

CONTRACT C WORKSHEET

NSN 6650013022647 NOMENCLATURE PERISCOPE, SUBASSY

ENGINEERING EXCEPTIONS: The following engineering changes apply to this procurement action(s):

LEVEL (A) PACKAGING SHALL BE IN ACCORDANCE WITH METHOD (41) OF MIL-STD-2073-1 UNLESS OTHERWISE SPECIFIED IN THE SOLICITATION. DETAILED SPECIAL PACKAGING INSTRUCTION MAY APPLY.

DOCUMENT	DELETE	REPLACE
12352466	MS16995 & MS16996	NASM 16995 & NASM 16996
12358136	MS33558	MIL-STD-130
12266591	MS9021	AMS 7274
12266673	MS20426	NASM 20426
12266626, 12352466	MIL-G-46886	A-A-59173
12266672	MIL-P-13949	IPC-4101
1226626, 12266670 1226671, 12277883	MIL-STD-2000	"SOLDER IN ACCORDANCE WITH BEST COMMERCIAL PRACTICE TO ENSURE COMPLIANCE WITH DWG OR SPECIFICATION REQUIREMENTS AS APPLICABLE"
12266674, 12277701 12277710	MIL-T-10727	ASTM B545
12277771	PPP-P-420	DELETE "PER PPP-P-420" FROM DWG
12277772	QQ-A-200	ASTM B308
12266554, 12266576	QQ-A-225	ASTM B211
12266601, 12266614		
12266770, 12266795		
12277712, 12277771		
12277780		
12266654, 12266795	QQ-A-225/6	ASTM B211
12277701, 12277710	QQ-B-626	ASTM B16
12266555, 12266580	QQ-P-35	ASTM A967
12266581, 12266596		
12266660, 12266604		
12266605, 12266642		
12266645, 12266646		
12266647, 12266649		
12266651, 12266650		
12266792, 12277700		
12277704, 12277712		
12277719, 12277759		
12352414		
12266605, 12266650	QQ-S-766	ASTM A240
12266574, 12266626 12266670, 12266671 12277883	MIL-HDBK-454	"SOLDER IN ACCORDANCE WITH BEST COMMERCIAL PRACTICE TO ENSURE COMPLIANCE WITH DWG OR SPECIFI-

CATION REQUIREMENT AS APPLICABLE."

12277722,12266765  
7680606,12266626  
12352466,12266591  
12266626,12298832  
12266537,12266552  
12266553,12266554  
12266555,12266569  
12266570,12266571  
12266572,12266576  
12266577,12266578  
12266579,12266580  
12266581,12266585  
12266592,12266593  
12266594,12266595  
12266596,12266601  
12266605,12266614  
12266615,12266642  
12266645,12266646  
12266670,12266671  
12266672,12266673  
12266674,12266770  
12266789,12266791  
12266792,12266793  
12266794,12266795  
12266796,12266797  
12277701,12277702  
12277703,12277704  
12277710,12277712  
12277719,12277721  
12277759,12277771  
12277772,12277882  
12298833,12298834  
12311494,12311495  
12311671,12352414  
12358136,7641866

"OZONE DEPLETING CHEMICALS SHOULD NOT BE USED. NON-ODC COMMERCIALY AVAILABLE CLEANERS RECOMMENDED BY THE BONDING OR COATING MANUFACTURER SHALL BE USED TO MEET THE CLEAN SURFACE REQUIREMENT."

DOCUMENT	DELETE	REPLACE WITH
QAR 12266537	AQLS	MIL-STD-1916 VL IV for MAJOR & VL II for MINOR characteristics
QAR 12266554	"	"
QAR 12266555	"	"
QAR 12266570	"	"
QAR 12266574	"	"
QAR 12266578	"	"
QAR 12266580	"	"
QAR 12266591	"	"
QAR 12266592	"	"
QAR 12266593	"	"
QAR 12266596	"	"
QAR 12266601	"	"
QAR 12266614	"	"
QAR 12266626	"	"
QAR 12266642	"	"
QAR 12266670	"	"
QAR 12266671	"	"

QAR 12266791	"	"
QAR 12266795	"	"
QAR 12277771	"	"
QAR 12277772	"	"
QAR 12298833	"	"
QAR 12352466	"	"

On all the above QARS add MIL-F-13926 to Pg. 1, PART I under SPECS.

For QAR 12266537 Pg. 4 for MINORS 203, 204, 207 & 210 change as follows:

FROM: 203 .190-32UNF-2B THD THRU	1	F5	SME
TO: 203 .190-32UNF-2B THD THRU	1	F5	
PITCH DIAMETER			SMTE
MINOR DIAMETER			SMTE
FROM: 204 .164-32UNC-2B THD BLIND	2	D6	SME
(2) PLACES			
TO: 204 .164-32UNC-2B THD BLIND			
(2) PLACES			
PITCH DIAMETER			SMTE
MINOR DIAMETER			SMTE
FROM: 209 .216-2BUNF-2B THD BLIND	I	H4	SME
(10) PLACES			
TO: 209 .216-20UNF-2B THD BLIND	I	H4	
(10) PLACES			
PITCH DIAMETER			SMTE
MINOR DIAMETER			SMTE
FROM: 210 .138-12UNC-2B THD BLIND	2	C5	SME
(10) PLACES			
TO: 210 .138-12UNC-2B THD BLIND	2	C5	
(10) PLACES			
PITCH DIAMETER			SMTE
MINOR DIAMETER			SMTE

Pg. 7 under PART III-CERTIFICATION REQUIREMENTS delete (REFERENCE STA FORM 4452) and add: The certification provisions of MIL-F-13926 for Certification of Conformance (COC) shall apply for the following:

On the following QARS the WORKMANSHIP characteristic should be reinstated or added as a MINOR characteristic: 12256554, 12266555, 12266570, 12266571, 12266578, 12266580, 12266591, 12266592, 12266593, 12266596, 12266601, 13366614, 12266626, 12266642, 12266791, 12266795, 12277771, 12277772, 12298833, 12266670, 12266671, & 12352466.

For QAR 12266554 Pg. 2, PART II, TABLE I change MINOR 201 as follows:

FROM: 201 .086-56UNC-2B THD	B4	SME
TO: 201 .086-56UNC-2B THD	B4	
PITCH DIAMETER		SMTE
MINOR DIAMETER		SMTE

For QARS 12266555, 12266570, 12266571, 12266578, 12266580, 12266592, 12266593, 12266596, 12266601, 12266614, 12266642, 12266626, 12266670, 12266671, 12266791, 12266795, 12277771, 12277772, 12298833, & 12352466. Delete (REF STA FORM 4452, PARA. 3.5) and add: The certification provisions of MIL-F-13926 for Certification of Conformance (COC) shall apply for the following:

For QAR 12266571 Pg. 2, for MINOR 202 change as follows:

FROM: 202 .164-32UNC-2B THD (2) PLACES	GO THD PLLUG GAGE
TO: 202 .164-32UNC-2B THD (2) PLACES	Not GO THD PLUG GAGE
PITCH DIAMETER	SMTE
MINOR DIAMETER	SMTE

For QAR 12266578 Pg. 2, for MINOR 201 change as follows:

FROM: 201 .112-40UNC-2B THD (3) PLACES	SME
TO: 201 .112-40UNC-2B THD (3) P LACES	
PITCH DIAMETER	SMTE
MINOR DIAMETER	SMTE

For QAR 12266580 Pg. 3, for MINORS 213 & 214 change as follows:

FROM: 213 .750-20UNEF 2A THD	SME
TO: 213 ,750-20UNEF-2A THD	
PITCH DIAMETER	SMTE
MINOR DIAMETER	SMTE
FROM: 214 .138-32UNC-2B THD	SME
TO: 214 .138-32UNC-2B THD	
PITCH DIAMETER	SMTE
PITCH DIAMETER	SMTE

For QAR 12266592 Pg. 3 for MINOR for MINOR 201 a) & b change as follows:

FROM: 201 a) .112-40UNC-2B (6) A HOLES THRU	2	H8	SME
TO: 201 a) .112-40UNC-2B (6) A HOLES THRU	2	H8	
PITCH DIAMETER			SMTE
MINOR DIAMETER			SMTE
FROM: 201 b) .112-40UNC-2B (6) B, C, D HOLES BLIND	2	D8,E8	SME
TO: 201 b) ,112-40UNC-2B (6) B, C, D HOLES BLIND	2	D8,E8	
PITCH DIAMETER			SMTE
MINOR DIAMETER			SMTE

Pg. 3 under PART III-CERTIFICATION REQUIREMENTS delete (REFERENCD STA FORM 4452, PARA 3.5) and add: The certification provisions of MIL-F-13926 for Certification of Conformance (COC) shall apply for the following:

For QAR 12266593 Pg. 3 for MINORS 202 & 203 change as follows:

FROM: 202 .112-40UNC-2B THD (4) PLACES	C5D6	SME
HOLE (C)	D7	
TO: 202 .112-40UNC-2B THD (4) PLACES		
HOLE (C)		
PITCH DIAMETER		SMTE
MINOR DIAMETER		SMTE
FROM: 203 .138-32UNC-2B THD (6) PLACES	C5D6	SME
HOLE (E)	D7	
PITCH DIAMETER		SMTE
MINOR DIAMETER		SMTE

Pg. 5 under PART III-CERTIFICATION REQUIREMENTS delete (REF STA FORM 4452, PARA. 3.5) and add: The certification provisions of MIL-F-13926 for Certification of Conformance (COC) shall apply for the following:

For QAR 12266596 Pg. 3 under PART III-Certification REQUIREMENTS delete (REF STA FORM 4452 PARA 3.5) and add: The certification provisions of Mil-F-13926 for Certification of Conformance (COC) shall apply for the following.

For QAR 12266601 Pg. 2 for MINOR 204 change as follows:

FROM: 204 .112-40UNC-2B THD	SME
TO: 204 .112-40UNC-2B-THD	
PITCH DIAMETER	SMTE
MINOR DIAMETER	SMTE

Pg. 4 Under PART III-CERTIFICATION REQUIREMENTS delete (REF STA FORM 4452 PARA. 3.5) and add: THE certification provisions of MIL-F-13926 shall apply for the following:

For QAR 12266614 Pg. 4 under PART III-CERTIFICATION REQUIREMENTS delete (REF STA FORM 4452 PARA 3.5) and add: The certification provisions of MIL-W-13926 for Certification of Conformance (COC) shall apply for the following:

For QAR 12266626 Pg. 5 under PART II, TABLE ii change 314 as follows:

FROM: 313 SOLDERING MIL-STD-454	1,2	VISUAL
TO: 313 SOLDERING STATEMENT BELOW	1,2	VISUAL

For QAR 12266642Pg. 3, under PART III-CERTIFICATION REQUIREMENTS delete (REF STA FORM 4452, PARA. 3.5) and add: THE certification provisions of MIL-F-13926 for Certification of Conformance (COC) shall apply for the following:

For QAR 12266671 Pg. 3 under PART II, TABLE II for characteristic NO 302 change as follows:

FROM: 302 SOLDERING (MIL-STD-454)	VISUAL
TO: 302 SOLDERING STATEMENT BELOW	VISUAL

For QAR 12277771 Pg. 3 under PART III-CERTIFICATION REQUIREMENTS delete (REFERENCE STA FORM 4452, PARA 3.5) and add: THE certification provisions of MIL-F-13926 for Certification of Conformance (COC) shall apply for the following.

For QARS 12277772, and 12229833 changes are the same as QAR 12277771.

For QAR 12352466 Pg. 5 PART II, TABLE III for PARA. 3 delete MIL-STD-454 REQ. 5 and substitute soldering statement.

For characteristic NO 314 change as follows"

FROM: 314 SOLDERING (MIL-STD-454	1	A6	VISUAL
	2	B2	
TO: 314 SOLDERING PER SOLDERING	1	A6	VISUAL
STATEMENT BELOW	2	B2	

All soldering and soldering related operations shall be performed in accordance with a detailed soldering process plan to be developed and

maintained by the contractor. The plan shall include the procedures to be used for all soldering and soldering related operations (i.e. hand soldering, tinning, solderability testing or verification, automated soldering, inspection, process controls). Each procedure shall describe the operation in sufficient detail to ensure that the performance requirements for the item being manufactured are met. As a minimum, each procedure shall include the process, tools, equipment, materials and acceptance criteria used for the operation. The soldering process plan shall be made available to the cognizant government technical agency.

In lieu of developing a soldering process plan, the contractor may elect to utilize ANSI/IPC/J-STD-001, Class 3\*, with the cleanliness designator as indicated below:

Flux Type in use -----	Cleanliness Designator** -----
Low Residue/No Clean Flux	C02
Rosin Based Flux	C22
Water Soluble Flux	C22

**\*Class 3 High Performance Electronic Products**

Includes equipment for commercial and military products where continued performance or performance-on-demand is critical. Equipment downtime cannot be tolerated, end-item use may be uncommonly harsh, and the equipment must function when required, such as life support systems and critical weapons systems.

\*\*ANSI/IPC/J-STD-001 Rev A, paragraph 8.3.2 and sub-paragraphs.

DN 1

DOCUMENT	DELETE	REPLACE WITH
QS 12352466	MS16995-18B	MS 16995-18B PER NASM 16995
	MS16995-17B	MS 16995-17B PER NASM 16995
	MS16995-26	MS 16995-26 PER NASM 16995
	MS16996-11B	MS 16995 11B PER NASM 16996

GFM/GFE: DRAWING NO.

MYLARS REQUIRED (Check one): X Y or N

APPENDIX I

GOVERNMENT-DESIGNED ACCEPTANCE INSPECTION EQUIPMENT

AVAILABLE EQUIPMENT				Estimated Weight <u>5 lb</u>			
<u>QTY</u>	<u>DRAWING NUMBER</u>	<u>REV</u>	<u>COST</u>	<u>QTY</u>	<u>DRAWING NUMBER</u>	<u>REV</u>	<u>COST</u>
		<u>SYM</u>	<u>EACH</u>			<u>SYM</u>	<u>EACH</u>
1	7641866	N	\$2000.00				

Attachment 002

## DOCUMENT SUMMARY LIST

Item: HOUSING ASSY, M901/M981 ITV/FISTV  
 NSN: 6650-01-302-2647  
 Control Number/PRON: P30LCYX3

Identifies all first tier documents (cited in SOW) (applicable DIDs). Also included are all referenced documents (2nd, (includes DID block 10 references), 3<sup>rd</sup> and lower tier) which have been tailored.

### DOCUMENT CATEGORY:

**CATEGORY 0** - Unless otherwise specified in the solicitation, contract, or contract modifications, all documents are for guidance and information only.

**CATEGORY 1** - The requirements contained in the directly cited document are contractually applicable to the extent specified. All referenced documents are for guidance and information only.

**CATEGORY 2** - The requirements contained in the directly cited document and the reference documents identified in the directly cited document are contractually applicable to the extent specified. All subsequently referenced documents are for guidance and information only.

**CATEGORY 3** - Unless otherwise specified in the solicitation, contract or contract modification, all requirements contained in the directly cited document and all reference and subsequently referenced documents are contractually applicable to the extent specified.

Document Number (Contract Reference) Applicable Tailoring	Document Title	Document Date/ Document Category
1a. MIL-STD-2549 Table DIP4-1	Configuration Management Data Interface	30 Jun 97 Cat 2
1b. DI-CMAN-81554 (seq A001)	Configuration Change Control Data Information Packet	30 Jun 97 Cat 2
2. ANSI/ISO/ASQC Q9002 or equivalent	Model for Quality Assurance in Production, Installation & Servicing	18 Jul 94
3a. NCSL Z540-1 (ES7010)	General Requirements for Calibration Laboratories and Measuring and Test Equipment OR	30 Aug 1994
ISO 10012-1 (ES7010)	Quality Assurance Requirements for Measuring Equipment, Part 1: Metrological Confirmation System	1992
3b. DI-QCIC-81006 (DD Form 1423)	Special Inspection Equipment Description Documentation	11 Sep 89 Cat 2

CONTRACT DATA REQUIREMENTS LIST

CATEGORY: MISC SYSTEM/ITEM: M901/M981 ITV/FISTV  
 TO CONTRACT/PR: P30LCYX3

- |                            |                                   |                          |
|----------------------------|-----------------------------------|--------------------------|
| 1. SEQUENCE NUMBER         | 14. DISTRIBUTION                  | DRFT/REG/REPRO<br>COPIES |
| 2. TITLE OF DATA ITEM      |                                   |                          |
| 3. SUBTITLE                |                                   |                          |
| 4. DATA ITEM NUMBER        |                                   |                          |
| 5. CONTRACT REFERENCE      |                                   |                          |
| 6. TECHNICAL OFFICE        | 7. DD 8. APP 9. DIST STATEMENT    |                          |
|                            | 250 CODE REQUIRED                 |                          |
| 10. FREQUENCY              | 11. AS OF DATE                    |                          |
| 12. DATE OF 1ST SUBMISSION | 13. DATE OF SUBSEQUENT SUBMISSION |                          |

- |                                  |                               |                   |
|----------------------------------|-------------------------------|-------------------|
| 1. A001                          | 14. AMSTA-AR-CCL-F<br>(ECALS) | / /<br>/ /        |
| 2. CONFIGURATION CHANGE CONTROL* |                               |                   |
| 3. ENGINEERING ACTIONS           |                               |                   |
| 4. DI-CMAN-81554                 |                               |                   |
| 5. SECTION C                     |                               |                   |
| 6. AMSTA-AR-CCL-F                | 7. NO 8. 9. **                |                   |
| 10. ASREQ                        | 11. --                        | 15. TOTAL 0/ 0/ 0 |
| 12. ASREQ                        | 13. ASREQ                     |                   |

16. REMARKS

PREPARE ENGINEERING ACTIONS IAW DI-CMAN-81554 AND SUBMIT ELECTRONICALLY VIA ECALS WORLDWIDE WEB PAGE HTTP://EDMD4.PICA.ARMY.MIL/.  
 \*DATA INFORMATION PACKET \*\*DISTRIBUTION STATEMENT WILL BE ASSIGNED AND IMPLEMENTED BY THE DOD CONFIGURATION MANAGER.  
 THE POC FOR ECALS IS LEE SADAUSKAS, AMSTA-AR-QAW, (973) 724-6626, EMAIL LEES@PICA.ARMY.MIL.

- |  |  |                                   |
|--|--|-----------------------------------|
| 1. A002                                  | 14. AMSTA-AR-QAA (1)<br>QAR<br>CO (LT ONLY)<br>AMSTA-AR-QAW-C (R)<br>(LT ONLY) (2) | / 1/<br>/ 1/<br>/ /<br>/ /<br>/ / |
| 2. SPECIAL INSPECTION EQUIP. DESCRIPTIVE |  |                                   |
| 3. DOC. AIE DESIGN DOCUMENTAT            |  |                                   |
| 4. DI-QCIC-81006*                        |  |                                   |
| 5. SECTION E                             |  |                                   |
| 6. AMSTA-AR-QA                           | 7. XX 8. A 9. N/A  |                                   |
| 10. ONE/R                                | 11.  | 15. TOTAL 0/ 2/ 0                 |
| 12. **                                   | 13. WHEN REVISED   |                                   |

16. REMARKS

Exhibit A

\*DO NOT ADDRESS PARAS 10.1, 10.2, 10.4.1(F) AND 10.4.2. IGNORE ALL REFERENCE TO THE WORD "SPECIAL" IN DID. SUBMIT FOR ALL CRITICAL, SPECIAL AND MAJOR CHARACTERISTICS IN SPECIFICATION OR QAP. \*\*SUBMIT 30 DAYS PRIOR TO FA, OR PRODUCTION, IF FA IS WAIVED. THE GOVT WILL RESPOND WITHIN 30 DAYS OF RECEIPT OF ORIGINALS AND REVISIONS. REVISIONS ARE TO BE SUBMITTED WITHIN 10 DAYS OF RECEIPT OF GOVT RESPONSE. IF DOCUMENTATION WAS APPROVED ON PRIOR CONTRACT AND NO CHANGES WERE MADE, SUBMIT ONLY EVIDENCE OF PRIOR APPROVALS.  
EMAIL: (1) AIE-QAA@PICA.ARMY.MIL (2) AMSTA-AR-QA-CDRL@RIA.ARMY.MIL  
TEXT: MICROSOFT OFFICE 97  
DRAWINGS: AUTOCAD-RELEASE 14 (EXPRESSED MAIL HARD COPIES WILL BE ACCEPTED)  
FILES MAY BE COMPRESSED USING ZIP PROGRAM.  
WARNING: LARGE PKGS MAY CAUSE DELAYS IN DELIVERY USING MAIL INTERNET.  
EMAIL SUBJECT LINE MUST CONTAIN END ITEM NOMENCLATURE.

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APPROVED BY: SHELLEY SCHABILION, SDMO, AMSTA-AR-QAD

DATE: 10/13/2000