APPENDIX C

DATA ELEMENT DESCRIPTION AND VALIDATION SPECIFICATIONS

1. Purpose

This appendix identifies the data elements used for 3-M documentation and reporting, and provides a complete listing of the data elements and their descriptions. This appendix also includes the data element specifications used for 3-M reporting. Only the core 3-M data elements have been included, however, the use of additional data elements may be allowed if they support specific TYCOM, Program Manager, or OPNAV requirements.

2. Objective

The objective of this appendix is to ensure that 3-M data requirements are explicitly understood and followed. Divided into two sections, the validation specification portion followed by a data element description section. The validation specification portion can be used to:

a. Provide a means for organizational and intermediate level personnel to document information that is correct and complete.

b. Establish data element requirements for all 3-M ADP systems, including systems that interface with 3-M.

c. Provide a means for personnel conducting 3-M validations to ensure that 3-M data specifications are being followed.

d. Establish requirements for reporting 3-M maintenance data.

3. Data Element Specifications

Following the validation specification section is an alphabetical listing of the authorized 3-M data elements. This listing provides a short definition of each data element along with allowable codes and values where applicable. Updates to any of the Reference Codes may be requested according to Section III, Chapter 1, Reports and Services Available from Naval Sea Logistics Center (NSLC), paragraph 9. (c).

DATA ELEMENT SPECIFICATIONS

DATA ELEMENT	DEN	MAINTENANCE TYPE	LENGTH	ENTRY TYPE	VALIDATION SPECIFICATION
Action Taken	F968	2K	2	E	1. Mandatory. 2. Must be left-justified. 3. For 4790/2K, first character must be 0, 1, 2, 3, 4, 6, 7, 8, or 9. For action taken codes 1, 2, and 3, the second character codes A, B, C, M, or T can be used. For action taken code 7, the second character codes A, B, C, D, or E can be used. For action taken code 9, the second character codes A, B, C, D, E, F, G, H, I, or J can be used. 4. For action taken code 6, the second character codes A, B, C, D, E, F, G, H, I, J, K or L can be used. 5. Codes are listed on the NSLC Reference Code Forum website; choose the Action Taken Lookup dropdown option. Available from: https://oars.nslc.navy.mil/oars/docs/ref/index.html

DATA ELEMENT SPECIFICATIONS

DATA ELEMENT	DEN	MAINTENANCE TYPE	LENGTH	ENTRY TYPE	VALIDATION SPECIFICATION
Action Taken	F968	2K	2	E	1. Mandatory. 2. Must be left-justified. 3. For 4790/2K, first character must be 0, 1, 2, 3, 4, 6, 7, 8, or 9. For action taken codes 1, 2, and 3, the second character codes A, B, C, M, or T can be used. For action taken code 7, the second character codes A, B, C, D, or E can be used. For action taken code 9, the second character codes A, B, C, D, E, F, G, H, I, or J can be used. 4. For action taken code 6, the second character codes A, B, C, D, E, F, G, H, I, J, K or L can be used. 5. Codes are listed on the NSLC Reference Code Forum website; choose the Action Taken Lookup dropdown option. Available from: https://oars.nslc.navy.mil/oars/docs/ref/index.html

DATA ELEMENT	DEN	MAINTENANCE TYPE	LENGTH	ENTRY TYPE	VALIDATION SPECIFICATION
Action Taken	F968	CK	2	E	1. Mandatory. 2. Must be left-justified. 3. For 4790/CK, must be 1, 2, 3 with or without the second character A, B, C, M, or T. 4. For Alteration CK, must be 5A, 5B, 5C, or 5D. 5. Codes are listed on the NSLC Reference Code Forum website; choose the Action Taken Lookup dropdown option. Available from: https://oars.nslc.navy.mil/oars/docs/ref/index.html
Note for Action Taken codes: 1. 4790/2K block 29 is Action Taken, and block 64 is Final Action (IMA only). 4790/CK block 6 is Action Taken. 2. Action Taken codes 5A-D are used in 2K block 64 or CK block 6 only. 3. The second character A, B, C, M, and T of Action Taken codes 1, 2, and 3 are used in 2K block 29 only. 4. Action Taken code 8 is used in 2K block 29 only.					
Active Maintenance Time	F943	2K/CK	3	N	1. Optional. 2. Mandatory for SEL reporting Allowance Parts.
Allowance Parts List/Allowance Equipage List (APL/AEL)	D008G	2K/CK	11	E	1. Mandatory. 2. Must not be blank, not all zeros, and no imbedded blanks.

DATA ELEMENT	DEN	MAINTENANCE TYPE	LENGTH	ENTRY TYPE	VALIDATION SPECIFICATION
					3. Must be the APL/AEL Number, "NOTLISTED", or "NA".
Alterations (Configuration Changes)	E319	2K/CK	14	E	1. Optional. 2. For SHIPALT, pos. 1 & 2 must be SA. Pos. 3-6 is ship type. Pos. 7-13 is alteration number. Pos. 14 is title code. 3. For FIELD CHANGE, pos 1&2 must be FC. Pos 3 is blank. pos 4-5 are the Field Change Bulletin numeric characters. 4. For all other alteration types, pos. 1, 2, & 3 must be A&I, AMI, AR, BA, BK1, CFE, DFS, EC, ECC, ECH, ECI, ECO, ECP, EMR, EN, EP, FMR, GFE, HI, HMR, ICO, INS, LAR, LSA, MA, MJC, MO, MOD, MPL, NI, NL, OA, OSV, PDD, PSA, SC, SCD, SI, SP, SW, TC, TCM, TD, TDC, TEC, TMA, TMP, TR, TRI, TY, or TZ. Pos. 3 is blank for a 2-character code. Pos. 4-14 is alteration/SCD/Alt Directive number. 5. Official codes are listed in the NSLC Reference Table Forum, Maintenance

DATA ELEMENT	DEN	MAINTENANCE TYPE	LENGTH	ENTRY TYPE	VALIDATION SPECIFICATION
					Modernization Business Unit (MMBU) Forum dropdown option. They are listed here in the event users cannot access the NSLC site at: https://oars.nslc.navy.mil/oars/docs/ref/index.html
Assist Repair Work Center	E902A	2K/2P	4	E	1. Optional.
Assist Repair Work Center Estimated Man-Hours (Asst. Est. MHRS)	E902A	2K/2P	4	E	1. Optional.
Automated Integrated Language System Identification Number (AILSIN)	E129	2K/CK	12	E	1. Optional.
Available on Board(Yes/No)		2K	1	A	1. Mandatory only if the "Blueprints, Technical Manuals, etc." data element is filled. 2. Must be an "X".
Availability Category		2K	1	A	1. Optional. Used for Deferral and IMA AWR Maintenance Actions. 2. Must be A-Z and 1-8. 3. Codes are listed on the NSLC Reference Code Forum website; choose the Availability

DATA ELEMENT	DEN	MAINTENANCE TYPE	LENGTH	ENTRY TYPE	VALIDATION SPECIFICATION
					Lookup dropdown option. Available from: https://oars.nslc.navy.mil/oars/docs/ref/index.html
Blueprints, Technical Manuals, etc.		2K	32	E	1. Optional
Cause	F964C	2K	1	N	1. Mandatory. 2. Must be 1, 2, 3, 4, 5, 6, 7, 8 or 0.
Completion Date		2K/CK	*	N	1. Mandatory. 2. Must be greater than deferral date. * Length is determined by the date format.
Component Action	F968C	CK	1	A	1. Mandatory. 2. If reporting a configuration maintenance action, must be R, I, or M. 3. If reporting a configuration file correction, must be A, D, or C.
Component Identification	F940B	CK	15	E	1. Optional
Component Noun Name		CK	26	E	1. Mandatory. 2. For HM&E equipment, enter the noun name. 3. For electronics equipment, enter the A/N type designator or commercial model number. 4. For ordnance equipment, enter the

DATA ELEMENT	DEN	MAINTENANCE TYPE	LENGTH	ENTRY TYPE	VALIDATION SPECIFICATION
					system/equipment nomenclature, followed by the Mark and Mod numbers.
Component Serial Number		CK	15	E	1. Mandatory. 2. For equipment without a serial number, enter "NONE".
CSMP Summary	F905D	2K	30	E	1. Mandatory
Date Completed		2K	*	N	* Length is determined by the date format.
Date of Estimate		2K	*	N	* Length is determined by the date format.
Deadline Date	F964F	2K	*	N	1. Optional. 2. * Length is determined by the date format.
Deferral Date	F964E	2K	*	N	1. Mandatory. 2. * Length is determined by the date format.
Deferral Reason	F964D	2K	1	N	1. Mandatory. 2. Must be 1, 2, 3, 4, 5, 6, 7, 8, 9, or 0.
Departure Test Required		2P	1	A	1. Optional. 2. If used, must be an "X".
Dry Dock Required		2P	1	A	1. Optional. 2. If used, must be an "X".
Engineering Operational Sequencing System (EOSS)		CK	15	E	1. Optional. 2. Not required for Electronics or Ordnance configuration change actions.

DATA ELEMENT	DEN	MAINTENANCE TYPE	LENGTH	ENTRY TYPE	VALIDATION SPECIFICATION
Equipment Identification Code	D008D	2K/CK	7	E	1. Mandatory.
Equipment Noun Name	F940	2K/CK	16	E	1. Mandatory. 2. If the maintenance action is a SHIPALT, enter the equipment noun name from the SHIPALT record. Otherwise, enter the equipment nomenclature/description of the equipment or system on which the maintenance was performed. 3. For HM&E equipment, enter the noun name. 4. For electronics equipment, enter the A/N type designator or commercial model number. 5. For ordnance equipment, enter the system/equipment nomenclature, followed by the Mark and Mod numbers.
Estimated Man-Days		2K/2P	5	N	1. If the estimate is less than one, enter "1".
Estimated Man-Days Cost		2K/2P	7	N	1. If no estimate, enter "0".
Estimated Man-Hours	G902A	2K/2P	4	N	1. If no estimate, enter "0".
Estimated Material Costs	G902M	2K/2P	6	N	1. If no estimate, enter "0".

DATA ELEMENT	DEN	MAINTENANCE TYPE	LENGTH	ENTRY TYPE	VALIDATION SPECIFICATION
Estimated Total Cost		2K/2P	7	N	1. If no estimate, enter "0".
Final Action (IMA only)		2K	2	E	1. Mandatory 2. Must be left-justified. 3. Codes are listed on the NSLC Reference Code Forum website; choose the dropdown option "ACTION TAKEN LOOKUP." Referred to as Final Action when coming from repair facility. Available from: https://oars.nslc.navy.mil/oars/docs/ref/index.html
First Contact	F804	2K	18	E	1. Mandatory
Hull Number		2K/CK/2P	11	E	1. Optional
Identification/Equipment Serial Number		2K	15	E	1. Mandatory
INSURV Number	D912	2K	7	E	1. Optional
Integrated Priority	F802	2K	5	N	1. Optional
Intermediate Unit Commander (IUC) Screening	F949	2K	2	E	1. Optional. 2. If used, must be 1, 2, 3 with or without the second character A, S, or M; 4; 5, 5A-5F; 6, 6A-6E; or 8.
IUC/Repair Activity/TYCOM Remarks		2P	180	E	1. Optional
Job Control Number	E349	2K/CK/2P	13	E	1. Mandatory.

DATA ELEMENT	DEN	MAINTENANCE TYPE	LENGTH	ENTRY TYPE	VALIDATION SPECIFICATION
(JCN)					2. This data element is made up of the UIC (A002), Work Center (E128), and JSN (E349C).
Job Description/ Remarks		CK	120	E	1. Mandatory
Job Order Number	G679	2K	10	E	1. Optional
Job Sequence Number (JSN)	E349C	2K/CK/2P	4	N	1. Mandatory
Key Event	F934	2P	4	E	1. Optional
Key Operation	F939	2P	2	N	1. Optional
Lead Planning & Estimating Code		2K	4	E	1. Optional
Lead Repair Work Center (LWC)	E902D	2K/2P	4	E	1. Mandatory
Location	E900A	2K/CK	20	E	1. Mandatory
Maintenance Index Page Number (MIP)	E130	CK	15	E	1. Optional
Man-Hours Expended		2K	4	N	1. Mandatory. 2. Cannot be blank.
Meter Reading		2K	5	N	1. Optional
Meter Reading Indicator	D916G	CK	1	A	1. Optional. 2. If used, must be "X".
Nameplate Data	F940C	CK	120	E	1. Mandatory for installation, and addition. 2. Optional for removal, modification, change, and deletion.
Next Higher Assembly	F940D	CK	21	E	1. Optional
Normally Done By		2P	1	A	1. Optional
Periodic Maintenance Requirement		2P	12	E	1. Optional
Periodicity		2P	3	E	1.Optional 2.

DATA ELEMENT	DEN	MAINTENANCE TYPE	LENGTH	ENTRY TYPE	VALIDATION SPECIFICATION
Post-Overhaul Test Required		2P	1	A	1. Optional. 2. If used, must be an "X".
Pre-Arrival/Arrival Conference Action/Remarks		2K	56	E	1. Optional
Pre-Overhaul Test Required		2P	1	A	1. Optional. 2. If used, must be an "X".
Priority	C904A	2K	1	N	1. Mandatory. 2. Must be 1, 2, 3, or 4.
Quality Assurance Requirements		2P	12	A	1. Optional
Quantity		CK	3	N	1. Mandatory
R/M (Maintenance Indicator)	D912E	2K	1	A	1. Optional. 2. If used, must be "M" or "R".
Rate	F804A	2K	4	E	1. Mandatory
Record Identification Number (RIN)	E221	CK	5	E	1. Mandatory for deletion, removal, and modification. 2. Optional for installation and addition.
Remarks/Description	F905	2K/CK	1200	E	1. Mandatory
Repair Activity UIC	A002P	2K	5	E	1. Optional
Repair Work Center	E902A	2K	4	E	1. Optional
S (Safety Identifier)	D912B	2K	1	A	1. Optional. 2. If used, must be "S".
Safety Hazard	C921A	2K	1	E	1. Optional. 2. Must be 1, 2, 3, 4, 5, 0. Code 6 thru 9 may be locally assigned by TYCOMs for

DATA ELEMENT	DEN	MAINTENANCE TYPE	LENGTH	ENTRY TYPE	VALIDATION SPECIFICATION
					additional safety codes as required.
Scheduled Completion Date		2K/2P	*	N	1. Optional. * Length is determined by the date format.
Scheduled Start Date		2K/2P	*	N	1. Optional. * Length is determined by the date format.
Second Contact/ Supervisor	F804B	2K	18	E	1. Optional
Service Application Code	E010A	CK	10	E	1. Optional
Ship's Force Man-Hours (S/F MHRS)	F808B	2K	4	N	1. Mandatory
Ship's Force Man-Hours Expended (S/F MHRS EXP)	F808	2K/CK	4	N	1. Mandatory
Ship's Force Man-Hours Remaining (S/F MHRS REM)	F808A		4	N(*)	1. Optional * If TYCOM allows an automatic close out of the deferral by the IMA, enter "AUTO".
Special Interest		2P	1	A	1. Optional. 2. If used, must be an "X".
Special Purpose A	F801	2K	2	E	1. Optional. 2. If used, enter the Key Event code.
Special Purpose B	F801	2K	2	A	1. Optional. 2. If used, enter SS for SUBSAFE. Surface Ships may enter; S1 for "PARTS ON HAND/PARTS NOT REQD," S2 for "PARTS ON ORDER-DEF DEL DT," S3 for "CONT PROCURE PARTS," S4 for "WORK COMPL PREVIOUSLY.

DATA ELEMENT	DEN	MAINTENANCE TYPE	LENGTH	ENTRY TYPE	VALIDATION SPECIFICATION
Special Purpose C	F801	2K	2	E	1. Optional. 2. If used, must be L1.
Special Purpose D	F801	2K	2	N	1. Optional. 2. If used, must be 08.
Special Purpose E	F801	2K	2	A	1. Optional. 2. If used, must be RC.
Special Purpose F	F801	2K	2	A	1. Optional. 2. If used, must be DD.
Special Purpose G	F801	2K	2	A	1. Optional. 2. If used, must be NC or NP.
Special Purpose H	F801	2K	2	E	1. Optional. 2. The following codes are used in MFOM VSB for work screening: AC (AVCERT) BC (Blanket Purchase Agreement/Basic Ordering Agreement) CC (Commercial Industrial Services) CS (Crane Services) DV (Diver Services) GC (Contract) IC (Indefinite Delivery, Indefinite Quantity) NS (NAVSEA) RC (Regional Maintenance Center Contracting Officer) TC (Type Commander Contracting) TV (Tanks & Voids)
Special Purpose I	F801	2K	2	E	1. Reserved for future use.
Special Purpose J	F801	2K	2	E	1. Reserved for future use.
Special Purpose K	F801	2K	2	E	1. Optional. 2. If used, enter FB (Fly By Wire Certification Boundary) SF

DATA ELEMENT	DEN	MAINTENANCE TYPE	LENGTH	ENTRY TYPE	VALIDATION SPECIFICATION
					(Submarine Flight Critical Component), or DS (Deep Submergence System-Scope of Certification).
Special Purpose L	F801	2K	2	E	1. Optional. 2. If used, enter the code assigned to the visiting activity.
Special Requirements		2P	*	E	1. Optional. 2. If used, refer to Key Event, Special Interest, Dry Dock Required, Pre-Overhaul Test Required, Post-Overhaul Test Required, or Departure Test Required Codes for allowable codes and values. * Length is determined by the codes entered.
Status	F964B	2K	1	N	1. Mandatory. 2. Must be 1, 2, 3, or 0.
Suffix	D912D	2K	2	E	1. Optional.
Task		2P	12	E	1. Optional.
Technical Documentation		2P	28	E	1. Optional.
Technical Manual Number		CK	32	E	1. Optional.
Trouble Isolation	F980	2K	1	N	1. Optional.
TYCOM Screening	F949A	2K	2	E	1. Optional. 2. If used, must be 1, 2, 3, with or without the second character A, S, or M; 4; 5A-5F; 6, 6A-6E; 8; or 9.

DATA ELEMENT	DEN	MAINTENANCE TYPE	LENGTH	ENTRY TYPE	VALIDATION SPECIFICATION
Type Availability	F927	2K	1	N	1. Mandatory. 2. Must be 1, 2, 3, or 4.
U (Mission Degrading)	D912C	2K	1	A	1. Optional. 2. If used, must be "U".
Unit Identification Code (UIC)	A002	2K/CK/2P	5	E	1. Mandatory. 2. No imbedded blanks.
When Discovered Code	F964	2K	1	N	1. Mandatory. 2. Must be 1, 2, 3, 4, 5, 6, 7, 8, 9 or 0.
When Discovered Date	F964A	2K	*	N	1. Mandatory. 2. * Length is determined by the date format.
Work Center	E128	2K/CK/2P	4	E	1. Mandatory for installation or addition. 2. Optional for removal, modification, deletion, or change.
Work Center Responsible for Equipment (WCRE)	E128	CK	4	E	1. Mandatory for installation or addition. 2. Optional for removal, modification, deletion, or change.
Work Request Routine		2K	5	E	1. Optional. 2. If used, must be either the Expanded Ship Work Breakdown Structure, Ship Work Breakdown Structure, Ship Work Authorization Boundary, or Ship Work Line Item Number as directed by the TYCOM.
YYMM Issued		2P	4	N	1. Optional.

Table C-1

4. Data Element Description

a. Alpha "A" Data Elements.

(1) Accepted By (2K). The signature/name and rank/rate of the person authorized by the tended ship to verify the acceptability of work performed. This entry is mandatory when reporting completion of a previously deferred maintenance action. The Work Center Supervisor must approve all maintenance actions not requiring assistance from an outside Work Center; the Work Center Supervisor's approval will be recorded when the maintenance action is documented.

(2) Action Taken (ACT. TKN.) (2K and CK). A code to describe the maintenance action taken.

(a) Select the code (Table C-2) which best describes the action taken to complete the maintenance. When recording these codes, start in the left justified position of the field. The first character is to be chosen from the list below; the second character is free-form and is to be recorded as specified by the TYCOM. For maintenance action reporting, the action codes in the Reference Table Forum can be used. Codes are listed on the NSLC Reference Code Forum website; choose the Availability Lookup dropdown option. Available from: https://oars.nslc.navy.mil/oars/docs/ref/index.html

***NOTE**: If there is an entry in the Alterations field of a deferred maintenance action (2K), a code "5", including the applicable suffix from the Reference Table Forum, must be entered in the "FINAL ACTION" field."*

MAINTENANCE ACTION CODES

CODE	DESCRIPTION
1	Maintenance Action Completed; Parts Drawn from Supply
2	Maintenance Action Completed; Required Parts Not Drawn from Supply (local manufacture, pre-expended bins, etc.)
3	Maintenance Action Completed; No Parts Required
NOTE: The following second character codes can be used with the above Action Taken codes 1, 2, or 3 as directed by the TYCOM:	
	A - Maintenance Requirement Could Have Been Deferred
	B - Maintenance Requirement Was Necessary
	C - Maintenance Requirement Should Have Been Done Sooner
	M - High Cost Repairs
	T - The Equipment Being Reported Had a Time Meter

CODE	DESCRIPTION
4	Canceled (When this code is used, the deferral will be removed from the CSMP. This code is not to be used with INSURV, safety, or priority 1 or 2 deferrals screened for accomplishment by the TYCOM or IUC.)
6	Rejected Work Request (see Final Action Code). This code is only to be used by Intermediate Maintenance Activities in the Final Action Block for rejected work. This code is not allowed for shipboard use.
7	Maintenance Action Completed; 2-M (Miniature/Micro-miniature Electronic Modules) Capability Utilized.
NOTE: The following second character codes can be used with Action Taken Code 7 to better describe the action taken:	
	A - Parts Drawn from Supply Utilized
	B - Parts Not Drawn from Supply Utilized
	C - Automatic Test Equipment (ATE) Utilized
	D - ATE and Parts Drawn from Supply Utilized
	E - ATE and Parts Not Drawn from Supply Utilized
8	Periodic Time Meter/Cycle Counter reporting. (This code is not applicable to the "FINAL ACTION" code reported by the repair activity.)
9	Maintenance Action Completed; 3-M Fiber Optic Repair
NOTE: The following second character codes can be used with ACTION TAKEN CODE 9 to better describe the action taken:	
	A - FOTE (fiber optic test equipment), multimode ST MQJs utilized
	B - FOTE, multimode heavy duty MQJs utilized
	C - FOTE, multimode rotary mechanical splice MQJs utilized
	D - FOTE, single mode ST MQJs utilized
	E - FOTE, single mode heavy duty MQJs utilized
	F - FOTE, multimode specialty MQJs utilized
	G - FOTE, single mode specialty MQJs utilized
	H - FOTE, not available
	I - Standard MQJs (measurement quality jumpers) not available
	J - Specialty MQJs not available
0	None of the Above (Code "0" is not recommended for shipboard use.)

Table C-2

(b) Select the code (Table C-3) which best describes the maintenance action associated with configuration change reporting.

CONFIGURATION CHANGES MAINTENANCE ACTION CODES

CODE	DESCRIPTION
1	Maintenance Action Completed; Parts Drawn from Supply
2	Maintenance Action Completed; Required Parts Not Drawn from Supply (local manufacture, pre-expended bins, etc.)
3	Maintenance Action Completed; No Parts Required
NOTE: The following second character codes can be used with the above Action Taken codes 1, 2, or 3 as directed by the TYCOM:	
	A - Maintenance Requirement Could Have Been Deferred
	B - Maintenance Requirement Was Necessary
	C - Maintenance Requirement Should Have Been Done Sooner
	M - High Cost Repairs
	T - The Equipment Being Reported Had a Time Meter
NOTE: If there is an entry in the Alterations field of a deferred maintenance action (2K), a code "5", including the applicable suffix ("A-D"), must be entered in the "FINAL ACTION" field.	
5A - Partially Completed Alteration	
5B - Fully Completed Alteration	
5C - Fully Completed Equivalent to Alteration	
5D - Alteration Directive Not Applicable	

Table C-3

(3) Active Maintenance Time (2K and CK). The total clock hours, to the nearest whole hour, during which Ship's Force maintenance was performed. This should show actual time for troubleshooting, but should not include delays.

(4) Actual Man-Days. The total Man-Days required to accomplish the job for all involved repair Work Centers.

(5) Actual Man-Day Cost. The total Man-Day cost required by the Repair Activity to accomplish the job.

(6) Actual Material Cost. The total cost for all the material used by the Repair Activity to complete the job.

(7) Actual Total Cost. The sum total of both the Actual Man-Day Cost and the Actual Material Cost required by the Repair Activity.

(8) Adjusted Completion Date. The completion date after the original completion date of a Deferral MA or IMA AWR has been changed.

(9) Automated Integrated Language System Identification Number (AILSIN). – (See data element Table C-1) – The number used to identify the functional/hierarchical relationship of

the ship, system, and equipment configuration records. Current numbering schemes are AILSIN, Configuration Identification Number (CIN) and Functional Group Code (FGC).

(10) Allowance Parts List/Allowance Equipage List (APL/AEL) (2K and CK). The APL/AEL relates to a set of characteristics which identify a particular system, equipment, or component. The Master Index of APLs/AELs (MIAPL) lists what APLs/AELs are available and cross references various equipment identification numbers to an existing APL/AEL (e.g., "992179236" for an APL, and "2-260034096" for an AEL). For manual reporting, on equipment not listed in the Coordinated Shipboard Allowance List (COSAL), enter "NOT LISTED" in the APL/AEL field. For maintenance actions that are not equipment related (e.g., requests for cruise box manufacture, printing services, etc.), enter "NA" in this field.

(11) Alteration Identification (Configuration Changes) (2K and CK). An alteration is a change in design, material, number, location, or relationship of an assembly's component parts. Some alteration categories are:

(a) SHIPALT. Enter the alteration identification exactly as it appears on the Ship Alteration (SHIPALT) Record. Record the alteration type "SA" in the first two positions, ship type starting in position three, and the alteration number starting in the 7th position of the block (i.e., SASSBNf342130). Enter the title code from the alteration record in the last position of the field.

(b) FIELD CHANGE. Enter "FC" in the two left-justified positions. Leave position 3 blank; place the numeric characters listed in the FC Bulletin in positions 4 and 5.

(c) ALTERATION REQUEST. May be originated by a ship to request an alteration design. Enter and left-justify "AR", then a blank space, then any number the ship assigns for its own control.

(d) SHIP CHANGE DOCUMENT. Enter “SCD” in the first three positions followed by the SCD number. This type of alteration is replacing all other alteration types. Alterations of other types in the system continue to carry superseded types but all new alterations will be of type SCD.

(e) OTHER ALTERATIONS. Enter the appropriate alteration prefix from the following list (Table C-4) in the three left-justified positions, leave position three blank if code is only two position, and identify the alteration directive in the remaining positions.

OTHER ALTERATIONS

CODE:	DESCRIPTION:
A&I	ALTERATION AND IMPROVEMENT
AMI	AUTONETICS MODIFICATION INSTRUCTION (TRIDENT)
AVC	AVIONICS CHANGE
BA	BOAT ALTERATION
BK1	BLOCK UPDATE (TRIDENT)
CC	CONTRACTOR CHANGE
CFE	CONTRACTOR FURNISHED EQUIPMENT REPORT
DFS	DEPARTURE FROM SPECIFICATION (TRIDENT)
EC	ENGINEERING CHANGE
ECC	CCS MEMOD ENGINEERING CHANGE (TRIDENT)
ECH	HM&E ENGINEERING CHANGE (TRIDENT)
ECI	EQUIPMENT CERTIFICATION INSTRUCTION
ECO	ENGINEERING CHANGE ORDER
EMR	EQUIPMENT MODIFICATION RECORD (TRIDENT)
EN	ENGINEERING NOTICE (TRIDENT)
EP	ENGINEERING CHANGE PROPOSAL
ESR	ENGINEERING SERVICES REQUEST
FC	FIELD CHANGE
FCA	FIELD CHANGE NUMBER (AEGIS)
FM	FIELD MODIFICATION (AEGIS)
FMB	FIELD MODIFICATION BULLETIN (AEGIS)
FMR	FIELD MODIFICATION REQUEST (TRIDENT)
GFE	GOVERNMENT FURNISHED EQUIPMENT REPORT
HI	HABITABILITY
HMR	HEAD QUARTERS MODIFICATION REQUEST (TRIDENT)
ICO	INSTALLATION CHANGE ORDER (TRIDENT)
INS	INSPECTION & SURVEY (TRIDENT)
LAR	LIASON ACTION REQUEST (TRIDENT)
LSA	LOGISTIC SUPPORT ANALYSIS
MA	MACHINERY ALTERATION
MJC	MACHINERY ALTERATION (TRIDENT)
MO	MODIFICATION (CRYPTO EQUIPMENT)
MOD	MODIFICATION (TRIDENT)
MPL	MILITARY PRODUCT LINE (TRIDENT)
NCW	TRIDENT (OBSOLETE)
NI	NAVY INSTRUCTION (TRIDENT)
NL	NAVY LETTER (TRIDENT)
OA	ORDNANCE ALTERATION
OSV	COMPUTER OPERATING SYSTEM VERSION

CODE:	DESCRIPTION:
PDD	PLANNING DEPARTMENT DRAWING (TRIDENT)
SA	SHIP ALTERATION
SC	SERVICE CHANGE OR SOFTWARE CHANGE
SCD	SHIP CHANGE DOCUMENT
SI	SYSCOM COMMAND INSTRUCTION
SP	SPECIAL PROJECTS
SPA	SPECIAL PROJECT ALTERATION
SW	SOFTWARE DELIVERY
TC	TRIDENT COMMAND AND CONTROL SYSTEMS MODIFICATION
TCM	TRIDENT COMMAND AND CONTROL SYSTEMS MODIFICATION
TD	TECHNICAL DIRECTIVE
TDC	TYCOM DISCRETIONARY CHANGE
TEC	TEMPORARY ENGINEERING CHANGE
TMA	TRIPPER MACHINERY OPERATION
TMP	TEMPORARY ALTERATION (TRIDENT)
TR	TRIDENT ALTERATION
TRI	TRIDENT SHIP ALTERATION
TY	TYCOM DIRECTIVE
TZ	TYPE ZERO ALTERATION

Table C-4

(12) Assist Repair Work Center (ASST. REPAIR W/C) (2K and 2P). The three (3) or four (4) character code of the first Work Center assigned to assist the lead Work Center on the job being planned. The code is always left justified in the field. On the 2K, if more than one assist Work Center is required, fill in another 2K. Only two assist Work Centers (two supplemental 2K continuation sheets) can be accommodated when a 2K is used as a planning document by an IMA.

(13) Assist Repair Work Center Estimated Man-Hours (ASST EST MHRS) (2K). The total number of estimated man-hours required by the repair activity assist Work Center to complete its portion of the job.

(14) Availability Category (2K). A code (see table C-5) that specifies the type of availability scheduled for an activity. Applicable to only Deferral MA or IMA AWR Data.

AVAILABILITY CODES

CODE:	DESCRIPTION:
A	Alongside Scheduled Continuous Maintenance
B	Docking Selected Restricted Availability (DSRA)

CODE:	DESCRIPTION:
C	Selected Restricted Availability (SRA)
D	Complex Overhaul
E	Extended Incremental Selected Restricted
F	Extended Docking Selected Restricted Avail (EDSRA)
G	Extended Selected Restricted Availability (ESRA)
H	Docking Incremental Selected Restricted Avail (DISRA)
I	Intermediate Maintenance Availability
J	Incremental Selected Restricted Availability
K	Interim/Emergent Dry Dock
L	Docking Phased Maintenance Availability
M	Phased Planned Maintenance Availability
N	Inactivation Availability (INAC)
O	Post Delivery Availability
P	Continuous Availability (Year Long CM)
Q	Post Shakedown Availability
R	Regular Overhaul
S	Self-Availability/Ship to Shop Availability
T	Restricted Availability
U	Unfunded
V	Phased Incremental Availability (PIA)
W	Depot Modernization Period
X	Technical Availability/Assessment
Y	Docking Phased Incremental Avail (DPIA)
Z	Voyage Repairs (PER title X) /BFIMA
1	Docking Phased Incremental Avail (DPIA1)
2	Docking Phased Incremental Avail (DPIA2)
3	Docking Phased Incremental Avail (DPIA3)
4	Phased Incremental Availability (PIA1)
5	Phased Incremental Availability (PIA2)
6	Phased Incremental Availability (PIA3)
7	Refueling Complex Overhaul (RCOH)
8	Extended Docking Planned Maintenance Avail (EDPMA)
?	Invalid

Table C-5

(15) Availability Number. Identifies the availability number in which the component PMR was last accomplished.

(16) Availability Proposed Start Date.

(17) Availability Proposed End Date.

(18) Availability Actual Start Date.

(19) Availability Actual End Date.

b. Bravo "B" Data Elements.

(1) Blueprints, Technical Manuals, etc. (2K). Used to list technical material (blueprints, technical manuals, plans, etc.), that might be of assistance to the repair activity providing assistance.

c. Charlie "C" Data Elements.

(1) CASREP Date Time Group.

(2) Cause (CAS) (2K). The code (Table C-6) best describing the cause of the failure or malfunction when need for maintenance was first discovered. When more than one cause contributed to the failure or malfunction, select the primary or overriding one (this field provides valuable data to the equipment manager; without it, only the fact that the equipment failed is known). Maintenance personnel must use their best judgment in determining the cause of failure.

CAUSE CODES

CODE	DESCRIPTION
1	Abnormal Environment. Exposure to conditions more extreme than those reasonably expected in the normal shipboard environment (e.g., electrical equipment sprayed by salt water, or compartment flooded).
2	Manufacturer/Installation Defects. Material not assembled or manufactured per specifications, or installed improperly by IMA or Depot (e.g., motor with open circuit armature).
3	Lack of Knowledge or Skill. Failure or malfunction of the equipment due to insufficient training, experience, or physical coordination of the operator, maintainer, or other personnel (e.g., not knowing equipment limitations such as the danger of a low speed wheel on a high speed grinder).
4	Communications Problem. A breakdown in the passing, receiving, or understanding of information (e.g., failure to hear or receive a complete message due to noise or mechanical or electrical interference).
5	Inadequate Instruction/Procedure. The instruction or procedures guide has omissions, errors, ambiguities, or other deficiencies (e.g., technical manual omits lubricant type).
6	Inadequate Design. Material manufactured and installed per specifications failed prematurely during normal usage under normal environmental conditions (e.g., steam piping orientation precludes adequate draining during warm-up).

CODE	DESCRIPTION
7	Normal Wear and Tear. Material requires replacement after long service and/or as a result of PMS (e.g., pump wear rings replaced during PMS).
8	Corrosion Condition.
0	Other or No Malfunction. Needs to be explained in the "Remarks" field. Examples: 1) Fatigue or physical stress brought on by prolonged work periods or excessive heat, humidity, or noise. 2) Desire to save time and effort by taking shortcut and jury-rigging equipment. 3) Malfunction occurred when installing a field change to improve equipment effectiveness, or when the cause resulted from a personnel oriented deficiency affecting safety due to fatigue, etc.

Table C-6

(3) Commanding Officer's Signature (2K). Shows approval by the Commanding Officer or authorized representative. Required on all deferrals for outside assistance.

(4) Command's Name (2K, CK, 2P, and 2L). The name of the activity originating the maintenance action.

(5) Completed By (2K). The signature and rate of the senior person actively engaged in the job at the lead Work Center. The senior person on the job will be identified for all maintenance actions not requiring assistance from an outside Work Center.

(6) Completed Deferral (COMP DEFL) (CK). Indicates the completion of a previously deferred job.

(7) Completed Maintenance Action, No Deferral (COMP M/A NO DEFL) (CK). Indicates a completed maintenance action with no prior deferral.

(8) Completion Date (2K and CK). The Julian date the maintenance action was completed.

(9) Component Action (CA) (CK). Indicates if the identified component was removed (R), installed (I), or modified (M). Use the codes R, I, or M as appropriate. If reporting a configuration record change, use the code "A" for addition, "D" for deletion, and "C" for correction.

(10) Component APL/AEL (CK). The APL/AEL of the component or equipment identified. If unsure of the correct APL/AEL for the equipment, entry may be left blank, and assistance requested from the supply department (also see 4.a.(10)).

(11) Component Identification (CK). The local numbering system used to identify equipment, (e.g., Station Number: "1A BOILER" or Valve Mark: "ASW 25"). A description of

the component may be entered. For electronic and combat systems equipment, the entry is optional if the component serial number field has an entry.

(12) Component Noun Name (CK). Identifies the component. If the action being reported is the accomplishment of an equipment alteration (Field Change, Engineering Change, etc.), the component is defined at the equipment level addressed in the alteration directive, usually the major equipment or system level; otherwise, the component is defined at the lowest unit, type designator, or assembly that has its own configuration identity. This component may or may not have its own APL. Example of an equipment and related components:

System or Equipment: AN/WRT-2
Component: PP-2222/WRT-2
Component: C-2764/WRT-2

If several components are removed and installed in a single maintenance action (identified by one JCN), continuation pages may be used to report the component changes. If necessary, overflow data from the component noun name can be placed in the nameplate data field.

(13) Component Serial Number/Identification/Equipment Serial Number (CK). Serial number of the component. If a serial number is entered, the "Quantity" field must be one ("1"). For equipment without a serial number, enter "NONE".

(14) Configuration File Correction (CONF FILE CORR) (CK). A data element field that indicates that the report is being submitted to correct erroneous configuration records (no equipment maintenance action involved).

(15) Continuation for (2L). Identifies the maintenance action to which the supplemental information pertains.

(16) Continuation Sheet (2K). Indicates remarks are continued on a second, third, or fourth form (2K). For manual reporting enter an "X".

(17) CSMP Summary (2K). A condensed description of the problem. This entry is limited to 30 characters. The CSMP summary conveys to management the significance of the JCN (maintenance action). The CSMP summary is displayed on management reports, as opposed to the entire narrative of the "REMARKS" field which is not. If continuation sheets are used, the summary line will appear on the first page.

d. Delta “D” Data Elements.

(1) Date (2L). The Julian date the document is prepared.

(2) Date Completed (2K). The Julian date the work request is completed and signed off by the requesting ship.

(3) Date of Estimate (2K). The Julian date the assisting activity completed the planning of the maintenance action.

(4) Deadline Date (2K). The latest possible Julian date that outside assistance and Ship's Force work must be completed as determined by the originator. This entry may be used to indicate a completion date required to meet an operational commitment, or to allow another job to start. This is an optional entry.

(5) Deferral Date (DEFER. DATE) (2K). The Julian date the maintenance action was deferred. An example of a deferral action on 27 July 2017 would be: "7208".

(6) Deferral Reason (DFR) (2K). A code which best describes the reason maintenance could not be performed at the time of deferral. Acceptable codes are reflected in Table C-7.

DEFERRAL REASON CODES

CODE	DEFERRAL REASON
1	Due To Ship's Force Work Backlog/Operational Priority. Within capability of Ship's Force to accomplish, but unable to do so because of ship's overall workload or operations.
2	Lack of Material. Within capability of Ship's Force, but unable to accomplish due to lack of parts, tools, test equipment, etc., that are specified for use in repair work by the technical manual or drawing. ***NOTE: List the unavailable parts, tools, or test equipment and the technical manual and/or equipment drawing in Remarks.***
3	No Formal Training on this Equipment. Should be within capability of Ship's Force, but personnel responsible have no formal training in the maintenance of the equipment.
4	Formal Training Inadequate for this Equipment. Should be within capability of Ship's Force, and personnel responsible have received formal training, but the training is considered inadequate.
5	Inadequate School Practical Training. Should be within capability of Ship's Force, and personnel responsible have received formal training, but practical maintenance aspects of training are considered inadequate.
6	Lack of Facilities/Capabilities. The ship is not allowed shop equipment or other facilities to accomplish; work is otherwise beyond expected capability of Ship's Force to accomplish.
7	Not Authorized for Ship's Force Accomplishment. Directives of higher authority specify that the job will be done by other than Ship's Force.

CODE	DEFERRAL REASON
8	For Ship's Force Overhaul or Availability Work List. For jobs to be done by Ship's Force during forthcoming overhaul or availability.
9	Lack of Technical Documentation. Should be within capability of ship to accomplish but unable to do so because technical manuals, blueprints, drawings, etc., are not available.
0	Other or Not Applicable. Explain in Remarks.

Table C-7

(7) Department Initials (2K). The initials of the Department Head indicating the document was screened.

(8) Division Initials (2K). The initials of the Division Officer indicating the document was screened.

e. Echo "E" Data Elements.

(1) Engineering Operational Sequencing System (EOSS) (CK). The Document Code and Control Number of the primary EOSS procedure that is affected by the configuration change.

(2) Equipment Identification Code (EIC) (2K and CK).

(a) A seven (7) character code that identifies the equipment. The first position identifies the system; the first and second characters together identify the subsystem; the third and fourth together identify the equipment category in that system. The remaining three digits provide greater definition of the applicable equipment part and are useful to the engineer. Where the EIC is known to be more than four digits, it should be recorded at that level. EICs are listed in the SCLSIS Index Report.

(b) If an equipment is not listed in the SCLSIS Index Report, but it can be identified to the subsystem, use the subsystem identification, followed by two zeros. Example: An equipment identified as TRANSCEIVERSCOMMUNICATIONS, but not in the SCLSIS Index Report, would be reported as "QD". If the equipment is identified only to the system, use the system identification, followed by three zeros.

(3) Equipment Noun Name (2K and CK). The nomenclature/description of the equipment. This is the same nomenclature assigned to the equipment EIC. Standard abbreviations may be used. When recording the accomplishment of a SHIPALT, use the noun name from the record. If the maintenance action affects several components or systems, enter the name/designator of the highest assembly affected.

(a) For HM&E, use the noun name (e.g., "MOTOR GENERATOR").

(b) For electronics equipment, use the Army/Navy (A/N) designation, or commercial model number (e.g., "AN/SPS-40D", "CY-4727/SPA-25", and "403-B").

(c) For combat systems equipment, enter the nomenclature followed by the Mark (MK) and Modification (MOD), separated by "/" (e.g., "LAUNCH SYSTEM 36/1").

(4) Estimated Man-Days (2K and 2P). Used by the repair activity, the total man-day estimate for all involved Work Centers to complete the job (if estimate is less than 1, enter "1").

(5) Estimated Man-Days Cost (2K and 2P). Used by the repair activity, the total man-day cost estimate for all involved Work Centers to complete the job (Estimated Man-Day entry X man-hour rate X 8 (working hours per day)).

(6) Estimated Man-Hours (EST. MHRS.) (2K and 2P). The man-hours estimated by the repair activity lead Work Center to complete the job.

(7) Estimated Material Costs (2K and 2P). Used by the repair activity, the total material costs estimated to complete the job.

(8) Estimated Total Cost (2K and 2P). Used by the repair activity, the total cost estimated to complete the job (Estimated Man-Day Cost + Estimated Material Costs = Estimated Total Cost).

(9) Expanded Ship Work Breakdown Structure (ESWBS). A five (5) digit code reported by RUIC/LWC/AWC as applicable by the AWR. ESWBS identifies a 2K equipment being repaired for “tended” UIC.

(10) External Work Candidate Identifier.

(11) External Work Candidate Identifier UIC.

(12) External Work Candidate Identifier System.

(13) External Work Candidate Identifier Date.

(14) External Work Candidate Identifier Sequence Number.

f. Foxtrot “F” Data Elements.

(1) Final Action (entered on 2K). A code that describes the final action taken by the repair activity to complete the job. Refer to the data element "ACTION TAKEN" used for maintenance action reporting for a complete list of codes (Table C-2). Action Taken code "8" is not applicable. In addition, the codes reflected in Table C-8 can be used.

***NOTE**: Codes are listed on the NSLC Reference Code Forum website; choose the dropdown option "ACTION TAKEN LOOKUP." Referred to as Final Action when coming from repair facility.*

Available from:

https://oars.nslc.navy.mil/oars/docs/ref/index.html

FINAL ACTION CODES

CODE	DESCRIPTION
5A	Partially Completed Alteration
5B	Fully Completed Alteration
5C	Fully Completed Equivalent to Alteration
5D	Alteration Directive Not Applicable
6	Rejected Work Request (add suffix below for reason)
A	Ship's Force/Standard Stock Item
B	Excessive Shop Workload/Insufficient Availability
C	Lack of Skills
D	Lack of Facilities
E	Lack of Test or Calibration Equipment
F	Lack of Parts/Material
G	Lack of Documentation
H	Lack of Funds
I	Other (record the explanation in "Remarks")
J	Rescheduled Work Request Lack of Capabilities
K	Rescheduled Work Request Lack of Capacity
L	Rescheduled Work Request Lack of Material

Table C-8

(2) First Contact/Maintenance (MAN) (2K and 2L). The name of the senior person engaged in the maintenance action.

(3) Funding Activity Code.

FUNDING ACTIVITY SEQUENCE	FUNDING ACTIVITY SEQUENCE	FUNDING ACTIVITY CODE	FUNDING ACTIVITY OBS FLAG	FUNDING ACTIVITY TEXT
28	28	AA	0	TYCOM CM Non-Nuclear
29	29	AB	0	TYCOM EM Non-Nuclear
30	30	AC	0	TYCOM Diving Services

FUNDING ACTIVITY SEQUENCE	FUNDING ACTIVITY SEQUENCE	FUNDING ACTIVITY CODE	FUNDING ACTIVITY OBS FLAG	FUNDING ACTIVITY TEXT
31	31	AD	0	TYCOM Fleet Alteration Non-Nuclear
32	32	AE	0	TYCOM Funded Semat (ETC) Ships Force Assistance
33	33	AF	0	TYCOM Nuclear Maintenance/Repairs
34	34	AG	0	TYCOM Nuclear Alterations
35	35	AH	0	TYCOM Funded CNO Scheduled Availability Maintenance
36	36	BA	0	NAVSEA Nuclear Alteration
37	37	BB	0	NAVSEA Ordnance Alteration (ORDALTS)
38	38	BC	0	NAVSEA Non-Nuclear Program Alteration
39	39	BD	0	NAVSEA–Unique Non-Nuclear (includes ALT Development, Tech Support)
40	40	BE	0	NAVSEA-Unique-Nuclear and/or Refueling
41	41	BF	0	Naval Shipyard Mission Funded
42	42	BG	0	SRF Mission Funded
43	43	CA	0	IMA Funded Maintenance
44	44	DA	0	Administrative Support Non-Nuclear (pro-ratable) Including DSA Funded
45	45	DB	0	Administrative Support Nuclear (pro-ratable)
46	46	EA	0	Ship’s Force Maintenance/Repair

FUNDING ACTIVITY SEQUENCE	FUNDING ACTIVITY SEQUENCE	FUNDING ACTIVITY CODE	FUNDING ACTIVITY OBS FLAG	FUNDING ACTIVITY TEXT
47	47	EB	0	Ship's Force Self Help Habitability
48	48	FA	0	Technical Support: NAVWAR SSC, RMC (mission funded)
49	49	FB	0	Technical Support: NAVWAR (separate Funding only)
50	50	GA	0	VRT-N VRT-M, ALRE
51	51	HA	0	NAVAIR (CAFSU, NAWC, FAA, ASIR)
52	52	HB	0	NAEC Lakehurst NJ
53	53	HC	0	NAWC China Lake
54	54	HD	0	NAWC PT Mugu
55	55	HE	0	NAWC PAX River
56	56	HF	0	NAWCAD ST Indigoes MD
57	57	IA	0	NSWCCD/David Taylor
58	58	IB	0	NSWCCD/SESS
59	59	IC	0	NSWCCD/PHD
60	60	ID	0	NSWC Crane
61	61	IE	0	NSWC Panama City
62	62	IF	0	NSWC Newport
63	63	IG	0	NSWC Keyport
64	64	IH	0	NSWC Louisville
65	65	JA	0	NAVWAR (AIT)
66	66	KA	0	ESU
67	67	0	0	OTHER- Explain In Remarks
68	68	VV	0	Visiting Ship Support Foreign Navy
999999	999999	?	0	Invalid

Table C-9

g. Golf "G" Data Elements.

(Not currently used)

h. Hotel “H” Data Elements.

(1) Hierarchical Structure Code (HSC) (2K and CK). Automatically filled in from equipment configuration files on 2K. If unknown, leave blank on a CK.

(2) Hull Number (2K, CK, 2P and 2L). The ship type and hull number of the activity originating the maintenance action. Not required by activities other than ships.

i. India “I” Data Elements.

(1) ICMP Last Accomplish Date.

(2) Identification/Equipment Serial Number (2K). The identification or serial number (up to 12 characters) of the equipment or system on which maintenance is being deferred.

(a) For electronics and combat systems equipment, use the serial number from the equipment nameplate (e.g., for AN/SPS-10C Radar with serial number 48, use "48").

(b) For HM&E, enter the ship's/activity’s numbering system (e.g., for number 1A boiler, use "1A").

(c) Where no specific identification or equipment serial number is given, or for photographic services, plaques, printing, cruise boxes, etc., enter "NA" (Not Applicable).

(d) On items such as phones and fans, etc., to list more than one item of the same type on a maintenance action; enter "VARIOUS".

(e) If the serial number exceeds 12 characters, enter the words "SERIAL NUMBER" in the narrative, followed by the applicable number.

(3) IMA Repair Work Center. The lead Work Center at the IMA involved in the accomplishment of the maintenance. A three (3) or four (4) character code is used to uniquely identify the lead Work Center. Table C-10 provides a listing of the authorized IMA Work Center codes.

IMA REPAIR WORK CENTER

REPAIR W/C CODE	NAME	ABBREVIATED NAME	SUPPLY ID CODE
03T	Tender Repair Team	Tender Repair Team	
04A	Technical Library (AIMD)		
06A	Tool Room	Tool Room	6A

REPAIR W/C CODE	NAME	ABBREVIATED NAME	SUPPLY ID CODE
06B	Portable Tools	Portable Tools	6B
10A	Repair Office/ARRS/MCO	Repair Office	6D
10B	Weapons Repair Office	Weapon Rep Office	AR
10C	Non-Nuclear Planning	Non-Nuclear Planning	6E
10D	Nuclear Planning	Nuclear Planning	6F
10E	Technical Library	Technical Library	6G
11A	Shipfitter	Shipfitter	7A
17A	Sheetmetal	Sheetmetal	7B
25A	Gas Manufacturing	Gas Manufacturing	5A
25C	CO2 Recharge and Repair	CO2 Recharge/Repr	5C
25D	General Engineering Service	General Engnrg Svc	5D
26A	Welding Shop	Welding	7E
26B	Nuclear Welding	Nuclear Welding	7F
31A	Inside Machine	Inside Machine	2A
31B	Engraving	Engraving	2B
31C	Governor Injector	Governor Injector	2C
31D	Valve Repair and Test	Valve	2D
31E	Internal Combustion Engine Repair	Intrnl Cmbstn Eng	2E
31F	Hydraulics Repair	Hydraulics	2F
31G	Pump Repair	Pump	2R
31H	ACFT L & R	ACFT L & R	AX
31T	Gas Turbine	Gas Turbine	2Q
31Z	Metal Build-up	Metal Build-up	2H
35A	Optical Repair and Overhaul	Optical	5E
35D	Watch and Clock Shop	Watch & Clock	5H
35E	Typewriter Shop	Typewriter	5J
37A	Print Shop	Print	31
38A	Outside Machine Shop	Outside Machine	2G
38B	Ordnance Repair, Test, and Align	Ordnance	5K
38D	Valve Barge	Valve Barge	1H
38N	Nuclear Repair	Nuclear Repair	2J
38Y	Ordnance Alteration	Ordalt	
39A	Photographic Shop	Photographic	32

REPAIR W/C CODE	NAME	ABBREVIATED NAME	SUPPLY ID CODE
400	Power Plants Div (AIMD)		7R
410	Jet Engine Branch (AIMD)		7R
414	Power Plants Module Repair Shop (AIMD)		7R
41A	Boiler Inspection and Repair	Boiler	2K
41B	Boiler-Outside Repair	Boiler-Outside Rpr	2L
420	Reciprocating Engine Branch (AIMD)		7R
430	Propeller Branch (AIMD)		7R
500	Airframes Division (AIMD)		7R
51A	Electrical Repair	Electrical Repair	33
51B	Outside Electrical	Outside Electrical	34
51C	Meter Calibration	Meter Calibration	35
51E	Battery Shop	Battery	36
51F	Gyro Inspection and Repair	Gyro	37
51G	Interior Communication Test and Repair	IC Interior Commun	38
51H	Cable Shop	Cable	39
520	Hydraulics/Pneumatics Branch (AIMD)		7R
530	NDI (Non-Destructive Inspection) Branch (AIMD)		7R
56A	Pipe Shop	Pipe	7H
56B	Refrigeration and Air Conditioning Repair and Test	Refrig & Air Cond	2M
56C	Flexible Hose Test and Repair	Flexible Hose	7J
57A	Lagging and Pipe Covering Inspection and Repair	Lagging/Pipe Cover	7K
57B	Rubber and Plastic Forming Shop	Rubber and Plastic	7L

REPAIR W/C CODE	NAME	ABBREVIATED NAME	SUPPLY ID CODE
600	Avionics Division (AIMD)		7R
610	COMM/NAV Branch (AIMD)		7R
62A	Electric Shop (AIMD)		9G
62B	Instrument Shop (AIMD)		9G
62C	Battery Shop, Lead Acid (AIMD)		9G
62D	Battery Shop, Nickel Cadmium (AIMD)		9G
64A	Woodworking and Pattern Making Shop	Woodworking & Pattern	7M
64D	Drafting Shop	Drafting	7Q
64E	Key and Lock Shop	Key and Lock	5M
67A	Electronics Test, Repair, and Alignment	Electronics	41
67B	Electronics Calibration Lab (FECL)	Electronic Cal Lab	42
67C	Crypto Repair and Test	Crypto Repair	43
67E	Fire Control Test and Repair	Fire Control	AD
67F	Radiac Calibration and Repair	Radiac Calibration	5N
67G	Sonar Test, Repair, and Alignment	Sonar	5P
67H	Antenna Test, Repair, and Install	Antenna	45
67J	Navigation Repair		AQ
67K	Weapons Test Equipment, Repair and Calibrate	Weapons Test Equip	AP
67L	Module Test & Repair	2M MTR Repair	46
67M	PCB Repair	PCB Repair	47
67W	AN/SLQ-32(V) Repair Shop	SLQ Repair	48
68A	Boat Repair	Boat Repair	7R
68B	Small Craft Support	Small Craft	7W
68C	Life Boat Repair (Inflatable)	Life Boat Repair	9N

REPAIR W/C CODE	NAME	ABBREVIATED NAME	SUPPLY ID CODE
700	Armament Division (AIM/D)		2E/7E
71A	Paint and Sandblast	Paint and Sandblst	66
71B	Corrosion Control	Corrosion Control	7Y
72A	Riggers Support Activity	Riggers	7S
72B	Divers Support Activity	Divers	7T
72C	General Deck Service	General Deck Service	7U
72D	Weight Testing	Weight Testing	5Q
740	Airborne Mine Countermeasures Branch (AIMD)		6T
74A	Sail Loft and Canvas Shop	Sail Loft & Canvas	5R
800	Aviation Life Support Systems Div (AIMD)		
81A	Foundry Operations	Foundry	2P
81C	Oxygen Regulator & Repair Shop (AIMD)		
85A	Ballistic Fire Control Repair and Calibration	Ballistic FC Repair and Calibration	AL
900	Support Equipment Division (AIMD)		
910	SE Gas Engine Repair Branch (AIMD)		
91B	ASROC Overhaul, Test, Repair, and Stow	ASROC & ASTOR	4T
91C	Torpedo Test, Repair, and Stowage	Torpedo	4T
91D	SUBROC/TOMAHAWK Land Attack Missile System Nuclear	SUBROC Mk-14	8S
91E	Mk 48 Torpedo/Cruise Missile	MK 48	AH
91F	Mine Neutralization System (SLQ-48)		
91Q	Weapons Quality Assurance	Wpns Quality Assur	AM
92A	Sound Analysis Service	Sound Analysis	5S

REPAIR W/C CODE	NAME	ABBREVIATED NAME	SUPPLY ID CODE
92B	Support Equipment Hydraulic Repair Shop (AIMD)		
92C	Liquid Oxygen/Oxygen/Nitrogen Servicing Equip Repair Shop (AIMD)		2M
92D	Support Equipment Corrosion Control Branch (AIMD)		
930	Support Equipment Electrical Repair Branch (AIMD)		
93A	Non-Destructive Testing	Non-Destructive, QA	62
93B	Quality Assurance Service	Qlty Assur Svc	63
94A	Nucleonics and Radcon Service (AS/Subbase Only)	Nucleonics, Radcon	5T
95A	Water Chemical Lab	Water Chemical Lab	5V
95B	Spectrometer Lab Service Test	Spectromtr Lab	5W
960	Installed/Combat Air Start Branch (AIMD)		
96A	Mechanical Standard	Mechanical Standard	5Y
96B	SISCAL		
970	Air Conditioning Repair Branch (AIMD)		
97C	Non-Skid Service Shop	Non-Skid Shop	1C
97D	Ground Support Equipment	Support Eqpt	1D
97E	Aviation Ordnance Shop	Aviation Ordnance	1E
97F	Aviation Fuels Shop	Aviation Fuels	1F
97J	Manlifts	Manlifts	4B
97M	Contractor Support	Yellow Gear	3D
97R	Helo Landing Syst Recovery Assist, Secure, Traverse	HLST/RAST	1R
97W	Weapons Elevator Support Unit	WESU	1W

REPAIR W/C CODE	NAME	ABBREVIATED NAME	SUPPLY ID CODE
970	Public Works	Public Works	Z0
973	Comm Elec Safety	Comm Elec Safety	Z0
974	Eng Elec Safety	Eng Elec Safety	Z0
981	Tiger Team	Tiger Team	Z0
982	Depot Tiger Team	Depot Tiger Team	Z0
983	DIRSSP	DIRSSP	Z0
990	Other Department	Other Dept	ZZ
991	Ship's Force (S/F)	Ships Force (S/F)	Z0
993	Commercial Industrial Services (CIS)	CIS	Z0
999	Other (Non-IMA)	Other (Non-IMA)	ZZ
99B	Paint Locker	Paint Locker	6K
FCA	Field Calibration Facility (Gauge/Meters)	FCA	Z0
RD00	Repair Department (10A)	R00	DJ
RD01	Hull Systems Repair & Services	R01	DK
RD02	Mechanical Systems Repair Division	R02	DL
RD03	Electrical Systems Repair Division	R03	DM
RD04	Electronic Systems Repair Division	R04	DN
RD05	Combat Systems Repair Division	R05	DP
RD06	Nuclear Service and Repair Division	R06	DQ
WI05	Armory	Armory	DR
WR00	Weapons Repair Administration	W00	DC
WR01	Torpedo Repair	W01	DD
WR02	Fire Control Repair	W02	DE
WR03	Special Weapon Repair Ord Services at NSSF	W03	DF
WR04	Missile and Launcher Repair	W04	DG
WR05	Navigation Repair	W05	DH
WR06	Weapons Quality Assurance	W06	DI

Table C-10

(4) In Progress (Site Specific Detail Work Sheet). Coded information that indicates the progress of the job at different stages of accomplishment. Standard job progress reporting and monitoring is performed by each Work Center at the outside repair activity involved in the repair. Reported information includes "in-progress" information, which is coded as reflected in Table C-11.

CODE	DESCRIPTION
A	Awaiting Parts/Supplies/Tools
B	Awaiting Transportation
C	Awaiting QA Inspector
D	Awaiting NDT
E	Awaiting Fire-watch
F	Awaiting Access to Ship (Quarter-Deck Clearance)
G	Awaiting Riggers/Crane Services/Scaffolding Barge
H	Making Special Tool/Part
I	Awaiting AWC/Other Craft
J	Awaiting Tag Out
K	Awaiting Additional Reference Material
L	Awaiting Ship's Force
M	Ship Drills
N	Shop Equipment Inoperative
O	Change in Weather
Rework. Unplanned delay caused by the need to repeat previously accomplished work due to poor workmanship or the omission of work steps.	
P1	Failed Test
P2	Re-Lap/Re-Grind
P3	Wrong Material
P4	Wrong Measure
P5	Miscellaneous
Change of Normal Method/Tools Not Used. Unplanned delay caused by the need to correct a deficiency that the normal shop method of repair could not or did not correct.	
Q1	New Set-Up
Q2	Parts Frozen
Q3	Departure From Specifications
Q4	Parts Build-Up
Q5	Miscellaneous
R	Other Than the Above

Table C-11

(5) INSURV Number (2K). Number assigned by INSURV to the applicable deficiencies identified during the INSURV inspection (Section II Chapter 1)

(6) Integrated Priority (2K). A sequential number to indicate its priority relative to other deferred work for an availability.

(7) Internal Work Candidate Identifier

(8) Internal Work Candidate Identifier UIC

(9) Internal Work Candidate Identifier System

(10) Internal Work Candidate Identifier Date

(11) Internal Work Candidate Identifier Sequence Number

(12) CDM Record Identification Number (RIN) (2K and CK). 2K BLOCK 28 Record Identification Number (RIN) identifies the component from the Coordinated Shipboard Allowance List (COSAL).

(13) IUC/Repair Activity/TYCOM Remarks (2P). Remarks relating to the repair job by the IUC, the repair activity, or the TYCOM.

(14) IUC Screening (2K). Recommendation by the IUC or designated representative indicating the action to be taken using one of the screening codes listed under the data element "SCREENING (TYCOM)".

(15) IUC Signature (2P). The initials of the IUC indicating the document was screened and is recommended for accomplishment.

j. Juliet “J” Data Elements.

(1) Job Control Number (JCN) (2K, CK, 2P and 2L). The JCN is the key identifier for maintenance actions and related supply documents. The JCN is used to identify the maintenance action and to relate all of the parts used when a ship reports a maintenance action and it links all associated reporting of a maintenance action. The JCN is comprised of three blocks. Block 1 is the Ship’s/Activity’s UIC (5 numeric characters), Block 2 is the Work Center (WC) (see WC entry), and Block 3 is the Job Sequence Number (JSN) (see JSN entry). It is also the link for associating up-line reporting of a maintenance action when more than one activity is involved. It is important that all activities involved continue to use the same JCN on all maintenance and supply documents that apply to that particular maintenance action.

(2) Job Description/Remarks (CK). Any remarks relating to the accomplishment of the maintenance action being reported. In some cases, the alteration directive will specify that certain information be documented.

(3) Job Order Number (2K). The job order number assigned by the activity performing the work.

(4) Job Sequence Number (JSN) (2K, CK, 2P, and 2L). A 4-character number assigned by the Work Center to the maintenance action, or assigned by the outside activity performing the work. This is a number assigned sequentially from the Ship's Work Candidate/JSN Log. The first position of the JSN is used to identify the tool or organization that created the 2K. In the case of activities other than the ship creating jobs for the ship, this first character will be an "Alpha" character. The Job Originator Table in the Maintenance and Modernization Business Unit (MMBU) available through the Naval Sea Logistics Center website under MMBU look up tables provides information on the "owner" of each "Alpha" character. The specific value contained within the first position of the JSN provides enhanced data mining capabilities and facilitates data aggregation and analysis. References to "National" values indicate that, based upon SHIPMAIN direction, an Information Technology application has been identified as the only authorized tool that will create 2Ks continuing the respective Job Originator Code.

(5) Julian Date (2K, CK, 2P, and 2L). A 4-character entry composed of the last digit of the calendar year followed by the numerical day of the year (e.g., 1 January 1994 is "4001" and 31 December 1993 is "3365").

k. Kilo "K" Data Elements.

(1) Key Event (2P). An occurrence during a tended unit's availability which affects or is affected by the repair activity's productive effort; e.g., docking, undocking, boiler light-off, weapons handling, fuel/defuel, etc. Key events are to be identified by assigning a 2-digit numeric code to each event and assigning an abbreviation of 15 characters maximum to that code. When more than 99 key events are required, the code can be assigned using alphanumeric combinations. The Key Event code and definition is assigned and managed by TYCOM instruction. Repair activities must ensure continuity of schedules by using codes mutually agreed to by TYCOM representatives.

NOTE: *some automated systems allow for a four-digit code to be entered (refer to the TYCOM instruction).*

(2) Key Operation (KEY OP) (2P). Assigned numbers indicating the logical sequence of the task identified. Table C-12 provides an example.

KEY OPERATION	TASK
01	Disconnect & Deliver
02	Disassemble
03	Replace Bearings
Etc.	Etc.

Table C-12

l. Lima “L” Data Elements.

(1) Lead Planning & Estimating Code (2K). The code assigned to the lead planning and estimating organization.

(2) Lead Repair Work Center (LWC) (2K and 2P). The code of the Lead Repair Work Center assigned to the job. The first character of the code is left-justified. The following codes indicate the IMA department to which the action Work Center is assigned; they are used to process IMA Performance Summaries at both IMA and TYCOM levels. Table C-13 refers.

DEPARTMENT KEY	
A	Dry Dock
B	Other Departments
F	Special
K	Temporary IMA
L	Reservist
P	Civilians
R	Repair Department
Z	Other Activities

Table C-13

***NOTE**: Variable department names may be assigned as directed by the TYCOM using the letters "G", "H", and "J". Refer to data element "IMA Repair Work Center" (Table C-10) for a list of authorized IMA Repair Work Center codes.*

(3) Location (2K and CK). The location of the equipment on which maintenance is required or was performed.

(a) Compartment. Enter the compartment number identified on the compartment check-off list.

(b) Deck-Frame-Side. Enter the deck, frame, and side that best describes the location of the equipment. If neither the compartment nor the deck, frame, side is appropriate; enter the name of the location (e.g., "FANTAIL", "FLIGHT DECK"). For submarines use standard abbreviation for locations (e.g., "OPSUL"). For shipboard locations, see General Specification for Ships of the U.S. Navy (NAVSEA PUB-AA-SPN 010/GEN SPEC) (NOTAL).

m. Mike “M” Data Elements.

(1) Maintenance Figure of Merit (MFOM) V1. MFOM1 is computed off the maintenance factors of the job, such as, priority code, status code, etc. The higher MFOM is, the more maintenance worth.

(2) Maintenance Figure of Merit (MFOM) V2. MFOM2 comes from Corona to RMAIS to 3-M. The lower MFOM is, the more maintenance worthy.

(3) Maintenance Index Page (MIP) Number (CK). The MIP number covering the affected equipment. For like equipment installations, i.e., exchanges, enter the MIP covering the deleted equipment. For new installations, enter the MIP number for the new equipment when available; if not available, enter "NA".

(4) Man-Hours Expended (2K). The man-hours expended on the last day the repair Work Center is involved in the work request (NOT the total man-hours of the work request).

(5) Master Job Catalog (MJC) Number. MJC are 14-position SF/IMA routines for repetitive tasks.

(6) Meter Reading (M/R) (CK). Used to indicate if the equipment or any of the equipment components/subunits being reported have time meters installed.

(7) Meter Reading (M/R) (2K). (An expected entry for Selected Level Reporting (SLR) Level 1/Level 2 equipment.) The meter reading (to the nearest whole hour) at the time of failure. If the equipment has more than one meter, designate the meter being recorded in "REMARKS" using the letters "METRED" followed by the meter designator. An asterisk (*) must precede and follow meter designation as shown in the example below. The required meter is the meter associated with the major functional unit that failed. Example: *METRED-1A2M1*

(8) MRS SEVERITY CODE.

n. November “N” Data Elements.

(1) Nameplate Data (CK). Data that helps identify the equipment. Enter information available from the following list:

(a) Contract Number or Procurement Document Number.

(b) Part Number/Model Number/Drawing Number.

(c) Commercial and Government Entity (CAGE) code, or if not available, the name and address of the manufacturer.

(d) Any additional information, such as physical characteristics and manufacturer's identification that is readily available and provides a description of the use or operation of the component.

(2) Next Higher Assembly (CK). The nomenclature and serial number of the Next Higher Assembly (NHA) in which the equipment/component identified is a part of. If the serial number is unavailable, use the locally assigned NHA number. The NHA is usually identified in the technical manual and the COSAL.

(3) Normally Done By (2P). Indicates where this particular type of maintenance is normally performed (S/F, IMA, Depot), which allows the collection of data for evaluation of IMA costs relative to other maintenance activities.

o. Oscar "O" Data Elements.

(1) OMMS NG Software Release Number. Identifies the Release Number of the software.

p. Papa "P" Data Elements.

(1) Periodicity (2P). Identifies the number of months between which periodic maintenance requirements are to be performed.

(2) Periodic Maintenance Requirement (2P). The code of a specific periodic maintenance requirement (e.g.,"MRC-G40 A1"), a Submarine Maintenance Engineering for Planning and Procurement (SUBMEPP) code, or a Metrology Automated System for the Uniform Recall and Reporting (MEASURE) code identifying a periodic maintenance requirement.

(3) Pre Arrival/Arrival Conference Action/Remarks (2K). Remarks provided by the repair activity determined necessary to facilitate repairs or that would require attention of the originating activity.

(4) Priority (PRI) (2K). Identifies the priority of the deferred maintenance action as reflected in Table C-14.

DEFERRED MAINTENANCE ACTION PRIORITY

CODE	DESCRIPTION
1	Mandatory. The system or equipment is not functioning within designed parameters and may only be operated under emergency conditions. May be a threat to

CODE	DESCRIPTION
	personnel safety or is a critical damage control item. Required to sustain bare minimum acceptable level of human needs and sanitation. The system or equipment failure/malfunction causes a major degradation or total loss of primary mission (C-4 CASREP equivalent).
2	Essential. The system or equipment is severely degraded with major operational restrictions and may only be operated under emergency conditions. Further damage may result from continued operations. Poses no threat to personnel safety. Extremely important safety or damage control item. Required to sustain normal level of basic human needs and sanitation. Will contribute so markedly to efficient and economical operation and maintenance of a vital system that the payoff in the next year will overshadow the cost to accomplish. Required for minimum acceptable level of preservation and protection. Required for sustained performance of activity's mission. Required to maintain overall integrity of activity or a system essential to activity's mission. The system or equipment failure/malfunction causes a major degradation but not the total loss of primary mission (C-3 CASREP equivalent).
3	Highly Desirable. The system or equipment is operable with deficiencies that affect performance. No restrictions on operation. The system or equipment is capable of performing intended functions, but not to all designed performance standards, or not capable of performing required functions in all operating modes. Important safety or damage control item. Required for normal level of human comfort. Required for efficient performance of activity's mission. Required for overall integrity of equipment or systems that are not essential, but are required as backups in case of primary system failure. Will contribute so markedly to efficient and economical operation and/or maintenance of a vital system that the payoff in the next year will at least equal the cost to accomplish. Will effect major reduction in future maintenance in an area or system that presently cannot be maintained close to acceptable standards. Required to achieve minimum acceptable level of appearance. The system or equipment failure/malfunction causes a major degradation or total loss of a secondary mission (C-2 CASREP equivalent).
4	Desirable. The system or equipment is operable with minor discrepancies that do not impact performance. Required for overall integrity of other than an essential system or its backup system. Some contribution to efficient performance. Some contribution of normal level of human comfort and welfare. Will contribute to appearance in an important area. Will significantly reduce future maintenance.

Table C-14

(a) Priority 4 is the level all Work Candidates start with during the review and approval process. The Division Officer or Divisional LCPO may raise the priority to a 3 “Highly Desirable” but no higher. The reason for the priority increase will be explained in the block 35 recommended solutions block.

(b) The next level of review and approval is the Department Head who may raise the priority to 2 “Essential”. The reason for the increase will be explained in the block 35 recommended solutions block.

(c) Priority 1 Mandatory is assignable by the 3-M Coordinator upon direction of the Maintenance Team or the unit Commanding Officer.

> ***NOTE**: Unit Commanders must be aware that alerting seniors to the operational limitations of their units, brought about by equipment casualties or degradation is as important as expediting receipt of replacement parts and obtaining technical assistance. Both of these functions of maintenance and casualty reporting serve extremely beneficial purposes. They provide necessary information, not only in the realm of command and control of US Navy forces, but also in maintaining the unit in a truly combat ready status.* ***Unit commanders will not delay or withhold reports in order to artificially maintain the unit’s readiness rating at a higher than actual level**. Support from every level, including intermediate and group commanders, is essential in order to maintain the highest level of combat readiness throughout the Navy. Casualty reports will be made as required based on the command material condition. Priority for the work candidate will be set based upon the material condition and current situation of the command vice casualty reporting requirements. All priority changes or any updates to the work candidates will be documented in the block 35 recommended solution block of the work candidate. Every work candidate starts with a priority of four (4). To raise the priority, answer the questions and follow the steps of the priority flow chart Figure C-1.* ***Every priority level increase will be explained in the block 35 recommended solutions block of the work candidate**.*

q. Quebec “Q” Data Elements.

(1) Quality Assurance Requirements (2P). Identifies the specific planning actions, work controls, and auditable records in support of individual TYCOM management needs. These special requirements are indicated by an "X" placed in the appropriate reporting field.

(2) Quantity (CK). The number of like equipment identified in the Work Center that was removed, installed, or modified to accomplish the maintenance action. If the component serial number field has an entry, the quantity entered must be "1". Only one piece of equipment can be uniquely identified by a single serial number.

r. Romeo “R” Data Elements.

(1) Rate (2K). The rank/rate of the first contact/maintenance person. The following examples apply:

RATE DATA ELEMENTS

RANK / RATE CODE	ENTRY
Officers	OFF
ET1	ET1
Civilian	CIV
GM2	GM2
FTSN	FTSN
EMFN	EMFN
FN	FN

Table C-15

(2) Record Identification Number (RIN) (2K and CK). 2K BLOCK 28 RIN identifies the component from the Coordinated Shipboard Allowance List (COSAL). Identifies a specific equipment record within the SNAP, WSF, and SCLSIS databases. For CK deletions, removals, and modifications, enter the RIN for the component as listed in Part I, Section C of the COSAL. For CK installations and additions, leave applicable fields blank.

(3) Remarks/Description (2K and CK).

(a) For a Maintenance Action (2K). Provide information that describes the problem and what caused the failure (if known); followed by what needs to be done to correct the problem. Separate the problem description and corrective action entries with three X's (i.e., "What is WrongXXXWhat Must be Done"). If reporting the completion of a maintenance action, the field should describe the trouble and the corrective action. If necessary, this field is used to record safety related data and for expected SLR Level 2 data. For SLR Level 2 reporting the following narrative information is expected:

1. Any problems encountered which hindered or delayed completion of the maintenance action.

2. Reference Designators and/or Part Serial Numbers of removed and installed parts.

3. Symptoms of the failure.

4. Logistics Deficiencies - part number(s) of parts replaced or causing logistic delays (if the part was obtained by cannibalization identify source).

5. Description of difficulties with or deficiencies of fault isolation procedures, maintenance documentation, or test equipment.

6. Full description of multiple events within a maintenance action.

7. Any other helpful information concerning the event.

(b) SLR Level 3 Specialized Reporting. The data will be in a structured-narrative format as designed in a unique template.

(c) Configuration (CK). Enter information that describes the accomplishment of the action. Occasionally, alterations specify that certain information be documented. If an "X" is entered in the M/R field, identify each equipment and enter "M/R" followed by the meter reading.

(4) Remarks/Sketches (2L). Required amplifying information related to a maintenance action. Include drawings and sketches, or multiple item serial numbers and locations for which identical maintenance requirements exist from an outside activity.

(5) Repair Activity Action Taken. A code describing action taken to complete a Maintenance Action (MA) at SF or IMA level. Some code values are applicable to both SF and IMA while some are unique to SF only or IMA only.

(6) Repair Activity Completion Date. The date when the IMA has completed all maintenance work.

(7) Repair Activity UIC (2K). The UIC of the activity performing work for the originating ship.

(8) Repair Work Center (RWC) (2K). Used by the repair activity for internal planning and scheduling, a 3 or 4-character code identifying the lead Work Center assigned to the job.

(9) R/M (Maintenance Indicator) (2K). Either an "R" or "M", used by INSURV, which identifies equipment that shows low reliability or unusual maintenance. "R" indicates low reliability, requiring frequent corrective maintenance; "M" indicates poor maintainability, requiring unusual maintenance efforts due to installation or design.

s. Sierra “S” Data Elements.

(1) S (Safety Identifier) (2K). The code "S", used by INSURV to identify those discrepancies which might cause injury to personnel or material damage.

(2) Safety Hazard (2K). A code number selected from the Risk Assessment Codes (RAC) that describes a problem or condition which has caused, or has the potential to cause injury to personnel and/or damage to material, enter the applicable RAC (Table C-16) described in codes "1" through "5". If the documented maintenance action is not safety related, leave

blank. If a "0" is entered, an explanation in block 35 is not required and the maintenance action should not be routed to the Safety Officer. All other entries in this block require an explanation in block 35.

RISK ASSESSMENT CODES

CODE	RISK ASSESSMENT DESCRIPTION
1	Critical Safety or Health Deficiency-Correct Immediately. This category identifies deficiencies which present a critical safety hazard to personnel or machinery, or a health hazard to personnel, and which must be corrected immediately. This code is used for items such as electric shock hazards, inoperative interlocks or safety devices, missing or damaged lifelines, inoperable escape scuttles, refrigerants (air conditioning or refrigeration) leaking into confined spaces, leaking components containing PCBs, and the like. All efforts must be exerted to correct these items prior to any other maintenance deficiencies. Suspension of use of the equipment, system, and/or space is mandatory.
2	Serious Safety or Health Deficiency-Suspension of Equipment or System or Space Use is Required. This category deals with serious safety hazards to personnel or machinery, or health hazards which must be corrected prior to resuming use of the equipment, system and/or space.
3	Moderate Safety or Health Deficiency-Waiver of Equipment or System or Space Use is Granted Pending Correction of the Item. This category is used in cases where the equipment, system, and/or space can be operated or utilized in a satisfactory manner without greatly risking physical injury, serious damage to the equipment, system, and/or space, or greatly risking the health of personnel.
4	Minor Safety or Health Deficiency. This is a category of safety or health deficiencies which must be corrected when resources become available.
5	Negligible Safety or Health Deficiency. This category identifies deficiencies which are noted for record purposes and may be corrected when other work is accomplished on the equipment, system, and/or space.
X	Safety Related Indicator
0	Maintenance Action is Not Safety Related
NOTE: Codes "6" through "9" may be locally assigned by TYCOMs for additional safety codes required.	
A brief explanation must be included in the Remarks/Description field. For example: "RE-INSPECTION OF SEPARATOR FOR PRESENCE OF OIL AFTER RINSE. MRC A-27 EVIDENTLY NOT DONE. PRESENCE OF OIL RESULTED IN FIRE IN HP AIR SYSTEMS WHEN COMPRESSOR OPERATED UNDER LOAD. FIRE BADLY BURNED VALVE AHP-287, REQUIRING REPLACEMENT." The ship's 3MC will forward a copy of all OPNAV 4790/2K documentation having an entry in this field to the safety officer for review.	

Table C-16

(3) Scheduled Completion Date (2K and 2P). The Julian date on which all work on the job is scheduled to be completed by the activity assisting the originating ship.

(4) Scheduled Start Date (2K and 2P). Used by the repair activity, the Julian date on which work on the job is to begin.

(5) Screening Action (2P). Appropriate action to be taken to accomplish the maintenance as directed by the TYCOM. The field may also be used by the IUC, but the TYCOM representative's decision has precedence. The IUC/TYCOM representative must indicate the level at which the maintenance, if approved, is to be done.

(6) Screening (IUC) (2K). The IUC or designated representative recommended action to be taken using one of the codes listed below under Screening (TYCOM). The IUC is that officer in the chain of command between the ship and the TYCOM.

(7) Screening (TYCOM) (2K). The action to be taken as determined by the TYCOM or designated representative. Acceptable screening codes are reflected in Table C-17.

CODE	DESCRIPTION
1	Depot (shipyard or ship repair facility) Accomplish
1A	Depot Assisted by Ship's Force
1S	Ship to Shop
1M	Accomplish with Modification
2	Intermediate Maintenance Activity (IMA) (tender/repair ship, etc.) Accomplish
2A	IMA Assisted by Ship's Force
2S	Ship to Shop
2M	Accomplish with Modification
3	TYCOM Support Unit (TSU) (floating dry dock, etc.) Accomplish or Technical Assistance from NAVUNDERSEAWARFARCENDET/Regional Maintenance Centers/Contractor Representative
3A	TSU Assisted by Ship's Force
3S	Ship to Shop
3M	Accomplish with Modification
4	Ship's Force Accomplish
5	Deferred
5A	Insufficient Time in the Availability to Complete the Task
5B	Lack of Shipyard Capability
5C	Lack of Material
5D	Lack of Funds
5E	Not Required During this Availability
5F	General
6	Not Authorized
6A	Not Technically Justified
6B	Covered by an Existing Ship Alteration
6C	Duplicate of Another JCN

CODE	DESCRIPTION
6D	Not Cost Effective
6E	General
8*	Disapproved
9**	Remove from CSMP. Pass to history (to be assigned by TYCOM only)
* This screening code disapproves the accomplishment of a work item by an outside activity. It does not prevent entry of the deferral into the CSMP, which is the decision of the Commanding Officer.	
** This screening code is restricted to the removal of INSURV items from the CSMP for which, in the opinion of the ship's IUC and TYCOM, the ship has no responsibility for accomplishment.	

Table C-17

(8) SECAS Office Use (CK). No longer in use.

(9) Second Contact/Supervisor (2K and 2L). The supervisor of the first contact/maintenance person indicating he screened the maintenance action entry for completeness and accuracy.

(10) Selected Equipment List (2K). Selected equipment under an intensive management program requiring additional usage data to be collected. See data element Remarks/Description for reporting requirements.

(11) Service Application Code (SAC) (CK). A code used to group equipment, components, assemblies, etc., according to a particular system or service application. This code is similar to the HSC in purpose, but does not provide a hierarchical structure. The SAC is a code assigned by the supply department.

(12) Ship's Force Man-Hours (S/F MHRS) (2K). The total man-hours (to the nearest whole hour - cannot be zero hours) that Ship's Force used doing the maintenance after submitting the deferral. It includes witnessing of tests, and those man-hours expended in reinstallation, testing, in process documentation, and 2K document completion time. 2K document completion time cannot exceed "1" hour."

(13) Ship's Force Man-Hours Expended (S/F MHRS. EXP.) (2K and CK).

(a) Maintenance Action (2K). The total man-hours (to the nearest whole hour-cannot be zero hours) used by all Work Centers in the maintenance action up to the deferral time; include documentation time which cannot exceed "1".

(b) Configuration Change (CK). The total number of man-hours expended by Ship's Force (and not previously reported) in completing the maintenance action; include

documentation time which cannot exceed “1” hour. Man-hours expended by other than ships force are to be documented separately.

(14) Ship’s Force Man-Hours Remaining (S/F MHRS. REM.) (2K). Ship’s Force/Activity man-hour estimate (to the nearest whole hour) remaining to complete the maintenance action. If TYCOM allows an automatic close out of the deferral by the IMA, enter "AUTO"; this is a request to the IMA to complete the maintenance action with no further documentation from the shop after the job has been accepted by the originator (authorized signature). If the originating unit does not receive CSMP support from the IMA doing the work, do not use the AUTO close out feature.

(15) Special Data (2P). Data element currently not assigned for use. Available for future expansion.

(16) Special Purpose (2K). A code used to indicate quality control and quality assurance standards are required. Refer to TYCOM instructions for additional information relative to these entries. Enter the code in the designated field "A" through "L" as reflected in Table C-18.

FIELD	DESCRIPTION
A	The department head will enter the KEY EVENT code from the ISIC provided Key Event Schedule.
B	Submarines enter code "SS" if the job requires work within the SUBSAFE boundaries or involves SUBSAFE materials (Refer to CSL/CSP INST 4790.16 and JFMM Vol V Part 1 para. 8.2.5e). Surface Ships may enter S1 for "PARTS ON HAND/PARTS NOT REQD," S2 for "PARTS ON ORDER-DEF DEL DT," S3 for "CONT PROCURE PARTS," or S4 for "WORK COMPL PREVIOUSLY."
C	Enter the code "L1" if the job requires work within Level I boundaries or involves Level I material. (Refer to CSL/CSP INST 4790.16 and JFMM Vol V Part 1 para. 6.3.1.3 & 6.3.1.4).
D	Enter the code "08" if the job is associated with nuclear equipment. (Refer to NAVSEAINST 9210.4A (NOTAL)).
E	Enter the code "RC" if the job requires radiological controls (RADCON). (Refer to NAVSEA Technical Publication S9213-33-MMA-000/(V).)
F	Enter the code "DD" if the job requires dry docking to accomplish.
G	Enter the code "NC" for critical noise deficiencies or "NP" for potential radiated noise deficiencies.
H	The following codes are used in MFOM VSB for work screening: GC (Contract), IC (Indefinite Delivery, Indefinite Quantity), CC (Commercial Industrial Services), RC (Regional Maintenance Center Contracting Officer), TC (Type Commander Contracting), BC (Blanket Purchase Agreement/Basic Ordering Agreement), TV (Tanks & Voids), CS (Crane Services), NS (NAVSEA), DV (Diver Services), or AC (AVCERT).
I	Reserved for future use.

J	Reserved for future use.
K	Enter the appropriate code: FB for Fly By Wire Certification Boundary (FBW Certification Blue Boundary), SF for Submarine Flight Critical Component (SFCC Red Boundary), or DS for Deep Submergence System-Scope of Certification (DSS-SOC).
L	Enter the code assigned to the visiting activity. This will identify the visiting activity as the originator of the deferral. Information reported as directed by the cognizant TYCOM.

Table C-18

(17) Special Requirements (2P).

(a) Key Event. 2-digit number identifying an event which influences a job or is influenced by the completion of a job, (e.g., job requiring completion before undocking). Blank indicates that the job is not associated with a key event.

(b) Special Interest. A field used to indicate the job has been selected for job management reports, and identifying the job as having significant management interest. An "X" is the common entry for this field.

(c) Dry Dock Required. A field used to show that the requested maintenance requires the ship to be dry docked. An "X" is the common entry for this field.

(d) Pre-Overhaul Test Required. A field used to identify a specific test required prior to an equipment or ship overhaul. An "X" is the common entry for this field.

(e) Post Overhaul Test Required. A field used to identify that a test must be completed after equipment or ship overhaul. An "X" is the common entry for this field.

(f) Departure Required. A field used to indicate that if the maintenance is not accomplished to specifications, notice of the departure must be sent to the TYCOM. An "X" is the common entry for this field.

(18) Status (STA) (2K). A code (Table C-19) that describes the effect of failure or malfunction on the operational capability of the equipment or system when the need for maintenance was first discovered.

EFFECT OF FAILURE

CODE	DESCRIPTION
1	Operational
2	Non-Operational
3	Reduced Capability
0	Not Applicable (use if reporting printing services, etc.)

Table C-19

(19) Suffix (2K). Used by INSURV to insert additional required numbers between sequential numbers.

t. Tango "T" Data Elements.

(1) Task (2P). The description(s) of the task(s) for which the "Lead" and "Assist" Repair Work Center(s) identified are responsible.

(2) Technical Documentation (2P). Blueprints, technical manuals, etc., which may be useful to the IMA in providing required assistance. Indicate with an "X" if the publications are held by the tended unit or the IMA.

(3) Technical Manual (TM) Number (CK). The TM number covering the component. For removals and modifications, enter the appropriate TM number for the equipment. For like equipment installations (i.e., exchanges), enter the TM number of the deleted equipment. For new installations, enter the TM number covering the component. If unavailable, enter "NA".

(4) Trouble Isolation (TI) (2K). A single numeral (1-9) to indicate, to the nearest 10 percent, the percentage of active maintenance expended in troubleshooting. If no troubleshooting is involved, enter "f". Examples: "2" = 20%, "3" = 30%, "7" = 70%, etc.

(5) TYCOM Authorization (2K). Signature/entry of the TYCOM representative screening deferrals.

(6) TYCOM (Screening) (2K). Refer to data element Screening (TYCOM).

(7) TYCOM Signature (2P). Signature of the IUC or TYCOM representative indicating the maintenance request has been screened.

(8) Type of Availability (T/A) (2K). Type of availability recommended for performance of a deferral.

AVAILABILITY TYPE

CODE	DESCRIPTION
1	Depot (shipyard or ship repair facility). OMMS-NG displays "Depot".
2	Intermediate Maintenance Activity (tender, repair ship, etc.). OMMS-NG displays either "Fleet Repair Center" or "Regional Repair Center".
3	Fleet Technical Support. TYCOM Support Unit (floating dry dock, etc., or technical assistance from NAVUNDERSEAWARCEN DETACHMENT, Regional Maintenance Centers, or contractor representative). OMMS-NG displays "Fleet Technical Support".
4A	Ship's Force Originating Work Center. OMMS-NG displays "Originating Work Center".
4B	Ship's Force Organizational Level. OMMS-NG displays "Organizational Level".

Table C-20

u. Uniform "U" Data Elements.

(1) U (Mission Degrading) (2K). Used by INSURV, field identifies certain deficiencies which are considered as preventing the ship from carrying out some part of its mission.

(2) Unit Identification Code (UIC) (2K, CK, 2P, and 2L). Identifies the Unit Identification Code of the activity originating the maintenance action. The Navy Unit Identification Code Listing is available from: http://doni.daps.dla.mil/sndl.aspx. For service craft or boats without a UIC use the UIC of the parent activity. Other than U.S. Navy ships will have an "A" as the first character followed by a sequential number related to the number of foreign units in availability.

v. Victor "V" Data Elements.

(Currently not used.)

w. Whisky "W" Data Elements.

(1) When Discovered (WND) (2K). Identifies when the need for maintenance was discovered.

WHEN DISCOVERED CODES

CODE	DESCRIPTION
1	Lighting Off or Starting
2	Normal Operation
3	During Operability Tests
4	During Inspection
5	Shifting Operational Modes

CODE	DESCRIPTION
6	During PMS
7	Securing
8	During AEC (Assessment of Equipment) Program
9	No Failure, PMS Accomplishment Only
0	Not Applicable (use when reporting printing services, etc.)

Table C-21

(2) When Discovered Date (2K). The Julian Date when the equipment failure was discovered.

(3) Work Center (WC) (2K, CK, 2P, and 2L). Two basic types of Work Center codes exist. Their definition and application are as follows:

(a) Ships/Activities. Use a 4-position Work Center code. The first two positions identify the Department and Division. The last two positions identify the Division Work Center.

(b) Repair Departments of Tenders, RMCs and other IMAs. These organizations use a 3-position Work Center code to identify the repair shops (e.g., "10A", "67A", "91A", etc.). See data element "IMA Repair Work Center" (Table C-10) for a list of authorized IMA repair Work Center codes.

(4) Work Request Routine (2K). The appropriate ESWBS, Ship Work Breakdown Structure (SWBS), Ship Work Authorization Boundary (SWAB), or Ship Work Line Item Number (SWLIN), as directed by the TYCOM. This entry is made to integrate the deferral into applicable work packages.

x. X-ray “X” Data Elements.

(Currently not used.)

y. Yankee “Y” Data Elements.

(1) YYMM Issued (2P). Four numbers used to identify the year and month during which the periodic maintenance requirement entered was issued. The first two digits identify the year and the last two digits identify the month.

z. Zulu “Z” Data Elements.

(Currently not used.)