL JU JUAN DE NOVA ISLAND KE KENYA KG KYRGYZSTAN		
ID INDONESIA IM MAN, ISLE OF IN INDIA IO BRITISH INDIAN OCEAN TERRITORY IP CLIPPERTON ISLAND IR IRAN IS ISRAEL IT ITALY IV COTE D'IVOIRE IZ IRAQ JA JAPAN JE JERSEY JM JAMAICA JN JAN MAYEN JO JORDAN JQ JOHNSTON ATOLL JU JUAN DE NOVA ISLAND KE KENYA KG KYRGYZSTAN		
IM MAN, ISLE OF IN INDIA IO BRITISH INDIAN OCEAN TERRITORY IP CLIPPERTON ISLAND IR IRAN IS ISRAEL IT ITALY IV COTE D'IVOIRE IZ IRAQ JA JAPAN JE JERSEY JM JAMAICA JN JAN MAYEN JO JORDAN JQ JOHNSTON ATOLL JU JUAN DE NOVA ISLAND KE KENYA KG KYRGYZSTAN		
IN INDIA IO BRITISH INDIAN OCEAN TERRITORY IP CLIPPERTON ISLAND IR IRAN IS ISRAEL IT ITALY IV COTE D'IVOIRE IZ IRAQ JA JAPAN JE JERSEY JM JAMAICA JN JAN MAYEN JO JORDAN JQ JOHNSTON ATOLL JU JUAN DE NOVA ISLAND KE KENYA KG KYRGYZSTAN		
IO BRITISH INDIAN OCEAN TERRITORY IP CLIPPERTON ISLAND IR IRAN IS ISRAEL IT ITALY IV COTE D'IVOIRE IZ IRAQ JA JAPAN JE JERSEY JM JAMAICA JN JAN MAYEN JO JORDAN JQ JOHNSTON ATOLL JU JUAN DE NOVA ISLAND KE KENYA KG KYRGYZSTAN		
IP CLIPPERTON ISLAND IR IRAN IS ISRAEL IT ITALY IV COTE D'IVOIRE IZ IRAQ JA JAPAN JE JERSEY JM JAMAICA JN JAN MAYEN JO JORDAN JQ JOHNSTON ATOLL JU JUAN DE NOVA ISLAND KE KENYA KG KYRGYZSTAN		
IR IRAN IS ISRAEL IT ITALY IV COTE D'IVOIRE IZ IRAQ JA JAPAN JE JERSEY JM JAMAICA JN JAN MAYEN JO JORDAN JQ JOHNSTON ATOLL JU JUAN DE NOVA ISLAND KE KENYA KG KYRGYZSTAN	Ю	BRITISH INDIAN OCEAN TERRITORY
IS ISRAEL IT ITALY IV COTE D'IVOIRE IZ IRAQ JA JAPAN JE JERSEY JM JAMAICA JN JAN MAYEN JO JORDAN JQ JOHNSTON ATOLL JU JUAN DE NOVA ISLAND KE KENYA KG KYRGYZSTAN	IP	CLIPPERTON ISLAND
IT ITALY IV COTE D'IVOIRE IZ IRAQ JA JAPAN JE JERSEY JM JAMAICA JN JAN MAYEN JO JORDAN JQ JOHNSTON ATOLL JU JUAN DE NOVA ISLAND KE KENYA KG KYRGYZSTAN	IR	IRAN
IV COTE D'IVOIRE IZ IRAQ JA JAPAN JE JERSEY JM JAMAICA JN JAN MAYEN JO JORDAN JQ JOHNSTON ATOLL JU JUAN DE NOVA ISLAND KE KENYA KG KYRGYZSTAN	IS	ISRAEL
IZ IRAQ JA JAPAN JE JERSEY JM JAMAICA JN JAN MAYEN JO JORDAN JQ JOHNSTON ATOLL JU JUAN DE NOVA ISLAND KE KENYA KG KYRGYZSTAN	IT	ITALY
JA JAPAN JE JERSEY JM JAMAICA JN JAN MAYEN JO JORDAN JQ JOHNSTON ATOLL JU JUAN DE NOVA ISLAND KE KENYA KG KYRGYZSTAN	IV	COTE D'IVOIRE
JE JERSEY JM JAMAICA JN JAN MAYEN JO JORDAN JQ JOHNSTON ATOLL JU JUAN DE NOVA ISLAND KE KENYA KG KYRGYZSTAN	IZ	IRAQ
JM JAMAICA JN JAN MAYEN JO JORDAN JQ JOHNSTON ATOLL JU JUAN DE NOVA ISLAND KE KENYA KG KYRGYZSTAN	JA	JAPAN
JN JAN MAYEN JO JORDAN JQ JOHNSTON ATOLL JU JUAN DE NOVA ISLAND KE KENYA KG KYRGYZSTAN	JE	JERSEY
JO JORDAN JQ JOHNSTON ATOLL JU JUAN DE NOVA ISLAND KE KENYA KG KYRGYZSTAN	JM	JAMAICA
JQ JOHNSTON ATOLL JU JUAN DE NOVA ISLAND KE KENYA KG KYRGYZSTAN	JN	JAN MAYEN
JU JUAN DE NOVA ISLAND KE KENYA KG KYRGYZSTAN	JO	JORDAN
KE KENYA KG KYRGYZSTAN	JQ	JOHNSTON ATOLL
KG KYRGYZSTAN	JU	JUAN DE NOVA ISLAND
	KE	KENYA
	KG	KYRGYZSTAN
KN KOREA, DEMOCRATIC PEOPLES REPUBLIC OF	KN	KOREA, DEMOCRATIC PEOPLES REPUBLIC OF
KQ KINGMAN REEF	KQ	KINGMAN REEF

KR	KIRIBATI
KS	KOREA, REPUBLIC OF
KT	CHRISTMAS ISLAND
KU	KUWAIT
KZ	KAZAKHSTAN
LA	LAOS
LE	LEBANON
LG	LATVIA
LH	LITHUANIA
LI	LIBERIA
LO	SLOVAKIA
LQ	PALMYRA ATOLL
LS	LIECHTENSTEIN
LT	LESOTHO
LU	LUXEMBOURG
LY	LIBYA
MA	MADAGASCAR
MB	MARTINIQUE
MC	MACAU
MD	MOLDOVA
MF	MAYOTTE
MG	MONGOLIA
MH	MONTSERRAT
MI	MALAWI
MK	MACEDONIA
ML	MALI
MN	MONACO
MO	MOROCCO
MP	MAURITIUS
MQ	MIDWAY ISLANDS
MR	MAURITANIA
MT	MALTA
MU	OMAN
MV	MALDIVES
MX	MEXICO
MY	MALAYSIA
MZ	MOZAMBIQUE

NC	NEW CALEDONIA
NE	NIUE
NF	NORFOLK ISLAND
NG	NIGER
NH	VANUATU
NI	NIGERIA
NL	NETHERLANDS
NO	NORWAY
NP	NEPAL
NR	NAURU
NS	SURINAME
NT	NETHERLANDS ANTILLES
NU	NICARAGUA
NZ	NEW ZEALAND
OA	EXERCISE BLACK COUNTRY
ОВ	EXERCISE BLACK FORCES
ОС	EXERCISE BLUE COUNTRY
OD	EXERCISE BLUE FORCE
OE	EXERCISE RED FORCE
OJ	EXERCISE ORANGE COUNTRY
OK	EXERCISE ORANGE FORCE
OL	EXERCISE PURPLE FORCE
ON	EXERCISE WHITE COUNTRY
00	OTHER COUNTRY
OR	EXERCISE RED COUNTRY
ОТ	EXERCISE NATO FORCE
OW	EXERCISE FORMER WARSAW PACT FORCE
ОХ	RED CROSS
PA	PARAGUAY
PC	PITCAIRN ISLANDS
PE	PERU
PF	PARACEL ISLANDS
PG	SPRATLY ISLANDS
PK	PAKISTAN
PL	POLAND
PM	PANAMA
РО	PORTUGAL

PP	PAPUA NEW GUINEA
PS	PALAU
PU	GUINEABISSAU
QA	QATAR
RE	REUNION
RM	MARSHALL ISLANDS
RO	ROMANIA
RP	PHILIPPINES
RQ	PUERTO RICO
RS	RUSSIA
RW	RWANDA
SA	SAUDI ARABIA
SB	ST. PIERRE AND MIQUELON
SC	ST. KITTS AND NEVIS
SE	SEYCHELLES
SF	SOUTH AFRICA
SG	SENEGAL
SH	ST. HELENA
SI	SLOVENIA
SL	SIERRA LEONE
SM	SAN MARINO
SN	SINGAPORE
SO	SOMALIA
SP	SPAIN
ST	ST. LUCIA
SU	SUDAN
SV	SVALBARD
SW	SWEDEN
SX	SOUTH GEORGIA AND THE SOUTH SANDWICH ISLANDS
SY	SYRIA
SZ	SWITZERLAND
TD	TRINIDAD AND TOBAGO
TE	TROMELIN ISLAND
TH	THAILAND
TI	TAJIKISTAN
TK	TURKS AND CAICOS ISLANDS
TL	TOKELAU

TN	TONGA
то	TOGO
TP	SAO TOME AND PRINCIPE
TS	TUNISIA
TT	EAST TIMOR
TU	TURKEY
TV	TUVALU
TW	TAIWAN
TX	TURKMENISTAN
TZ	TANZANIA
UG	UGANDA
UK	UNITED KINGDOM
UP	UKRAINE
US	UNITED STATES
UU	EXERCISE UNITED NATIONS FORCE
UV	BURKINA
UY	URUGUAY
UZ	UZBEKISTAN
VC	ST. VINCENT AND THE GRENADINES
VE	VENEZUELA
VI	BRITISH VIRGIN ISLANDS
VM	VIETNAM
VQ	VIRGIN ISLANDS
VT	VATICAN CITY
WA	NAMIBIA
WE	WEST BANK
WF	WALLIS AND FUTUNA
WI	WESTERN SAHARA
WQ	WAKE ISLAND
WS	SAMOA
WZ	SWAZILAND
XA	EXERCISE SPARE NUMBER ONE
XB	EXERCISE SPARE NUMBER TWO
XC	EXERCISE HOSTILE COUNTRY
XX	EXERCISE HOSTILE FORCE
YC	EXERCISE FRIENDLY COUNTRY
YI	SERBIA AND MONTENEGRO

YM	YEMEN
YY	EXERCISE FRIENDLY FORCE
ZA	ZAMBIA
ZC	EXERCISE NEUTRAL COUNTRY
ZI	ZIMBABWE
ZZ	EXERCISE NEUTRAL FORCE

A.6.3 TMPOS

A.6.3.1 Mission Event

Code	Mission Event
AI-BB	Abrupt in-bottom bounce
AI-CZ	Abrupt in-convergence zone
AI-DP	Abrupt in-direct path
AO-BB	Abrupt out-bottom bounce
AO-CZ	Abrupt out-convergence zone
AO-DP	Abrupt out-direct path
ATTACK	Attack
CPA-A	Closest point of approach analysis
CPA-C	Closest point of approach crew
BROKEN	Contact broken
CRSCHG	Contact course change
FIXED	Contact location fixed
NOFIX	Contact location not fixed
CZ-SO	Convergence zone-select out
DP-SO	Direct path-select out
FI-BB	Fade in-bottom bounce
FI-CZ	Fade in-convergence zone
FI-DP	Fade in-direct path
FO-BB	Fade out-bottom bounce
FO-CZ	Fade out-convergence zone
FO-DP	Fade out-direct path
GAINED	Gained contact
HOLDING	Holding contact
BRKOFF	Intentional breakoff
LOST	Lost contact

MODECHG	Mode change
REGAIN	Regain contact
SI-BB	Select in-bottom bounce
SI-CZ	Select in-convergence zone
SI-DP	Select in-direct path
SO-BB	Select out-bottom bounce
SO-CZ	Select out-convergence zone
SO-DP	Select out-direct path
SENSOFF	Sensor off
SPDCHG	Speed change

Table A-5: TMPOS Set (Mission Event)

Index

Symbols	Archival Records, 6-2	Back to Qualifications, 5-6
.atomsvc, 4-3	archives, 3-6	Band Limit, 3-19
.txt, 1-1	AREA, 3-21	BATHY, 3-48
.txt file, 3-11	area coverage, 3-12	BATHY Tab, 3-48
.txt file, 0-11	Arrival Date-Time, 3-17	Bathythermograph, 3-48
	Arrival ICAO ID, 3-17	Beam, 3-40
	Artifacts, 3-10	Bottom Bounce, 3-43
A	AS - Altostratus, 3-26	Bow, 3-40
AC - Altocumulus, 3-26	ASA, P-i	Briefed, 3-17, 3-40
Accept Button, 5-9	Assessment, 5-6	Browse, 2-5, 3-58, 6-7
Access Rights, 6-8	assessment, 6-9 Assignment, 3-16	browse, 2-5 BTMB, 3-43
ACFTID, 3-20	ASU 201 ASU JOINT / COMBINED	BUOY, 3-28, 3-45, 3-47
Acoustic, 3-37, 3-45, 3-46	OPERATIONS, 5-2	BUOY Details, 3-47
Acoustic Source, 3-37, 3-38, 3-39	ASU 202 RANGE BOMBEX, 5-2	Buoy Details, 3-45
ACTRNG, 3-43	ASU 203 HARPOON MISSILEX, 5-2	Buoy Total, 3-47
ACTRNG Tab, 3-43	ASU 204 MAVERICK MISSILEX, 5-	Buoy Type, 3-43, 3-46
Actual, 3-17	2	BUOYS, 3-50
Actual Bearing, 3-34	ASU 206 MINEX, 5-2	Buoys Spacing, 3-47
Actual Range (NM), 3-34	ASU 209 COORDINATED SLAM-	Buoys/Row, 3-47
Additional Identifier, 3-12	ER MISSILEX, 5-2	Bureau Number, 3-20
Administration, 2-4	ASW 201 DIESEL / LITTORAL	Barbaa Nambor, 6 26
Administration tab, 5-1, 6-1, 6-2, 6-5	ASW, 5-2	
Administrator, 5-10	ASW 202 NUCLEAR / OPEN	С
administrator, 2-9	OCEAN ASW, 5-2	C
administrators, 2-5	ASW 203 ASW COORDINATED	C2W 201 COMBAT ARRIVAL / DE-
Aircraft, 3-58	OPERATIONS, 5-2	PARTURE, 5-2
aircraft, 3-17	ASW 204 RANGE TORPEX, 5-2	CAC, 3-7
aircraft accident, 3-12	ASW 205 EER (EXTENDED ECHO	California, P-i
Aircraft Airspeed, 3-34	RANGING), 5-2	Call Sign, 3-18
Aircraft Altitude, 3-34	ASW 205 SLAM-ER MISSILEX, 5-2	Called Sub, 3-41
Aircraft Identification, 3-20	ASW 206 AIRBORNE ACOUSTIC	Cance, 6-3
Aircraft Type, 3-18, 3-44	INTELLIGENCE, 5-2	Cancel, 3-7, 3-28, 3-29, 3-36, 3-37,
Aircrew, 3-1, 3-24, 4-12	ASW 207 CREW ASW PROFICIEN-	3-53, 3-59, 5-8, 5-12, 5-13, 6-2, 6-5,
Alert Prompt, 3-37	CY, 5-2	6-6
alphanumeric, 3-13	ASW 208 BOMBEX, 5-2	Category, 3-54
ALT, 3-19, 3-52	ASW 210 IEER (IMPROVED EX-	CB - Cumulonimbus, 3-26
Altitude, 3-19	TENDED ECHO RANGING), 5-2	CC - Cirrocumulus, 3-26
Altitude Purpose ID, 3-19	ASW 211 ASW ACTIVE/ PASSIVE	Celsius, 3-26
AMBTN, 3-49	SEARCH, 5-2	Centalized database, 1-1
AMBTN Tab, 3-49	ATTACK, 3-16, 3-31, 3-34	Channel, 3-46
AMPN, 3-14, 3-16, 3-18, 3-19, 3-21,	Attack, 4-12	CI - Cirrus, 3-26
3-23, 3-24, 3-32, 3-36, 3-47, 3-51, 3-	Attack Method, 3-33, 3-34	Class, 3-32
52, 3-53, 3-55	ATTACK SOLUTION, 3-16	Classification Confidence Level, 3-
Analysis, 3-40	ATTACK Tab, 3-33	32
Announcement Body, 6-3	Auto-fill, 3-7	Clause, 3-3
Announcement List, 6.4	Auto-generate, 3-29	delete, 6-10
Announcement List, 6-4	Avg Noise Level, 3-49	group, 6-10
Announcement Start, 6-2 Announcements, 6-1, 6-2		new, 6-10
Announcements Panel, 2-9	_	ungroup, 6-10
Aptima, P-i	В	CLOSE TRACK, 3-16
archival data, 4-2	Back to Event 3-32	Cloud Base, 3-26 Cloud Cover, 3-26
	LICHA IVI VEIII 353/	

Cloud Top, 3-26	CZ Max Range, 3-47	drop-down menu, 4-2
Cloud Type, 3-26	CZ Min Range, 3-47	drop-down selector, 3-6, 5-8
CODE NAME, 3-12		DRRS
Code name, 3-12		related documentation, P-ii
Codeword, 3-13	D	system requirements, P-ii
collision at sea, 3-12	D	
column, 3-3	Dashboard, 5-1	
headings, 3-4	Dashboard Header menu, 5-1	E
columns, 3-2	Data	E
Combat Air Crew, 2-8, 4-4	filtration, 4-3	Edit, 3-48, 3-53
Commander, Patrol and Reconnais-	data, 4-2, 4-4	Edit Announcement, 6-4
sance Group, P-i	Data Accuracy, 3-23	Edit Buoy, 3-45
Comment Box, 5-9	Data Feed, 4-3	Edit Event, 3-8
Community, 2-5, 3-7, 6-2, 6-3, 6-5,	Data Link, 3-22	Edit Profile, 2-5
6-6	Database	Edit Qual Skill., 5-15, 5-16
COMPATRECONGRUINST		Edit Qualification, 5-10
	centralized, 1-1	
3500.25E, 5-2	normalized, 1-1	Edit Qualification Skill, 5-16
Confirm, 3-36, 5-13, 5-14, 6-3	Date, 3-25	Edit Skill, 5-12
Confirm Password, 6-6	Date / Time, 3-35	Edit TMPOS, 3-36
Confirmed Sub, 3-41	Date/Time, 3-27, 3-29, 3-33, 3-34, 3-	Electronic Silence, 3-15
CONTACT, 3-16	35, 3-37, 3-38	Electronics, 3-15
Contact	Date/Time (Z), 3-56	Email, 6-5, 6-6
Held Percentage, 4-10	Date-Time, 3-45	EMCON, 3-15
Contact Details, 3-28, 3-31	DBO, 3-24, 5-5	End Date, 6-3
Contact Method, 3-56	debriefing, 3-12	End Date (Z), 3-29
CONTACTS, 3-35	Debriefing Officer, 2-2, 3-24, 5-17, 6-	End Lat-Long, 3-29
Contacts, 3-28, 4-4	8	End Time, 3-29
Contacts of Interest, 3-58	Debriefing Officers, 5-15, 5-17	Engagement, 4-13
Control buttons, 3-11	Decibels, 3-49	Enter End Date, 4-2
controls, 3-6	default, 3-5, 3-6, 5-8	Enter Start Date, 4-2
Convergence Zone, 3-43, 3-47	Delete, 3-28, 3-37, 3-45, 3-48, 5-12,	environment, 3-12
Coordinated Universal Time, 3-9	5-14, 6-2, 6-5	environmental factors, 5-3
COPS	delete, 3-11	EQUIPMAL, 3-53
Contingency Operations, 3-15	Delete Qualification, 5-8	Equipment Malfunction, 3-53
Count of Detecting Sensors, 3-27, 3-	Departure Date-Time, 3-17	Equipment Name, 3-53
36	Departure ICAO, 3-17	equipment status, 3-12
Country of Origin, 3-29	Depth (FT), 3-39, 3-46	Estimated Position Accuracy, 3-27,
Course, 3-27, 3-30	Depth Measurement Method, 3-39	3-36
Course (T), 3-30, 3-35	designation, 3-12	Event, 2-7, 3-59
COVERT, 3-15	Detected Sub, 3-41	record row, 3-2
CPRG, P-i, 2-9, 5-10, 6-1, 6-2, 6-3,	Detection Probability, 3-47	Event #, 3-7, 3-9
6-5, 6-7	Detection Status, 3-38	Event Details, 3-2, 3-9
CPRG Staff Officer, 6-8	DI Code / Nato Designation, 3-32	Event Details Identification Header,
CPRG Wing Training Manual, 5-1, 5-	diagrams, 4-1, 4-4	3-7, 3-9
2	DIFAR Mode, 3-40, 3-43	Event Details Page, 3-32
CPRW Staff Officer, 6-8	Discard Button, 5-9	Event List, 3-8
Create a New Event, 3-7	Display Order, 5-16	Event List Customization Header, 3-
Created By, 6-2	Display Zoom Selector, 4-2	5
credentials, 6-5	Document	Event Number, 3-5
Credibility, 3-32	conventions, P-ii	Event Origination, 3-7
CREW, 3-24	Domain, 5-6, 5-13, 5-17	Event Page Controls, 5-8
Crew, 2-9, 3-2, 4-4, 6-8	Draft, 3-11	Event Type, 3-7
Crew Member, 3-24, 6-5, 6-6	Dragging and Dropping, 3-4, 3-5	Events, 2-4, 2-7
Crew Number, 3-24, 0-3, 0-0	drill, 3-12	events, 3-6
Crew Qualification Metrics, 5-2	Drill-down, 4-10	Events / Qualification Panel, 5-1
crew training, 3-12	Drop Date/Time (Z), 3-46	Events Details, 3-9
CS - Cirrostratus, 3-26	Drop Lat-Long, 3-46	
CU - Cumulus, 3-26	drop-down calendars, 3-3	Events List, 3-2, 3-11, 5-8 Events List Controls, 3-6
CZ, 3-43, 3-47	drop-down lists, 3-7	Events List Controls, 3-6 Events List Customization Header,
UL, U-40, U-41	arop-aowir iists, 3-1	Lyonia Liai Guaidinizalidii Meadel,

3-4	Good Accuracy, 3-23	ISR 202 LITTORAL / OVERLAND
Events Tab, 3-2	grade, 5-3	RECONNAISSANCE, 5-2
EVTASK, 3-17	Gradesheet, 5-5, 5-6, 5-7	ISR 203 EMITTER RECOGNITION,
Excel, 4-3	gradesheet, 6-9	5-2
EXER, 3-12	gradesheets, 5-3	ISR 204 EW COLLECTION / SEI
exercise, 3-12	graphs, 4-1, 4-4	(SPECIFIC EMITTER RECOGNI-
		· ·
Exercise Identification, 3-12	Greenwich Mean Time, 3-9	TION), 5-2
Exercise Name, 3-12	Group, 3-4	ISR 205 AIR TO AIR INTERCEPT /
EXPEND, 3-54	group, 3-4	COUNTER DRUG OPERATIONS,
Expendable, 3-45	grouping, 3-1	5-2
Expenditure, 3-54		ISR 206 OVERLAND SAR RECON-
Expenditure Category, 3-54, 3-55		NAISSANCE, 5-2
expiration date, 2-9	Н	Itinerary, 3-17
Explorer, 3-58, 6-7		
Export, 4-3	Harmonic, 3-37, 3-38, 3-39	
Export Format Selector, 4-3	Header Menu, 2-3, 2-4, 3-2, 6-2	K
export options, 4-3	Heading, 3-33	•
Export Purple, 3-11, 3-28, 3-59	Heading (T), 3-34	keywords, 4-2
Export to Data Feed, 4-3	Hertz, 3-37, 3-49	
EXTENDEX, 3-15	HF, 3-23	
,	Hierarchies, 3-4	
	High Frequency, 3-23	L
_	Home, 2-4, 3-7, 6-2	Landing, 3-7
F	Home / Dashboard, 2-3, 2-9	Last Name, 6-5, 6-6
failure, 5-3	Home/ Dashboard, 5-4	Latest Events panel, 3-9
field	Hourglass Icon, 3-45	Latest Qualifications, 5-1, 5-4
value, 3-3	Hours Attempted, 3-22, 3-23	Lat-Long, 3-27, 3-29, 3-33, 3-35, 3-
FILES, 3-10, 3-58		45
	Hours Successful, 3-22, 3-23	
FILES Set, 3-58	Human Performance Markup Lan-	lat-long, 3-28
Filter, 3-3	guage (HPML), P-i	leaderboard, 2-8
filter, 3-3, 3-5	human-language, 6-9	Life (HR), 3-46
icon, 3-3	Hydrophone, 3-46	Line of Sight, 3-15
filtering, 3-1, 3-2	Hydrophone Depth, 3-40	LINK, 3-22
Find Text in Report, 4-2	Hydrophone Depth (FT), 3-43	Link Only, 3-23
First Name, 6-5, 6-6		LINK Set, 3-22
FISHCTC, 3-31		literal symbol, 3-13
fishing, 3-28	I	LOCATE, 3-16
Fishing Vessels, 3-58	•	Locating Report Number, 3-32
Flag, 3-29, 3-32	Identification, 3-52	LOFAL, 3-31, 3-41
Flight, 2-7, 3-1, 3-9	identification, 3-18	LOFAL Tab, 3-41, 3-44
Flight Crew, 3-24	Identify Friend or Foe, 3-52	Log Off, 2-4, 2-6
Flight Level, 3-25, 3-26	IFF, 3-20, 3-52	Log On, 2-2
Flight Level / Altitude, 3-19	IFF / SIF Code, 3-52	Login, 2-2, 6-5
Flight Level Type, 3-19	IFF / SIF Mode, 3-52	Lost Date/Time (Z), 3-42
flights, 3-2	Image File, 2-5	2001 2010/11110 (2), 0 12
FORCE, 3-17	Incomplete, 5-9	
Force Tasked, 3-17	Information Detail Workspace, 3-9,	3.6
Frequency, 3-37, 3-38, 3-49	3-11	M
· · · · · · · · · · · · · · · · · · ·		Machine generated 2.59
From	Information Details Workspace, 5-7	Machine-generated, 3-58
, 6-2	InnovaSystems International, LLC,	Magnifying Glass, 3-31
	P-i	Malfunction Date, 3-53
_	Insert, 3-7, 3-29, 6-6	Malfunction Date/Time, 3-53
G	Instructor, 2-2	Malfunctions, 3-53
	intelligence, 3-12	Mandatory, 3-18, 3-20, 3-24, 3-32
G, 3-23	Intended Bearing, 3-34	mandatory, 3-1
Gained Date/Time (Z), 3-42	Intended Range (NM), 3-34	Mandatory Sets, 3-10, 3-12
Geographic Search, 3-21	Investigated Sub, 3-41	mandatory space, 3-13
GMT, 3-9	ISR 201 MARITIME SURVEIL-	map, 3-28
goal, 5-3	LANCE, 5-2	Map View, 3-35, 3-45

maritime unit, 3-12	Name, 3-20	NMETE standards, 5-3
Max Detection (YD), 3-43	NARR, 3-10, 3-58	No Success, 3-23
Max Frequency, 3-39	NARR Set, 3-58	NONCOI, 3-10
Max Noise Level, 3-49	narrative, 3-10	NONCOl Set, 3-58
Maximum Bottom Bounce, 3-40	NASIS Code, 3-51	Normalized database, 1-1
Maximum Convergence Zone	Nasis Code, 3-50	Notepad, 3-59
Range, 3-40	Nautical Miles, 3-47, 3-58	NS - Nimbostratus, 3-26
MC, 3-23	NAVAL, 3-29, 3-31	Number Expended, 3-54, 3-55
MCDR, 3-23	Naval Air Requirements Group, P-i	Number of Failures, 3-54, 3-55
MCJR, 3-23	Naval Air Warfare Center Training	Number of Rows, 3-47
MDR, 3-47	Systems Division, R-iii	Number Ordered, 3-17
		Number Ordered, 5-17
MDR Spacing, 3-47	Naval Vessels, 3-58	
Measure of Difficulty, 4-5, 5-3, 5-4,	Navigation Accuracy, 3-20	_
5-9	Navigation Error (NM) Sign, 3-20	0
Measure of Performance, 5-3, 5-4	Navigation Header Menu, 4-1	01: (: 0.40
Measure of Readiness, 4-5, 4-7, 5-4	Navigator / Communication, 3-24	Objective, 3-16
Measured Value, 6-9	NAWCTSD, P-i	Objective Area, 5-6, 5-9, 5-13, 5-17
Measures of Readiness, 5-3	NC, 3-23, 3-24	Observable Detection Range, 3-40
Median Detection Range, 3-47	Nest Root, 3-28	Observed, 3-40
menu	Nested List, 3-30	ODR, 3-31
drop-down, 3-3	Net Control, 3-23	ODR Tab, 3-40
merchant, 3-28	New AMBTN, 3-49	Off-Station, 3-17
Merchant Ships, 3-58	New Announcement, 6-2, 6-3	Off-Station Date-Time, 3-17
Message, 3-14	New Assessment, 5-14	OK, 3-28, 3-37, 5-8, 5-12, 6-5
Message Type, 3-14	New ATTACK button, 3-33	on station relief, 3-56
Message/Comm Type, 3-51	NEW ATTACK prompt, 3-33	On-Station Date Time, 3-17
MET, 3-25, 3-26	New BATHY, 3-48	Open, 3-58, 3-59, 6-7
metadata, 2-9	New Buoy, 3-45	OPER, 3-12, 3-13
Meteorological, 3-45	New Contact, 3-29	Operating Mode, 3-22, 3-23, 3-39
Meteorological Information, 3-25	New Contact button, 3-28	operation, 3-12
military unit, 3-17	New Contact prompt, 3-28	operation plan number, 3-13
Min Frequency, 3-39	New Crew Member, 3-24	operational control authority, 3-12
Min Noise Level, 3-49	New EQUIPMAL button, 3-53	Operator Performance, 3-41
Minus-sign Icon, 4-11	NEW EQUIPMAL Prompt, 3-53	operators
Misc Sets, 3-10, 3-58	New Event, 2-7, 3-7	list of, 3-3
mission constraints, 5-3	button, 3-2	Optional, 3-17, 3-20, 3-32
Mission Event, 3-27, 3-35, 3-42, 4-2	New EXPEND, 3-54	optional, 3-1
mission number, 3-18	New IFF button, 3-52	Optional Sets, 3-10, 3-12, 3-28, 3-53
Mission Phases, 3-17	NEW IFF prompt, 3-52	order
Mission Type, 3-15	NEW LINK, 3-22	ascending, descending, 3-2
MISSN, 3-15	New LINK, 3-22	Ordnance Type, 3-33, 3-34, 3-54, 3-
MOD, 4-5, 4-6, 5-3, 5-4, 5-6, 5-9	New MET button, 3-25	55
MODE, 3-39	NEW MET Prompt, 3-25	Originator, 3-14, 3-50, 3-51
Mode, 3-15	New Qualification Button, 5-10, 5-11	OTHER, 3-15
Mode for Max Range, 3-43	New Qualification Prompt, 5-10, 5-	OVERT, 3-15
Month, 3-14, 3-38	11	·
MOP, 5-3, 5-4, 5-6	New Qualifications Wizard, 3-11	
MOP tab, 5-6	New REF, 3-51	Р
MOR, 4-5, 4-6, 5-3, 5-4	New REF prompt, 3-51	r
Most Sig. Weather, 3-26	New SIGNA, 3-38	P, 3-23
MS Office, 3-58	New SIGNA button, 3-37	P-3, 1-1
MSGID, 3-14	NEW SIGNA prompt, 3-37	P-3C, P-i
Multichannel Difar Relay, 3-23	New Skill, 5-12, 5-13	P-8A, P-i
Multichannel Jezebel Relay, 3-23	New SWAP, 3-56	Page Controls, 3-2, 5-15
, ,	New TMPOS, 3-30, 3-35	Report, 4-2
	New User, 6-5, 6-6	paging, 3-1
N	Next, 3-28	parameters, 4-3
14	nickname,, 3-12	Pass/Fail, 5-5
N. 3-23	NMETL. 5-3	Passive Median Detection Range, 3-

40	Qual, 2-7	Repair Date/Time, 3-53
PASSMDR, 3-40	Qual Name field, 5-11	report, 3-1
Password, 2-2, 2-4, 6-6	Qual Readiness vs. Difficulty by	Report Builder, 4-16
Change, 2-6	Crew, 4-6	Report Control Ribbon, 4-2
Pattern Type, 3-47	Qual Readiness vs. Difficulty by	Report Page Controls, 4-2
PC, 3-24	Squadron, 4-5	Reports, 2-4
PDF, 3-58	Qualification Gradesheet, 5-4, 5-9	Tab, 4-1
Pencil Icon, 3-35, 3-37, 3-45, 5-14,	Qualification Gradesheet Wizard, 5-	Restrictions, 3-15
6-2	7, 5-9	Results, 3-33, 3-34
Percent Time Contact Held, 3-42	Qualification Management, 5-1, 5-11	RMKS, 3-57
Performance Measurement, P-i	Qualification Page Controls, 5-8	Role, 2-5
permission levels, 6-2	Qualification Skills, 5-17	Roles, 6-8
Permissions, 6-7	Qualification Skills Detail, 5-15	Roles Tab, 6-7
PFA, 3-40	Qualification Skills Page, 5-10	Rotational Speed, 3-38
PFA Available, 3-41	Qualifications, P-i, 2-7, 3-10, 3-11, 4-	Row Orientation, 3-47
Photo Formats, 3-58	8	Row Spacing, 3-47
Photos, 3-32	qualifications, 3-1	Rows
Picket Unit, 3-23	Qualifications Button, 5-7	record, 5-1
Place Name, 3-21	Qualifications button, 5-1	RS, 3-23
plan originator, 3-13	Qualifications Drop-Down List, 5-7	Rules Engine, 6-9
Plan Originator & Number, 3-13	Qualifications for Event #, 5-4, 5-6	Rules Management, 6-1, 6-9
Plane Commander, 3-24	Qualifications Management, 5-10, 6-	Engine, 6-9
Platform, P-i	1, 6-4	Engine, 0 5
Platform Call-Sign, 3-56	Qualifier, 3-14	
Platform Type, 3-56	Quals Assigned, 5-14	
• •	G .	S
Plus-sign Icon, 4-10 PM	query, 6-9	San Diago D i
	Queue, 5-17	San Diego, P-i
Performance Measurement, P-i		Save, 3-59
PM Engine, P-i	_	Save As, 3-28
Poor Accuracy, 3-23	R	Save As, 3-59
Position, 3-30, 3-35	madia hautan 0.40	Save Changes, 2-5, 3-32, 3-58, 5-
Post Mission Summary, P-i	radio button, 3-12	14, 5-16, 5-17, 6-7
Post-Flight Analysis, 3-40	Radio Silence, 3-23	SC - Stratocumulus, 3-26
Post-Mission Summary, 3-20	RAINFORM PURPLE, P-i	Schedule number, 3-2
PowerPivot, 4-3	Rainform Purple, 1-1, 3-1, 3-11	Scoreboard, 3-1
Pressure, 3-26	Rainform Purple Message, 3-10, 3-	Scoreboard Chart, 2-8
Primary Option Nickname, 3-13	12	Scroll Bar, 2-9, 5-8
Print, 4-3	Range, 3-33	Scroll Wheel, 3-28
Print Gradesheet, 5-5	Range (NM), 3-34	Sea State, 3-26
Print MOD, 5-6	Readiness by Qualification, 4-7	Search Area Size, 3-58
Print MOP, 5-6	read-only, 5-1	Secondary Option Nickname, 3-13
procedurally proficient, 5-3	Receive Only, 3-23	Security Credentials, 5-10
Profile, 2-4	Reception Quality, 3-23	Sensor Code, 3-27, 3-36, 3-38, 3-42
Profile Image, 2-5, 2-8	Record Row, 2-7, 3-45	Sensor Platform, 3-27, 3-35
Propulsion Mode, 3-39	Record rows, 5-1	Sensor Station Number 1, 3-24
Propulsion Type, 3-32	REF, 3-50	Sensor Station Number 2, 3-24
Prototype, 6-9	Reference Date, 3-50, 3-51	Sensor Station Number 3, 3-24
PU, 3-23	Referenced Message Information, 3-	SENSORS
Purple, 3-11	50	ACTIVE, 3-16
Purple Creator, 1-1	Refresh, 3-6, 3-28, 4-3, 5-14, 6-5	PASSIVE, 3-16
Purple Message, 3-28, 3-59	Refresh Button, 5-10	Sensors Authorized, 3-16
Purple Message Sets, 3-12	Related Documents, P-ii	Serial #, 3-32, 3-50
Purple Sets, 5-7	Relative Bearing, 3-33, 3-34	Serial ID, 3-50
Purpose, 3-15	Relative Range (NM), 3-34	Serial Letter, 3-51
•	REMARKS, 3-57	Serial Number, 3-14, 3-32
		Serial number, 3-51
0	Remarks, 3-57	Serial number, 3-51 Serial Number of Qualifier, 3-14
Q		Serial number, 3-51 Serial Number of Qualifier, 3-14 SERVICES, 3-16

current, 4-3	SUB Average Engagement Time, 4-	Transmission Quality, 3-23
session, 3-5	13	Transmit / Receive, 3-23
Set Complete Icon, 3-10	SUB Average Engagement Time Ta-	Transmit Only, 3-23
Sets Menu, 3-9, 3-10	ble, 4-13	Trend Analysis, P-i
SharePoint, 4-3	SUB Average Gained / Lost Time, 4-	TRNG
Ship Control Number, 3-32	15	Training, 3-15
SHR, 3-23	SUB Set, 3-32	TSC, 6-8
Side or ID Number, 3-20	SUB SUMRY (Table Collapsed), 4-	Turbulence, 3-25, 3-26
SIGNA, 3-31, 3-38	10	turnover, 3-56
SIGNA Tab, 3-37	SUB SUMRY (Table Expanded), 4-	Turnover Method, 3-56
SIGSUM, 3-39	11	Turns Per Knot, 3-37
Simulation, 3-9	SUB SUMRY Contact Held Percent-	TurnsperKnot, 3-38
simulation, 3-1	age, by Crew, 4-9	Type, 3-20, 3-29, 3-32, 3-45, 3-50,
simulations, 3-2	SUB Time to Attack, 4-12	3-56, 5-13
Simulator, 2-7	sub-areas, 5-3	Type/Model/Series, 5-11
Simulator Event, 5-1, 5-7	Submarine, 3-32, 3-41	
Skill Description, 5-6, 5-13, 5-16	Submarines, 3-58	
Skill Details, 5-12, 5-14	submenu, 6-5	U
Skill Management, 5-13	subs, 3-28	
skill weight assignment page, 5-15	SUMRY, 3-31, 3-42	UHF, 3-23
skills, 5-10, 5-15	SUMRY Tab, 3-42	Ultra High Frequency, 3-23
Skills Management, 5-10, 5-12, 5-14	Super High Frequency, 3-23	Unit Base, 3-52
Sonobuoy, 3-45, 3-46	SWAP, 3-56	Unit Designation, 3-32, 3-44, 3-52
Sonobuoy Type, 3-54, 3-55	Synopsis, 3-58	Unit Designator, 3-17
SOPS	System Requirements, P-ii	Unknown, 3-28
Scheduled Operations, 3-15		Unknown Vessels, 3-58
sort, 3-2		Updated, 6-2
Sortie, 3-17	T	Upload, 3-58
sortie, 3-18	T 0.00	Upper Altitude, 3-19
sortie number, 3-18	T, 3-23	Upper Flight Level Type, 3-19
Sorties, 3-19, 4-8	T/R Indicator, 3-23	user
Sorties and Qualifications Passed by	tables, 4-4	credentials, 4-1
Crew, 4-8	Tactical Coordinator, 3-24	role, 3-2
sorting, 3-1, 3-2 Source Code, 3-27, 3-36, 3-42	tactical exchange, 3-56	User Details, 6-7
SOW, P-i	Tactical Support Center, 6-8 tactically proficient, 5-3	User Management, 6-1 User Manual
Special Configuration, 3-20	Take-Off, 3-7	conventions used, P-ii
Special Notation, 3-50, 3-51	Target Aspect, 3-43	User Name, 2-2
Speed, 3-30	Target Aspects, 3-40	User Profile Panel, 2-8
Speed (KTS), 3-27, 3-35	Target MDR, 3-40	User Roles, 6-7
SQL Server Reporting Services, 4-2	task time, 3-12	Username, 6-5, 6-6
Squadron, 2-5, 2-8, 3-2, 3-7, 4-2, 6-	TC, 3-24	Users, 6-5
5, 6-6	Temperature (C), 3-26	create, 6-1
Squadron Mission Commander, 6-8	Temperature (F), 3-48	Manage, 6-7
Squadron Training Officer, 6-8	threat environment, 5-3	manage, 6-1
SS1, 3-24	Time, 3-30, 3-35	USMTF, 3-28, 3-50, 3-59
SS2, 3-24	Time to Establish Link, 3-23	UTC, 3-9
SS3, 3-24	TIMPD, 3-50	,
ST - Stratus, 3-26	Title, 6-2, 6-3	
Staff Officers, 6-1	TMPOS, 3-27, 3-29, 3-31, 3-34	V
Start Date, 6-3	TMPOS Tab, 3-35	V
Start Date (Z), 3-29	TMS, 3-7	Variable Line Array DIFAR Median
Start New Qualification, 5-7	То	Detection Range, 3-40
Start Time, 3-29	, 6-2	Very High Frequency, 3-23
Statement of Work, P-i	TR, 3-23	VHF, 3-23
Statistics, 3-40	TRACK, 3-16	View Report, 4-16
status, 3-11	Tracking Type, 3-47	Visibility, 3-25
Stern, 3-40	Trademark, 3-44	Visibility (NM), 3-26
SUB, 3-29, 3-31	Transmission Mode, 3-22, 3-23	VLADMDR, 3-40

VP-26, 3-3

W

Warranted, 3-41 Wave Crest, 3-26 Wave Direction (T), 3-26 Wave Height (FT), 3-26 Weapons School Evaluator, 6-8 Weather, 3-25 Weather Conditions, 3-25 web address, 2-2 Wedge Angle, 3-47 Weight, 5-16 Weight and Display Order, 5-15 Wind Direction, 3-25, 3-26 Wind Speed, 3-25 Wind Speed (KTS), 3-26 Windows Explorer, 2-5 Wing, 2-5, 2-8, 3-2, 4-2, 6-5, 6-6 Wing Commander, 2-2

Ζ

Zoom Magnitude Handle, 3-28 Zoom Slider Bar, 3-28 Zulu, 3-9 Zulu Standard, 3-29