APPENDIX D
PREPARATION INSTRUCTIONS MAINTENANCE ACTION FORM
(OPNAV 4790/2K)

1. MAINTENANCE ACTION FORM (OPNAV 4790/2K). The OPNAV 4790/2K Form is used for reporting deferred maintenance actions, and the completion of maintenance actions that do not result in a configuration change. Two blocks at the top of the form are used to specify what type of maintenance action is being reported, a deferral "DEFL" or a completion "COMP". The rest of the form is separated into six sections. A partially completed maintenance action which results in a configuration change or a complete or partially accomplished alteration should be reported using the OPNAV 4790/CK Form. Refer to the instructions for using the OPNAV 4790/CK Form, appendix C.

1.1 Section I - IDENTIFICATION: This section is used to identify the equipment or system on which maintenance actions are being reported.

1.2 Section II - DEFERRAL ACTION: This section, filled in when reporting a deferral of a maintenance action, indicates man-hours expended up to the time of deferral, the date of deferral, man-hours remaining and required completion date (if necessary).

1.3 Section III - COMPLETED ACTION: This section is filled in when reporting the completion of a maintenance action and contains blocks used when reporting maintenance actions on selected equipment.

1.4 Section IV - REMARKS/DESCRIPTION: This section is filled in when reporting the deferral of a maintenance action. The type of information recorded includes remarks that describe what is wrong, what caused the failure or malfunction, maintenance to be performed, the names of personnel involved in the maintenance action, a priority and availability assignment and signatures by management personnel who screened the maintenance action.

1.5 Section V - SUPPLEMENTARY INFORMATION: This section completed by the reporting activity provides information pertaining to required maintenance actions or onboard reference material (e.g., technical manuals, blueprints, etc.). This section is also used by the repair activity in planning, scheduling and controlling the repair activity work.

1.6 Section VI - REPAIR ACTIVITY PLANNING/ACTION: This section is used by the repair activity for planning, estimating and scheduling purposes and can be used to report work accomplished by an internal department Work Center or by an external activity not under an ADP system.

NOTE: EXAMPLES OF COMPLETED OPNAV 4790/2K FORMS FOR VARIOUS REPORTING SITUATIONS CAN BE FOUND AT THE END OF THIS APPENDIX:

Figure 1 Maintenance Action Form for a Deferred Maintenance Action

Figure 2 Maintenance Action Form for a Completed Maintenance Action without Prior Deferral

2. PROCEDURES FOR DOCUMENTING A DEFERRED MAINTENANCE ACTION - PLACE AN "X" IN THE BLOCK TITLED "DEFL" AT TOP OF FORM.

2.1 Section I - IDENTIFICATION

a. JOB CONTROL NUMBER (Blocks 1 - 3):

(1) Block 1 - UIC: Enter the UIC of the activity initiating the maintenance action.

(2) Block 2 - WORK CENTER: Enter the Work Center code of the Work Center initiating the maintenance action. For Ships, a four-position Work Center code will be entered. For repair departments of, IMAs, RMCs and other IMAs, a three-digit code will be entered. The three-digit code is entered left-to-right leaving the right most position blank. Appendix C of this chapter provides a listing of authorized Work Center codes. (Submarine Tender Repair Work Centers have been converted to four position work center codes)

(3) Block 3 - JOB SEQ. NO.: Enter the job sequence number assigned by the Work Center Supervisor. This is an entry assigned sequentially from the SFWL/JSN Log.

b. Block 4 - APL/AEL (Allowance Parts List/Allowance Equipment List): Enter the APL/AEL of the equipment being reported. These numbers are found in the COSAL or SCLSIS Index Report. An example of an APL would be "882170236" and an AEL would be "2-260034096."

c. Block A - Enter COMMAND'S NAME

d. Block 5 - EQUIPMENT NOUN NAME: Enter the equipment nomenclature and description on which maintenance is being reported. The equipment nomenclature and description should be the same as that identified by the EIC and is limited to 16 positions. Standard abbreviations can be used if clarity is retained. For electronic equipment having an Army-Navy (AN) designation, it will be substituted for the equipment nomenclature.

e. Block B - Enter SHIP'S HULL NUMBER (if applicable).

f. Block 6 - WHEN DISCOVERED (WND): Enter the code (Table 1) that best identifies when the need for maintenance was discovered.

Table 1 - When Discovered Codes

Code	Description
1	Lighting Off or Starting
2	Normal Operation
3	During Operability Test
4	During Inspection
5	Shifting Operational Modes
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.)

g. Block 7 - STATUS (STA): Enter the code (Table 2) that most accurately describes the effect of the failure or malfunction on the operational performance capability of the equipment when the need for maintenance was first discovered.

Table 2 – Status Codes

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

(1) OPERATIONAL must be selected when the system or equipment is operational with only minor discrepancies that do not impact performance. (Similar to EOC 0.8 – 1.0: See chapter 5, appendix A of this volume)

(2) NON-OPERATIONAL must be selected when the system or equipment is totally inoperative or is severely degraded with major operation restrictions and may be a threat to personnel safety. (Similar to EOC 0.0 - 0.4: See chapter 5, appendix A, of this volume)

(3) REDUCED CAPABILITY must be selected when the system or equipment is operational with discrepancies that could potentially impact performance or has minor operational restrictions that are not a threat to personnel safety. (Similar to EOC 0.5 - 0.7: See chapter 5, Appendix A, of this Volume)

(4) NOT APPLICABLE (Equivalent to EOC 1.0: See chapter 5, Appendix A, of this Volume) must be selected:

(a) When ordering parts for PMS.

(b) When updating a 4790/2K and the object has been repaired but the JCN cannot be closed due to awaiting parts.

(c) When requesting services such as printing, plaques, special support equipment, test equipment, etc.

(d) For data reporting.

(e) For SHIPALTs/Ship Change Documents.

(f) For system or equipment configuration changes (4790/CK).

(g) When requesting support services in a maintenance availability.

(h) For future time directed CMP and PMS maintenance tasks.

h. Block 8 - CAUSE (CAS): Enter the code (Table 3) that best describes the cause of the failure or malfunction when the need for maintenance was first discovered. (Refer to reference (a), Appendix A, Table A-6 data element "CAUSE" for an expanded definition of the allowable codes or values).

Table 3 - Cause Codes

Code	Description
1	Abnormal Environment
2	Manufacturer or Installation Defects
3	Lack of Knowledge or Skill
4	Communication Problem
5	Inadequate Instruction or Procedure
6	Inadequate Design
7	Normal Wear and Tear
0	Other or No Malfunction

i. Block 9 - DEFERRAL REASON (DFR): Enter the deferral reason code (Table 4) which best describes the reason the maintenance cannot be done at the time of deferral. (Refer to reference (a), Appendix A, Table A-7 data element "DEFERRAL REASON" for an expanded definition of the allowable codes or values).

Table 4 – Deferral Codes

Code	Deferral Reason
1	Due to Ship's Force, Unit's Work Backlog or Operational Priority
2	Lack of Material
3	No Formal Training on this Equipment
4	Formal Training Inadequate for this Equipment

Code	Deferral Reason
5	Inadequate School Practical Training
6	Lack of Facilities or Capabilities
7	Not Authorized for Ship's Force or Unit Accomplishment
8	For Ship's Force or Unit Overhaul of Availability Work List
9	Lack of Technical Documentation
0	Other - or Not Applicable (explain in block 35)

j. Block 10 - This Block is reserved for TYCOM directed applications. Refer to TYCOM instruction for use.

k. Block 11 - This Block is reserved for TYCOM directed applications. Refer to TYCOM instruction for use.

l. Block 12 - This Block is reserved for TYCOM directed applications. Refer to TYCOM instruction for use.

m. Block 13 - IDENT/EQUIPMENT SERIAL NUMBER: Enter the identification or serial number of the equipment or system on which maintenance is being deferred. For HM&E equipment, enter the Valve Mark or Electric Symbol Number (ESN) or Primary Identification Number. For electronic equipment, enter the manufacturer's serial number of the equipment or system on which maintenance is being deferred.

n. Block 14 - EIC: Enter the Equipment Identification Code of the component, equipment, subsystem, or system for which the maintenance is being reported.

o. Block 15 - SAFETY HAZARD: Enter an "X" or applicable safety code (Table 5) if the maintenance action describes a problem or condition which has caused or has the potential to cause serious injury to personnel or material. A brief explanation must be included in the Remarks/Description field (Block 35).

For example: "Reinspection of separator for presence of oil after rinse. MRC A-27 evidently not done. Presence of oil resulted in fire in HP air system when compressor operated under load. Fire badly burned valve AHP-287, requiring replacement."

NOTE: THE SHIP'S OR UNIT'S 3-M COORDINATOR WILL FORWARD A COPY OF ALL OPNAV 4790/2K DOCUMENTATION HAVING AN ENTRY IN THIS FIELD TO THE SAFETY OFFICER FOR REVIEW. (REFER TO REFERENCE (A), APPENDIX A, TABLE A-14, DATA ELEMENT "SAFETY HAZARD" FOR AN EXPANDED DEFINITION OF THE ALLOWABLE CODES OR VALUES).

Table 5 - Safety Hazard Codes	
Code	Description
1	Critical Safety or Health Deficiency-Correct Immediately
2	Serious Safety or Health Deficiency-Suspension of Equipment, System or Space Use is required
3	Moderate Safety or Health Deficiency-Waiver of Equipment, System or Space Use is granted Pending Correction of the Item
4	Minor Safety or Health Deficiency
5	Negligible Safety or Health Deficiency
0	Maintenance Action is Not Safety Related
NOTE: CODES "6" THROUGH "9" MAY BE LOCALLY ASSIGNED BY TYCOMS IF ADDITIONAL SAFETY CODES ARE REQUIRED.	

p. Block 16 - LOCATION: Enter the location (compartment number, deck, frame, or side notation), that best describes the location of the equipment requiring maintenance as identified in Block 13. If none of the mentioned location identifications are appropriate, enter description of the location (e.g., FANTAIL, FLIGHT DECK, etc.).

q. Block 17 - WHEN DISCOVERED DATE: Enter the Julian date when the equipment or system failure or malfunction was discovered.

r. Block 18 - ALTERATIONS (SHIPALT, ORDALT, Fld. Chg., etc.): If reporting the deferral of an alteration:

(1) SHIPALT - Enter the alteration identification exactly as it appears on the 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 right-hand position of the block.

(2) OTHER Alteration Types - Enter the alteration type character code (Table 6) in the first two positions of the block. Leave the third position blank and enter the alteration number starting in position four (i.e., OA f96999, FC 29, TY 0132). If an alteration identification number is not provided with the alteration record, leave blank.

Table 6 - Alteration Type Codes

SA	Ship Alteration
OA	Ordnance Alteration
BA	Boat Alteration
FC	Field Change
MA	Machinery Alteration
SI	SYSCOM Command Instruction
EC	Engineering Change
HI	Habitability
TY	TYCOM Direction
TD	Technical Directive
SP	Strategic Systems Project Office Alteration
SC	Service Change
TR	Trident Alteration
EP	Engineering Change Proposal
MO	Crypto Equipment Modification
AR	Alteration Request May be originated by a ship to request an alteration design. Enter and left-justify the authorized prefix "AR" followed by a blank space any number the ship assigns for its own control.

s. Blocks 19 through 24 - FOR INSURV USE - no entries required. See Section 2 of NAVSEAINST 4790.8C for specifications.

2.2 Section II - DEFERRAL ACTION.

a. Block 25 - MAN-HOURS EXPENDED (MHRS. EXP.): Enter the total man-hours (to the nearest whole hour) expended by personnel of all Work Centers involved in the maintenance action up to the time of deferral (include documentation time which should not exceed one hour).

b. Block 26 - DEFER. DATE: Enter the Julian date when the maintenance action was deferred. An example of a deferral on 11 January 1994 would be "4011".

c. Block 27 - MAN-HOURS REMAINING (MHRS. REM.): Enter the estimated number of man-hours remaining to complete the maintenance action. Round off to the nearest whole hour. If the TYCOM allows an automated close out of the deferral by the IMA, the letters "AUTO" will be entered. 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

command does not receive CSMP support from the IMA doing the work, do not use the "AUTO" close out feature.

d. Block 28 - DEADLINE DATE:

(1) Depot (shipyard or ship repair facility) (T/A-1) the Deadline Date is required. The date entered is the end of the scheduled maintenance availability.

(2) Intermediate Maintenance Activity (tender, repair ship, etc.) (T/A-2) the Deadline Date is required. The date entered is the end of the scheduled maintenance availability.

(3) TYCOM Support Unit (floating dry dock, etc. or technical assistance from Systems Command, organic technical agents, or contractor representative) (T/A-3) is required. Date entered is the entry date plus a realistic estimated time to repair. Update to the Deadline Date is required if the estimate changes.

(4) Ship's Force or Unit (T/A-4) is required. Date entered is the entry date plus a realistic estimated time to repair. Updates to Deadline Date are required if the estimate changes.

2.3 Section III - COMPLETED ACTION.

a. Blocks 29 through 33 - USED FOR REPORTING THE COMPLETION OF A MAINTENANCE ACTION.

b. Block 34 - METER READING: If the equipment has a time meter and is on the Selected Equipment List (SEL), the reading (to the nearest whole hour) at the time of failure is entered in this block. If the equipment has more than one meter, designate the meter being recorded in Block 35 "REMARKS" using the letters "METRED" followed by the meter designator. An asterisk (*) must precede and follow the meter designation. Example: *METRED-1A2M1*.

2.4 Section IV - REMARKS/DESCRIPTION.

a. Block 35 - REMARKS/DESCRIPTION: Enter remarks relating to the maintenance action. These remarks should be brief, but complete and meaningful. Remarks should state what is wrong, what caused the failure (if known) and what must be done to correct the problem. Separate the two statements with "XXX". For example, "HIGH PITCHED SQUEAL OF PUMP SHAFT, GAUGE READING ABOVE RED LINE ON #2 PUMP, SSG CASING IS EXTREMELY HOT. XXX INVESTIGATE AND REPAIR AS NECESSARY." If more space is needed, check Block 36 "CONT. SHEET" and continue the remarks on a second form using the same JCN. Include the statement "2L USED" if Supplemental Form OPNAV 4790/2L is used for drawings or other supplemental information. The remarks should not include statements explaining what has been coded in another place of the form; i.e., "DEFERRAL REASON 2 = LACK OF MATERIAL". Classified or Navy Nuclear Power Information is prohibited from being entered into the Work Candidate. If a full description of the material deficiency requires the use of classified information, a separate message should be generated with the required data and the message referred

to in Block 35 by message Date Time Group. The following are minimum requirements for Block 35:

(1) Depot (shipyard or ship repair facility) (T/A-1):

(a) Concisely describe the failure or malfunction and what caused it. Include how and when the casualty was discovered. Provide description of the casualty to include information on operating configuration symptoms and indications.

(b) Concisely describe the actions taken by Ship's Force or Unit personnel and outside activities to troubleshoot and correct the failure or malfunction. Include initial follow-up and troubleshooting, Ship's Force or Unit repair efforts or technical assistance received.

(c) Include any test results from troubleshooting.

(d) Include the reason for deferral to an off ship maintenance activity.

(2) Intermediate Maintenance Activity (tender, repair ship, etc.) (T/A-2):

(a) Concisely describe the failure or malfunction and what caused it. Include how and when the casualty was discovered. Provide description of the casualty to include information on operating configuration symptoms and indications.

(b) Concisely describe the actions taken by the command and outside activities to troubleshoot and correct the failure or malfunction. Include initial follow-up and troubleshooting, command repair efforts or technical assistance received.

(c) Include any test results from troubleshooting.

(d) Include the reason for deferral to an off ship maintenance activity.

(3) Technical Assistance in troubleshooting (T/A-3):

(a) Concisely describe the failure or malfunction and what caused it. Include how and when the casualty was discovered. Provide description of the casualty to include information on operating configuration symptoms and indications.

(b) Concisely describe the actions taken by command personnel to troubleshoot and correct the failure or malfunction. Include initial follow-up and troubleshooting, command's repair efforts or previous technical assistance.

(c) Include any test results from troubleshooting.

(d) Clearly specify the type of outside assistance and the time frame desired by the activity.

(4) Technical Assistance in obtaining special support or test equipment (T/A-3):

(a) Describe the special support or test equipment required by the activity.

(b) Describe the maintenance action for which the equipment will be used.

(c) Include any assistance the activity may need from the requesting activity (e.g., training, assistance in operating the equipment, etc.).

(d) Clearly specify the dates the equipment is needed and estimated time the equipment will be returned.

(5) Technical Assistance documenting the results of an inspection or assessment (T/A-3):

(a) The inspection or assessment activity must provide the activity with a maintenance ready 4790/2K.

(b) Documentation of assessment results by the equipment Subject Matter Expert will include all the technical data needed to complete a 4790/2K as specified in chapter 42 of this volume.

(6) Technical Assistance in obtaining support services during a maintenance availability (T/A-3):

(a) Describe the support service required by the activity.

(b) Describe the maintenance action for which the support services will be used.

(c) Include any assistance the activity may need from the requesting activity (e.g., training, assistance in operating the equipment, etc.).

(d) Clearly specify the dates the support services are needed and estimated time the support services will no longer be required.

(7) Ship's Force and Unit maintenance action (T/A-4):

(a) Concisely describe the failure or malfunction and what caused it. Include how and when the deficiency was discovered. Provide description of the deficiency to include information on operating configuration symptoms and indications.

(b) Concisely describe the actions taken by command personnel to correct the failure or malfunction. Include initial follow-up and troubleshooting, command personnel repair efforts or previous technical assistance.

(c) Include any test results from either troubleshooting or post repair testing.

b. Block 36 - CONT. SHEET: Enter an "X" in this block if the "REMARKS" are continued on additional 2K forms. No more than three additional OPNAV 4790/2K forms can be used.

NOTE: WHEN USING OPNAV 4790/2K CONTINUATION PAGES FOR THE CONTINUATION OF "REMARKS", ENTER THE JCN OF THE FIRST FORM AND CONTINUE WITH THE REMARKS IN SECTION IV. IN

THE TOP MARGIN OF EACH CONTINUATION PAGE, INSERT THE WORDS "PAGE 2", "PAGE 3", ETC.

c. Block 37 – CSMP SUMMARY: Enter a condensed description of the problem. The Work Center Supervisor is to ensure the summary succinctly captures the meaning of the Block 35 REMARKS/DESCRIPTION narrative. 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 blocks.

d. Block 38 - FIRST CONTACT/MAINT. MAN: Printed name of the senior person knowledgeable in the specifics of the JCN (maintenance action).

e. Block 39 - RATE: Enter the rate of the first contact or maintenance person. Examples are:

Table 7 – Rank or Rate Codes

Rank or Rate Code	Entry
Officers	OFF
ET1	ET1
Civilian	CIV
GMG2	GMG2
FTGSN	FTGN
FN	FN

f. Block 40 - SECOND CONTACT/SUPERVISOR: Printed name of the supervisor of the first contact or maintenance person after screening the maintenance action for completeness and accuracy.

g. Block 41 - PRI: Enter the appropriate priority code (Table 8). Refer to reference (a) Appendix A, Table A-12 for an expanded definition of the allowable codes or values.

Table 8 – Priority Codes

Code	Description
1	Mandatory
2	Essential
3	Highly Desirable
4	Desirable

h. Block 42 - TA: Enter the Type Availability (T/A) code (Table 9) for the type availability recommended for performance of the deferral.

Table 9 - Type Availability Codes	
Code	Description
1	Depot (shipyard or ship repair facility)
2	Intermediate Maintenance Activity (tender, repair ship, etc.)
3	Fleet Technical Support. TYCOM Support Unit (floating dry dock, etc., or technical assistance from NAVSEA or Regional Maintenance Centers or contractor representative)
4	Ship's Force or Unit (Originating Work Center, Organizational Level)
0	Not Applicable
U	(Mission Degrading) (entered on 2K) Used by INSURV. Field identifies certain deficiencies which are considered as preventing the activity from carrying out some part of its mission.

NOTE: TABLE 10 PROVIDES GUIDANCE ON USING AVAILABILITY CODES.

Table 10 – Type Availability Codes	
Scenario or Issue	Use T/A Code
When requesting technical assistance from off-hull activities.	3
When requesting repair (industrial) from outside activities.	1 or 2
When requesting calibration from outside activities.	1 or 2
When ordering parts or materials for Ship's Force or Unit use.	4
For data reporting.	3
When requesting special support or test equipment (hydrostatic pumps, rigging equipment, etc.).	3
Completed without prior deferral.	4
When submitting a CASREP.	1, 2, 3 or 4
When submitting a temporary DFS.	1, 2 or 4
For any change in system or equipment configuration.	3
For documenting the results of an inspection or assessment.	3
For installation of a SHIPALT or Ship Change Document.	1, 2 or 4
For support services during a maintenance availability.	3
For a CMP maintenance action.	1 , 2, 3 or 4

i. Block 43 - INTEGRATED PRIORITY: If the maintenance is to be done by an outside activity, the Command's Engineer may rank departmental deferrals by integrated priority. A sequential number may be placed in this block to indicate its priority relative to other deferred work for a given availability.

(1) Block C - DIV. INIT: Initialed by the Division Officer after screening the document.

(2) Block D - DEPT. INIT: Initialed by the Department Head after screening the document.

(3) Block E - COMMANDING OFFICER'S SIGNATURE: Required on all deferrals for outside assistance, the Commanding Officer or authorized representative must sign the deferral.

(4) Block F - TYCOM AUTHORIZATION: This block is reserved for the signature of the TYCOM representative screening the deferral. This is usually applicable when direct routing from command to TYCOM for Depot emergent work is employed.

j. Blocks 44 through 46 are not completed at the time of deferral. Entries are made by the next level of management after leaving the command (IUC and TYCOM during the screening process).

2.5 Section V - SUPPLEMENTARY INFORMATION. Block 47 - BLUEPRINTS, TECH. MANUALS, PLANS, ETC.: Enter any TMs, blueprints, etc., which might be of use to a repair activity providing assistance. Indicate with an "X" in the "AVAILABLE ON BOARD" – "YES/NO" block if the TM is onboard or not.

3. PROCEDURES FOR DOCUMENTING INTERNAL WORK REQUESTS - When it is necessary to obtain assistance from other departments within the organizational level, the OPNAV 4790/2K Form can be used as an internal work request. If more than a single assisting Work Center is required, multiple copies will be prepared using the same JCN on each request. The requesting Work Center prepares the number of copies required for internal control. The words "INTERNAL WORK REQUEST" is written at the top of each copy to be sent to the assisting Work Center(s). The following blocks are used:

3.1 Section I - IDENTIFICATION: Document all of this section. See "Procedures for Documenting a Deferred Maintenance Action" paragraph 4.1.

3.2 Section IV - REMARKS/DESCRIPTION. Block 35 - REMARKS/DESCRIPTION: Describe the tasks required of the Assisting Work Center (AWC).

3.3 Section VI - REPAIR ACTIVITY PLANNING/ACTION.

a. Block 49 - REPAIR WORK CENTER (W/C): Enter the AWC's code.

b. Block 55 - REPAIR ACTIVITY UIC: Enter the organization unit's UIC. This will be the same as Block 1 except when the ship is being assisted by a non-reporting outside activity, in this case, the outside activity's UIC will be entered.

c. Block 56 - WORK REQ. ROUTINE: Enter the appropriate Expanded Ship Work Breakdown Structure, SWAB, SWLIN, etc., as directed by the TYCOM.

4. PROCEDURES FOR DOCUMENTING SCREENING INFORMATION ON DEFERRED MAINTENANCE ACTIONS - Used by other activities, such as IUCs, TYCOM representatives and IMAs for screening, planning, and scheduling.

4.1 Section IV - REMARKS/DESCRIPTION.

a. Block F - TYCOM AUTHORIZATION: This block is reserved for the signature of the TYCOM representative screening the deferral.

b. Block 44 - IUC: The IUC or designated representative screening the deferral enters the recommendation as to the action to be taken. See the allowable codes (Table 11).

Table 11 - Action to be Taken Codes

Code	Description
1	Depot (shipyard or ship repair facility) Accomplish
1A	Depot Assisted by Ship's Force or Unit Personnel
1S	Ship to Shop
1M	Accomplish with Modification
2	IMA (tender or repair ship, etc.) Accomplish
2A	IMA Assisted by Ship's Force or Unit Personnel
2S	Ship to Shop
2M	Accomplish with Modification
3	Fleet Technical Support. TYCOM Support Unit (floating dry dock, etc.) accomplished or Technical Assistance from NAVSEA, Regional Maintenance Center or Contractor Representative.
3A	TYCOM Support Un Assisted by Ship's Force or Unit Personnel
3S	Ship to Shop
3M	Accomplish with Modification
4	Ship's Force or Unit Personnel 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

Code	Description
6A	Not Technically Justified
6B	Covered by an Existing Ship Alteration
6C	Duplicate of Another Job Control Number (JCN)
6D	Not Cost Effective
6E	General
8*	Disapproved. * 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
9**	Remove from Current Ship's or Unit Maintenance Project (CSMP). Pass to history (to be assigned by TYCOM only). ** This screening code is restricted to the removal of INSURV items from the CSMP for which, in the opinion of the Ship's or Unit's IUC and TYCOM, the ship has no responsibility for accomplishment.
NOTE:	**THE FIRST CHARACTER OF THE UIC OR TYCOM SCREENING CODE SHOULD BE ENTERED IN THE APPROPRIATE FIELD. THE SECOND CHARACTER, WHEN USED, SHOULD BE ENTERED IN THE SPACE JUST BELOW IT.**

c. Block 45 - TYCOM: The TYCOM or designated representative screening the deferral will enter the action to be taken. See the allowable codes (Table 11).

d. Block 46 (A-L) - SPECIAL PURPOSE: Use of these codes are optional and indicates that quality control and quality assurance standards may be required. Special purpose blocks 46A through 46H and 46K will be used when directed by TYCOM.

(1) Block 46A - The Department Head may enter the KEY EVENT code from the ISIC provided Key Event Schedule.

(2) Block 46B – Optional, if used Submarines will enter code "SS" if the job requires work within SUBSAFE boundaries or involves SUBSAFE materials. Surface Ships may enter S1 for "PARTS ON HAND or PARTS NOT REQD," S2 for "PARTS ON ORDER-DEF DEL DT," S3 for "CONT PROCURE PARTS," S4 for "WORK COMPL PREVIOUSLY."

(3) Block 46C – Optional, if used, enter the code "L1" if the job requires work within Level I boundaries or involves Level I material.

(4) Block 46D – Optional, if used, enter the code "08" if the job is associated with nuclear equipment. Refer to NAVSEAINST 9210.4A (NOTAL).

(5) Block 46E - Optional, if used, enter the code "RC" if the job requires radiological controls (RADCON). (Refer to NAVSEA Technical Publication S9213- 33-MMA-000/(V).

(6) Block 46F - Optional, if used, enter the code "DD" if the job requires Dry Docking to accomplish.

(7) Block 46G - Optional, if used, enter the code "NC" for critical noise deficiencies or "NP" for potential radiated noise deficiencies.

(8) Block 46H - 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).

(9) Block 46I - Reserved for future use.

(10) Block 46J - Reserved for future use.

(11) Block 46K - Optional, if used, 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).

(12) Block 46L - Enter the code assigned to the visiting activity. This will identify the visiting activity as the originator of the deferral.

4.2 Section V - SUPPLEMENTARY INFORMATION.

a. Block 47 - BLUEPRINTS, TECHNICAL MANUALS, PLANS, ETC: The repair activity can use this block during the work request planning in much the same manner as the originator. Information that might be of use in the accomplishment of the maintenance can be entered (e.g., TMs, blueprints, etc.).

b. Block 48 - PREARRIVAL/ARRIVAL CONFERENCE ACTION/REMARKS: The repair activity may enter any remarks considered necessary to facilitate repairs.

4.3 Section VI - REPAIR ACTIVITY PLANNING/ACTION.

a. Block 49 - REPAIR W/C: Enter the character code of the lead Work Center assigned to the job. Refer to reference (a) appendix A, Table A-10 data element "IMA REPAIR WORK CENTER" for a listing of IMA Work Center codes.

b. Block 50 - EST. MHRS.: Enter the total number of estimated man-hours required by the lead Work Center to complete the job.

c. Block 51 - ASST. REPAIR W/C: Enter the three or four character code of the first Work Center assigned to assist the lead Work Center on the job being planned. If more than one assist Work Center is required, check Block 36 to indicate a continuation page is being used. On the continuation page (new 2K form), fill in Blocks 1, 2, 3 with the same JCN of the original 2K. In Block 51, enter the second

assist repair Work Center's code. No more than two assist Work Centers (two supplemental 2K forms) can be submitted.

d. Block 52 - ASST. EST. MHRS: Enter the total number of estimated man-hours required by the assist Work Center to complete its portion of the job.

e. Block 53 - SCHED. START DATE: Enter the Julian date that work on the job is to begin.

f. Block 54 - SCHED. COMP. DATE: Enter the Julian date that all work on the job is scheduled to be completed by the repair activity.

g. Block 55 - REPAIR ACTIVITY UIC: Enter the UIC of the repair activity performing the work for the originating command.

h. Block 56 - WORK REQ. ROUTINE: Enter the appropriate Expanded Ship Work Breakdown Structure

, Ship Work Authorization Boundary (SWAB), Ship Work Line Item Number (SWLIN), etc., as directed by the TYCOM.

i. Blocks 57 through 63: - Used to identify Depot estimates on individual CSMP items from the Master Job Catalog. These blocks may also be used as directed by TYCOM instruction.

(1) Block 57 - EST. MAN-DAYS: Enter an estimate of the total number of man-days required to complete the job. If the estimate is less than one, enter 1.

(2) Block 58 - EST. MAN-DAY COSTS: Enter an estimate of the total man-day costs required to complete the job.

(3) Block 59 - EST. MATERIAL COSTS: Enter an estimate of the total material costs required to complete the job.

(4) Block 60 - EST. TOTAL COST: Enter an estimate of the total cost required to complete the job (Add Blocks 58 and 59).

(5) Block 61 - JOB ORDER NUMBER: Enter Job Order Number assigned by the activity performing the work.

(6) Block 62 - LEAD P&E CODE: Enter the code assigned to the lead planning and scheduling organization.

(7) Block 63 - DATE OF EST: Enter the date that the repair activity's planning action was completed.

5. PROCEDURES FOR DOCUMENTING A COMPLETED MAINTENANCE ACTION PREVIOUSLY DEFERRED: Blocks A, B, and applicable Blocks 1 through 47 have previously been filled. The maintenance person must report completion of a previously deferred maintenance action by using the copy of the OPNAV 4790/2K retained onboard when the maintenance action was deferred. If there is no record (paper) copy of the original 2K and the maintenance action is on the CSMP, enter the JCN on a blank 2K form, and without providing all the deferred maintenance information, enter the completion data in Section III. If the word

"AUTO" has been entered in Block 27 as directed by the TYCOM, submission of a completed maintenance action by the originating ship may not be necessary.

5.1 Section III - COMPLETED ACTION. Block 29 - ACT. TKN: Enter the code (Table 12) that best describes the action taken to complete the maintenance.

NOTE: THE LIST OF "ACTION TAKEN" CODES CHANGES OCCASIONALLY. VERIFY CURRENT "ACTION TAKEN" CODES AT THE FOLLOWING WEB SITE: HTTPS://OARS.NSLC.NAVY.MIL/OARS/DOCS/REF/INDEX.HTML

Table 12 - Action Taken 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 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
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.	
7	Maintenance Action Completed; 2-M (Miniature and 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 or 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, multimode ST MQJs utilized

Table 12 - Action Taken Codes		
Code	Description	
	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 not available
	J	Specialty MQJs not available
0	None of the Above	

b. Block 30 - MHRS: Enter the total man-hours (to the nearest whole hour) that was expended doing the maintenance after submitting the deferral. This includes man-hours expended for reinstallation, witnessing of tests, etc. (include documentation time which should not exceed 1 hour).

c. Block 31 - COMPLETION DATE: Enter the Julian date the maintenance action was completed.

d. Block 32 - ACT. MAINT. TIME: Enter the total clock hours (to the nearest whole hour) during which maintenance was performed. This should the include time for troubleshooting, but not delays.

e. Block 33 - TI: Enter a single numeral (1 through 9) to indicate, to the nearest 10%, the percentage of active maintenance expended in troubleshooting. For example, if no troubleshooting is involved, enter “f”, “2” for 20%, “3” for 30%, “7” for 70%, etc.

f. Block 34 - METER READING: There is no entry required on the completed deferral action. (Refer to Block 34 instructions for DOCUMENTING A DEFERRED MAINTENANCE ACTION).

g. Block 35 - REMARKS/DESCRIPTION: When the “what must be done” statement on the original deferral accurately describes the work which was done, no further entries are required. If remarks in addition to the original remarks entered are needed to describe the work done, refer to paragraph 7 of this appendix for “Documenting Changes, Additions and Deletions to Previously Submitted Maintenance Actions.” Describe what was done and any additional information considered significant. If additional space is needed for the completed action description, use up to three continuation pages.

5.2 Section IV - REMARKS/DESCRIPTION - (Used by the Repair Activity when Reporting a Completed Maintenance Action): This type of completed work request is to be provided to the ship for 3-M processing.

Block 64 - FINAL ACT.: Enter the code that best describes the final action taken to complete the maintenance. (Refer to Block 29 for "ACTION TAKEN" allowable codes or values). In addition, the following codes (Table 13) can be used:

NOTE: THE LIST OF "ACTION TAKEN" CODES CHANGES OCCASIONALLY. VERIFY CURRENT "ACTION TAKEN" CODES AT THE FOLLOWING WEB SITE: HTTPS://OARS.NSLC.NAVY.MIL/OARS/DOCS/REF/INDEX.HTML

Table 13 - Action Taken 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

NOTE: ADD THE FOLLOWING SECOND CHARACTER CODE WITH ACTION TAKEN CODE 6 TO BETTER DESCRIBE THE ACTION TAKEN:

A	Ship's Force or Unit Standard Stock Item
B	Excessive Ship Workload or Insufficient Availability
C	Lack of Skills
D	Lack of Facilities
E	Lack of Test or Calibration Equipment
F	Lack of Parts or Material
G	Lack of Documentation
H	Lack of Funds
I	Other (record the explanation in "Remarks")

b. Block 65 - MHRS. EXPENDED: Enter 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.

c. Block 66 - DATE COMPLETED: Enter the Julian date the work request is completed and signed off by the requesting command.

(1) Block G - COMPLETED BY: The signature and rank and rate of the individual authorized by the repair activity to verify the acceptability of work performed is entered in this block.

(2) Block H - ACCEPTED BY: The signature and rank and rate of the individual authorized by the command to verify the acceptability of work performed. Completion of this block is mandatory when a 2K is used to report completion of a previously deferred maintenance action.

6. PROCEDURES FOR DOCUMENTING A COMPLETED MAINTENANCE ACTION WITHOUT PRIOR DEFERRAL: Place an "X" in the block titled "COMP" at top of form.

6.1 Section I – IDENTIFICATION.

a. JOB CONTROL NUMBER (Blocks 1 - 3):

(1) Block 1 - UIC: Enter the Unit Identification Code (UIC) of the activity initiating the maintenance action.

(2) Block 2 - WORK CENTER: Enter the code of the Work Center initiating the maintenance action. For Ships, a four-position Work Center code will be entered. For repair departments of IMAs, RMCs and other IMAs, a three-digit code will be entered. The three-digit code is entered left-to-right leaving the right most position blank. Appendix C of this chapter provides a listing of authorized Work Center codes (Submarine Tenders have been converted to a four position Work Center code).

(3) Block 3 - JOB SEQ. NO. (JSN): Enter the four character JSN assigned by the Work Center Supervisor. This is an entry assigned sequentially from the SFWL/JSN Log.

b. Block 4 - APL/AEL (Allowance Parts List/Allowance Equipment List): Enter the APL/AEL of the equipment being reported. These numbers are found in the COSAL or SCLSIS Index Report. An example of an APL would be "882170236" and an AEL would be "2-260034096."

c. Block A - Enter COMMAND'S NAME.

d. Block 5 - EQUIPMENT NOUN NAME: Enter the equipment nomenclature and description on which maintenance is being reported. The equipment nomenclature and description should be the same as that identified by the EIC and is limited to 16 positions. Standard abbreviations can be used if clarity is retained. For electronic equipment having an Army-Navy (AN) designation, it will be substituted for the equipment nomenclature.

e. Block B: - Enter SHIP'S HULL NUMBER (if applicable).

f. Block 6 - WHEN DISCOVERED (WND): Enter the code (Table 14) that best identifies when the need for maintenance was discovered.

Table 14 - When Discovered Codes	
Code	Description
1	Lighting Off or Starting
2	Normal Operation
3	During Operability Test
4	During Inspection
5	Shifting Operational Modes
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.)

g. Block 7 - STATUS (STA): Enter the code (Table 15) that most accurately describes the effect of the failure or malfunction on the operational performance capability of the equipment when the need for maintenance was first discovered.

Table 15 - Status Codes	
Code	Description
1	Operational
2	Non-Operational
3	Reduced Capability
0	Not Applicable (use if reporting printing services, etc.)

h. Block 8 - CAUSE (CAS): Enter the code (Table 16) that best describes the cause of the failure or malfunction when the need for maintenance was first discovered. (Refer to reference (a), Appendix A, Table A-6 data element “CAUSE” for an expanded definition of the allowable codes or values).

Table 16 - Cause Codes	
Code	Description
1	Abnormal Environment
2	Manufacturer or Installation Defects
3	Lack of Knowledge or Skill
4	Communication Problem
5	Inadequate Instruction or Procedure
6	Inadequate Design
7	Normal Wear and Tear
0	Other or No Malfunction

i. Block 9 - DEFERRAL REASON (DFR): Leave blank.

j. Block 10: - Block is reserved for TYCOM directed applications. Refer to TYCOM instruction for use.

k. Block 11: - Block is reserved for TYCOM directed applications. Refer to TYCOM instruction for use.

l. Block 12: - Block is reserved for TYCOM directed applications. Refer to TYCOM instruction for use.

m. Block 13 - IDENT./EQUIPMENT SERIAL NUMBER: Enter the identification or serial number of the equipment or system on which maintenance is being deferred. For Hull, Mechanical & Electrical (HM&E) equipment, enter the Valve Mark or Electric Symbol Number (ESN) or Primary Identification Number. For electronic equipment, enter the manufacturer's serial number of the equipment or system on which maintenance is being deferred.

n. Block 14 - EIC: Enter the Equipment Identification Code of the component, equipment, subsystem, or system for which the maintenance is being reported.

o. Block 15 - SAFETY HAZARD: Enter an "X" or applicable safety code (Table 17) if the maintenance action describes a problem or condition which has caused, or has the potential to cause, serious injury to personnel or material. A brief explanation must be included in the REMARKS/DESCRIPTION field (Block 35). For example:

"Reinspection of separator for presence of oil after rinse. MRC A-27 evidently not done. Presence of oil resulted in fire in HP air system when compressor operated under load. Fire badly burned valve AHP-287, requiring replacement."

NOTE: THE SHIP'S OR UNIT'S 3-M COORDINATOR WILL FORWARD A COPY OF ALL OPNAV 4790/2K DOCUMENTATION HAVING AN ENTRY IN THIS FIELD TO THE SAFETY OFFICER FOR REVIEW. (REFER TO REFERENCE (A), APPENDIX A, TABLE A-14, DATA

ELEMENT "SAFETY HAZARD" FOR AN EXPANDED DEFINITION OF THE ALLOWABLE CODES OR VALUES).

Table 17 - Safety Hazard Codes	
Code	Description
1	Critical Safety or Health Deficiency-Correct Immediately
2	Serious Safety or Health Deficiency-Suspension of Equipment, System or Space Use is required
3	Moderate Safety or Health Deficiency-Waiver of Equipment, System or Space Use is granted Pending Correction of the Item
4	Minor Safety or Health Deficiency
5	Negligible Safety or Health Deficiency
0	Maintenance Action is Not Safety Related

NOTE: CODES "6" THROUGH "9" MAY BE LOCALLY ASSIGNED BY TYCOMS IF ADDITIONAL SAFETY CODES ARE REQUIRED.

p. Block 16 - LOCATION: Enter the location (compartment number, deck, frame, or side notation), that best describes the location of the equipment requiring maintenance as identified in Block 13. If none of the mentioned location identifications are appropriate, enter description of the location (e.g., FANTAIL, FLIGHT DECK, etc.).

q. Block 17 - WHEN DISCOVERED DATE: Enter the Julian date when the equipment or system failure or malfunction was discovered.

r. Block 18 - ALTERATIONS: Leave blank. If the completed maintenance action resulted in a configuration change or alteration, refer to the instructions for submitting an OPNAV 4790/CK form Appendix C.

s. Blocks 19 through 24 - FOR INSURV USE: No entries required. See Section 2 for details.

6.2 Section II - DEFERRAL ACTION (Block 25 - 28): Leave blank.

6.3 Section III - COMPLETED ACTION.

a. Block 29 - ACT. TKN: Enter the code (Table 18) that best describes the action taken to complete the maintenance.

NOTE: THE LIST OF "ACTION TAKEN" CODES CHANGES OCCASIONALLY. VERIFY CURRENT "ACTION TAKEN" CODES AT THE FOLLOWING WEB SITE: HTTPS://OARS.NSLC.NAVY.MIL/OARS/DOCS/REF/INDEX.HTML

Table 18 - Action Taken 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 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

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.
7	Maintenance Action Completed; 2-M (Miniature and 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 or 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, 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 not available
	J	Specialty MQJs not available
0	None of the Above	

b. Block 30 - MHRS: Enter the total man-hours (to the nearest whole hour) that were expended completing the maintenance. This includes man-hours expended for reinstallation, witnessing of tests, etc. (include documentation time, which should not exceed 1 hour).

NOTE: BLOCKS 32, 33, AND 34 ARE ONLY TO BE REPORTED, IF THE EQUIPMENT HAS BEEN SEL DESIGNATED.

c. Block 31 - COMPLETION DATE: Enter the Julian date the maintenance action was completed.

d. Block 32 - ACT. MAINT. TIME: Enter the total clock hours (to the nearest whole hour) during which maintenance was performed. This should include time for troubleshooting, but not delays.

e. Block 33 - TI: Enter a single numeral (1 through 9) to indicate, to the nearest 10 percent, the percentage of active maintenance expended in troubleshooting. For example, if no troubleshooting is involved, enter "f", "2" for 20%, "3" for 30%, "7" for 70%, etc.

f. Block 34 - METER READING: Enter the time 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 Block 35 "REMARKS" using the letters "METRED" followed by the meter designator. An asterisk (*) must precede and follow the meter designation. Example: *METRED-1A2M1*.

g. Block 35 - REMARKS/DESCRIPTION: Enter remarks relating to the maintenance action. These remarks should be brief, but complete and meaningful. Remarks should state what was wrong, what caused the failure (if known) and what was done to correct the problem. If "SAFETY HAZARD" (Block 15) is checked, a description of the condition creating the hazard should be inserted in "REMARKS". If more space is needed, check Block 36 "CONT. SHEET" and continue the remarks on a second form using the same JCN.

7. PROCEDURES FOR DOCUMENTING CHANGES, ADDITIONS, AND DELETIONS TO PREVIOUSLY SUBMITTED MAINTENANCE ACTIONS: Place an "X" in the block titled "CORRECTION" at the top of the form. Enter the exact JCN (Blocks 1, 2, and 3) of the original 2K previously processed. Enter only the information to be added, deleted, or changed in the applicable blocks. If the selected data elements are to be deleted, without deleting the entire document, enter dashes (one dash per tic mark) within the data block to be deleted. When changing Block 35, REMARKS/DESCRIPTION, the entire narrative must be entered so that the correct information is included. It is not possible to change just a word or two.

8. PROCEDURES TO ADD-ON REMARKS TO THE CSMP: To add to the remarks as originally submitted, place an "X" in the block titled "ADD-ON REMARKS" at the top of a new 2K Form. Place an "X" in the "DEFL" block at the top of the form and enter in Blocks 1, 2 and 3 the JCN of the original 2K. In Block 35 "REMARKS/DESCRIPTION", enter the initials of the activity adding on to the remarks followed by a dash (-). For example, CINCPACFLT would be entered as "CPF-". Following the dash (-) enter the additional information. If it is necessary to rewrite, or change the narrative as originally submitted, use the procedures for "DOCUMENTING CHANGES, ADDITIONS, and DELETIONS" in paragraph 7.

9. HANDLING PROCEDURES: The 2K is required for documenting a maintenance action that did not result in a configuration change. The 2K must be forwarded to the automated data processing facility serving the command. A copy is submitted when reporting the completion of that maintenance action. A second copy is retained until completion of the maintenance action results in its removal from the CSMP; then it may be destroyed.

Maintenance Action Form for a Deferred Maintenance Action

Figure 1 Maintenance Action Form for a Completed Maintenance Action without Prior Deferral

OPNAV 4790/2K (REV 5-17)

Clear Form

MAINTENANCE ACTION FORM (2-KILO) ☐ COMP ☒ DEFL ☐ CORRECTION ☐ ADD-ON REMARKS

SECTION I. IDENTIFICATION

JOB CONTROL NUMBER			
1. UIC: 21455	2. WORK CENTER: OI01	3. JOB. SEQ NO.: 0589	4. APL/AEL: 882170236

A. COMMAND NAME	5. EQUIPMENT NOUN NAME	6.WND	7.STA	8. CAS	9.DFR	10.	11.	12.
USS SCOUT	VALVE, GLOBE	6	1	7	1			

B. HULL NUMBER (*IF APPLICABLE*)	13. INDENT / EQUIPMENT SERIAL NUMBER	14. EIC
MCM8	FM-3-20-0	5E451

15. SAFETY HAZARD	16. LOCATION (Compartment / Deck / Frame / Side)	17. WHEN DISCOVERED DATE (YR DAY)
☐	3-20-0-E	6 2 1 4

CONFIGURATION CHANGE	FOR INSURV USE					
18. ALTERATIONS (SHIPALT, ORDALT, Fld Chg. ect.)	19. */**	20. INSURV NUMBER	21. SUFFIX	22. U	23. S	24. R/M

SECTION II. DEFERRAL ACTION

25. MHRS. EXP.	26. DEFER DATE (YR DAY)	27. MHRS. REM.	28. DEADLINE DATE (YR DAY)
4	6 2 1 4	6	6 2 2 5

SECTION III. COMPLETED ACTION

			FOR SELECTED EQUIPMENT ONLY		
29. ACT. TKN.	30. MHRS.	31. COMPLETION DATE (YR DAY)	32. ACT. MAINT. TIME	33. TI	34. METER READING

SECTION IV. REMARKS / DESCRIPTION

35. REMARKS / DESCRIPTIONS

WHILE PERFORMING PMS, MAINTENANCE PERSON NOTED EXCESSIVE LEAKING FROM VALVE STEM PACKING GLAND ON FIREMAIN SUPPLY VALVE. XXX SHIPS FORCE WILL ORDER PACKING MATERIAL FROM SUPPLY AND REPAIR AT SOONEST OPPORTUNITY UPON RECEIPT OF PARTS.

36. CONT. SHEET ☐

37. CSMP SUMMARY

VALVE FM-3-20-0 STEM PACKING GLAND LEAKS EXTERNALLY

38. FIRST CONTACT / MAINT. MAN (Print)	39. RATE	40. SECOND CONTACT / SUPERVISOR (Print)	41. PRI	42. T/A	43. INTEGRATE PRIORITY	SCREENING
GRUBE	ENFN	GROFF, ENC	4	4		

C. DIV. INT.	D. DEPT. INIT.	E. COMMANDING OFFICER'S SIGNATURE	F. TYCOM AUTHORIZATION	44. IUC	45. TYCOM
TFO	DER				

46. SPECIAL PURPOSE	A.	B.	C.	D.	E.	F.	G.	H.	I.	J.	K.	L.	

SECTION V. SUPPLEMENTARY INFORMATION

47. BLUEPRINTS, TECH. MANUALS, PLANS, ECT.	AVAILABLE ON BOARD YES	AVAILABLE ON BOARD NO	48. PREARRIVAL / ARRIVAL CONFERENC ACTION / REMARKS
0947-214-9010	☒	☐	
	☐	☐	
	☐	☐	
	☐	☐	

SECTION VI. REPAIR ACTIVITY PLANNING / ACTION

49. REPAIR W/C	50. EST. MHRS.	51. ASST. REPAIR W/C	52. ASST. EST. MHRS	53. SCHED. START DATE (YR DAY)	54. SCHED. COMP. DATE (YR DAY)

55. REPAIR ACTIVITY UIC	56. WORK REQ. ROUTINE	57. EST. MANDAYS	58. EST. MANDAY COST $	59. EST. MATERIAL COST $

60. EST. TOTAL COST $	61. JOB ORDER NUMBER	62. LEAD P&E CODE	63. DATE OF EST. (YR DAY)	

64. FINAL ACT.	65. MHRS EXPENDED	66. DATE COMPLETED (YR DAY)	G. COMPLETED BY (Signature – Rate)	H. ACCEPTED BY (Signature – Rate/Rank)	PAGE 1 OF 1

Figure 2 Maintenance Action Form for a Change to a Previously Submitted Deferred Maintenance Action

OPNAV 4790/2K (REV 5-17)

Clear Form

MAINTENANCE ACTION FORM (2-KILO) ☒ COMP ☐ DEFL ☐ CORRECTION ☐ ADD-ON REMARKS

SECTION I. IDENTIFICATION

JOB CONTROL NUMBER			
1. UIC: 21455	2. WORK CENTER: OI01	3. JOB. SEQ NO.: 0593	4. APL/AEL: 882170236

A. COMMAND NAME	5. EQUIPMENT NOUN NAME	6.WND	7.STA	8. CAS	9.DFR	10.	11.	12.
USS SCOUT	VALVE, GLOBE	6	1	7	0			

B. HULL NUMBER (*IF APPLICABLE*)	13. INDENT / EQUIPMENT SERIAL NUMBER	14. EIC
MCM8	FM-2-21-0	5E451

15. SAFETY HAZARD	16. LOCATION (Compartment / Deck / Frame / Side)	17. WHEN DISCOVERED DATE YR DAY
☐	2-20-0-E	6 2 1 5

CONFIGURATION CHANGE	FOR INSURV USE					
18. ALTERATIONS (SHIPALT, ORDALT, Fld Chg. ect.)	19. */**	20. INSURV NUMBER	21. SUFFIX	22. U	23. S	24. R/M

SECTION II. DEFERRAL ACTION

25. MHRS. EXP.	26. DEFER DATE YR DAY	27. MHRS. REM.	28. DEADLINE DATE YR DAY

SECTION III. COMPLETED ACTION

			FOR SELECTED EQUIPMENT ONLY		
29. ACT. TKN.	30. MHRS.	31. COMPLETION DATE YR DAY	32. ACT. MAINT. TIME	33. TI	34. METER READING
3	2	6 2 1 5	2		

SECTION IV. REMARKS / DESCRIPTION

35. REMARKS / DESCRIPTIONS

WHILE PERFORMING PMS, MAINTENANCE PERSON NOTED EXCESSIVE LEAKING FROM VALVE STEM PACKING GLAND ON FIREMAIN CUT-OUT VALVE. XXX SHIPS FORCE TIGHTENED PACKING GLAND NUT IAW TECHNICAL MANUAL AND MONITORED VALVE FOR PROPER OPERATION. LEAK FROM VALVE STEM PACKING GLAND HAS BEEN REPAIRED.

36. CONT. SHEET ☐

37. CSMP SUMMARY
VALVE FM-2-21-0 STEM PACKING GLAND LEAKS EXTERNALLY

38. FIRST CONTACT / MAINT. MAN (Print)	39. RATE	40. SECOND CONTACT / SUPERVISOR (Print)	41. PRI	42. T/A	43. INTEGRATE PRIORITY	SCREENING
GRUBE	ENFN	GROFF, ENC	4	4		

C. DIV. INT.	D. DEPT. INIT.	E. COMMANDING OFFICER'S SIGNATURE	F. TYCOM AUTHORIZATION	44. IUC	45. TYCOM
TFO	DER				

46. SPECIAL PURPOSE	A.	B.	C.	D.	E.	F.	G.	H.	I.	J.	K.	L.

SECTION V. SUPPLEMENTARY INFORMATION

47. BLUEPRINTS, TECH. MANUALS, PLANS, ECT.	AVAILABLE ON BOARD YES	AVAILABLE ON BOARD NO	48. PREARRIVAL / ARRIVAL CONFERENC ACTION / REMARKS
0947-215-9010	☒	☐	
	☐	☐	
	☐	☐	
	☐	☐	

SECTION VI. REPAIR ACTIVITY PLANNING / ACTION

49. REPAIR W/C	50. EST. MHRS.	51. ASST. REPAIR W/C	52. ASST. EST. MHRS	53. SCHED. START DATE YR DAY	54. SCHED. COMP. DATE YR DAY

55. REPAIR ACTIVITY UIC	56. WORK REQ. ROUTINE	57. EST. MANDAYS	58. EST. MANDAY COST $	59. EST. MATERIAL COST $

60. EST. TOTAL COST $	61. JOB ORDER NUMBER	62. LEAD P&E CODE	63. DATE OF EST. YR DAY	

64. FINAL ACT.	65. MHRS EXPENDED	66. DATE COMPLETED YR DAY	G. COMPLETED BY (Signature – Rate)	H. ACCEPTED BY (Signature – Rate/Rank)	PAGE 1 OF 1

Figure 3 Maintenance Action Form for Add-on Remarks to a Previously Submitted Deferred Maintenance Action

OPNAV 4790/2K (REV 5-17)

Clear Form

MAINTENANCE ACTION FORM (2-KILO) ☐ COMP ☐ DEFL ☒ CORRECTION ☐ ADD-ON REMARKS

SECTION I. IDENTIFICATION

JOB CONTROL NUMBER			
1. UIC: 21455	2. WORK CENTER: OI01	3. JOB. SEQ NO.: 0589	4. APL/AEL

A. COMMAND NAME	5. EQUIPMENT NOUN NAME	6.WND	7.STA	8. CAS	9.DFR	10.	11.	12.
					2			

B. HULL NUMBER (*IF APPLICABLE*)	13. INDENT / EQUIPMENT SERIAL NUMBER	14. EIC

15. SAFETY HAZARD ☐	16. LOCATION (Compartment / Deck / Frame / Side)	17. WHEN DISCOVERED DATE YR DAY

CONFIGURATION CHANGE		FOR INSURV USE				
18. ALTERATIONS (SHIPALT, ORDALT, Fld Chg. ect.)	19. */**	20. INSURV NUMBER	21. SUFFIX	22. U	23. S	24. R/M

SECTION II. DEFERRAL ACTION

25. MHRS. EXP.	26. DEFER DATE YR DAY	27. MHRS. REM.	28. DEADLINE DATE YR DAY

SECTION III. COMPLETED ACTION

			FOR SELECTED EQUIPMENT ONLY		
29. ACT. TKN.	30. MHRS.	31. COMPLETION DATE YR DAY	32. ACT. MAINT. TIME	33. TI	34. METER READING

SECTION IV. REMARKS / DESCRIPTION

35. REMARKS / DESCRIPTIONS

WHILE PERFORMING PMS, MAINTENANCE PERSON NOTED EXCESSIVE LEAKING FROM VALVE STEM PACKING GLAND ON FIREMAIN SUPPLY VALVE. DUE TO DESIGN, VALVE STEM PACKING GLAND IS NOT ADJUSTABLE / REPAIRABLE. XXX SHIPS FORCE WILL ORDER REPLACEMENT VALVE FROM SUPPLY AND REPLACE AT SOONEST OPPORTUNITY UPON RECEIPT OF NEW VALVE.

36. CONT. SHEET ☐

37. CSMP SUMMARY

38. FIRST CONTACT / MAINT. MAN (Print)	39. RATE	40. SECOND CONTACT / SUPERVISOR (Print)	41. PRI	42. T/A	43. INTEGRATE PRIORITY	SCREENING

C. DIV. INT.	D. DEPT. INIT.	E. COMMANDING OFFICER'S SIGNATURE	F. TYCOM AUTHORIZATION	44. IUC	45. TYCOM

46. SPECIAL PURPOSE	A.	B.	C.	D.	E.	F.	G.	H.	I.	J.	K.	L.

SECTION V. SUPPLEMENTARY INFORMATION

47. BLUEPRINTS, TECH. MANUALS, PLANS, ECT.	AVAILABLE ON BOARD YES	NO	48. PREARRIVAL / ARRIVAL CONFERENC ACTION / REMARKS
	☐	☐	
	☐	☐	
	☐	☐	

SECTION VI. REPAIR ACTIVITY PLANNING / ACTION

49. REPAIR W/C	50. EST. MHRS.	51. ASST. REPAIR W/C	52. ASST. EST. MHRS	53. SCHED. START DATE YR DAY	54. SCHED. COMP. DATE YR DAY

55. REPAIR ACTIVITY UIC	56. WORK REQ. ROUTINE	57. EST. MANDAYS	58. EST. MANDAY COST $	59. EST. MATERIAL COST $

60. EST. TOTAL COST $	61. JOB ORDER NUMBER	62. LEAD P&E CODE	63. DATE OF EST. YR DAY	

64. FINAL ACT.	65. MHRS EXPENDED	66. DATE COMPLETED YR DAY	G. COMPLETED BY (Signature – Rate)	H. ACCEPTED BY (Signature – Rate/Rank)	PAGE 1 OF 1

Figure 4 Maintenance Action Form for Add-on Remarks to a Previously Submitted Deferred Maintenance Action

OPNAV 4790/2K (REV 5-17)

Clear Form

MAINTENANCE ACTION FORM (2-KILO) ☐ COMP ☒ DEFL ☐ CORRECTION ☒ ADD-ON REMARKS

SECTION I. IDENTIFICATION

JOB CONTROL NUMBER			
1. UIC: 21455	2. WORK CENTER: OI01	3. JOB. SEQ NO.: 0589	4. APL/AEL

A. COMMAND NAME	5. EQUIPMENT NOUN NAME	6.WND	7.STA	8. CAS	9.DFR	10.	11.	12.
B. HULL NUMBER (*IF APPLICABLE*)	13. INDENT / EQUIPMENT SERIAL NUMBER	14. EIC						

15. SAFETY HAZARD ☐	16. LOCATION (Compartment / Deck / Frame / Side)	17. WHEN DISCOVERED DATE YR DAY

CONFIGURATION CHANGE	FOR INSURV USE					
18. ALTERATIONS (SHIPALT, ORDALT, Fld Chg. ect.)	19. */**	20. INSURV NUMBER	21. SUFFIX	22. U	23. S	24. R/M

SECTION II. DEFERRAL ACTION

25. MHRS. EXP.	26. DEFER DATE YR DAY	27. MHRS. REM.	28. DEADLINE DATE YR DAY

SECTION III. COMPLETED ACTION

			FOR SELECTED EQUIPMENT ONLY		
29. ACT. TKN.	30. MHRS.	31. COMPLETION DATE YR DAY	32. ACT. MAINT. TIME	33. TI	34. METER READING

SECTION IV. REMARKS / DESCRIPTION

35. REMARKS / DESCRIPTIONS

CSP - THIS IS THE FIFTH (5) FAILURE OF THIS TYPE OF VALVE ON THE MCM CLASS IN 60 DAYS. THIS APL / ESWBS WILL BE FLAGGED AS A "TROUBLED SYSTEM" FOR MATERIEL TRACKING PURPOSES.

36. CONT. SHEET ☐

37. CSMP SUMMARY

38. FIRST CONTACT / MAINT. MAN (Print)	39. RATE	40. SECOND CONTACT / SUPERVISOR (Print)	41. PRI	42. T/A	43. INTEGRATE PRIORITY	SCREENING

C. DIV. INT.	D. DEPT. INIT.	E. COMMANDING OFFICER'S SIGNATURE	F. TYCOM AUTHORIZATION	44. IUC	45. TYCOM

46. SPECIAL PURPOSE	A.	B.	C.	D.	E.	F.	G.	H.	I.	J.	K.	L.

SECTION V. SUPPLEMENTARY INFORMATION

47. BLUEPRINTS, TECH. MANUALS, PLANS, ECT.	AVAILABLE ON BOARD YES ☐	AVAILABLE ON BOARD NO ☐	48. PREARRIVAL / ARRIVAL CONFERENC ACTION / REMARKS
	☐	☐	
	☐	☐	
	☐	☐	

SECTION VI. REPAIR ACTIVITY PLANNING / ACTION

49. REPAIR W/C	50. EST. MHRS.	51. ASST. REPAIR W/C	52. ASST. EST. MHRS	53. SCHED. START DATE YR DAY	54. SCHED. COMP. DATE YR DAY

55. REPAIR ACTIVITY UIC	56. WORK REQ. ROUTINE	57. EST. MANDAYS	58. EST. MANDAY COST $	59. EST. MATERIAL COST $

60. EST. TOTAL COST $	61. JOB ORDER NUMBER	62. LEAD P&E CODE	63. DATE OF EST. YR DAY	

64. FINAL ACT.	65. MHRS EXPENDED	66. DATE COMPLETED YR DAY	G. COMPLETED BY (Signature – Rate)	H. ACCEPTED BY (Signature – Rate/Rank)	PAGE 1 OF 1

APPENDIX E

PREPARATION INSTRUCTIONS SUPPLEMENTAL FORM

(OPNAV 4790/2L)

1. SUPPLEMENTAL FORM (OPNAV 4790/2L).

   a. This form is used to provide amplifying information (such as drawings and listings) related to a maintenance action, reported on an OPNAV 4790/2K (2L) form. The 2L may be used to list multiple item serial numbers and locations for which identical maintenance requirements exist from an outside activity; or to provide a list of drawings and sketches that would be helpful in the accomplishment of the maintenance.

   b. The OPNAV 4790/2L (2L) form is retained with the suspense copy of the corresponding 2K form that deferred the maintenance action. The 2L is never submitted to the ADP facility servicing the activity, as the data on the 2L will never be entered into the computer. However, the 2L can be attached to the original 2K or computer produced (simulated) 2K when submitted to an assisting activity.

2. SPECIAL APPLICATION.

   a. If a MJC routine has been added to the CSMP for service routines or for IMA manufacturing of sheet metal enclosures, structures or flex hoses, multiple OPNAV 4790/2Ls may be used for the same JCN. Each 2L would result in an additional task being added to the JCN, thus accounting for man-hour expenditure for each task. Similarly, the 2L could be used to request critical hose manufacturing by referencing the MJC number and using the activity's own JCN, thus precluding the necessity to submit multiple complete OPNAV 4790/2Ks.

   b. The form is separated into three sections:

      (1) SECTION I "IDENTIFICATION"

      (2) SECTION II "REMARKS/SKETCHES"

      (3) SECTION III "AUTHENTICATION"

NOTE: WHEN USING THE 2L, ALL SECTIONS OF THE FORM ARE TO BE FILLED OUT. ON THE OPNAV 4790/2K FORM, BE SURE TO ENTER THE NOTATION "2L USED" IN THE "REMARKS/DESCRIPTION" SECTION, BLOCK 35.

NOTE: FIGURES 1 AND 2 PROVIDE AN EXAMPLE OF COMPLETED OPNAV 4790/2L FORMS.

Figure 1 Supplemental Form Containing an Equipment Listing.

Figure 2 Supplemental Form Containing a Sketch or Drawing.