References:

- a) National Security Telecommunications and Information Systems Security Advisory Memorandum (NSTISSAM) TEMPEST/2-95A, C3 DOD NSA, 3 Feb. 2000.
 - Section 3, Recommendation I, Installing NSTISSAM TEMPEST/I-92 (Level III), Zone C or all other Red equipment in a TEMPEST Zone C Facility, Page 27.
 - 2. Section 4, Guidance For Tempest Integrity, Page 29
 - 3. Section 5, Secure Voice Systems, Page 43
 - 4. Section 9, Ships, Page 53.
- b) IA Pub 5239-31
- c) Department of the Navy (DON) Information Security Program (ISP) Regulation, SECNAVINST 5510.36
- d) Installation Standards, Electrometric Interface, MIL-STD-1310G, 7 Sept. 2001.
- e) Automated Information System (AIS) Security Manual, COMDTINST M5500.13A, 7 Sept. 2001
- f) Communications Security Material System (U), CMS-4, 7 Sept. 2001
- g) Policy and Procedures (U), Cryptographic Security, 7 Sept. 2001.
- h) Industrial Manual for Safeguarding Classified Information, DOD 5220.22-M, 7 Sept. 2001.
- i) Implementation Manual for Physical Security Standards for Sensitive Compartments Information Facilities, DCID 1/21.

TEMPEST Policy:

The official reference (a) policy is; "The RED/BLACK guidance contained in this document will be considered by the inspector along with other measures to determine the most cost-effective countermeasures to achieve TEMPEST security. Only those RED/BLACK criteria specifically identified by the inspector will be implemented."

TEMPEST Posture:

This author is unfamiliar with the teachings of today's TEMPEST inspector, however when MIL-STD-1680C, predecessor to reference (a), was the guiding document the need to resolve a discrepancy was based on the following credo, "When a situation arises that classified information can be disseminated/compromise due to a TEMPEST discrepancy, the discrepancy shall be repaired to the point that is financially feasible to prevent the dissemination/compromise. All remaining discrepancies shall be adjudicated by the governing authority". In this case, the governing authority would be the United States Coast Guard (USCG).

Assumptions:

- None of the equipment racks have been through a TEMPEST inspection process.
- There is no Sensitive Compartment (SC) space nor is there an obligation to meet the requirements of a future SC space.

- In accordance with reference (a2), Recommendation I, Installing NSTISSAM TEMPEST /1-92 (Level III) ,Zone C or all other RED equipment in a TEMPEST Zone C Facility will be used as the guiding requirements.
- The Identification Friend-Foe (IFF) circuit is to be treated as BLACK. This is a standard TEMPEST practice and is being mentioned for clarification.
- A CTTA ruling on how to treat the Sea Fiber Linked Infrared (Sea FLIR) Circuit is pending. Due to time constraints, for the purpose of this report the circuit shall be considered BLACK.
- The distance from the ARC-210 RF Tray (LC031524), Bridge ISDN Phone (LC030119) and the LAN Drop associated with cable W6029 to the Bridge Console is not 300 cm., but it is at a distance that meets the intent of the obligation.

How to Read the Table:

Issue #: REQ = Summary of the requirement. A number is a unique numerical identifier for tracking the discrepancy.

VTTI Issue #: This is a comprehensive report. It defines all of the TEMPEST issues. There is a correlation between the given amount of inspection time and the number of violations identified. Eventually, follow-on inspections will identify all of the issues. This column is to help the reader associate the master list with the latest VTTI list.

Repair Complexity: The level of difficult based on the author's experience, to make corrections at this point in the products development.

| • | Hard | an impact to the schedule and/or cost budgets will be incurred. Recommend resolution post sell off. |
|---|---------|---|
| • | Medium | an impact to the schedule and/or cost budgets will be incurred if no support is committed immediately. Recommended resolution between Builders Trial (BT) and sell off. |
| • | Easy | an impact to the schedule and/or cost budgets will be incurred, but the correction is achievable and simplistic in scope that the repair can be made prior to deadline. Recommend immediate resolution. |
| • | Contest | no impact to schedule and/or cost budgets will be incurred. We believe that we have a response that addresses the requirement without any work effort. |

Requirement: The paragraph number either in the DITSCAP (8510.1-M), NSTISSAM TEMPEST 2/95, SECNAVINST 5510.36 or MIL-STD-1310

TEMPEST Criticality: A scalable measure of the severity of the violation based on the authors experience.

- Red (1); Issue will be expected to be corrected prior to custody transfer.
- Orange (2); Issue should be corrected prior to custody transfer. It will be up to the USCG if they will be willing to accept this as a known problem.
- Yellow (3); It will be up to the inspector if he/she will make this an issue that must be corrected.
- Green (4); It is a common issue and should be repaired; however the inspector (if in a good mood) may overlook the issue.
- Blue (5); A requirement in reference (a) that we could get cited for, but most likely the inspector will only make a verbal comment without a written violation.
- Grey (6); A requirement that is virtually impossible to meet given the environment. It is this author's opinion that some of the reference (a) criteria can only be met if invoked on a capital vessel.

Action: From a programmatic perspective, which activity should get the action to make corrections?

- BSI: Bollinger Shipbuilding
- MS2: Lockheed Martine Maritime Systems and Sensors
 - o SI: Ship Integration IPT
 - o Comm: Communications IPT
 - o Net: Networks/Infrastructure IPT
 - o C2: C2/Sensors/NAV

In order to reduce the level of effort in understanding the requirements of the references, this author will use paraphrase the requirement in order to convey the issue. In addition, this author will only address the issues that should be identified by the Certified TEMPEST Technical Authority (CTTA). There is no assurance as to what the VTTI or the CTTA may consider a priority.

| Issue # | VTTI Issue # | Repair Complex ity | Issue | Location | Requirement | TEMPEST Criticality | Action To | Recommended Action |
|---------|-----------------|--------------------------|---|-----------------------|---|------------------------|---------------------------|---|
| REQ. | | , | There shall be a 300cm separation between Red Processors and RF Transmitters. | | Ref (a1), Para 6 Ref. b Para A.1.1.1.b | | | |
| 1. | 1/2/16 | HARD | All Non-TEMPEST qualified hardware hosted within Electronic Cabinets #1,#2 & #3 violates this requirement due to their proximity to the SSR Model 211 PC-RP in Cabinet #2 and the RT-1794(C)/ARC-210 transceiver in Cabinet #3. | TEMPEST | | 1 | Net Mech SI | Wait for results of instrument test and CTTA authorization. Relocate RT-1794(C) to the bridge hosted in a locked structure. Relocate the PCRP to the Bridge. Request waiver. |
| REQ. | | | There shall be a 100 cm. separation between RED processors and Black processing equipment having a nonmetallic enclosure with signal lines connected to an RF transmitter. | | Ref (a1), Para 2a Ref b, Para A.1.1.1.a.3 | | | |
| 2. | 20 | EASY | The RED LAN Drops associated with cables W6031-33 are mounted next to the BLACK LAN Drops associated with W6067 & W6068. | TEMPEST | | 1 | Net Mech SI | 1. Change LAN Drop housing to a SYM 406.1 with a metallic face plate and ground the unit. Separate units by 20 cm. 2. Request waiver. |
| 3. | 29 | EASY | The RED LAN Drops associated with cables W6028 is mounted next to the BLACK LAN Drops associated with W6070. | Co Cabin | | 1 | Net Mech SI | 1. Change LAN Drop housing to a SYM 406.1 with a metallic face plate and ground the unit. Separate units by 20 cm. 2. Request waiver. |
| 4. | 21/22 | MED | The following hardware violates this requirement due to their proximity to the UHF/VHF Digital Wireless Spectra W9, HF Guard Rcv SR501, WEFAX Rcv FAX-207, Transceiver (LC 032501), DF Processor 4400, Radar Display 1933/RDP139/NT, Faxphone Switch TT-3617A, TT-334B, VHF Marine Radios DCS500Pro-M: LC 060482 LC 060472 LC 060497 LC 060497 LC 060487 | Bridge Console | | 2 | Net Comm Mech SI | 1. Wait for results of instrument test and CTTA authorization. 2. Shield all RED processing equipment either with Stainless Steel grounded insert, steel/aluminum cup or MU-Metal. 3. Request waiver. |
| 5. | 23 | MED | The MES Cellular Wireless Telephone, LC031401, is collocated with the RED LAN Drop associated with cable W6029. | Bridge | | 1 | Comm Mech Net | Relocate LAN Drop. Request waiver. |
| REQ. | | | There shall be a 100 cm. separation between RED Processors and unshielded Black signal lines connected to an RF transmitter. | | Ref (a1), Para 2a Ref b, Para .a.1 | | | |
| 6. | 15 | HARD | The following hardware violates this requirement due to their proximity to the SSR Model 211 PC-RP: CC060481 (A8) | TEMPEST Cabinet #2 | | 1 | Sensor SI | Wait for results of instrument test and CTTA authorization. Relocate the PCRP to the |

| | | | LC060471 (A5) LC060415 (A10) LC060503 (A9) LC030520 (A14) LC060443 (A6) LC060444 (A2) LC060445 (A11) LC020110 (A1) | | | | | Bridge. 3. Request waiver. |
|------|---|------|---|-----------------------|--|---|-------------------|--|
| 7. | 4 | HARD | The following hardware violates this requirement due to their proximity to the RT-1794(C)/ARC-210 transceiver: LC 060401 (A2) LC 031121 (A8) LC 060422 (A10) LC 031531 (A11) | TEMPEST Cabinet #3 | | 1 | Comm SI | Wait for results of instrument test and CTTA authorization. Relocate RT-1794(C) to the bridge hosted in a locked structure. Request waiver. |
| REQ. | | | There shall be a 100 cm. separation between RED Processors and unshielded Black power lines connected to an RF transmitter. | | Ref (a1), Para 2b Ref b, Para A.1.1.1.a.2 | 1 | | |
| 8. | 3 | HARD | The following hardware violates this requirement due to their proximity to cable LW306: LC 060401 (A2) LC 031121 (A8) LC 060422 (A10) LC 031531 (A11) | TEMPEST Cabinet #3 | | 1 | Mech Net SI | 1. Wait for results of instrument test and CTTA authorization. 2. Relocate RT-1794(C) to the bridge hosted in a locked structure. 3. Request waiver. |
| REQ. | | | RED processing equipment shall not be connected to the same AC distribution panels as RF Transmitters. | | Ref (a1), Para 6 Ref. b, Para A.1.1.2 | | | |
| 9. | 6 | HARD | The following hardware violates this requirement due to because the power source is the same as the SSR Model 211 PC-RP: LC 060481 (A8) LC 060471 (A5) LC 060443 (A6)** LC 060432 (A7)** LC 060444 (A2)** LC 060433 (A3)** LC 020110 (A1)** ** Not applicable if the AC/DC power supply can demonstrate a 100db of data suppression. | TEMPEST Cabinet #2 | | 1 | Sensor SI | Wait for results of instrument test and CTTA authorization. Relocate the PCRP to the Bridge. Request waiver. |
| 10. | 6 | HARD | The required change to install a SP-320-27 power supply for the RT-1794C inadvertently resolved one TEMPEST issue. By sourcing the power from Power Strip 1B has created a violation for the KYV-5. If the AC/DC power supply can demonstrate a 100db of data suppression, then this is not an issue. | TEMPEST Cabinet #3 | | 2 | Comm SI | 1. Wait for results of instrument test and CTTA authorization. 2. Relocate RT-1794(C) to the bridge hosted in a locked structure. 3. Request waiver. |
| REQ. | | | RED metallic wire cables shall be shielded with the exception of desktop computer cables provided by the manufacturer. | | Ref (a2), Para 4.4 Ref (a4), Para 9.2.1.1 | | | |

| | | | | | Ref. b, Para A.1.1.7.1 | | | |
|-----|------|-----|---|---------|---------------------------|---|--------------------|--|
| 11. | 5/26 | MED | ■ The following thru-ship RED metallic cables are not shielded: ○ W1090 ○ W2005 ○ W1006 ○ W1103 ○ W1092 ○ W2023 ○ W1020 ○ W2017 ○ W2025 ○ W3001 ○ W3002 ○ W3003 ○ W3004 ○ W3005 ○ W3006 ○ W3007 ○ W3008 ○ W3009 ○ W3010 ○ W3010 ○ W3014 ○ W3048 ○ W3019 ○ W3044 ○ W3020 ○ W3044 ○ W3020 ○ W3045 ○ W3070 ○ W3047 ○ W3070 ○ W3070 ○ W3070 ○ W3071 ○ W3070 ○ W3071 ○ W3070 ○ W3071 ○ W3 | Various | A.1.1.7.1 | 2 | SI Sensor Net Comm | 1. Wait for results of instrument test and CTTA authorization. 2. Request waiver. 3. Replace cables. |
| | | | o W3086 o W6019 | | | | | |

| | | | | 1 | | 1 | | |
|-----|---|-----|---|------------|---|---|------|-----------------------------------|
| | | | o W6020 | | | | | |
| | | | o W6021 | | | | | |
| | | | o W6022 | | | | | |
| | | | o W6023 | | | | | |
| | | | o W6024 | | | | | |
| | | | o W6025 | | | | | |
| | | | o W6057 | | | | | |
| | | | o W6027 | | | | | |
| | | | o W6028 | | | | | |
| | | | o W6029 | | | | | |
| | | | o W6030 | | | | | |
| | | | o W6031 | | | | | |
| | | | o W6032 | | | | | |
| | | | o W6033 | | | | | |
| | | | o W6036 | | | | | |
| | | | o W6036a | | | | | |
| | | | o W6039 | | | | | |
| | | | o W6039a | | | | | |
| | | | o W6140 | | | | | |
| | | | o W6140a | | | | | |
| | | | o W6049 | | | | | |
| | | | o W6142 | | | | | |
| | | | o W6054 | | | | | |
| | | | o W6054a | | | | | |
| | | | o W6051 | | | | | |
| | | | o W6051a | | | | | |
| | | | o W6055 | | | | | |
| | | | o W6082 | | | | | |
| | | | o W6140 | | | | | |
| | | | o W6140a | | | | | |
| | | | o W6132 | | | | | |
| 12. | 5 | MED | • The following RED metallic cables are not shielded: | TEMPEST | | 2 | Mech | 1. Wait for results of instrument |
| | | | o LW142 | Cabinet #1 | | | Net | test and CTTA authorization. |
| | | | o LW130 | | | | SI | 2. Request waiver. |
| | | | o LW131 | | | | | 3. Replace cables. |
| | | | o LW132 | | | | | • |
| | | | o LW133 | | | | | |
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| | | | o LW151## | | | | | |
| | | | o LW152## | | | | | |
| | | | o LW154## | | | | | |
| | | | o LW153## | | | | | |
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| 1. 1. 1. 1. 1. 1. 1. 1. | | | | | | | | 1 |
|--|-----|---|------|---|------------|---|------|-----------------------------------|
| 13. S MED Temperature From shielding if provided by manufacturer. A TEMPEST instrument inspection may waive the requirement for the shielding. LW231## Cabinet #2. Cabinet #2. LW231## Cabinet #2. LW234## Cabinet #3. Cab | | | | o LW150## | | | | |
| Section Sect | | | | o LW145## | | | | |
| ## Items are exempt from shielding if provided by manufacturer. A TEMPEST instrument inspection may waive the requirement for the shielding. 13. | | | | o LW146## | | | | |
| A TEMPEST instrument inspection may waive the requirement for the shielding. | | | | o LW147## | | | | |
| A TEMPEST instrument inspection may waive the requirement for the shielding. | | | | | | | | |
| A TEMPEST instrument inspection may waive the requirement for the shielding. | | | | ## Items are exempt from shielding if provided by manufacturer. | | | | |
| 13. S MED | | | | A TEMPEST instrument inspection may waive the | | | | |
| 13. 5 MED • The following RED metallic cables are not shielded: Cabinet #2 Cabinet #2 2 Mech 1. Wait for results of instrument rest and CTTA authorization. 2. Request waiver. 3. Replace cables. | | | | | | | | |
| Net Net | 13. | 5 | MED | The following RED metallic cables are not shielded: | TEMPEST | 2 | Mech | 1. Wait for results of instrument |
| SI 2. Request waiver. 3. Replace cables. | | | | o LW231## | | | | |
| 1. 1. 1. 1. 1. 1. 1. 1. | | | | | | | | |
| C | | | | | | | | |
| I | | | | | | | | c. c.c.pc. c.messa. |
| 1. W237## | | | | | | | | |
| 1. W239## 0. W240## 0. W240## 0. W241## ## Items are exempt from shielding if provided by manufacturer. A TEMPEST instrument inspection may waive the requirement for the shielding. 14. 5 MED • The following RED metallic cables are not shielded: 0. LW301## 0. LW301## 0. LW311## 0. LW304 0. LW303 0. LW304 0. LW305 0. LW305 0. LW306## 0. LW331** 0. LW331** 0. LW331** 0. LW331** 0. LW331** 0. LW335** 0. LW335** 0. LW335** 0. LW336** 0. LW336** 0. LW346** 0. LW352** 0. LW346** 0. LW346** 0. LW347** 0. LW347** 0. LW347** 0. LW347** 0. LW347** 0. LW348** 0. LW348** | | | | | | | | |
| LW230## LW241## ## Items are exempt from shielding if provided by manufacturer. A TEMPEST instrument inspection may waive the requirement for the shielding. | | | | | | | | |
| LW240## | | | | | | | | |
| LW241## ## Items are exempt from shielding if provided by manufacturer. A TEMPEST instrument inspection may waive the requirement for the shielding. 14. | | | | | | | | |
| ## Items are exempt from shielding if provided by manufacturer. A TEMPEST instrument inspection may waive the requirement for the shielding. 14. 5 MED • The following RED metallic cables are not shielded: | | | | | | | | |
| A TEMPEST instrument inspection may waive the requirement for the shielding. 1. Wait for results of instrument requirement for the shielding. 1. Wait for results of instrument test and CTTA authorization. 2. Request waiver. 3. Replace cables. 2. Request waiver. 3. Replace cables. 3. Rep | | | | O BWZ41mm | | | | |
| A TEMPEST instrument inspection may waive the requirement for the shielding. 1. Wait for results of instrument requirement for the shielding. 1. Wait for results of instrument test and CTTA authorization. 2. Request waiver. 3. Replace cables. 2. Request waiver. 3. Replace cables. 3. Rep | | | | ## Items are exempt from shielding if provided by manufacturer | | | | |
| The following RED metallic cables are not shielded: | | | | A TEMPEST instrument inspection may waive the | | | | |
| 14. 5 MED The following RED metallic cables are not shielded: 0 | | | | | | | | |
| Cabinet #3 Net | 14 | 5 | MED | The following RED metallic cables are not shielded: | TEMPEST | 2 | Mech | 1 Wait for results of instrument |
| O LW311## O LW304 O LW304 O LW306## O LW330** O LW332** O LW332** O LW333** O LW336** O LW336** O LW338** O LW348** O LW348** O LW348** O LW349** | 14. | 3 | WILD | O I W301## | | 2 | | |
| O LW344 O LW303 O LW304 O LW305 O LW306## O LW331** O LW332** O LW333** O LW335** O LW336** O LW338** O LW338** O LW346** O LW346** O LW346** O LW347** O LW347** O LW347** O LW348** O LW347** O LW348** O LW347** O LW348** O LW348** O LW347** | | | | | Cubinet #5 | | | |
| O LW303 O LW304 O LW305 O LW306## O LW330** O LW331** O LW332** O LW333** O LW334** O LW336** O LW336** O LW337** O LW337** O LW338** O LW345** O LW346** O LW348** O LW344** O LW347** O LW347** O LW348** O LW348** O LW348** O LW348** | | | | | | | 51 | |
| Description of LW304 | | | | | | | | 3. Replace casies. |
| O LW306## O LW330** O LW331** O LW332** O LW333** O LW335** O LW336** O LW336** O LW338** O LW338** O LW345** O LW346** O LW353** O LW353** O LW353** O LW3548** O LW353** | | | | | | | | |
| O LW306## O LW330** O LW331** O LW333** O LW334** O LW335** O LW336** O LW337** O LW338** O LW345** O LW345** O LW352** O LW352** O LW348** O LW352** O LW348** O LW348** O LW348** | | | | | | | | |
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| | | | o LW350** | | | | | |
| | | | o LW351** o LW352** | | | | | |
| | | | 11405011 | | | | | |
| | | | o LW353** | | | | | |
| | | | ** Item requires an individually shielded pairs IAW Ref. b, Para | | | | | |
| | | | A.1.1.7.2.a or A1.1.7.2.b | | | | | |
| | | | ## Items are exempt from shielding if provided by manufacturer. | | | | | |
| | | | A TEMPEST instrument inspection may waive the | | | | | |
| | | | requirement for the shielding. | | | | | |
| REQ. | | | RED Secure Voice Cables shall have balanced twisted pair | | Ref. b, Para | | | |
| ILLQ. | | | nonferrous shielded transmit and receive audio lines. The shields | | A.1.1.7.2.a | | | |
| | | | shall be insulated from each other. | | 71.1.1.7.2.0 | | | |
| 15. | 18/25 | MED | The following cables do not have isolated individually | TEMPEST | | 1 | Mech | 1. Wait for results of instrument |
| 10. | 10/20 | 1,122 | shielded transmit and receive audio pairs: | Cabinet #3 | | - | SI | test and CTTA authorization. |
| | | | o LW330 | | | | ~- | 2. Request waiver. |
| | | | o LW331 | | | | | 3. Replace cables. |
| | | | o LW332 | | | | | overspanse success |
| | | | o LW333 | | | | | |
| | | | o LW334 | | | | | |
| | | | o LW335 | | | | | |
| | | | o LW336 | | | | | |
| | | | o LW311 | | | | | |
| 16. | 26 | MED | The following cables do not have their shields isolated | TEMPEST/ | | 1 | SI | 1. Wait for results of instrument |
| | | | from each other: | Bridge | | | Comm | test and CTTA authorization. |
| | | | o W3092 | | | | | 2. Request waiver. |
| | | | o W3087 | | | | | 3. Replace cables. |
| REQ. | | | Equipment having RED/BLACK signal and/or control lines | | Ref (a2), Para | | | |
| | | | interface shall be limited to the following: | | 4.3.b Ref. b, | | | |
| | | | a. Prior TEMPEST approval | | Para B.1.2.2. | | | |
| | | | b. Port-to-Port Isolation: | | | | | |
| | | | 1) No prior approval, but 100 db. audio isolation | | | | | |
| | | | between 0.3 and 1.5 kHz | | | | | |
| | | | 2) No prior approval, but 80 db. video isolation up to | | | | | |
| | | | 5Mhz. | | | | | |
| | | | 3) No prior approval, but 60 db. digital isolation up to | | | | | |
| | | | 10x the data rate. | | | | | |
| | | | c. NSA Cryptographic equipment. | | | | | |
| | | | d. Approved TEMPEST equipment with approved isolation | | | | | |
| | | | device between the RED and BLACK circuits. | | | | | |
| | | | f. RED and BLACK processing that received data from a | | | | | |
| | | | BLACK navigation system. | | | | | |
| | | | i. Junction boxes installed IAW A.1.1.7.4.3. | | | | | |
| | | | j. Combined radio and secure systems shall be installed in | | | | | |
| | | | boats and craft IAW: | | | | | |
| | | | 1) The system shall have prior TEMPEST installation | | | | | |
| | | | approval, where radio transceiver and secure | | | | | |
| | | | processing equipment share common circuitry. | | | | | |
| | | | 2) The system shall have prior TEMPEST installation | | | | | |
| | | | approval, where the radio transmitter performs the | | | | | |

| | | | function of switching between RED/BLACK transmissions. | | | | | |
|------|----|------|--|-----------------------|---|---|-----------------------------|---|
| 17. | 19 | HARD | The following hardware has not been qualified as equipment authorized to have RED and BLACK interfaces: MARCOM IVCS Switch (LC031101)** RT-1794(C)/ARC-210 (LC031502)## Disconnect Panel #1 (LC031121) Disconnect Panel #2 (LC031122) Disconnect Panel #1 (LC031531) ** L3 Baltimore has forwarded a letter that qualifies the unit if used in a specific manner. This configuration voids that letter. ## At the time of this writing an unsubstantiated rumor is circulating that the AN/ARC-210 has failed NSA testing as a RED/BLACK encryption device. | TEMPEST Cabinet #3 | | 2 | Comm | Wait for results of instrument test and CTTA authorization. Request waiver. |
| REQ. | | | RED metallic wire shielded cables shall meet the applicable requirements of MIL-C-17, MIL-C-915, MIL-C-24640 or MIL-C-24643. | | Ref (a1), Para 4 Ref (a4), Para 9.2.1.3 Ref. b, Para B.1.2.5. | | | |
| 18. | 5 | HARD | • The following thru-ship cables do not meet the MIL-C classification requirements of reference (b) Para B.1.2.5 • W1090 • W2005 • W1006 • W1103 • W1092 • W2023 • W1020 • W2017 • W2025 • W3001 • W3002 • W3003 • W3004 • W3005 • W3006 • W3007 • W3008 • W3009 • W3010 • W3014 • W3048 • W3019 • W3044 • W3020 • W3049 • W3041 | Various | | 2 | SI Net Sensor Comm | Wait for results of instrument test and CTTA authorization. Request waiver. Replace cables. |

| O W3137 O W30773 O W30774 O W3077 O W31377 O W31362 O W3162 O W3162 O W3101 O W3085 O W3085 O W3085 O W3085 O W3086 O W3086 O W6019 O W6021 O W6022 O W6022 O W6025 O W6025 O W6025 O W6025 O W6025 O W6025 O W6026 O W6026 O W6027 O W6027 O W6028 O W6029 O W6030 O W6031 O W6031 O W6032 O W6032 O W6033 O W6033 O W6034 O W6039 O W6039 O W6034 O W6034 O W6034 O W6035 O W6034 O W6035 O W6036 O W6039 O W6036 O W6039 O W6034 O W6036 O W6036 | 1 | 1 | | | 1 | 1 | 1 | |
|--|-------|---|---|--------|---|---|---|--|
| O W3073 O W3074 O W3079 O W3087 O W3184 O W3168 O W3102 W3101 W3085 W3224 W3086 W3086 O W6019 W6019 W6021 W6022 W6023 W6025 W6025 W6026 W6027 W6028 W6029 W6030 W6031 W6031 W6031 W6031 W6032 W6033 W6036 W6036 W6037 W6037 W6038 W6039 W6039 W6039 W6044 W6144 W6145 W6145 W6145 W6145 W6145 W615 W605 W6 | | | 0 | W3070 | | | | |
| □ W3074 □ W3079 □ W3087 □ W3134 □ W3162 □ W3162 □ W3163 □ W3101 □ W3085 □ W3085 □ W3085 □ W3086 □ W3086 □ W3086 □ W6021 □ W6022 □ W6022 □ W6023 □ W6025 □ W6027 □ W6027 □ W6027 □ W6028 □ W6028 □ W6038 □ W6038 □ W6039 □ W6031 □ W6031 □ W6032 □ W6033 □ W6034 □ W6035 □ W6036 □ W6036 □ W6031 □ W6038 □ W6031 □ W6038 □ W6031 □ W6039 □ W6031 □ W6036 □ W6036 □ W6039 □ W6031 □ W6031 □ W6031 □ W6032 □ W6039 □ W6031 □ W6031 □ W6031 □ W6031 □ W6032 □ W6033 □ W6036 □ W6038 □ W6031 □ W6032 □ W60330 □ W6031 □ W6031 □ W6031 □ W6031 □ W6032 □ W60330 □ W60340 □ W60341 □ W60351 □ W60352 □ W60352 □ W60362 □ W6140 □ W61400 □ W61400 | | | 0 | W3137 | | | | |
| □ W3074 □ W3079 □ W3087 □ W3134 □ W3162 □ W3162 □ W3163 □ W3101 □ W3085 □ W3085 □ W3085 □ W3086 □ W3086 □ W3086 □ W6021 □ W6022 □ W6022 □ W6023 □ W6025 □ W6027 □ W6027 □ W6027 □ W6028 □ W6028 □ W6038 □ W6038 □ W6039 □ W6031 □ W6031 □ W6032 □ W6033 □ W6034 □ W6035 □ W6036 □ W6036 □ W6031 □ W6038 □ W6031 □ W6038 □ W6031 □ W6039 □ W6031 □ W6036 □ W6036 □ W6039 □ W6031 □ W6031 □ W6031 □ W6032 □ W6039 □ W6031 □ W6031 □ W6031 □ W6031 □ W6032 □ W6033 □ W6036 □ W6038 □ W6031 □ W6032 □ W60330 □ W6031 □ W6031 □ W6031 □ W6031 □ W6032 □ W60330 □ W60340 □ W60341 □ W60351 □ W60352 □ W60352 □ W60362 □ W6140 □ W61400 □ W61400 | | | 0 | W3073 | | | | |
| W3067 | | | 0 | | | | | |
| □ W3079 □ W3087 □ W3162 □ W3162 □ W3168 □ W3101 □ W3085 □ W3224 □ W3083 □ W3086 □ W4086 □ W4091 □ W6021 □ W6021 □ W6022 □ W6023 □ W6023 □ W6025 □ W6025 □ W6026 □ W6027 □ W6027 □ W6027 □ W6021 □ W6028 □ W6029 □ W6029 □ W6029 □ W6029 □ W6029 □ W6034 □ W6036 □ W6036 □ W6039 □ W6039 □ W6031 | | | | W3067 | | | | |
| W3087 W3134 W3162 W3162 W3168 W3102 W3101 W3085 W3224 W3086 W3086 W3086 W6019 W6021 W6022 W6023 W6024 W6025 W6025 W6023 W6023 W6024 W6025 W6025 W6023 W6024 W6025 W6025 W6026 W6031 W6032 W6033 W6034 W6035 W6036 W6039 W6036 W6039 W6039 W6039 W6039 W6030 W6030 W6030 W6030 W6031 W6032 W6036 W603 | | | | | | | | |
| W3143 W3162 W3101 W3083 W3084 W3083 W3086 W30986 W30986 W6019 W6019 W6021 W6022 W6023 W6023 W6025 W6025 W6025 W6025 W6025 W6028 W6030 | | | | | | | | |
| W3162 W3102 W3101 W3085 W3101 W3085 W3224 W3083 W3086 W3087 W3022 W3023 W3024 W3025 W302 | | | | W/2124 | | | | |
| ○ W3108 ○ W3101 ○ W3085 ○ W3224 ○ W3086 ○ W6019 ○ W6021 ○ W6021 ○ W6023 ○ W6025 ○ W6027 ○ W6027 ○ W6031 ○ W6032 ○ W6033 ○ W6031 ○ W6032 ○ W6033 ○ W6034 ○ W6035 ○ W6036 ○ W6037 ○ W6038 ○ W6039 ○ W6039 ○ W6040 ○ W6140 ○ W6054 ○ W6055 ○ W6055 ○ W6140 ○ W6140 | | | | | | | | |
| W3102 W3105 W3085 W3224 W3086 W3086 W6019 W6020 W6021 W6022 W6023 W6025 W6027 W6027 W6029 W6030 W6031 W6033 W6036 W6036 W6037 W6040 W605 W606 | | | | W3162 | | | | |
| W3101 W3085 W30224 W3086 W3086 W6019 W6020 W6021 W6022 W6023 W6025 W6025 W6029 W6030 W6031 W6032 W6030 W6031 W6032 W6032 W6033 W6039 W6030 W6031 W6031 W6032 W6030 W6031 W6032 W6039 W6039 W6039 W6039 W6039 W6039 W6039 W6039 W6030 W6031 W6032 W6035 W6035 W6036 W6036 W6037 W6038 W6039 W6039 W6039 W6039 W6030 W6 | | | 0 | | | | | |
| ○ W3085 ○ W3083 ○ W3086 ○ W3019 ○ W6020 ○ W6021 ○ W6022 ○ W6023 ○ W6023 ○ W6025 ○ W6027 ○ W6029 ○ W6030 ○ W6031 ○ W6033 ○ W6033 ○ W6039a ○ W6039a ○ W6039a ○ W6039a ○ W6049 ○ W6140 ○ W6051 ○ W6055 ○ W6055 ○ W6082 ○ W6140 | | | 0 | W3102 | | | | |
| | | | 0 | | | | | |
| ○ W3086 ○ W3086 ○ W6019 ○ W6020 ○ W6021 ○ W6023 ○ W6024 ○ W6025 ○ W6027 ○ W6029 ○ W6030 ○ W6031 ○ W6033 ○ W6036 ○ W6039a ○ W6140 ○ W6142 ○ W6054a ○ W6051 ○ W6052 ○ W6052 ○ W6054 ○ W6054 ○ W6052 ○ W6140a ○ W6140b | | | 0 | W3085 | | | | |
| ○ W3086 ○ W3086 ○ W6019 ○ W6020 ○ W6021 ○ W6023 ○ W6024 ○ W6025 ○ W6027 ○ W6029 ○ W6030 ○ W6031 ○ W6033 ○ W6036 ○ W6039a ○ W6140 ○ W6142 ○ W6054a ○ W6051 ○ W6052 ○ W6052 ○ W6054 ○ W6054 ○ W6052 ○ W6140a ○ W6140b | | | 0 | W3224 | | | | |
| ○ W.3086 ○ W6019 ○ W6020 ○ W6021 ○ W6022 ○ W6023 ○ W6024 ○ W6025 ○ W6027 ○ W6028 ○ W6030 ○ W6031 ○ W6033 ○ W6036 ○ W6037 ○ W6038 ○ W6039 ○ W6039 ○ W6039 ○ W6039 ○ W6049 ○ W6140 ○ W6051 ○ W6051 ○ W6051 ○ W6082 ○ W6140a | | | 0 | W3083 | | | | |
| ○ W3086 ○ W6019 ○ W6021 ○ W6022 ○ W6023 ○ W6024 ○ W6025 ○ W6057 ○ W6027 ○ W6028 ○ W6030 ○ W6030 ○ W6031 ○ W6031 ○ W6033 ○ W6033 ○ W6033 ○ W6036 ○ W6040 ○ W6140 ○ W6140 ○ W6140 ○ W6140 ○ W6051 ○ W6055 ○ W6082 ○ W6082 | | | | | | | | |
| ○ W6020 ○ W6021 ○ W6023 ○ W6024 ○ W6025 ○ W6027 ○ W6028 ○ W6030 ○ W6031 ○ W6032 ○ W6033 ○ W6036a ○ W6039a ○ W6040b ○ W6040 ○ W6040 ○ W6040 ○ W6051 ○ W6055 ○ W6040 ○ W6140 ○ W6040 ○ W6051 ○ W6052 ○ W6140 ○ W6140 | | | | | | | | |
| ○ W6021 ○ W6022 ○ W6023 ○ W6024 ○ W6025 ○ W6057 ○ W6028 ○ W6029 ○ W6030 ○ W6031 ○ W6033 ○ W6036 ○ W6036a ○ W6039a ○ W6140 ○ W6049 ○ W6054a ○ W6051a ○ W6082 ○ W6082 ○ W6140a | | | | | | | | |
| ○ W6021 ○ W6023 ○ W6024 ○ W6025 ○ W6025 ○ W6027 ○ W6028 ○ W6030 ○ W6031 ○ W6032 ○ W6033 ○ W6036a ○ W6039a ○ W6140 ○ W6142 ○ W6054 ○ W6051a ○ W6055 ○ W6082 ○ W6140a | | | | | | | | |
| ○ W6022 ○ W6023 ○ W6024 ○ W6025 ○ W6057 ○ W6027 ○ W6028 ○ W6029 ○ W6030 ○ W6031 ○ W6031 ○ W6032 ○ W6033 ○ W6036 ○ W6036 ○ W6039 ○ W6039 ○ W6049 ○ W6140 ○ W6049 ○ W6142 ○ W6051 ○ W6054 ○ W6051 ○ W6051 ○ W6051 ○ W6055 ○ W6082 ○ W6082 ○ W6082 ○ W6082 | | | | | | | | |
| ○ W6023 ○ W6025 ○ W6057 ○ W6027 ○ W6028 ○ W6030 ○ W6031 ○ W6033 ○ W6036a ○ W6039 ○ W6039a ○ W6140 ○ W6142 ○ W6054 ○ W6051 ○ W6055 ○ W6140 ○ W6140 | | | | | | | | |
| ○ W6024 ○ W6025 ○ W6057 ○ W6027 ○ W6028 ○ W6029 ○ W6030 ○ W6031 ○ W6031 ○ W6032 ○ W6033 ○ W6036 ○ W6036 ○ W6039 ○ W6039 ○ W6039 ○ W6040 ○ W6040 ○ W6140 ○ W6140 ○ W6140 ○ W6140 ○ W6051 ○ W6051 ○ W6055 ○ W6082 ○ W6082 ○ W6140 | | | | | | | | |
| ○ W6025 ○ W6027 ○ W6028 ○ W6029 ○ W6030 ○ W6031 ○ W6033 ○ W6036 ○ W6036a ○ W60399 ○ W6140 ○ W6140 ○ W6142 ○ W6054 ○ W6051 ○ W6055 ○ W6082 ○ W6140 | | | | | | | | |
| ○ W6027 ○ W6028 ○ W6029 ○ W6030 ○ W6031 ○ W6032 ○ W6036 ○ W6036a ○ W6039a ○ W6140 ○ W6142 ○ W6054 ○ W6051 ○ W6055 ○ W60400 ○ W6040 ○ W6040 ○ W6051 ○ W6052 ○ W6040 | | | 0 | | | | | |
| ○ W6027 ○ W6028 ○ W6030 ○ W6031 ○ W6032 ○ W6033 ○ W6036 ○ W6036a ○ W6039 ○ W6039 ○ W6140 ○ W6140 ○ W6142 ○ W6042 ○ W6054 ○ W6051 ○ W6051 ○ W6055 ○ W6082 ○ W6082 ○ W6140a | | | 0 | | | | | |
| ○ W6028 ○ W6030 ○ W6031 ○ W6032 ○ W6033 ○ W6036a ○ W6036a ○ W6039a ○ W6140 ○ W61440 ○ W6142 ○ W6049 ○ W6142 ○ W6054 ○ W6051 ○ W6055 ○ W6082 ○ W6082 ○ W6140a | | | 0 | | | | | |
| ○ W6030 ○ W6031 ○ W6032 ○ W6033 ○ W6036 ○ W6036 ○ W6039a ○ W6039a ○ W6040 ○ W6140 ○ W6142 ○ W6054 ○ W6051a ○ W6055 ○ W6082 ○ W6140a | | | 0 | | | | | |
| ○ W6030 ○ W6031 ○ W6032 ○ W6033 ○ W6036 ○ W6039 ○ W6039 ○ W6040 ○ W6140a ○ W6142 ○ W6054 ○ W6054 ○ W6051a ○ W6055 ○ W6055 ○ W6055 ○ W6082 ○ W6140a | | | 0 | | | | | |
| ○ W6031 ○ W6032 ○ W6036 ○ W6036a ○ W6039 ○ W6039a ○ W6140 ○ W6140a ○ W6049 ○ W6042 ○ W6051 ○ W6051 ○ W6055 ○ W6082 ○ W6082 ○ W6140a | | | 0 | W6029 | | | | |
| ○ W6031 ○ W6032 ○ W6036 ○ W6036a ○ W6039 ○ W6039a ○ W6140 ○ W6140a ○ W6142 ○ W6054 ○ W6051 ○ W6051 ○ W6055 ○ W6082 ○ W6082 ○ W6140a | | | 0 | W6030 | | | | |
| ○ W6032 ○ W6033 ○ W6036a ○ W6039 ○ W6039a ○ W6140 ○ W6140a ○ W6049 ○ W6049 ○ W6054 ○ W6051a ○ W6051a ○ W6055 ○ W6082 ○ W6140a | | | 0 | W6031 | | | | |
| ○ W6033 ○ W6036 ○ W6039 ○ W6039a ○ W6140 ○ W6140a ○ W6049 ○ W6142 ○ W6054 ○ W6054 ○ W6055 ○ W6051a ○ W6055 ○ W6082 ○ W6140a | | | 0 | | | | | |
| ○ W6036 ○ W6039 ○ W6039 ○ W6039a ○ W6140 ○ W6140a ○ W6142 ○ W6054 ○ W6051 ○ W6051 ○ W6055 ○ W6082 ○ W6040 ○ W6140 ○ W6140 ○ W6140 ○ W6140 ○ W6140 | | | | | | | | |
| ○ W6036a ○ W6039a ○ W6140 ○ W6140a ○ W6049 ○ W6142 ○ W6054 ○ W6051 ○ W6051a ○ W6055 ○ W6082 ○ W6140a | | | | | | | | |
| ○ W6039 ○ W6040 ○ W6140 ○ W6049 ○ W6142 ○ W6054 ○ W6051 ○ W6051 ○ W6055 ○ W6082 ○ W6040 ○ W6140 ○ W6140 | | | | | | | | |
| ○ W6039a ○ W6140 ○ W6140a ○ W6049 ○ W6142 ○ W6054 ○ W6051 ○ W6051a ○ W6055 ○ W6082 ○ W6140 ○ W6140a | | | | W6030a | | | | |
| ○ W6140 ○ W6049 ○ W6042 ○ W6054 ○ W6054 ○ W6051 ○ W6051a ○ W6055 ○ W6082 ○ W6140 ○ W6140a | | | | | | | | |
| 0 W6140a 0 W6049 0 W6142 0 W6054 0 W6051a 0 W6055 0 W6082 0 W6140 0 W6140a | | | | | | | | |
| 0 W6049 0 W6142 0 W6054 0 W6054a 0 W6051 0 W6055 0 W6082 0 W6140 0 W6140a | | | | | | | | |
| W6142 W6054 W6054a W6051 W6051a W6055 W6082 W6140 W6140a | | | | | | | | |
| W6054 W6054a W6051 W6051a W6055 W6082 W6140 W6140a | | | | | | | | |
| W6054a W6051 W6051a W6055 W6082 W6140 W6140a | | | | | | | | |
| W6051 W6051a W6055 W6082 W6140 W6140a | | | 0 | | | | | |
| W6051a W6055 W6082 W6140 W6140a | | | 0 | | | | | |
| o W6055 o W6082 o W6140 o W6140a | | | 0 | | | | | |
| o W6082 o W6140 o W6140a | | | 0 | W6051a | | | | |
| o W6140 o W6140a | | | 0 | | | | | |
| o W6140 o W6140a | | | 0 | W6082 | | | | |
| o W6140a | | | 0 | W6140 | | | | |
| 0 W6132 | | | 0 | | | | | |
| | | | 0 | W6132 | | | | |

| 19. | 5 | MED | • The cabinet cables do not meet the MIL-C classification requirements of reference (b) Para B.1.2.5 • LW142 • LW130 • LW131 • LW132 • LW133 • LW134 • LW135 • LW136 • LW137 • LW138 • LW139 • LW140 • LW141 • LW141 • LW141 • LW143 • LW151 • LW152 • LW154 • LW153 • LW150 • LW146 • LW146 | TEMPEST Cabinet #1 | 2 | Mech Net | Wait for results of instrument test and CTTA authorization. Request waiver. Replace cables. |
|-----|------|-----|---|-----------------------|---|-------------|---|
| 20. | 5 | MED | • The cabinet cables do not meet the MIL-C classification requirements of reference (b) Para B.1.2.5 • LW231 • LW232 • LW242 • LW242 • LW235 • LW237 • LW238 • LW239 • LW240 • LW241 | TEMPEST Cabinet #2 | 2 | Mech Net | Wait for results of instrument test and CTTA authorization. Request waiver. Replace cables. |
| 21. | 5/26 | MED | The cabinet cables do not meet the MIL-C classification requirements of reference (b) Para B.1.2.5 LW330 LW331 LW332 LW333 LW334 LW335 LW336 LW336 LW337 LW338 LW345 LW345 LW346 | TEMPEST Cabinet #3 | 2 | Mech Net | Wait for results of instrument test and CTTA authorization. Request waiver. Replace cables. |

| REQ. | | | LW352 LW353 LW3411 LW348 LW349 LW354 LW350 LW351 LW352 LW353 LW301 LW311 LW344 LW303 LW304 LW305 LW306 Within the electrical perimeter barrier of a secure space RED | | Ref. b. Para | | | |
|------|----|------|---|-----------------------|---|---|------|--|
| | | | processing cable, equipment, various parts, units and assemblies shall be bonded to ground IAW reference (d). | | B.1.2.6 | | | |
| 22. | 11 | EASY | Equipment Cabinet #1 is not bonded to ground using a Class C Type IV bond strap. | TEMPEST Cabinet #1 | Ref (a4), Para 9.2.1.4 Ref. d, Para 5.1.3.3.4. Ref. b, Para B.1.2.6.3/5/8/11 | 1 | Mech | Install correct bond strap. Request waiver. |
| 23. | 12 | EASY | Equipment Cabinet #1 grounding stud is not IAW reference (d). Specifically, remove the external tooth washers and the all thread bolt. | TEMPEST Cabinet #1 | Ref (a4), Para 9.2.1.4 Ref. d, Para A.5 | 1 | Mech | Install correct hardware. Request waiver. |
| 24. | 11 | EASY | Unit A1 (LC060412) is not bonded to the hosting sliding tray via Class B or C Type III bond. | TEMPEST Cabinet #1 | Ref (a4), Para 9.2.1.4 Ref. b, Para B.1.2.6.3/5/12 Ref. d, Para 5.1.3.3.3 | 1 | Mech | Install correct bond strap. Request waiver. |
| 25. | 11 | EASY | The hosting sliding tray for Unit A1 is not bonded to Equipment Cabinet #1 using a Class C Type IV bond strap. | TEMPEST Cabinet #1 | Ref (a4), Para 9.2.1.4 Ref. b, Para B.1.2.6.3/5/12 Ref. d, Para 5.1.3.3.4 | 1 | Mech | Install correct bond strap. Request waiver. |
| 26. | 11 | EASY | Unit A3 (LC060478) is not bonded to the hosting sliding tray via Class B or C Type III bond. | TEMPEST Cabinet #1 | Ref (a4), Para 9.2.1.4 Ref. b, Para B.1.2.6.3/5/12 Ref. d, Para 5.1.3.3.3 | 1 | Mech | Install correct bond strap. Request waiver. |

| 27. | 11 | EASY | The hosting sliding tray for Unit A3 is not bonded to Equipment Cabinet #1 using a Class C Type IV bond strap. | TEMPEST Cabinet #1 | Ref (a4), Para 9.2.1.4 Ref. b, Para B.1.2.6.3/5/12 | 1 | Mech | I. Install correct bond strap. Request waiver. |
|-----|-------|------|--|-----------------------|---|---|------|--|
| 28. | 11/13 | EASY | Unit A6 (LC060431) is not bonded to Equipment Cabinet #1 using a Class C Type III bond strap. | TEMPEST Cabinet #1 | Ref. d, Para 5.1.3.3.4 Ref (a4), Para 9.2.1.4 Ref. b, Para B.1.2.6.3/5/12 Ref. d, Para 5.1.3.3.3 | 1 | Mech | I. Install correct bond strap. Request waiver. |
| 29. | 11 | EASY | Equipment Cabinet #3 is not bonded to ground using a Class C Type IV bond strap. | TEMPEST Cabinet #3 | Ref (a4), Para 9.2.1.4 Ref. d, Para 5.1.3.3.4. Ref. b, Para B.1.2.6.3/5/8/11 | 1 | Mech | I. Install correct bond strap. Request waiver. |
| 30. | 12 | EASY | Equipment Cabinet #3 grounding stud is not IAW reference (d). Specifically, remove the external tooth washers and the all thread bolt. | TEMPEST Cabinet #3 | Ref. d, Para A.5 | 1 | Mech | I. Install correct hardware. Request waiver. |
| 31. | 11/16 | EASY | Unit A5 (LC030604) is not bonded to Equipment Cabinet #3 using a Class C Type III bond strap. | TEMPEST Cabinet #3 | Ref (a4), Para 9.2.1.5 Ref. b, Para B.1.2.6.13.I | 1 | Mech | Install correct bond strap. Request waiver. |
| 32. | 11/16 | EASY | The AC/DC PS of Unit CB1 (LC061057) is not bonded to the hosting sliding tray via Class B or C Type III bond. | TEMPEST Cabinet #3 | Ref (a4), Para 9.2.1.4 Ref. b, Para B.1.2.6.3/5/12 Ref. d, Para 5.1.3.3.3 | 1 | Mech | I. Install correct bond strap. Request waiver. |
| 33. | 11/16 | EASY | The DC Breaker of Unit CB1 (LC061057) is not bonded to the hosting sliding tray via Class B or C Type III bond. | TEMPEST Cabinet #3 | Ref (a4), Para 9.2.1.4 Ref. b, Para B.1.2.6.3/5/12 Ref. d, Para 5.1.3.3.3 | 1 | Mech | Install correct bond strap. Request waiver. |
| 34. | 11/16 | EASY | The hosting sliding tray for Unit CB1 is not bonded to Equipment Cabinet #1 using a Class C Type IV bond strap. | TEMPEST Cabinet #3 | Ref (a4), Para 9.2.1.4 Ref. b, Para B.1.2.6.3/5/12 Ref. d, Para 5.1.3.3.4 | 1 | Mech | Install correct bond strap. Request waiver. |
| 35. | 11/16 | EASY | Unit A3 (LC060205) is not bonded to Equipment Cabinet #3 using a Class C Type III or IV bond strap. | TEMPEST Cabinet #3 | Ref (a4), Para 9.2.1.5 Ref. b, Para B.1.2.6.13 | 1 | Mech | Install correct bond strap. Request waiver. |
| 36. | 11/16 | EASY | Unit A7 (LC030631) is not bonded to Equipment Cabinet #3 using a Class C Type III or IV bond strap. | TEMPEST Cabinet #3 | Ref (a4), Para 9.2.1.5 | 1 | Mech | I. Install correct bond strap. Request waiver. |

| | | | | | Ref. b, Para B.1.2.6.13 | | | |
|-----|-------|------|--|-----------------------|---|---|------|--|
| 37. | 11/16 | EASY | Unit A8/ARC-210 is not bonded to Equipment Cabinet #3 using a Class C Type III or IV bond strap. | TEMPEST Cabinet #3 | Ref (a4), Para 9.2.1.5 Ref. b, Para B.1.2.6.13 Ref. b, Para A.1.1.10 | 1 | Mech | Install correct bond strap. Request waiver. |
| 38. | 11/16 | EASY | Unit CB1 (LC061057) is not bonded to Equipment Cabinet #3 using a Class C Type III bond strap. | TEMPEST Cabinet #3 | Ref (a4), Para 9.2.1.4 Ref. d, Para 5.1.3.3.3 | 1 | Mech | I. Install correct bond strap. Request waiver. |
| 39. | 8 | EASY | The strain relief of the connectors to Unit A5 is clamped to shrink wrap around the cable pairs vice to the jacket of the cable. | TEMPEST Cabinet #3 | Ref b, Para 5.1.2.6 | 1 | Mech | Remake the connector. Request waiver. |
| 40. | 11 | EASY | Equipment Cabinet #2 is not bonded to ground using a Class C Type IV bond strap. | TEMPEST Cabinet #2 | Ref (a4), Para 9.2.1.4 Ref. d, Para 5.1.3.3.4. Ref. b, Para B.1.2.6.3/5/8/11 | 1 | Mech | I. Install correct bond strap. Request waiver. |
| 41. | 12 | EASY | Equipment Cabinet #2 grounding stud is not IAW reference (d). Specifically, remove the external tooth washers and the all thread bolt. | TEMPEST Cabinet #2 | Ref. d, Para A.5 | 1 | Mech | Install correct hardware. Request waiver. |
| 42. | 11 | EASY | Unit A1 (LC020110) is not bonded to the hosting sliding tray via Class B or C Type III bond. | TEMPEST Cabinet #2 | Ref (a4), Para 9.2.1.4 Ref. b, Para B.1.2.6.3/5/12 Ref. d, Para 5.1.3.3.3. | 1 | Mech | I. Install correct bond strap. Request waiver. |
| 43. | 11 | EASY | The hosting sliding tray for Unit A1 is not bonded to Equipment Cabinet #2 using a Class C Type IV bond strap. | TEMPEST Cabinet #2 | Ref (a4), Para 9.2.1.4 Ref. b, Para B.1.2.6.3/5/12 Ref. d, Para 5.1.3.3.4. | 1 | Mech | I. Install correct bond strap. Request waiver. |
| 44. | 11 | EASY | Units A2/A6/A7/A3/A11/A12 host slide strays are not bonded to Equipment Cabinet #3 using a Class C Type IV bond strap. | TEMPEST Cabinet #2 | Ref (a4), Para 9.2.1.4 Ref. b, Para B.1.2.6.3/5/12 Ref. d, Para 5.1.3.3.4. | 1 | Mech | Install correct bond strap. Request waiver. |
| 45. | 11 | EASY | Unit A6 (LC060443) is not bonded to the hosting sliding tray via Class B or C Type III bond. | TEMPEST Cabinet #2 | Ref (a4), Para 9.2.1.4 Ref. b, Para B.1.2.6.3/5/12 Ref. d, Para 5.1.3.3.3 | 1 | Mech | I. Install correct bond strap. Request waiver. |

| 46. | 11 | EASY | Unit A7 (LC060432) is not bonded to the hosting sliding tray via Class B or C Type III bond. | TEMPEST Cabinet #2 | Ref (a4), Para 9.2.1.4 Ref. b, Para B.1.2.6.3/5/12 Ref. d, Para 5.1.3.3.3 | 1 | Mech | Install correct bond strap. Request waiver. |
|-----|------|------|--|-----------------------|--|---|-----------|---|
| 47. | 11 | EASY | Unit A2 (LC060444) is not bonded to the hosting sliding tray via Class B or C Type III bond. | TEMPEST Cabinet #2 | Ref (a4), Para 9.2.1.4 Ref. b, Para B.1.2.6.3/5/12 Ref. d, Para 5.1.3.3.3 | 1 | Mech | Install correct bond strap. Request waiver. |
| 48. | 11 | EASY | Unit A3 (LC060433) is not bonded to the hosting sliding tray via Class B or C Type III bond. | TEMPEST Cabinet #2 | Ref (a4), Para 9.2.1.4 Ref. b, Para B.1.2.6.3/5/12 Ref. d, Para 5.1.3.3.3 | 1 | Mech | Install correct bond strap. Request waiver. |
| 49. | 11 | EASY | Unit A11 (LC060445) is not bonded to the hosting sliding tray via Class B or C Type III bond. | TEMPEST Cabinet #2 | Ref (a4), Para 9.2.1.4 Ref. b, Para B.1.2.6.3/5/12 Ref. d, Para 5.1.3.3.3 | 1 | Mech | Install correct bond strap. Request waiver. |
| 50. | 11 | EASY | Unit A22 (LC060434) is not bonded to the hosting sliding tray via Class B or C Type III bond. | TEMPEST Cabinet #2 | Ref (a4), Para 9.2.1.4 Ref. b, Para B.1.2.6.3/5/12 Ref. d, Para 5.1.3.3.3 | 1 | Mech | Install correct bond strap. Request waiver. |
| 51. | 11 | EASY | Power splice boxes associated with the following cables are not bonded to ground via a Class C Type III bond strap W6036 & W6036A W6039 & W6039A W6051 & W6051A W6054 & W6054A W6140 & W6140A W6107 & W6107A | TEMPEST | Ref (a4), Para 9.2.1.4 Ref. b, Para B.1.2.6.15 Ref. d, Para 5.1.3.3.3 | 1 | Net SI | Install correct bond strap. Request waiver. |
| 52. | 11 | EASY | Power Panel 2-29-2 is not bonded to ground via a Class C Type III bond strap. | TEMPEST | Ref (a4), Para 9.2.1.4 Ref. b, Para B.1.2.6.15 Ref. d, Para 5.1.3.3.3 | 1 | SI | Install correct bond strap. Request waiver. |
| 53. | 9/11 | EASY | IFF Enclosure (LC011314) is not bonded to ground via a Class C Type III bond strap. | TEMPEST | Ref (a4), Para 9.2.1.4 Ref. b, Para B.1.2.6.15 Ref. d, Para | 1 | GFE? | Install correct bond strap. Request waiver. |

| | | | | | 5.1.3.3.3 | | | |
|-----|----|------|--|-----------------------------|--|---|------|--|
| 54. | 11 | EASY | The LAN Drop boxes associated with the following cables are not bonded to ground via a Class C Type III bond strap: W6031 W6032 W6033 | TEMPEST | Ref (a4), Para 9.2.1.4 Ref. b, Para B.1.2.6.15 Ref. d, Para 5.1.3.3.3 | 1 | SI | Install correct bond strap. Request waiver. |
| 55. | 11 | EASY | The LAN Drop box associated with cable W6028 is not bonded to ground via a Class C Type III bond strap | CO Cabin | Ref (a4), Para 9.2.1.4 Ref. b, Para B.1.2.6.15 Ref. d, Para 5.1.3.3.3 | 1 | SI | Install correct bond strap. Request waiver. |
| 56. | 11 | EASY | The LAN Drop box associated with cable W6029 is not bonded to ground via a Class C Type III bond strap | Bridge | Ref (a4), Para 9.2.1.4 Ref. b, Para B.1.2.6.15 Ref. d, Para 5.1.3.3.3 | 1 | SI | Install correct bond strap. Request waiver. |
| 57. | 11 | EASY | The LAN Drop box associated with cable W6030 is not bonded to ground via a Class C Type III bond strap | Bridge | Ref (a4), Para 9.2.1.4 Ref. b, Para B.1.2.6.15 Ref. d, Para 5.1.3.3.3 | 1 | SI | Install correct bond strap. Request waiver. |
| 58. | 11 | EASY | The Main Deck ISDN Phone #3 (LC030105) is not bonded to ground via a Class C Type III bond strap. | CO Cabin | Ref (a4), Para 9.2.1.4 Ref. b, Para B.1.2.6.15 Ref. d, Para 5.1.3.3.3 | 1 | Mech | I. Install correct bond strap. Request waiver. |
| 59. | 11 | EASY | The STE is not bonded to ground via a Class C Type III bond strap. | Aft Electronics Space | Ref (a4), Para 9.2.1.4 Ref. B, Para B.1.2.6.15 Ref. d, Para 5.1.3.3.3 | 1 | Mech | Install correct bond strap. Request waiver. |
| 60. | 11 | EASY | KITE No.1 (LC031107) is not bonded to ground via a Class C Type III bond strap. | Bridge | Ref (a4), Para 9.2.1.4 Ref. B, Para B.1.2.6.15 Ref. d, Para 5.1.3.3.3 | 1 | Mech | Install correct bond strap. Request waiver. |
| 61. | 11 | EASY | KITE No.2 (LC031107) is not bonded to ground via a Class C Type III bond strap. | Bridge | Ref (a4), Para 9.2.1.4 Ref. B, Para B.1.2.6.15 Ref. d, Para | 1 | Mech | Install correct bond strap. Request waiver. |

| | | | | | 5.1.3.3.3 | | | |
|-----|-------|------|---|--------------------|--|---|------|--|
| 62. | 11/24 | EASY | The ARC-210 RF Tray (LC031524) is not bonded to ground via a Class C Type III bond strap. | Bridge | Ref (a4), Para 9.2.1.4 Ref. B, Para B.1.2.6.15 Ref. d, Para 5.1.3.3.3 | 1 | Mech | I. Install correct bond strap. Request waiver. |
| 63. | 11 | EASY | The C-12561A/ARC-210 (LC031501) is not bonded to ground via a Class C Type III bond strap. | Bridge | Ref (a4), Para 9.2.1.4 Ref. B, Para B.1.2.6.15 Ref. d, Para 5.1.3.3.3 | 1 | Mech | Install correct bond strap. Request waiver. |
| 64. | 11 | EASY | The Unclassified Printer (LC060360) is not bonded to ground via a Class C Type III bond strap.** ** At the time of this writing the status of the MARCOM switch and associated distribution panels qualifications were unauthorized. Subsequently, making this interface unauthorized. | Ship's Office | Ref (a4), Para 9.2.1.4 Ref. B, Para B.1.2.6.15 Ref. d, Para 5.1.3.3.3 | 1 | Mech | I. Install correct bond strap. Request waiver. |
| 65. | 11 | EASY | The following hardware within the Bridge Console are not bonded to ground via a Class C Type III bond strap: LC060472 LC060482 LC060416 LC060495 LC060496 LC060497 | Bridge | Ref (a4), Para 9.2.1.4 Ref. B, Para B.1.2.6.15 Ref. d, Para 5.1.3.3.3 | 1 | mech | I. Install correct bond strap. Request waiver. |
| 66. | 11 | EASY | Interior Speaker (LC030209) must be bonded to ground via a Class C Type III bond strap due to its proximity to a RED LAN Drop. | CO Cabin | Ref (a4), Para 9.2.1.4 Ref. B, Para B.1.2.6.15 Ref. d, Para 5.1.3.3.3 | 1 | SI | Install correct bond strap. Request waiver. |
| 67. | 11 | EASY | Interior Speaker (LC030216) must be bonded to ground via a Class C Type III bond strap due to its proximity to the Unclassified Printer Note: This would not be an issue if the compartment printer was not on the RED circuit. | Ship's Office | Ref (a4), Para 9.2.1.4 Ref. B, Para B.1.2.6.15 Ref. d, Para 5.1.3.3.3 | 1 | SI | I. Install correct bond strap. Request waiver. |
| 68. | 11 | EASY | Interior Speaker (LC030217) must be bonded to ground via a Class C Type III bond strap due to its proximity to a the STE processor. | Aft Electronics | Ref (a4), Para 9.2.1.4 Ref. B, Para B.1.2.6.15 Ref. d, Para 5.1.3.3.3 | 1 | SI | Install correct bond strap. Request waiver. |

| 69. | 11 | EASY | The Printer (LC060438) is not bonded to ground via a Class C Type III bond strap. Note: At the time of this writing, no printer was installed. | TEMPEST | Ref (a4), Para 9.2.1.4 Ref. b, Para B.1.2.6.15 Ref. d, Para 5.1.3.3.3 | 1 | Mech | Install correct bond strap. Request waiver. |
|------|-------|------|--|-----------------------------|--|---|------------|--|
| REQ. | | | RED and BLACK cables shall have their shields bonded to ground at both ends of the cable either by a terminal strip within an enclosure, at a lug within the enclosure, via the connector back shell (not strain relief) or via a pin tied to ground within the connector. | | Ref. b, Para B.1.2.6.16.b | | | |
| 70. | 26 | EASY | The shields of the individual pairs within cables W3087 and W3092 are tied to the overall shield vice to ground or to a grounded pin within the connector. | TEMPEST/ Bridge | | 1 | SI | Remake the connector. Request waiver. |
| 71. | 7 | EASY | The shields of cable LW335 must be tied to the terminal connection on backshell. | TEMPEST Cabinet #3 | | 1 | Mech | Remake the connector. Request waiver. |
| REQ. | | | The RED data cable of a Secure telephone shall be shielded with the shield bonded to the connector at both ends. | | Ref. b, Para A.1.1.4 | | | |
| 72. | 5 | MED | Cable W3020 is an unshielded cable. | Aft Electronics Space | | 1 | SI Comm | Wait for results of instrument test and CTTA authorization. Request waiver. Replace cables. |
| REQ. | | | There should be a 5 cm. separation between Red Cables and Black cables that exit the space or are connected to an RF transmitter. | | Ref (a1), Para 3a | | | |
| 73. | 14/28 | HARD | Listing all of the cables that violates this requirement will have little value to the intent of this report. The ship size is the limiting factor and that can not be resolved. The magnitude of the offense will be up to a CTTA to determine. | Various | | 3 | | Wait for results of instrument test and CTTA authorization. Request waiver. Reroute cables. |
| REQ. | | | There should be a 5 cm. separation between RED and BLACK wire lines and they should not use a common distribution vehicle. | | Ref (a1), Para 3 Note 2 | | | |
| 74. | 20 | HARD | The RED interfaces, W3003 & W3049 share a common distribution panel, Unit A9, with BLACK interfaces. | TEMPEST Cabinet #3 | | 2 | SI Comm | 1. Wait for results of instrument test and CTTA authorization. Site that there is a restricted access to panels and that the panel is fixed connections vice a patching device 2. Request waiver. 3. Create separate RED and BLACK distribution panels and redesign the rack to separate the panels by 20-50 cm. |
| 75. | 17 | HARD | The RED interfaces, LW347 & LW350 share a common distribution panel, Unit A6, with BLACK interfaces. | TEMPEST Cabinet #3 | | 2 | Mech | 1. Wait for results of instrument test and CTTA authorization. Site that there is a restricted access to panels and that the panel is fixed connections vice a patching device |

| | | | Request waiver. Create separate RED and BLACK distribution panels and |
|--|--|--|---|
| | | | redesign the rack to separate the panels by 20-50 cm. |
| | | | panels by 20-30 cm. |

U.S. Department of Homeland Security
United States
Coast Guard

Commander U.S. Coast Guard Telecommunication & Information 3b) Systems Command

Email: rporter@tiscom.uscg.mil

7323 Telegraph Road Alexandria, VA 23115 Staff Symbol: TISCOM (isd-

Phone: 703.313.5631 Fax: 703.313.5640

2241 05 March 2004

MEMORANDUM

From: Mr. Ronald T. Porter Reply to TISCOM (isd-3b) CG TISCOM (isd-3b) Attn of: Ronald T. Porter

703.313.5631

To: DIRECTOR, TISCOM Deepwater Systems

Subj: USCGC MATAGORDA VISUAL TEMPEST INSPECTION

Ref: (a) NSTISSAM TEMPEST 2-95

(b) IA PUB 5239-31 INFORMATION ASSURANCE SHIPBOARD

RED/BLACK INSTALLATION PUBLICATION

- 1. The Secure Electrical Information Processing System (SEIPS) on CGC MATAGORDA was inspected by Ronald Porter (TISCOM) on 19 and 21 February 2004. The inspection was conducted using criteria listed in references (a) and (b), and the SEIPS was found not to be in compliance. Discrepancies are listed in the enclosure.
- 2. This summary provides a record of the installation at the time of inspection. The correction of installation discrepancies is required as specified in reference (a) and (b); however, other modifications or changes to the SEIPS shall not be made without approval of Commander, TISCOM (isd-3d) or the appropriate MLC.
- 3. This summary and amendments to this summary shall be retained in the unit's SEIPS (TEMPEST) documentation file.

#

Enclosure: Visual Tempest Inspection Report

Copy: Maintenance and Logistics Command Atlantic (t)
Maintenance and Logistics Command Pacific (t)

Subject: Visual TEMPEST Inspection Summary

- 1. This Visual TEMPEST Inspection Summary is for the FTA Visit
- 2. The entire Secure Electrical Information Processing System was inspected.
- 3. List of spaces with secure processing equipment inspected by the visual TEMPEST inspector:

A. Visited space

4. Discrepancy form legend:

Narrative:

| Column A: | Sequential discrepancy number |
|-----------|---|
| Column B: | |
| SF | Correction of the discrepancy is within the capability of ship's force. |
| IAC | Correction of the discrepancy was completed by ships force prior to completion of inspection visit. |
| IA | Indicates that the assistance of an industrial activity is probably required to properly correct the discrepancy. |
| IAC | Indicates that an industrial activity corrected the discrepancy. |
| SA | Indicates that the assistance of a support activity is probably required to properly correct the discrepancy. |
| SAC | Indicates that a support activity corrected the discrepancy. |
| CA | Indicates that the Contractor Activity is probably required to properly correct the discrepancy. |
| Column C: | Reference of the paragraph in designated manuals to which the installation does not conform. |

A brief description of the discrepancy found.

5. Discrepancy

| A | В | С | Narrative |
|-----|-----|------------------|---|
| 01 | CA | NSTISSAM | Cabinet 3: Black RF transmitter (RT-1794) in same rack as Red |
| 0.1 | 0.1 | TEMPEST 2/95 | Processors. Recommend moving 3 meters away or in adjacent |
| | | PG 27 Para | Black Equipment Room. Explore option of putting on Bridge. If |
| | | 2a/pg16 para 5 | so, then distributive Key scheme may pose a problem. |
| | | IA Pub 5239-31 | |
| | | A.1.1.1 a, b | |
| 02 | CA | NSTISSAM | Cabinet 2: RF transmitter (PCRP 211/802) in same rack as Red |
| 0_ | 0.1 | TEMPEST 2/95 | Processors. Recommend moving 3 meters away or in adjacent |
| | | pg 27 Para | Black Equipment Room. |
| | | 2a/pg16 para 5 | Sinvi Equipment 1355mi |
| | | IA Pub 5239-31 | |
| | | A.1.1.1 a, b | |
| 03 | CA | NSTISSAM | Cabinet 3: Red processor less than one meter away from power |
| 03 | CII | TEMPEST 2/95 | line to black transmitter (RT-1794 p/o ARC-210) |
| | | PG 27 Para 2b | inc to older transmitter (RT 1774 p/o race 210) |
| 04 | CA | NSTISSAM | Cabinet 3: Red processor less than one meter away from black |
| 04 | CII | TEMPEST 2/95 | signal lines connected to RF transmitter (RT-1794) |
| | | pg 27 Para 2a | Signal fines connected to 14 dansintter (R1 1777) |
| 05 | CA | NSTISSAM | Signal cable used with RED processors, BLACK processors, |
| 0.5 | CII | TEMPEST 2/95 | ISDN telephones, and not terminated. Request additional |
| | | pg 27 Para 4 | information on CAT 5E cable. Red data cables for RED Lan |
| | | pg 27 I ara 4 | contain questionable shielding. Manufacturer data: DARKA |
| | | IA PUB 5239-31 | COMTEQ (F) ShipLan Cable 4PR 24 AWG Screened 307650. |
| | | Para A.1.7.1 | Cable contains what seems to be mylar foil. A TEMPEST hazard |
| | | | exists if RED cables are run with BLACK cables, or with |
| | | IA PUB 5239-31 | wirelines or power lines connected to an RF transmitter. |
| | | 1A 1 OB 3237-31 | whether or power lines connected to arrive transmitter. |
| | | MIL-STD 188- | NSTISSAM 2-95. RED processors meeting the requirements |
| | | 124B Para 5.2.12 | of NSTISSAM TEMPEST/1-92 (Levels I, II, or III) must use |
| | | 124D Tara 3.2.12 | optical or shielded wire cables if specified as part of the |
| | | | manufacturer's installation specification, or if specified for |
| | | | compliance with TEMPEST certification. |
| | | | Compilance with TEIM LOT Continuation. |
| | | | IA Pub 5239-31: RED Shielded Metallic Wire Cable. RED metallic |
| | | | wire cables in all locations shall be shielded, with the exception of |
| | | | desktop computer cables that are provided by the manufacturer, |
| | | | where there is not an offered shielded cable option. This |
| | | | requirement is not applicable to RED fiber optic cables. |
| | | | requirement is not applicable to KED fluer optic causes. |
| | | | B.1.2.5 (5239): Approved cables. Mil-C-17 (ref k), or MIL-C-915 |
| | | | (reference(1)), MIL-C-24640(reference(n)) or MIL-C-24643 |
| | | | (reference (o)). |
| | | | (Tereferice (U)). |
| | | | MIL-STD-188 "Foil shiels are not acceptable for peripheral |
| | | | bonding and do not provide mechanical durability" |
| | | | bolianing and do not provide incending duraumity |
| | | | IA Pub 5239-31 pg B-9 Para d. Note: "If both ends of the cable |
| | | | will not have the shield taken to ground, approval by the cognizant |
| | | | win not have the shield taken to ground, approval by the cognizant |

| | | | CTTA should be obtained prior to installation." |
|----|----|---|---|
| 06 | CA | NSTISSAM | RED processors and RF transmitters in Cabinet RED |
| | | TEMPEST 2/95 pg 28 Para 6 | processors should not be powered from the same circuits as RF transmitters. |
| 07 | CA | IA Pub 5239-31 Para B.1.2.6.16 pg B-8 and B-9 | Missing pins on CRYPTO cable to KYV-5. Missing ground terminal connection on backshell. |
| 08 | CA | IA Pub 5239-31 Para B.1.2.6.16 pg B-8 and B-9 | ANDVT cable has no ground terminal connection on backshell. Strain relief clamp is not on outer coating of cable. Redo connection. |
| 09 | CA | IA Pub 5239-31 Para B.1.2.6.10 | AN/UPX-28 has inadequate green wire ground. Replace with Class C bond strap. |
| 11 | CA | | Install ground cables per IA 5239-31. Where required, use soldered connectors vice crimping. |
| 12 | CA | IA Pub 5259-31 | Remove external tooth washers on ground connectors to cabinets. Use lock washers and lug nuts per IA Instruction 5239-31 Figure B- 5. |
| 13 | CA | IA Pub 5239 B.1.2.6.12 | Keyboard and Monitor in Cabinet #1 has non –manufacturer supplied power cable. Bond shelf to rack. |
| 14 | CA | NSTISSAM 2-95 Para 3 Notes 3 | RED/BLACK cable separation. Two inch minimum separation requirement. Six inch separation requirement for RED/BLACK cables that run in parallel for 100 ft runs. No way to physically identify RED/BLACK data cables from each other or from the ISDN phone lines. |
| 15 | CA | NSTISSAM TEMPEST 2/95 Recommendation I Pg 27 | PCRP (Model 211/802) is Black transmitter in RED Cabinet #3. PCRP (RADAR) is less than three meters away from RED processing equipment. Recommend moving outside of C4ISR Classified Room. |
| 16 | CA | IA Pub 5239-31 Para B.1.2.6.10 | Remove green wire grounds from CRYPTO rack and replace with Class C solid bond strap. |
| 17 | CA | IA Pub 5239-31 Para A.1.1.3 | Telephone cables connected to shore tie via telephone switch cannot be routed with red cables. More info on MARCOM switch required. |
| 18 | CA | IA Pub 5239-31 Para A.1.1.7. | ARC-210 Secure voice cables. Transmit and receive audio lines need to be shielded. |
| 19 | CA | | Request info on Marcom Compact IVCS Switch with PABX. Issue is port isolation for RED/BLACK connections. All ISDN phones, cellular wireless, shore connection box and KITEs have inputs to MARCOM. TISCOM TEMPEST program manager will check on configuration on SIPRNET. Wireline inputs to MARCOM in current configuration appear to be unshielded. |
| 20 | CA | NSTISSAM 2-95 Recommendation I Pg 27 Para 3 Notes: 2 | Operator position in Classified C4ISR room has cables from two UNCLAS LAN and three CLASSIFIED LAN connections. Require 2 inch (5 cm) separation. |

Bridge

| 21 | CA | NSTISSAM | Motorola VHF FM DES transceiver less than three meters from C2 | | | | | |
|----|----|------------------|---|--|--|--|--|--|
| | | TEMPEST 2/95 | Network flat panel display monitors LC 06-04-16, LC 06-04-72 and | | | | | |
| | | PG 27 Para 2a | LC 06-04-84. Pending Instrumented Test. | | | | | |
| 22 | CA | NSTISSAM | Ross VHF FM transceiver less than three meters from C2 Network | | | | | |
| | | TEMPEST 2/95 | flat panel display monitors LC 06-04-16, LC 06-04-72 and LC 06- | | | | | |
| | | PG 27 Para 2a | 04-84. Pending Instrumented Test | | | | | |
| 23 | CA | NSTISSAM | Cel phone next to Secure Lan junction box less than three meters | | | | | |
| | | TEMPEST 2/95 | from LC 06-04-82 and LC 06-04-72. Request composition of | | | | | |
| | | PG 27 Para 2a | enclosure. | | | | | |
| 24 | CA | IA Pub 5239-31 | No metal-to-metal contact for ground strap from ARC 210 Tray to | | | | | |
| | | Para B.1.2.6.13 | ground on shelf. Recommend use Class C ground strap and remove | | | | | |
| | | | paint for proper bonding. | | | | | |
| 25 | CA | IA Pub 5239 | Not clear if Shielded Twisted Pair is used for voice and control | | | | | |
| | | A.1.1.7.2a | wirelines. | | | | | |
| 26 | CA | IA Pub A.1.1.7.2 | Unshielded cable connected to connector J3 on ARC-210 Tray. | | | | | |
| | | Pg A-3 | Twisted red wires (four) runs to C4ISR Cabinet #3. | | | | | |
| 27 | CA | NSTISSAM | Wireless bridge for RHIB comms is RF transmitter?? Is this just a | | | | | |
| | | TEMPEST 2/95 | radio with mic on cutter?? PDAs?? | | | | | |

Other:

| 28 | CA | NSTISSAM 2-95 Recommendation I Pg 27 Para 3 Notes: 2 | CO's cabin. RED and BLACK LAN ports have no cable separation. Recommend 2 inch separation. |
|----|----|---|--|
| 29 | CA | NSTISSAM 2-95 Recommendation I Pg 27 Para 1 | CO's cabin. Proposed RED laptop on desk top less than 20 inches (20 cm) apart. |

Cabinet #3

Derived From: NSTISSAM TEMPEST 2/95

> Department of the Navy (DoN) Information Assurance (IA) Publication Module 5239-31

> MIL-STD-188-124B Grounding Bonding Shielding for Common Long Haul/Tactical Communications Systems

Form Approved MATERIAL INSPECTION AND RECEIVING REPORT OMB No. 0704-0248 The public reporting burden for this collection of information is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports (0704-02489), 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for falling to comply with a collection of information if it does not display a currently valid OMB control number. PLEASE DO NOT RETURN YOUR COMPLETED FORM TO THE ABOVE ADDRESS SEND THIS FORM IN ACCORDANCE WITH THE INSTRUCTIONS CONTAINED IN THE DFARS, APPENDIX F-401. 1. PROCUREMENT INSTRUMENT IDENTIFICATION 6. INVOICE NO./DATE ORDER NO 7. PAGE OF 8. ACCEPTANCE POINT (CONTRACT) NO ICGS0300-0008/03/01/04 F-2DW079 2 DTCG23-02-2DW001 D 2. SHIPMENT NO. 5. DISCOUNT TERMS 3. DATE SHIPPED 4. B/L NA None 1 Mar 04 TCN NA 10. ADMINISTERED BY CODE 1UYZ2 CODE 9. PRIME CONTRACTOR Integrated Coast Guard Systems, 1530 Wilson Blvd., Suite 400, Commandant (G-ACS-6) U.S. Coast Guard Deepwater SIPO, Arlington, VA 22209, USA 1530 Wilson Blvd., Suite 400, Arlington, VA 22209 11. SHIPPED FROM (If other than 9) CODE 12. PAYMENT WILL BE MADE BY CODE FOB: Commandant (G-ACS-6) U.S. Coast Guard Headquarters, 2100 Bollinger Shipyards Lockport, L.L.C. PO Box 250 Second St. SW, Room 5208, Washington, DC 20591-0001, USA 8365 Highway 308 Lockport, LA. 70374-0250 14. MARKED FOR 13. SHIPPED TO CODE WPB - 1303 CODE USCGC Matagorda (WPB - 1303), C/O Coast Guard LCDR Driscoll 8365 Highway 308 Lockport, LA. 70374-0250 16. STOCK/PART NO. DESCRIPTION 15. 17. QUANTITY 19. 20. 18. (Indicate number of shipping containers - type of container - container number.) SHIP/REC'D* ITEM NO. UNIT **UNIT PRICE** AMOUNT 0055 D 1/1 Services and Supplies: Matagorda, \$14,875,235.00 \$14,875,235.00 Lot WPB 123 conversion, Item short shipped of the following components: Details on Certificate of Conformance 01 \$196,815.00 \$196,815.00 Trial Cards Lot Provisioning and Spares \$71,000.00 02 Lot \$71,000.00 03 \$10,000 \$10,000.00 Training Lot CDRL Exceptions 1 Lot \$243,500.00 \$243,500.00 21. CONTRACT QUALITY ASSURANCE 22. RECEIVER'S USE Quantities shown in column 17 were received in a. ORIGIN b. DESTINATION apparent good condition except as noted. ACCEPTANCE of listed items ACCEPTANCE of listed items has COA 189 been made by me or under my supervision and they has been made by me or under my supervision and conform to contract, except as noted herein or on DATE RECEIVED they conform to contract, except as noted herein or supporting documents. on supporting documents. TYPED NAME: Catherine Martindale TITLE: Contracting Officer DATE SIGNATURE OF AUTHORIZED GOVERNMENT REPRESENTATIVE SIGNATURE OF AUTHORIZED GOVERNMENT REPRESENTATIVE MAILING ADDRESS: U.S. Coast Guard Deepwater SIPO TYPED NAME: TYPED NAME: Certificate of Conformance 1530 Wilson Blvd., Suite 400, Arlington, VA

23. CONTRACTOR USE ONLY

TITLE:

NUMBER

MAILING ADDRESS:

COMMERCIAL TELEPHONE

TITLE:

NUMBER:

MAILING ADDRESS:

COMMERCIAL TELEPHONE

COMMERCIAL TELEPHONE 571-218-3293

and encircle

* If quantity received by the Government is the same as quantity shipped, indicate by (X) mark; if different,

enter actual quantity received below quantity shipped

PAGE OF Form Approved MATERIAL INSPECTION AND RECEIVING REPORT - CONTINUATION SHEET 2 OMB No. 0704-0248

Public reporting burden for this collection of information is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0248), Washington DC 20503.

PLEASE DO NOT RETURN YOUR COMPLETED FORM TO EITHER OF THESE ADDRESSES.

SEND THIS FORM IN ACCORDANCE WITH THE INSTRUCTIONS CONTAINED IN THE DFARS, APPENDIX F-401.

| 0.115.75 | | SEND THIS FORM | IN ACCORDANCE WITH THE INSTRU | ICTIONS | | | | 101. |
|-------------|---|--|---|---------|-------------------------|---|------------------------|-----------------|
| SHIPME N | | 20040301 | PROC INSTRUMENT IDEN. (CONTR DTCG23-02-2DW001 | RACT) | (ORDER) NO. F-2DW079 | INVOIC | CE NO. ICGS0300-000 | 8/ 03/01/04 |
| ITEM NO. | | STOCK/PART NO. (Indicate nun con | DESCRIPTION nber of shipping containers - type of tainer - container number.) | | QUANTITY SHIP/REC'D | UNIT | UNIT PRICE | AMOUNT |
| 55 | | Continued | | | | | | \$0.00 |
| | 5 | Tempest and Classific | ed Testing | | 1 | lot | \$121,000.00 | \$121,000.00 |
| | 6 | LIMS Testing | | | 1 | lot | \$10,000.00 | \$10,000.00 |
| | 7 | Low Smoke Cable | | | 1 | lot | \$10,000.00 | \$10,000.00 |
| | 8 | C005 3.2 Verification | ı | | 1 | lot | \$500.00 | \$500.00 |
| | 9 | Control Cable for Eng | gine | | 1 | lot | \$1,000.00 | \$1,000.00 |
| | | Total Invoice Amoun | t Due | | 1 | lot | ₩,211,420.00 | \$14,211,420.00 |
| | | | | | | 14 | | \$0.00 |
| | | | | | | MOREO AND | | \$0.00 |
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| | | | | | | | | \$0.00 |
| | | | | | | | | |



ICGS Certificate of Conformance:

Contract Number: DTCG23-02-C-2DW001

DTO Number: DTCG23-02-F-2DW079, CLIN 0055D

Asset: CGC Matagorda, WPB 1303, 1 of 1

Description: This DTO provides the detailed design and construction for major modification of the 110-foot patrol boat Matagorda, including completion of all design, analyses, construction, and testing to deploy the lead vessel of the proposed 123-Ft Cutter Class, and to demonstrate compliance with requirements. Included in the modifications was an extensive ultrasonic survey of the hull was conducted resulting in the replacement of over 800 square feet of wasted hull plate; a new deckhouse providing an enlarged, 360-degree bridge and berthing for a dual-gender crew; a stern extension with a stern ramp and door for launch and recovery of the Short-Range Prosecutor; an upgraded C4ISR suite to ensure interoperability with the IDS; and all related logistics and training.

I certify that on 1 March 2004, the ICGS Deepwater Program furnished the supplies and/or services called for in accordance with all applicable requirements. I further certify that the supplies and/or services are of the quality specified and conform in all respects with the contract requirements, including specifications, drawings, preservation, packaging, packing, marking requirements, and physical item identification, and are in the quantity shown on the attached acceptance document.

Comment: This Certificate of Conformance is based upon;

- LM/MS2 Certificate of Conformance and supporting records.
- NG/SS Certificate of Conformance and supporting records
- Waiver W001 Superstructure Aluminum Extrusion ABS Test Results
- ICGS audits of LM/MS2, NG/SS, Chand, and Bollinger (BSI).
- Functional Configuration Audit and Physical Configuration Audit performed on 27 Feb 04
- 123 Cutter Certification Matrix

DEEPWATER

Exception(s):

- 1) Trial Cards (Attachment A)
- 2) Provisioning and Spares
 - On Board (estimated date of delivery 30 Mar 04)
 - Shore Side (estimated date of delivery 30 Mar 04)
 - Insurance (estimated date of delivery 30 Mar 04)
- 3) Training for the Matagorda crew
 - Common Operating Picture (COP estimated completion 30 Mar 04)
- 4) CDRL Exceptions (Attachment B)
- 5) Tempest and Classified Testing, (Attachment C)
- 6) LIMS Testing
- 7) Low Smoke Cable RFD
- 8) C005 3.2 Verification
- 9) Engine Control Cable

Date of Execution:

Signature:

Kevin J. O'Neill

Director of Contracts, ICGS LLC



Attachement A Matagorda Trial Cards

| Trial Card | ESWBS | Description | Résolution | Est. Cost | Target Date |
|------------|-------|---|--|-----------|-------------|
| CC004001 | 57476 | C2 displays lose power when port Mde is started | Initiate fix in two steps: 1) install temp solution of installing diodes; 2) install ne 24 v power supply for affected equipment | \$22,000 | 22-Mar-04 |
| OH0026001 | 05294 | First step on ladder down to mess deck lacks sufficient clearance | Screened KI, if investigation reveals in scope, correction will be made | \$570 | 15-Mar-04 |
| DC0026002 | 05028 | Fire Sta should be labeled iaw color and coating manual throughout | Color fire station IAW color and coating manual | \$2,060 | 15-Mar-04 |
| DK0004001 | 05315 | Notch grating in way of SRP ramp has not been installed or demonstrated to USCG | Receive and install grating | \$15,160 | 22-Mar-04 |
| EL0097003 | 57463 | Lower back cover shakes excessively | Secure cover | \$1,185 | 15-Mar-04 |
| OH0005001 | 05347 | 50cal gun aft platforms P/S have left no access to the mooring bitts & chocks. | Modify platforms | \$7,280 | 15-Mar-04 |
| DC0039001 | 05135 | Lazarette overhead insulation, in vicinity of door to aft steering is not taped | Tape insulation | \$1,010 | 15-Mar-04 |
| DK0022001 | 05107 | Gasoline for P-250 needs 15 gallons of gas for delivery | Provide 15 gallons of gasoline | \$500 | 15-Mar-04 |
| EL0022001 | 05453 | Portable wing station distribution panel mounted on aft bhd does not have protective cover to cannon plugs when control unit not plugged in | Install protective covers | \$620 | 15-Mar-04 |
| EL0103001 | 57453 | Battery room fan alarm indicated | | \$5,960 | 15-Mar-04 |
| HB0027001 | 05248 | Workmanship/installation of overhead insulation is very poor | Secure insulation | \$9,800 | 15-Mar-04 |



| | | quality | | | |
|-----------|-------|--|--|-----------------------|-----------|
| AX0051001 | 57452 | Port reduction gear control oil pressure is in the red (10). Units not identified | Investigate, report and repair if determined to be in scope effort | \$35,100 | 15-Mar-04 |
| AX0051002 | 57452 | STBD overspeed trip indicated during operations | Investigate, report and repair if determined to be in scope effort | \$3,620 | 15-Mar-04 |
| AX0051003 | 57452 | Engine lube oil and reduction gear control oil pressure share the same bar, yet reduction gear oil pressure runs locally | Investigate, report and repair if determined to be in scope effort | no cost associated | 15-Mar-04 |
| AX0073001 | 57443 | Firemain drain in Magazine is not in compliance with NAVSEA OP 4 sixth revision para 5-4-1.I | Investigate, report and repair if determined to be in scope effort | \$2,000 | 15-Mar-04 |
| DK0005001 | 05500 | Ensign mast back aft is removable, however, given the height above the main deck you cannot reach and safetly remove mast without the 50cal gun platform installed | Investigate, report and repair if determined to be in scope effort | \$1,010 | 15-Mar-04 |
| EL0032001 | 05318 | 110WPB arrived with a 24v disconnect switch mounted on the fwd bhd of deckhouse for securing power to the fwd gun | Investigate, report and repair if determined to be in scope effort | \$5,820 | 15-Mar-04 |
| EL0047001 | 05012 | Excess cable not properly secured | Investigate, report and repair if determined to be in scope effort | \$530 | 15-Mar-04 |
| EL0089001 | 57454 | Alarm sound several times a minute when tanks are above 90% | Investigate, report and repair if determined to be in scope effort | \$680 | 15-Mar-04 |
| EL0004001 | 05480 | Power strips installed on pilothouse overhead should be duplex receptacle | If determined to be in scope repair will be made | \$1,740 | 15-Mar-04 |
| CC0010 | | Cameras need to be mounted on permanent brackets | | \$10,000 | 15-Mar-04 |
| CC0002 | 05369 | Secure comms space door | | \$1,000 | 15-Mar-04 |
| CC0026002 | | Excessive cable length under pilothouse | | \$1,500 | 15-Mar-04 |

INTERBRIEU COAST GUARD SYSTEMS TER

| EL0024 | | Demonstrate CAPAC system | Needs to be demonstrated in salt water | \$500 | 15-Mar-04 |
|-----------|--------|---|--|----------|-----------|
| DC0026002 | | Photolumenescent labels | | \$1,000 | 15-Mar-04 |
| MP0002001 | 05303 | P/S MPDEs do not come up to | Repair if determined to be in scope | 0 | |
| EL0121001 | 57475 | UHF DAMA was not demonstrated | Demonstrate under classified testing | \$50,000 | 22-Mar-04 |
| CC0011001 | 05253 | Install ground cables/bond straps on racks iaw C4ISR cabinet specs and Mil STD 1310 | Install grounds | \$1,690 | 22-Mar-04 |
| CC0015001 | 05071D | LIMS Test steps were not successfully completed | Complete test enroute to NO | \$1,000 | 5-Mar-04 |
| CC0016001 | 05071E | Radar Test steps were not successfully completed (RDF bearing erratic) | Complete test enroute to NO | \$2,950 | 15-Mar-04 |
| CC0007001 | 05394 | C4ISR cable designation and tags not IAW GENSPEC | If determined to be in scope repair will be made | \$0 | 15 Mar 04 |
| DC0002001 | 05490 | General Alarms have wrong tones | Provide correct tones | \$10,000 | 22-Mar-04 |
| | | | | | |

Attachment B Matagorda CDRL Exceptions

| ELIN# | Deliverable Title | Cost to Complete |
|---|--|------------------|
| C002 | SW Requirements/Performance Specifications | |
| | | ¢1.700 |
| C005 | C4ISR Asset Performance Specification | \$1,790 |
| 0000 | OFIGIT ASSECT CHAIMance Openineation | \$10,739 |
| C006 | 123 C4ISR Asset Design Document | |
| | | \$5,369 |
| C007 | C4ISR Asset Integration and Installation Plan | \$3,132 |
| <u>1012</u> | Quality Assurance Plan | \$447 |
| 1017 | Environmental Management Plan | |
| | | \$313 |
| 1022 | Systems Engineering Management Plan (SEMP) | |
| | | \$7,159 |
| 1023 | Contractor Configuration Management Plan | |
| | | \$1,790 |
| 1026 | Technology Refreshment Plan | \$8,949 |
| <u>1030</u> | Test and Evaluation Program Plan | |
| | | \$3,580 |
| <u>1031-01</u> | <u>Test Plan</u> | \$1,342 |
| <u>1032-01</u> | <u>Test Procedure</u> | \$716 |
| 1033-01 | Test/Inspection Report | \$1,074 |
| 1034 | Test Assessment Plan | \$7,159 |
| 1035 | Technical Assessment Report | \$8,949 |
| 1039 | Concept of Operations Plan (CONOPS) | |
| | | \$7,159 |
| L002 | Logistics Standards Plan | \$313 |
| L003-04 | Manpower Regirements Analyses | |
| | | \$313 |
| L004-04 | Personnel Allowance Lists (PALS) | |
| | | \$313 |
| L007-01 | 123 WPB Asset Training Plan | \$2,237 |
| <u>L008-01</u> | 124 WPB Asset Training Needs Assessment and Analysis | |
| | (TANA) | |
| - · · · · · · · · · · · · · · · · · · · | | \$2,237 |
| L011 | Human Factors Engineering (HFE) Plan | |
| 10100 | | \$2,237 |
| L012-04 | Class Maintenance & Modernization Plan (CMMP) | |
| 1010 00 | 1 | \$2,685 |
| L013-09 | Level of Repair Analysis (LORA) | |
| 1044 | | \$313 |
| L014 | Equipment Support Plans | \$8,949 |

| L015-09 | Failure Modes Effects and Criticality Analysis (FMECA) | |
|----------------|---|--------------------|
| 1.040 | Technical Manuals | \$447 |
| L016 S002 | Launching Data | \$16,120 \$313 |
| S002 | Weight Control Plan | \$313 \$313 |
| S004 | Baseline Weight Estimate | \$313 |
| S005 | Performance Specification (P-SPEC) | φυιυ |
| 3003 | renormance opecinication (1 -or Lo) | \$447 |
| S008 | Technical Specification | \$2,237 |
| <u>S009</u> | Specific Certification Plan and Cutter Specific Certification Matrix | \$716 |
| S011-01 | Principal Characteristics Summary | \$7.10 |
| 3011-01 | Throipar Characteristics outlinary | \$3,132 |
| S011-02 | Hull Lines Drawing | \$313 |
| S011-03 | Rudder and Appendages Drawing | ψ010 |
| | | \$313 |
| S011-04 | Hull Curves of form | \$313 |
| S011-05 | General Arrangements Drawing | \$313 |
| S011-06 | Inboard/Outboard Profile Drawing | <u> </u> |
| | | \$313 |
| S011-07 | Topside Configuration Drawing (Mast) | |
| | | \$313 |
| S011-08 | Anchoring, Mooring and Towing Arrangement | |
| | | \$313 |
| S011-09 | Small Boat Handling Drawing | \$313 |
| <u>S011-10</u> | Midship Sections Drawing | \$313 |
| S011-11 | Auxiliary Systems Diagrams ALL SHEETS. | |
| | | \$313 |
| S011-16 | Propulsion Shafting Arrangement | |
| | | \$313 |
| S011-17 | Electric One Line Diagram | \$313 |
| S011-19 | Communications Center Arrangement Drawing | |
| | | \$313 |
| S011-20 | Pilot House and Bridge Wing Arrangements | |
| | | \$313 |
| S011-22 | C4ISR System Block Diagram | \$3,132 |
| S011-23 | Integrated Navigation System Block Diagram | |
| S011-24 | IC System Block Diagram | \$2,685 \$1,790 |
| S011-25 | Alarm and Indicating Systems Drawing | Φ1,790 |
| 0011-20 | Add indicating dystems brawing | \$716 |
| S011-26 | Propulsion Control System (PCS) Block Diagram | Ψίτο |
| 2011.20 | | \$313 |
| S011-27 | Master Equipment List | \$313 |
| S011-29 | Food Service Spaces Arrangements | ΨΟΙΟ |
| 30.7.20 | | \$313 |
| S011-30 | Arrangements of Living Spaces | \$313 |

| S012-01 | Mooring, Towing and Anchoring Analysis | ¢4.074 |
|-------------------|---|--------------|
| S012-02 | Auxiliary System Rib Launch/Retrieval Analysis | \$1,074 |
| | | \$313 |
| S012- 03(HVAC) | Auxiliary Systems HVAC Load Calculations | |
| 00(117710) | | \$313 |
| S012- | Auxiliary Systems HYD Load Calculations | |
| 03(HYD) | | \$313 |
| S012-04 | Electrical Plant Load Analysis (EPLA) | |
| 0040.05 | | \$313 |
| S012-05 | Propulsion Powering and Propulsor Analysis | |
| 0040.00 | Maria | \$313 |
| S012-06 | Model Test Reports | \$1,074 |
| S012-07 | Endurance Fuel Calculation | \$313 |
| S012-08 | Intact & Damage Stability Analysis & Limiting KG Analysis | |
| | | \$313 |
| S012-09 | Seakeeping Analysis | \$313 |
| S012-10 | Maneuvering Analysis | \$313 |
| S012-13 | Combat System Analysis | \$313 |
| S012-16 | | |
| | Replenishment at Sea Analysis | \$313 |
| S012-17 | Stores Handling Analysis | \$313 |
| S012-18 | Ammunition Handling Analysis | \$313 |
| S013 | SW Acquisition, Develop, and Integration Plan | 0040 |
| 0044 | Naise Control Plan | \$313 |
| S014 | Noise Control Plan | \$313 |
| S015 | Weight and Mass Properties Estimate | \$313 |
| S016 | Cutter Specific Certification Documents | 40.10 |
| | · | \$44,745 |
| S017-01 | Ship Vibration Analysis | \$313 |
| S017-02 | Shaft Vibration Analysis | |
| | | \$313 |
| S017-04 | Final Propulsion Powering Analysis and Propulsor Design | * |
| | Report | \$313 |
| S020 | Quarterly Weight Report 1 | \$313 |
| S023 | Inclining Experiment Report | |
| | | \$0 |
| S025 | Acceptance Trials (AT) Agenda & Certification | \$5,369 |
| S026 | Pollution Prevention Certificates of Compliance | |
| 0007 | On the state of the One than to | \$895 |
| S027 | Certificate for Sanitary Compliance | \$895 |
| S029 | Deratting Exemption Certificate | \$895 |
| S030-01 | Noise Control Design History | \$313 |

| S030-02 | Airborne Noise Survey Report | |
|---------|---|-----------|
| | | \$4,474 |
| S030-03 | Machinery Vibration Test Reports | \$4,474 |
| S030-04 | Vibration Survey Report | |
| | | \$4,474 |
| S030-05 | Propulsion System Vibration Test Report | |
| | | \$4,474 |
| S032 | Master Lubrication Table Report | \$313 |
| S033 | Material Safety Data Sheets | \$716 |
| S035 | General Information and Operationals Manual | \$8,949 |
| S037 | As-Built Drawings | \$17,898 |
| S038 | Selected Record Drawings | \$8,949 |
| | Total | \$243,500 |



Attachment C Tempest and Classified Testing

ICGS will review the outstanding TEMPEST discrepancies described in the final SPAWAR Instrumented TEMPEST Report conducted on CGC MATAGORDA during the week of 18Feb-24Feb 2004 and correct discrepancies if the required changes are clearly defined within the scope of the contract. ICGS will demonstrate the proper operation of C4ISR systems in a real-world classified environment. Agreed to MATAGORDA TEMPEST discrepancies to be resolved and classified testing to be successfully performed prior to June 24, 2004 (90 days after the receipt of the instrumented survey report). This effort shall be completed in the following phased manner, as each step is successfully completed that portion of the withholding listed will be released:

Step 1 Develop POA&M: Prepare and deliver Plan of Action and Milestones (POA&M) document which describes the schedule, locations, and resources needed to implement the following activities: (upon completion, ICGS receives 40% of the withholding)

- Development of design solutions to correct within scope MATAGORDA TEMPEST discrepancies outlined in the final SPAWAR TEMPEST Report.
- ☐ Installation of within scope design solutions to correct TEMPEST discrepancies aboard a 123 WPB class vessel
- □ Support of a SPAWAR Instrumented TEMPEST Survey to validate correction of TEMPEST discrepancies scheduled and executed via the CG program office.
- □ Conduct of Classified Testing aboard a 123 WPB class vessel per AT procedures
- ☐ Installation of TEMPEST corrections aboard MATAGORDA.

Step 2 Installation and Test of Tempest solution for 123 Class: (30% of total withholding)

- ☐ Install design solutions to correct identified and agreed upon Instrumented TEMPEST discrepancies (from USCG Tempest Report) aboard 123 WPB class vessel in accordance with the design solution.
- □ Support SPAWAR's Instrumented TEMPEST Survey to validate correction of TEMPEST discrepancies.
- Install approved design solutions to correct identified and agreed upon Instrumented TEMPEST report discrepancies on the Matagorda.

Step 3 Demonstration of Tempest solution for CGC MATAGORDA prior to Matagorda OT&E: (30% of total withholding)

DEEPWATER

- □ Conduct of Classified Testing aboard MATAGORDA to validate classified systems are properly installed and configured for operation in an actual (non simulated) classified environment
- Conduct Classified Testing aboard a 123 WPB class vessel to validate classified C4ISR system design in an actual (non simulated) classified environment

TEMPEST re-inspections will not be required if MATAGORDA's C4ISR configuration is the same as the 123 class vessel tested in Step #2)

EXTERNAL CERTIFICATION OF CONFORMANCE

3/1/2004

Page 1 of 2

It is hereby certified that the material supplied on the referenced purchase order/Contract Number fully conforms to all applicable specifications and requirements. The material supplied is in compliance with the latest ECN's / Revision noted. All material supplied under this order was originally purchased or manufactured by Lockheed Martin Maritime Systems and Sensors (MS2). All original purchasing and/or incoming inspection data is on file at MS2 and available for review upon request.

| Customer: _ | Integ | rated Coast Gua | rd Systems (ICGS) | |
|--------------------|----------------|-------------------------------|-----------------------|--|
| Purchase Orde | er/Co | ntract Number: | DTCG23-02-F-2DW079 | |
| P. O. Line Item | n Nun | nber/Level Code: | N/A | |
| Part Revision: | | | | |
| Part Number: | _C4 | ISR Equipment f | or CGC Matagorda -123 | |
| Part Description | on: | C4ISR Equipment CGC Matagorda | | , Testing & Training for the |
| Quantity: | N/A | | | |
| Shipping Notic | e Nu | mber: N/A | | |
| | | | | |
| Authorized Quality | www. y Repr | 3-1-0 esentative/Date | Y Authorized (| Africa of March 2004 Dontract's Representative/Date 3/4/04 |

The WPB-110 class cutters are receiving extensive upgrades under the USCG Integrated Deepwater System (IDS). Aside from extending the cutter to 123' for a stern boat launch ramp and other physical/mechanical upgrades, these patrol boats are receiving Command, Control, Communication and Computer, Intelligence, Surveillance and Reconnaissance (C4ISR) upgrades.

In accordance with the C4ISR Framework Architecture, IDS CONOP and IDS Requirements, Integrated Coast Guard Systems (ICGS) is providing the following C4ISR upgrades making this asset more capable in performance its missions.

This CoC is based on completion of: Design, Installation & Testing of the C4ISR Equipment for the Matagorda. Review of system operational /verification test results were completed. On–site LM Quality surveillance performed; 100% inspection on LM cabinets assemblies 1 through 5, 100% inspection of MES equipment performed, QA checklist completed, 30% spot inspection on cable installation. Receipt of subcontractors' CoC including PROSOFT, FLIR, NGIT, & MES. Conducting training services and material to the USCG personnel. FCA & PCA audit completed. Software Version Description Document (VDD) including password and license keys transferred.

Exceptions:

Comment:

Date:

EXTERNAL CERTIFICATION OF CONFORMANCE

LOCKHEED MARTIN CORPORATION MARITIME SYSTEMS & SENSORS

Page 2 of 2

- 1.) PROSOFT CoC will be submitted at the completion of COP training, completion of training is dependent upon successful implentation of classified system by 3/17/04.
- 2.) Open Trial Cards EL0121001,CC0011001,CC0015001,CC0016001,CC0007001 & DC0002001.
- 3.) Submittal of C006 for final as build CBDs, CRSs, Cabinet Rack Drawings, CSEL and Software Capabilities and Limitation Document to be supplied by May 30, 2004
- 4) Delivery of C005 with section 3.2 attached, May 30, 2004.
- 5) Delivery of C005 section 3.2 requirements verification matrix, May 30, 2004.
- 6.) S016:CCM compliance analysis by May 30, 2004.
- 7.) Test Report to be submitted by March 31, 2004
- 8.) Tempest corrections in accordance with the final instrumented tempest survey report provided by the USCG, and completion of classified testing.
- 9) Delivery of L016 data input to Northrop Grumman
- 10) Delivery of I026
- 11) Submittal of low Smoke Cables request for Deviations/Waivers

| | Page | 2 | of | 2 | |
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| The second state of the second | | | | | |
| Note: USCG will provide Iridium phone; reference 123 end item P-spec negotiations. | | | | | |
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SMH DEW

From:

Porter, Ronald

Sent:

Wednesday, December 22, 2004 9:10 AM

To:

Jones, David L.; Wright, Richard; Prokes, Terrence; Wharton, Rick; Wilhelm, Douglas G; Buford, Danny D. (Ship Systems); Calvin, Wally (Ship Systems); Colella, Harry (EXT); Conrad, Robert D. (Ship Systems); Driscoll, John LCDR; Frei, Kevin R; Hajduk, Philip J; Lang, Donald H; McLaverty, Brian; Meredith, Lawrence O; Mihelic, Joseph; Payne, Jeffrey LTJG; Talley, Shonda; Adkins, Steve; Alto, Alan; Ayala, Hala; Bassolino, John; Bauer, Sarah; Boyd, Barry ELC2; Boyd, Jay; Boyd, Jay; Brewer, George M ENG3; Cownie, Brodie LCDR; Figueroa, Nylsa; Fleming, Benjamin LT; Fontana, Richard CDR; Hartinger, Dan; Harwood, Fred; Henke, Douglas; Hernandez, Glenn LCDR; Hested, Jim; Illuminate, Dave; Jacoby, Chad LCDR; Driscoll, John LCDR; Leeper, Hank; Leeper, Henry; McLaughlin, Daniel CDR; Mitchell, Sean LT; Pearson, Steve; Powers, Geoffrey; Prokes, Terry; Reynolds, James LT; Rishar, David; Russell, Douglas CAPT; Sconiers, Thomas CWO; Walz, Michael CDR; Wood, John CDR

Cc:

Carter, Justin LT; Carter, Justin LT

Subject:

RE: MATAGORDA_122004_2200, METOMPKIN_122004_2200

Attachments:

CGC MATAGORDA.doc



.TAGORDA.doc (27 I All,

Attached is pending TEMPEST discrepancy list for Matagorda.

ron
Ronald T. Porter
USCG TISCOM (isd-3b)
TEMPEST Program Manager
703-313-5631 (STU-III)
703-313-5640 (FAX)

From: Jones, David L.

Sent: Wednesday, December 22, 2004 8:32 AM

To: 'Wright, Richard'; Prokes, Terrence; Wharton, Rick; Wilhelm, Douglas G; Buford, Danny D. (Ship Systems); Calvin, Wally (Ship Systems); Colella, Harry (EXT); Conrad, Robert D. (Ship Systems); Driscoll, John LCDR; Frei, Kevin R; Hajduk, Philip J; Lang, Donald H; McLaverty, Brian; Meredith, Lawrence O; Mihelic, Joseph CAPT; Payne, Jeffrey LTJG; Porter, Ronald; Talley-Green, Shonda; Adkins, Steve; Alto, Alan; Ayala, Hala; Bassolino, John; Bauer, Sarah LTJG; Boyd, Barry CWO; Boyd, Jay; Boyd, Jay F.; Brewer, George CWO; Cownie, Brodie LT; Figueroa, Nylsa; Fleming, Benjamin LT; Fontana, Richard CDR; Hartinger, Dan; Harwood, Fred; Henke, Doug; Hernandez, Glenn; Hested, Jim; Illuminate, Dave; Jacoby, Chad CDR; Driscoll, John LCDR; Leeper, Hank; Leeper, Henry; McLaughlin, Daniel CDR; Mitchell, Sean LT; Pearson, Steve; Powers, Geoffrey; Prokes, Terry; Reynolds, James LT; Rishar, David; Russell, Douglas CAPT; Sconiers, Thomas CWO; Walz, Michael CDR; Wood, John CDR Cc: Carter, Justin LT; Carter, Justin LT

I confirmed this morning that a copy of the scan results was left with LM engineers on the ship.

ENCLOSURES (1)

Sent: Tuesday, December 21, 2004 9:50 PM
To: Prokes, Terrence; Wharton, Rick; Wilhelm, Douglas G; Buford, Danny D. (Ship Systems); Calvin, Wally (Ship Systems); Colella, Harry (EXT); Conrad, Robert D. (Ship Systems); Driscoll, John LCDR; Frei, Kevin R; Hajduk, Philip J; Lang, Donald H; McLaverty, Brian; Meredith, Lawrence O; Mihelic, Joseph CAPT; Payne, Jeffrey LTJG; Porter, Ronald; Talley-Green, Shonda; Adkins, Steve; Alto, Alan; Ayala, Hala; Bassolino, John; Bauer, Sarah LTJG; Boyd, Barry CWO; Boyd, Jay; Boyd, Jay F.; Brewer, George CWO; Cownie, Brodie LT; Figueroa, Nylsa; Fleming, Benjamin LT; Fontana, Richard CDR; Hartinger, Dan; Harwood, Fred; Henke, Doug; Hernandez, Glenn; Hested, Jim; Illuminate, Dave; Jacoby, Chad CDR; Jones, David L.; Driscoll, John LCDR; Leeper, Hank; Leeper, Henry; McLaughlin, Daniel CDR; Mitchell, Sean LT; Pearson, Steve; Powers, Geoffrey; Prokes, Terry; Reynolds, James LT; Rishar, David; Russell, Douglas CAPT; Sconiers, Thomas CWO; Walz, Michael CDR; Wood, John CDR Cc: Carter, Justin LT; Carter, Justin LT

Any new status on Matagorda (scans, etc)

Rich

Richard Wright
ICGS C4ISR Domain Program Manager

US Coast Guard Integrated Deepwater System office: 571.218.3426 / mobile: 571.214.5508

richard.wright@dwicgs.com
"... Mission success IS customer satisfaction!"

----Original Message----

From: Prokes, Terrence [mailto:TProkes@comdt.uscg.mil]

Sent: Tuesday, December 21, 2004 4:14 PM

To: Wharton, Rick; Wilhelm, Douglas G; Buford, Danny D. (Ship Systems); Calvin, Wally (Ship Systems); Colella, Harry (EXT); Conrad, Robert D. (Ship Systems); Driscoll, John LCDR; Frei, Kevin R; Hajduk, Philip J; Lang, Donald H; McLaverty, Brian; Meredith, Lawrence O; Mihelic, Joseph CAPT; Payne, Jeffrey LTJG; Porter, Ronald; Talley-Green, Shonda; Wright, Richard; Adkins, Steve; Alto, Alan; Ayala, Hala; Bassolino, John; Bauer, Sarah LTJG; Boyd, Barry; Boyd, Jay; Boyd, Jay F.; Brewer, George CWO; Cownie, Brodie LT; Figueroa, Nylsa; Fleming, Benjamin LT; Fontana, Richard; Hartinger, Dan; Harwood, Fred; Henke, Doug; Hernandez, Glenn; Hested, Jim; Illuminate, Dave; Jacoby, Chad; Jones, David; Driscoll, John LCDR; Leeper, Hank; Leeper, Henry; McLaughlin, Daniel; Mitchell, Sean LT; Pearson, Steve; Powers, Geoffrey; Prokes, Terry; Reynolds, James LT; Rishar, David; Russell, Douglas; Sconiers, Thomas CWO; Walz, Michael; Wood, John

Cc: Carter, Justin LT; Carter, Justin LT

Subject: RE: MATAGORDA_122004_2200, METOMPKIN_122004_2200

Importance: High

Rick,

Metompkin schedule needs some major re-writes so the dates align (i.e. SSAA package not delivered to SMO until 2/8/05 - Testing conducted 1/19/05?). Recommend we review it at the meeting.

Page 42 of 134

Some items I noted:

Line # 21: Vessel schedule to depart BSI on 1/10/05

Line # 41: Vessel will not be launched until 1/4/05

Line #42: Suspect this date will be 1/5/05 Line #?: Need to add update Phone System

Line #90: Re-inspection not required - change to "Notify D7 Security MGR of corrections" & "D7 Security MGR issues letter"

Line # ??: Add line to Visual Tempest Inspection "Install screen in LE Locker Door" Line #121 & 122: Apply for and ATO approved on 1/26-2/1 conflict with lines 123 thru 130 SSAA package dates 2/2-8/05 (SSAA package must be submitted before ATO is approved).

Lines # 131-138: Dates do not match SSAA Package dates (lines 123-130) and Software Vulnerability dates (lines 106-122)

Line #154: Testing dates are scheduled before all requirements are completed (i.e. Software Vulnerability - line 106, SSAA package - line 123, SIPRNET ATO - line 131.

Thanks,

Terry Prokes ILS Transition Manager Commandant (G-DTM) U.S. Coast Guard Deepwater Transition Management e-mail: tprokes@comdt.uscg.mil PH: 202.267.0445 Cell: 202.498.2591

----Original Message----

From: Wharton, Rick [mailto:Rick.Wharton@dwicgs.com]

Sent: Monday, December 20, 2004 11:21 PM

To: Wilhelm, Douglas G; Buford, Danny D. (Ship Systems); Calvin, Wally (Ship Systems); Colella, Harry (EXT); Conrad, Robert D. (Ship Systems); Driscoll, John LCDR; Frei, Kevin R; Hajduk, Philip J; Lang, Donald H; McLaverty, Brian; Meredith, Lawrence O; Mihelic, Joseph CAPT; Payne, Jeffrey LTJG; Porter, Ronald; Talley-Green, Shonda; Wright, Richard; Adkins, Steve; Alto, Alan; Ayala, Hala; Bassolino, John; Bauer, Sarah LTJG; Boyd, Barry CWO; Boyd, Jay; Boyd, Jay F.; Brewer, George CWO; Cownie, Brodie LT; Figueroa, Nylsa; Fleming, Benjamin LT; Fontana, Richard CDR; Hartinger, Dan; Harwood, Fred; Henke, Doug; Hernandez, Glenn; Hested, Jim; Illuminate, Dave; Jacoby, Chad CDR; Jones, David; Driscoll, John LCDR; Leeper, Hank; Leeper, Henry; McLaughlin, Daniel CDR; Mitchell, Sean LT; Pearson, Steve; Powers, Geoffrey; Prokes, Terry; Reynolds, James LT; Rishar, David; Russell, Douglas CAPT; Sconiers, Thomas CWO; Prokes, Terrence; Walz, Michael CDR; Wharton, Rick; Wood, John CDR

Subject: MATAGORDA_122004_2200, METOMPKIN_122004_2200

Matagorda departed BSI today, one day earlier than planned to avoid weather later in the week. All warranty items corrected with the exception of the steering system breather cap, which will be shipped to the boat in Key West. Several C4ISR items being tested enroute Key West. Low Smoke Cable and Cable Tag DD-250 items pend resolution, but have no operational impact on the cutter. Solid door to LE locker was modified to an expanded metal cage-type door, eliminating the need for a protected distribution system for red cables in the space. If CATV filter/attenuator cannot be obtained in time to support TEMPEST final cert, cable will be disconnected (already discussed with Ron Porter) Talked with Dave Jones this morning - TISCOM personnel were onboard performing a scan of the 3

Page 43 of 134

C4ISR software enroute New Orleans. Plan for SPAWAR to scan $27~{\rm Dec.}$ ATO remains on track to be completed before $12~{\rm Jan.}$

BSI and on-site LM personnel turning their attention to Metompkin. Plan is to complete most of the outstanding warranty/DD-250 items before holiday shutdown. Fins have been removed and port lower bearing housing being replaced. Damaged prop being replaced with props (replaced as a pair) originally intended for Manitou - next set, intended to be spares, will be available early January in plenty of time to support Manitou launch.

<<MATAOGORDA_122004_2200.pdf>> <<MATAOGORDA_122004_2200.mpp>> <<METOMPKIN_122004_ 2200.pdf>> <<METOMPKIN_122004_2200.mpp>>

Rick Wharton Northrop Grumman Ship Systems 123 WPB Asset Manager Integrated Coast Guard Systems, LLC US Coast Guard Deepwater Program Ph: (571) 218-3221

Cell: (703) 627-0048 Fax: (571) 218-3342

USCGC MATAGORDA – SECOND VISUAL TEMPEST INSPECTION December 19, 2004

CGC MATAGORDA

- 1. Secure ground for ARC-210. Ground is loose. Recommend removing nut on front of braid to ensure maximum contact with equipment shelf.
- 2. Hand-held radios less than one meter from STE. Recommend unit SOP be worded to turn radios off prior to charging. Post sign to emphasize same.

CO's STATEROOM

3. Separate CLASSIFIED and UNCLASSIFIED LAN cables by two inches.

XO's STATEROOM

4. Separate CLASSIFIED and UNCLASSFIED LAN cables by two inches.

CLASSIFIED SERVER ROOM

- 5. CATV isolator required on cable prior to exiting ship. Recommend placing isolator in Cabinet 5 of UNCLAS Server rack.
- 6. Recommend CLASSIFED and UNCLASSIFIED stickers on LAN outlet boxes in view of the fact that the connectors and jacks are interchangeable.



Commander Maintenance and Logistics Command Atlantic

300 East Main Street, Suite 700 Norfolk, VA 23510-9103 Staff Symbol: (tp-1) Phone: (757) 628-4051 Fax: (757) 628-4035 E-mail: Ernestine.N.Cook@uscg.mil

2241 05.0381

OCT 28 2005

MEMORANDUM

From:

Reply to:

(tp-1)

Attn of:

Ernestine Cook

(757) 628-4051

To:

CGC MATAGORDA (WPB 1303)

Subi:

VISUAL TEMPEST INSPECTION OF USCGC MATAGORDA (WPB 1303)

Ref:

- (a) DON IA PUB 5239-31 Information Assurance Shipboard Red/Black Installation Publication
- (b) NSTISSAM TEMPEST 2-95 Red/Black Installation Guidance
- 1. Mr. Timothy Neary of ESU Miami conducted an inspection of the Secure Electrical Information Processing System (SEIPS) onboard CGC MATAGORDA on 3 August 2005. The inspection was conducted as required by references (a) and (b). A summary of corrected discrepancies is listed in enclosure (1). No new discrepancies were found.
- 2. This summary provides a record of the installation at the time of inspection. Modifications or changes to the SEIPS shall not be made without approval of TISCOM (isd-3b) or MLCA. This summary and amendments to this summary shall be retained in the unit's SEIPS TEMPEST documentation file.

#

Enclosure: (1) Visual TEMPEST Inspection Report

Copy: LANTAREA

TISCOM (isd-3b)

ESU Miami

ESD Key West

Visual TEMPEST Inspection Summary

USCGC MATAGORDA (WPB 1303) 3 August 2005

This Visual TEMPEST Inspection is for the FTA Visit

The entire Secure Electrical Information Processing System was inspected.

List of spaces with secure processing equipment inspected by the visual TEMPEST inspector:

- 1. Electronic space
- 2. Bridge

Disc

| _, | |
|-----------------|---|
| Discrepancy for | m legend: |
| Column A: | Sequential discrepancy number |
| Column B: | |
| SF | Correction of the discrepancy is within the capability of ship's force. |
| IAC | Correction of the discrepancy was completed by ships force prior to completion of inspection visit. |
| ĪA | Indicates that the assistance of an industrial activity is probably required to properly correct the discrepancy. |
| IAC | Indicates that an industrial activity corrected the discrepancy. |
| SA | Indicates that the assistance of a support activity is probably required to properly correct the discrepancy. |
| SAC | Indicates that a support activity corrected the discrepancy. |
| CA | Indicates that the Contractor Activity is probably required to properly correct the discrepancy. |
| Column C: | Reference of the paragraph in designated manuals to which the installation does not conform. |
| Narrative: | A brief description of the discrepancy found. |

Enclosure (1)

Discrepancies and Corrective Action Report

1. Electronic Space:

| A | В | С | Narrative |
|----|----|---|--|
| 01 | CA | NSTISSAM TEMPEST 2/95 PG 27 Para 2a/pg16 para 5 IA Pub 5239-31 A.1.1.1 a, b | Cabinet 3: Black RF transmitter (RT-1794) in same rack as Red Processors. Recommend moving 3 meters away or in adjacent Black Equipment Room. Recommend placing entire ARC-210 system on Bridge. Waived. |
| 02 | CA | NSTISSAM TEMPEST 2/95 PG 27 Para 2b | Cabinet 3: Red processor less than one meter away from power line to black transmitter (RT-1794 p/o ARC-210). Waived. |
| 03 | CA | NSTISSAM TEMPEST 2/95 pg 27 Para 2a | Cabinet 3: Red processor less than one meter away from black signal lines connected to RF transmitter (RT-1794). Waived. |
| 04 | CA | NSTISSAM TEMPEST 2/95 pg 27 Para 4, Para 4.4.1.1, 4.1.1.2 IA PUB 5239-31 Para A.1.7.1 IA PUB 5239-31 MIL-STD 188- 124B Para 5.2.12 | Signal cable used with RED processors, BLACK processors, ISDN telephones are not terminated. Red data cables for RED LAN have aluminum/mylar shielding. Manufacturer data: DRAKA COMTEQ (F) ShipLan Cable 4PR 24 AWG Screened 307650. Subject cable may pose a TEMPEST hazard. B.1.2.5 (5239): Approved cables. Mil-C-17 (ref k), or MIL-C-915 (reference(1)), MIL-C-24640(reference(n)) or MIL-C-24643 (reference (0)). Researched cable and found that it does NOT meet any of the above MIL-SPECs. Draka sells data cables that are MIL-DTL-24643 compliant. Subject cables are CAT 5e Shiplan '59W', '59' and '59S' Marine data cables. The cables listed all have a braided shield in addition to the aluminum mylar tape. The braided shield allows for a flexible ground. NSTISSAM 2-95: RED processors meeting the requirements of NSTISSAM TEMPEST/1-92 (Levels I, II, or III) must use optical or shielded wire cables if specified as part of the manufacturer's installation specification, or if specified for compliance with TEMPEST certification. Paragraphs 4.4.1.1, and 4.1.1.2 defines cable characteristics and shield termination. IA Pub 5239-31: RED Shielded Metallic Wire Cable. RED metallic wire cables in all locations shall be shielded, with the exception of desktop computer cables that are provided by the manufacturer, where there is not an offered shielded cable option. This requirement is not applicable to RED fiber optic cables. MIL-STD-188 "Foil shields are not acceptable for peripheral bonding and do not provide mechanical durability" IA Pub 5239-31 pg B-9 Para d. Note: "If both ends of the cable will not have the shield taken to ground, approval by the cognizant CTTA should be obtained prior to installation." Other source (AFMAN33-214V2 DATED 21SEP2001) states that foil shielding is intended for voice or digital signals less than 5Kbps. CG must assume risks associated with using subject cable. This is also documented in Instrumented Test Report. Acceptable risk. No discrepancy. |

| CA NSTISSAM TEMPEST 2/95 pg 28 Para 6 CA IA Pub 5239-31 Para B.1.2.6.10 CA IA Pub 5239-31 CA IA Pub 5259-31 | RED processors and RF transmitters in Cabinet 3. RED processors should not be powered from the same circuits as RF transmitters. Waived. AN/UPX-28 has flexible ground strap with crimped ends. Replace with Class C bond strap. Corrected. On racks, install ground cables per IA 5239-31. Where required, use soldered connectors vice crimping. Waived. Remove external tooth washers on ground connectors to cabinets. Use lock |
|---|--|
| pg 28 Para 6 CA IA Pub 5239-31 Para B.1.2.6.10 CA IA Pub 5239-31 | AN/UPX-28 has flexible ground strap with crimped ends. Replace with Class C bond strap. Corrected. On racks, install ground cables per IA 5239-31. Where required, use soldered connectors vice crimping. Waived. Remove external tooth washers on ground connectors to cabinets. Use lock |
| A IA Pub 5239-31 Para B.1.2.6.10 CA IA Pub 5239-31 | C bond strap. Corrected. On racks, install ground cables per IA 5239-31. Where required, use soldered connectors vice crimping. Waived. Remove external tooth washers on ground connectors to cabinets. Use lock |
| Para B.1.2.6.10 CA IA Pub 5239-31 | C bond strap. Corrected. On racks, install ground cables per IA 5239-31. Where required, use soldered connectors vice crimping. Waived. Remove external tooth washers on ground connectors to cabinets. Use lock |
| CA IA Pub 5239-31 | On racks, install ground cables per IA 5239-31. Where required, use soldered connectors vice crimping. Waived. Remove external tooth washers on ground connectors to cabinets. Use lock |
| | connectors vice crimping. Waived. Remove external tooth washers on ground connectors to cabinets. Use lock |
| CA IA Pub 5259-31 | |
| 1 1 | washers and lug nuts per IA Instruction 5239-31 Figure B-5. Corrected |
| CA IA Pub 5239 | Keyboard and Monitor in Cabinet #1 has non -manufacturer supplied power |
| B.1.2.6.12 | cable. Bond shelf to rack. Contends it is manufacturer's cable. Waived. |
| CA NSTISSAM 2-95 | RED/BLACK cable separation. Two inch minimum separation requirement. |
| Para 3 Notes 3 | Six inch separation requirement for RED/BLACK cables that run in parallel |
| | for 100 ft runs. The only way to ID is via cable tags. Waived. |
| A IA Pub 5239-31 | Remove flexible ground strap with crimped ends from ANDVT rack and |
| Para B.1.2.6.10 | replace with Class C solid. Strap. Corrected. |
| CA IA Pub 5239-31 | ARC-210 Secure voice cables. Transmit and receive audio lines need to be |
| Para A.1.1.7. | shielded. Resolved. See 2. Bridge item #4. |
| CA NSTISSAM 2-95 | Operator position in Classified C4ISR room has cables from two UNCLAS |
| Recommendation | LAN and three CLASSIFIED LAN connections. Require 2 inch (5 cm) |
| | separation. Waived. |
| 1 2 | |
| 7 | B.1.2.6.12 A NSTISSAM 2-95 Para 3 Notes 3 A IA Pub 5239-31 Para B.1.2.6.10 A IA Pub 5239-31 Para A.1.1.7. A NSTISSAM 2-95 |

2. Bridge:

| 01 | CA | NSTISSAM 2-95 Recommendation I Pg 27 Para 3 Notes: 2 | LAN (RED) and GPS (BLACK) use common junction box. No RED/BLACK separation. Corrected, moved BLACK LAN and GPS to separate junction boxes. RED LAN is routed in common cable run. Does not have minimum separation. See item #10. |
|----|----|---|---|
| 02 | CA | IA Pub 5239-31 Para B.1.2.6.13 | No metal-to-metal contact for ground strap from ARC 210 Tray to ground on shelf. Recommend use SOLID Class C ground strap vice crimped wire. Corrected. |
| 03 | CA | IA Pub 5239-31 A.1.1.7.2a | Not clear if Shielded Twisted Pair is used for voice and control wirelines. SPAWAR will inspect and test during Instrumented TEMPEST test. NOTE: No discrepancy noted by SPAWAR testing. Reference to ARC-210. Informed by Harris Corp that kit provided included shielding of all RED cables. Corrected. |
| 04 | CA | IA Pub 5239-31 Para A.1.1.7.2 Pg A-3 | Unshielded cable connected to connector J3 on ARC-210 Tray. Twisted red wires (four) runs to ARC-210 Control head mounted in the forward console of the bridge. This is the Control and Status of the ARC-210. All data is by channel/mode/power only, no audio is routed to the Control head. Replace cable run with proper cable. This cable should be shielded. Corrected. |

3. Other:

| 01 | CA | NSTISSAM 2-95 Recommendation I Pg 27 Para 3 Notes: 2 | CO's cabin. RED and BLACK LAN ports have no cable separation. Recommend 2 inch separation. RED/BLACK cable is tied together. Acceptable risk while underway. No discrepancy. |
|----|----|---|---|
| 02 | CA | NSTISSAM 2-95 Recommendation I Pg 27 Para 1 | CO's cabin. Proposed RED laptop on desk top less than 20 inches (20 cm) from black phone. Acceptable risk while underway. No discrepancy. |
| 03 | CA | IA Pub 5239-31 Para A.1.1.7.3.1.b | RED Fiber optic cable goes through space adjacent to black racks that contains hasp for locking. If the cable passes through normally locked spaces (for example, voids, staterooms, etc), that portion of the cable shall be contained in a metallic conduit. This space is the cutters armory and is considered a restricted area. Corrected. |

TEMPEST 2/95

Department of the Navy (DoN) Information Assurance (IA) Publication Module 5239-31

MIL-STD-188-124B Grounding Bonding Shielding for Common Long Haul/Tactical Communications Systems

Air Force Manual 33-214, Volume 2, Communications and Information Emission Security Countermeasures Review



Commander

Maintenance and Logistics Command

Atlantic

300 East Main Street, Suite 700 Norfolk, VA 23510-9103 Staff Symbol: (tp-1) Phone: (757) 628-4051 Fax: (757) 628-4226 E-mail: Ernestine.N.Cook@uscg.mil

2241 06.0362

DEC 2 6 2006

MEMORANDUM

From:

MLCLANT (t)

Reply to:

(tp-1)

Attn of:

Ernestine Cook

(757) 628-4051

To:

CGC MONHEGAN (WPB 1305)

Subj:

VISUAL TEMPEST INSPECTION OF USCGC MONHEGAN (WPB 1305)

Ref:

- (a) DON IA PUB 5239-31 Information Assurance Shipboard Red/Black Installation
- (b) NSTISSAM TEMPEST 2-95A Red/Black Installation Guidance
- (c) COMDT COGARD Washington DC//CG-62//042137Z Mar 04
- 1. Mr. Brian Meetze of ESD Miami Beach, LT Jim Cabase of COMDT (CG-623), and ET2 Michael Harrison of ESD Key West conducted a Visual Tempest Inspection (VTI) of the Secure Electrical Information Processing System (SEIPS) onboard CGC MONHEGAN on 2 November 2006. The inspection was conducted as required by references (a) and (b).
- 2. A summary of minor discrepancies is listed in enclosure (1). No serious TEMPEST hazards were noted; therefore, you may continue normal operations. In accordance with reference (c), discrepancies must be corrected within 90 days. You should contact Ms. Emestine Cook to schedule a re-inspection. This summary also provides a record of the installation at the time of inspection. Modifications or changes to the SEIPS shall not be made without approval of TISCOM (isd-3b) or MLCLANT.
- 3. This summary and amendments to this summary shall be retained in the unit's SEIPS TEMPEST documentation file.

#

Enclosure: (1) Visual TEMPEST Inspection Summary

Copy: COMDT (CG-623)

LANTAREA TISCOM (isd-3b) ESU Miami ESD Key West

Visual TEMPEST Inspection Summary

USCGC MONHEGAN (WPB 1305) 2 November 2006

This Visual TEMPEST Inspection is for the FTA Visit.

The entire Secure Electrical Information Processing System was inspected.

List of spaces with secure processing equipment inspected by the visual TEMPEST inspector:

- 1. Electronic space
- 2. Bridge
- 3. Other

Discrepancy form legend:

| Column A: Sea | quential discrepand | cy number |
|---------------|---------------------|-----------|
|---------------|---------------------|-----------|

Column B:

| Waived | Discrepancies granted a waiver as a result of instrumented testing and per TISCOM ltr of 12 Jul 05. |
|---|---|
| SF | Correction of the discrepancy is within the capability of ship's force. |
| IAC | Correction of the discrepancy was completed by ships force prior to completion of inspection visit. |
| IA | Indicates that the assistance of an industrial activity is probably required to properly correct the discrepancy. |
| IAC | Indicates that an industrial activity corrected the discrepancy. |
| SA | Indicates that the assistance of a support activity is probably required to properly correct the discrepancy. |
| SAC | Indicates that a support activity corrected the discrepancy. |
| CA | Indicates that the Contractor Activity is probably required to properly correct the discrepancy. |
| Column C: Reference of the paragraph in designated manuals to which the installation does not | |
| Narrative: | A brief description of the discrepancy found. |

Enclosure (1)

Discrepancies and Corrective Action Report

1. Electronic Space:

| Α | В | C | Narrative |
|----|--------|---|---|
| 01 | Waived | NSTISSAM TEMPEST 2/95A PG 27 Para 2a/pg16 para 5 IA Pub 5239-31 A.1.1.1 a, b | Cabinet 3: Black RF transmitter (RT-1794) in same rack as Red Processors. Recommend moving 3 meters away or in adjacent Black Equipment Room. Recommend placing entire ARC-210 system on Bridge. |
| 02 | Waived | NSTISSAM TEMPEST 2/95A PG 27 Para 2b | Cabinet 3: Red processor less than one meter away from power line to black transmitter (RT-1794 p/o ARC-210). |
| 03 | Waived | NSTISSAM TEMPEST 2/95A pg 27 Para 2a | Cabinet 3: Red processor less than one meter away from black signal lines connected to RF transmitter (RT-1794). |
| 04 | Waived | NSTISSAM TEMPEST 2/95 pg 28 Para 6 | RED processors and RF transmitters in Cabinet 3. RED processors should not be powered from the same circuits as RF transmitters. |
| 05 | CA | NSTISSAM 2-95A Para 3 Notes: 3 | RED/BLACK cable separation. Two inch minimum separation requirement. Six inch separation requirement for RED/BLACK cables that run in parallel for 100 ft runs. The only way to ID is via cable tags. |
| 06 | CA | IA Pub 5239-31 Para A.1.1.7. | ARC-210 and ANDVT Secure voice cables. Transmit and receive audio lines need to be shielded. |
| 07 | CA | NSTISSAM 2-95A Recommendation I Pg 27 Para 3 Notes: 2 | Operator position in Classified C4ISR room has cables from two UNCLAS LAN and three CLASSIFIED LAN connections. Require 2 inch (5 cm) separation. |
| 08 | CA | IA 5239-31 Para A.1.1.7.2.a. | Outer shield missing on KIV-7 db connector. |
| 09 | Waived | IA 5239-31 Para B.1.2.6 | Cabinet 1: Not grounded properly to ship's hull (i.e. Spring coils do not constitute a Class C bond). |
| 10 | Waived | IA 5239-31 Para B.1.2.6 | Cabinet 2: Not grounded properly to ship's hull (i.e. Spring coils do not constitute a Class C bond). |
| 11 | Waived | IA 5239-31 Para B.1.2.6 | Cabinet 3: Not grounded properly to ship's hull (i.e. Spring coils do not constitute a Class C bond). |
| 12 | CA | IA 5239-31 Para B.1.2.6 | KG-175/TACLANE in Cabinet 3 missing grounding hardware. |

2. Bridge:

| 01 | Waived | NSTISSAM 2- 95A Recommendation I Pg 27 Para 3 Notes: 2 | LAN (RED) cable is routed in conjunction with common cable run. No RED/BLACK separation. |
|----|--------|--|---|
| 02 | CA | IA 5239-31 Para B.1.2.6 | Starboard KITE 1: Replace ground wire with Class C bonding. |
| 03 | CA | NSTISSAM 2-95A Pg 30 Para 4.4.1 | Starboard KITE 1: Cable shielding not grounded at connector (J1). |
| 04 | CA | NSTISSAM 2-95A Pg 30 Para 4.4.1 | Port KITE 2: Cable shielding not grounded at connector (J1). |
| 05 | CA | NSTISSAM 2-95A Recommendation I | Starboard KITE 1: Missing 3 meter separation between RF transmitter and Red processor. |
| 06 | CA | NSTISSAM 2-95A Recommendation I | Port KITE 2: Missing 3 meter separation between RF transmitter and Red processor. |

3. Other:

| 01 | | | CO's and XO's cabin. RED cables of associated LAN drops are routed through a common cable run (i.e. black signal and power lines). Recommend 2 inch separation. |
|----|--|--|---|
|----|--|--|---|

NSTISSAM TEMPEST 2/95A

Department of the Navy (DoN) Information Assurance (IA) Publication Module 5239-31



Commander
Maintenance and Logistics Command
Atlantic

300 East Main Street, Suite 700 Norfolk, VA 23510-9103 Staff Symbol: (tp-1) Phone: (757) 628-4051 Fax: (757) 628-4035 E-mail: Ernestine.N.Cook@uscg.mill

2241 05.0380

OCT 14 2005

MEMORANDUM

From:

B. J/O'Keefe CAPT

Reply to:

(tp-1)

Attn of:

Ernestine Cook

(757) 628-4051

To:

CGC METOMPKIN (WPB 1325)

Subi:

VISUAL TEMPEST INSPECTION SUMMARY OF USCGC METOMPKIN

(WPB 1325)

Ref:

- (a) DON IA PUB 5239-31 Information Assurance Shipboard Red/Black Installation Publication
- (b) NSTISSAM TEMPEST 2-95 Red/Black Installation Guidance
- (c) TISCOM (isd-3b) Memo 2241 of 12 Jul 05
- (d) COMDT COGARD Washington DC//CG-62//042137Z Mar 04
- 1. Mr. Timothy Neary of ESU Miami conducted an inspection of the Secure Electrical Information Processing System (SEIPS) onboard CGC METOMPKIN on 4 August 2005. The inspection was conducted as required by references (a) and (b). Reference (c) cites waivers that have been given and will not be reported. A summary of a minor discrepancy is listed in enclosure (1).
- 2. No serious TEMPEST hazards were noted; therefore you may continue normal operations. In accordance with reference (d), discrepancies must be corrected within 90 days. You should contact Ms. Ernestine Cook to schedule a re-inspection. This summary also provides a record of the installation at the time of inspection. Modifications or changes to the SEIPS shall not be made without approval of TISCOM (isd-3b) or MLCA.
- 3. This summary and amendments to this summary shall be retained in the unit's SEIPS TEMPEST documentation file.

#

Enclosure: (1) Visual TEMPEST Inspection Report

Copy: LANTAREA

TISCOM (isd-3b) ESU Miami ESD Key West

Visual TEMPEST Inspection Summary

USCGC METOMPKIN 4 August 2005

The entire Secure Electrical Information Processing System was inspected.

List of spaces with secure processing equipment inspected by the visual TEMPEST inspector:

- 1. CIC
- 2. Radio

Discrepancy form legend:

Column A: Sequential discrepancy number

Column B:

SF Correction of the discrepancy is within the capability of ship's force.

SFC Correction of the discrepancy was completed by ships force prior to completion of inspection visit.

IA Indicates that the assistance of an industrial activity is probably required to properly correct the discrepancy.

IAC Indicates that an industrial activity corrected the discrepancy.

SA Indicates that the assistance of a support activity is probably required to properly correct the discrepancy.

SAC Indicates that a support activity corrected the discrepancy.

Column C: Document Reference to which the installation does not conform.

Narrative: A brief description of the discrepancy found.

ENCLOSURE (|)

Discrepancies and Corrective Action Report

1. CIC:

| A | В | С | Narrative |
|-----|----|--------------------|---|
| 001 | SA | IA Pub 5239-31 | RED fiber optic passes through armory, which has a solid metal |
| | | Para A.1.1.7.3.1.b | door. If the cable passes through locked spaces, it shall be |
| 1 | | | contained in PDS. The TISCOM compromise, a mesh door to |
| | • | | permit physical inspection, is scheduled to be installed during the |
| 1 | | | next shipyard period. |



Commander Maintenance and Logistics Command Atlantic 300 East Main Street, Suite 700 Norfolk, VA 23510-9103 Staff Symbol: (tp-1) Phone: (757) 628-4051 Fax: (757) 628-4035

2241 05.0043

SEP 13 2005

MEMORANDUM

From:

Reply to:

(tp-1)

Attn of:

Ernestine Cook

(757) 628-4051

To:

CGC NUNIVAK (WPB 1306)

Subi:

VISUAL TEMPEST INSPECTION SUMMARY FOR USCGC NUNIVAK

(WPB 1306)

Ref:

(a) NSTISSAM 2-95 Red/Black Installation Guidance

- (b) DON IA PUB 5239-31 Information Assurance Shipboard Red/Black Installation Publication
- (c) COMDT COGARD Washington DC//CG-62//042137Z Mar 04
- 1. ET2 Timothy Cole of ESD New Orleans conducted an inspection of the Secure Electrical Information Processing System (SEIPS) on CGC NUNIVAK on 7 January 2005. The inspection was conducted as required by references (a) and (b).
- 2. Enclosure (1) is a summary of minor discrepancies with the SEIPS. No serious TEMPEST hazards were noted; therefore, you may continue normal operations. In accordance with reference (c), discrepancies must be corrected within 90 days. You should contact Ms. Ernestine Cook to schedule a re-inspection. This summary also provides a record of the installation at the time of the inspection. Modifications or changes to the SEIPS shall not be made without the approval of TISCOM (isd-3b) or MLCA.

Subj: VISUAL TEMPEST INSPECTION SUMMARY

FOR USCGC NUNIVAK (WPB 1306)

2241

SEP 1 3 2005

3. This summary and amendments to this summary shall be retained in the unit's SEIPS (TEMPEST) documentation file.

#

Enclosures: (1) Visual Tempest Inspection Summary

(2) TISCOM (isd-3b) Memo 2241 of 12 Jul 05

Copy: COMDT (CG-6, G-DPM-3)

LANTAREA TISCOM (isd-3b) ESU New Orleans ESD New Orleans

ESU Miami ESD Key West

Visual TEMPEST Inspection Summary

The entire Secure Electrical Information Processing System was inspected.

Sequential discrepancy number

List of spaces with secure processing equipment inspected by the visual TEMPEST inspector:

- 1. Radio Room
- 2. State Rooms
- 3. Bridge

Column A:

Discrepancy form legend:

| Column B: | |
|-----------|---|
| SF | Correction of the discrepancy is within the capability of ship's force. |

SFC Correction of the discrepancy was completed by ships force prior to completion of inspection visit.

IA Indicates that the assistance of an industrial activity is probably required to properly correct the discrepancy.

IAC Indicates that an industrial activity corrected the discrepancy.

SA Indicates that the assistance of a support activity is probably required to properly correct the discrepancy.

SAC Indicates that a support activity corrected the discrepancy.

CA Indicates that a Contractor activity is required to correct the discrepancy.

Column C: Document Reference to which the installation does not conform.

Narrative: A brief description of the discrepancy found.

Enclosure (1)

Discrepancies and Corrective Action Report

1. Radio Room 2-28-O-Q

| Α | В | C | Narrative |
|-----|---------|--|---|
| 001 | IA/SA | IA PUB 5239-31 Paragraph A.1.1.2 | The printer (red) uses black power. The printer router (red) uses black power. Recommend plugging printer into UPS. |
| 002 | *Waived | NSTISSAM 2-95 Rec I Paragraph 6 | There is no 3meter separation between printer (red) and IFF transmitter. Transmitter is enclosed in metal case. Prototype passed RED LAN instrumented test. WAIVED |
| 003 | *Waived | NSTISSAM 2-95 Rec I Paragraph 6 | In Rack #3, there is no 3meter separation between red and black cables before entering the Marcom switch. Tested and evaluated by SPAWAR previously. WAIVED |
| 004 | *Waived | NSTISSAM 2-95 Rec I Paragraph 6 | In Rack #3, there is no 3meter separation between cryptographic equipment and RT9000 transceiver. Tested and evaluated by SPAWAR. WAIVED |
| 005 | CA | IA PUB 5239-31 Paragraph A.1.1.7.3.1.B | There is not a secure Protected Distribution System (PDS) leaving Radio Room. LE Locker behind Secure Space. Item to be corrected by Contractor. LE locker will have full length locking cage to allow viewing of the subject cables. |

Note: Separation of IFF antenna line and Class LAN line may be part of an upcoming GROOM

[•] Per TISCOM (isd-3b) ltr of 12 Jul 05



Commander
Maintenance and Logistics Command
Atlantic

300 East Main Street, Suite 700 Norfolk, VA 23510-9103 Staff Symbol: (tp-1) Phone: (757) 628-4051 Fax: (757) 628-4035

E-mail: Ernestine.N.Cook@uscg.mil

2241 05.0382 **YCT 2.7** 200

OCT 27 2000

MEMORANDUM

From:

MI PI ANT (1)

Reply to:

(tp-1)

Attn of:

Ernestine Cook

(757) 628-4051

To:

USCGC ATTU (WPB 1317)

Subj:

VISUAL TEMPEST INSPECTION SUMMARY OF USCGC ATTU (WPB 1317)

Ref:

- (a) DON IA PUB 5239-31 Information Assurance Shipboard Red/Black Installation Publication
- (b) NSTISSAM TEMPEST 2-95 Red/Black Installation Guidance
- 1. Mr. Timothy Neary of ESU Miami conducted a visual TEMPEST inspection of the Secure Electrical Information Processing System (SEIPS) onboard CGC ATTU on 3 August 2005. The inspection was conducted as required by references (a) and (b). A summary of corrected discrepancies is listed in enclosure (1). No new discrepancies were found.
- 2. This summary provides a record of the installation at the time of inspection. Modifications or changes to the SEIPS shall not be made without approval of TISCOM (isd-3b) or MLCA. This summary and amendments to this summary shall be retained in the unit's SEIPS TEMPEST documentation file.

#

Enclosure: (1) Visual TEMPEST Inspection Summary

Copy: LANTAREA

TISCOM (isd-3b) ESU Miami ESD Key West

Visual TEMPEST Inspection Summary

USCGC ATTU (WPB 1317) 3 August 2005

This Visual TEMPEST Inspection is for the FTA Visit

The entire Secure Electrical Information Processing System was inspected.

List of spaces with secure processing equipment inspected by the visual TEMPEST inspector:

- 1. Electronic space
- 2. Bridge

Disc

| Discrepancy for | Discrepancy form legend: | | | |
|-----------------|---|--|--|--|
| Column A: | Sequential discrepancy number | | | |
| Column B: | | | | |
| SF | Correction of the discrepancy is within the capability of ship's force. | | | |
| IAC | Correction of the discrepancy was completed by ships force prior to completion of inspection visit. | | | |
| lA | Indicates that the assistance of an industrial activity is probably required to properly correct the discrepancy. | | | |
| IAC | Indicates that an industrial activity corrected the discrepancy. | | | |
| SA | Indicates that the assistance of a support activity is probably required to properly correct the discrepancy. | | | |
| SAC | Indicates that a support activity corrected the discrepancy. | | | |
| CA | Indicates that the Contractor Activity is probably required to properly correct the discrepancy. | | | |
| Column C: | Reference of the paragraph in designated manuals to which the installation does not conform. | | | |
| Narrative: | A brief description of the discrepancy found. | | | |

Enclosure (1)

Discrepancies and Corrective Action Report

1. Electronic Space:

| 1 1 1 | NSTISSAM | Cabinet 3: Black RF transmitter (RT-1794) in same rack as Red Processors. |
|---------|---|--|
| | TEMPEST 2/95 PG 27 Para 2a/pg16 para 5 IA Pub 5239-31 A.1.1.1 a, b | Recommend moving 3 meters away or in adjacent Black Equipment Room. Recommend placing entire ARC-210 system on Bridge. Waived. |
| 7 | NSTISSAM TEMPEST 2/95 PG 27 Para 2b | Cabinet 3: Red processor less than one meter away from power line to black transmitter (RT-1794 p/o ARC-210). Waived. |
| 03 CA 1 | NSTISSAM TEMPEST 2/95 pg 27 Para 2a | Cabinet 3: Red processor less than one meter away from black signal lines connected to RF transmitter (RT-1794). Waived. |
| O4 CA I | pg 27 Para 2a NSTISSAM TEMPEST 2/95 pg 27 Para 4, Para 4.4.1.1, 4.1.1.2 IA PUB 5239-31 Para A.1.7.1 IA PUB 5239-31 MIL-STD 188- 124B Para 5.2.12 | Signal cable used with RED processors, BLACK processors, ISDN telephones are not terminated. Red data cables for RED LAN have aluminum/mylar shielding. Manufacturer data: DRAKA COMTEQ (F) ShipLan Cable 4PR 24 AWG Screened 307650. Subject cable may pose a TEMPEST hazard. B.1.2.5 (5239): Approved cables. Mil-C-17 (ref k), or MIL-C-915 (reference(I)), MIL-C-24640(reference(n)) or MIL-C-24643 (reference (o)). Researched cable and found that it does NOT meet any of the above MIL-SPECs. Draka sells data cables that are MIL-DTL-24643 compliant. Subject cables are CAT 5e Shiplan '59W', '59' and '59S' Marine data cables. The cables listed all have a braided shield in addition to the aluminum mylar tape. The braided shield allows for a flexible ground. NSTISSAM 2-95: RED processors meeting the requirements of NSTISSAM TEMPEST/1-92 (Levels I, II, or III) must use optical or shielded wire cables if specified as part of the manufacturer's installation specification, or if specified for compliance with TEMPEST certification. Paragraphs 4.4.1.1, and 4.1.1.2 defines cable characteristics and shield termination. IA Pub 5239-31: RED Shielded Metallic Wire Cable. RED metallic wire cables in all locations shall be shielded, with the exception of desktop computer cables that are provided by the manufacturer, where there is not an offered shielded cable option. This requirement is not applicable to RED fiber optic cables. MIL-STD-188 "Foil shields are not acceptable for peripheral bonding and do not provide mechanical durability" IA Pub 5239-31 pg B-9 Para d. Note: "If both ends of the cable will not have the shield taken to ground, approval by the cognizant CTTA should be obtained prior to installation." Other source (AFMAN33-214V2 DATED 21SEP2001) states that foil shielding is intended for voice or digital signals less than 5Kbps. CG must assume risks associated with using subject cable. This is also |

| 05 | CA | NSTISSAM | RED processors and RF transmitters in Cabinet 3. RED processors should not |
|----|---------|-----------------|--|
| | | TEMPEST 2/95 | be powered from the same circuits as RF transmitters. Waived. |
| Ĺ | | pg 28 Para 6 | |
| 06 | CA | IA Pub 5239-31 | AN/UPX-28 has flexible ground strap with crimped ends. Replace with Class |
| | | Para B.1,2,6.10 | C bond strap. Corrected. |
| 07 | CA | IA Pub 5239-31 | On racks, install ground cables per IA 5239-31. Where required, use soldered connectors vice crimping. Waived. |
| 08 | CA | IA Pub 5259-31 | Remove external tooth washers on ground connectors to cabinets. Use lock washers and lug nuts per IA Instruction 5239-31 Figure B-5. Corrected |
| 09 | CA | IA Pub 5239 | Keyboard and Monitor in Cabinet #1 has non -manufacturer supplied power |
| | | B.1.2.6.12 | cable. Bond shelf to rack. Contends it is manufacturer's cable. Waived. |
| 10 | CA | NSTISSAM 2-95 | RED/BLACK cable separation. Two inch minimum separation requirement. |
| | } | Para 3 Notes 3 | Six inch separation requirement for RED/BLACK cables that run in parallel |
| | <u></u> | | for 100 ft runs. The only way to ID is via cable tags. Waived. |
| 11 | CA | IA Pub 5239-31 | Remove flexible ground strap with crimped ends from ANDVT rack and |
| | | Para B.1.2.6.10 | replace with Class C solid. Strap. Corrected. |
| 12 | CA | IA Pub 5239-31 | ARC-210 Secure voice cables. Transmit and receive audio lines need to be |
| | | Para A.1.1.7. | shielded. Resolved. See 2. Bridge item #4. |
| 13 | CA | NSTISSAM 2-95 | Operator position in Classified C4ISR room has cables from two UNCLAS |
| 1 | | Recommendation | LAN and three CLASSIFIED LAN connections. Require 2 inch (5 cm) |
| | 1 | I Pg 27 Para 3 | separation. Waived. |
| L | L | Notes: 2 | |

2. Bridge:

| 01 | CA | NSTISSAM 2-95 Recommendation I Pg 27 Para 3 Notes: 2 | LAN (RED) and GPS (BLACK) use common junction box. No RED/BLACK separation. Corrected, moved BLACK LAN and GPS to separate junction boxes. RED LAN is routed in common cable run. Does not have minimum separation. See item #10. | |
|----|----|---|---|--|
| 02 | CA | IA Pub 5239-31 Para B.1.2.6.13 | No metal-to-metal contact for ground strap from ARC 210 Tray to ground on shelf. Recommend use SOLID Class C ground strap vice crimped wire. Corrected. | |
| 03 | CA | IA Pub 5239-31 A.1.1.7.2a | Not clear if Shielded Twisted Pair is used for voice and control wirelines. SPAWAR will inspect and test during Instrumented TEMPEST test. NOTE: No discrepancy noted by SPAWAR testing. Reference to ARC-210. Informed by Harris Corp that kit provided included shielding of all RED cables. Corrected. | |
| 04 | CA | IA Pub 5239-31 Para A.1.1.7.2 Pg A-3 | Unshielded cable connected to connector J3 on ARC-210 Tray. Twisted red wires (four) runs to ARC-210 Control head mounted in the forward console of the bridge. This is the Control and Status of the ARC-210. All data is by channel/mode/power only, no audio is routed to the Control head. Replace cable run with proper cable. This cable should be shielded. Corrected. | |

3. Other:

| 01 | CA | NSTISSAM 2-95 Recommendation I Pg 27 Para 3 Notes: 2 | CO's cabin. RED and BLACK LAN ports have no cable separation. Recommend 2 inch separation. RED/BLACK cable is tied together. Acceptable risk while underway. No discrepancy. |
|----|----|---|---|
| 02 | CA | NSTISSAM 2-95 Recommendation I Pg 27 Para 1 | CO's cabin. Proposed RED laptop on desk top less than 20 inches (20 cm) from black phone. Acceptable risk while underway. No discrepancy. |
| 03 | CA | IA Pub 5239-31 Para A.1.1.7.3.1.b | RED Fiber optic cable goes through space adjacent to black racks that contains hasp for locking. If the cable passes through normally locked spaces (for example, voids, staterooms, etc), that portion of the cable shall be contained in a metallic conduit. This space is the cutters armory and is considered a restricted area. Corrected. |

TEMPEST 2/95

Department of the Navy (DoN) Information Assurance (IA) Publication Module 5239-31

MIL-STD-188-124B Grounding Bonding Shielding for Common Long Haul/Tactical Communications Systems

Air Force Manual 33-214, Volume 2, Communications and Information Emission Security Countermeasures Review



Commander Maintenance and Logistics Command Atlantic

300 East Main Street, Suite 700 Norfolk, VA 23510-9103 Staff Symbol: (tp-1) Phone: (757) 628-4051 Fax: (757) 628-4035

2241 05.0098

SEP 13 2005

MEMORANDUM

From:

Reply to

(tp-1)

Attn of:

Ernestine Cook

(757) 628-4051

To:

jed.

USCGC VASHON (WPB 1308)

Subj:

VISUAL TEMPEST INSPECTION SUMMARY OF USCGC VASHON (WPB 1308)

Ref:

(a) DON IA PUB 5239-31 Information Assurance Shipboard Red/Black Installation

(b) NSTISSAM TEMPEST 2-95 Red/Black Installation Guidance

- 1. ETC David Cooper and ET2 James Bennett of ESD New Orleans conducted an inspection of the Secure Electrical Information Processing System (SEIPS) onboard CGC VASHON on 17 March 2005. The inspection was conducted as required by references (a) and (b). A list of discrepancies is noted in enclosure (1).
- 2. This summary provides a record of the installation at the time of inspection. Enclosure (2) provides the basis for waiver statements in enclosure (1). Modifications or changes to the SEIPS shall not be made without the approval of TISCOM (isd-3d) or MLCA.
- 3. This summary shall be retained in the unit's SEIPS (TEMPEST) documentation file.

#

Enclosures: (1) Visual Tempest Inspection Report

(2) TISCOM (isd-3b) Memo 2241 of 12 Jul 05

Copy:

COMDT (CG-6, G-DPM-3)

LANTAREA TISCOM (isd-3b) **ESU New Orleans ESD New Orleans**

Visual TEMPEST Inspection Summary

The entire Secure Electrical Information Processing System was inspected.

List of spaces with secure processing equipment inspected by the visual TEMPEST inspector:

- 1. Radio Room
- 2. State Rooms
- 3. Bridge

Discrepancy form legend:

Column A: Sequential discrepancy number

Column B:

SF Correction of the discrepancy is within the capability of ship's force.

SFC Correction of the discrepancy was completed by ships force prior to completion of inspection visit.

IA Indicates that the assistance of an industrial activity is probably required to properly correct the discrepancy.

IAC Indicates that an industrial activity corrected the discrepancy.

SA Indicates that the assistance of a support activity is probably required to properly correct the discrepancy.

SAC Indicates that a support activity corrected the discrepancy.

Column C: Document Reference to which the installation does not conform.

Narrative: A brief description of the discrepancy found.

FNCLOSURE (1)

Discrepancies and Corrective Action Report

1. Radio Room 2-29-2-Q

| A | В | C | Narrative |
|-----|--------|---|--|
| 001 | WAIVED | NSTISSAM 2-95 Rec I Paragraph 1.A | The printer (red) is closer than 1 M to black IFF power lines. Waived as result of Instrumented Test on prototype. |
| 002 | WAIVED | NSTISSAM 2-95 Rec I Paragraph 2.A | The printer (red) along with Classified LAN line runs parallel with IFF transmitter antenna line. There is no separation of these lines. Waived as result of Instrumented Test on prototype. |
| 003 | WAIVED | NSTISSAM 2-95 Rec I Paragraph 6 | There is no 3-meter separation between printer (red) and IFF transmitter. Waived as result of Instrumented Test and IFF metal enclosure. |

2. State Rooms 1-16-1-L/1-16-2-L

| Α | В | C | Narrative |
|-----|--------|---|--|
| 001 | WAIVED | NSTISSAM 2-95 Rec I Paragraph 2.A Note 2 | RED LAN Line is in same distribution panel with RF transmission lines. Waived as result of Instrumented Test on prototype. |

3. Bridge

| Α | В | С | Narrative |
|-----|--------|---|--|
| 001 | WAIVED | NSTISSAM 2-95 Rec I Paragraph 2.A Note 2 | RED LAN Line is in same distribution panel with RF transmission lines. Waived as result of Instrumented Test on prototype. |



Commander
Maintenance and Logistics Command
Atlantic

300 East Main Street, Suite 700 Norfolk, VA 23510-9103 Staff Symbol: (tp-1) Phone: (757) 628-4051 Fax: (757) 628-4035 E-mail: Ernestine.N.Cook@uscg.mil

2241 06.0042

MAR - 2 2006

MEMORANDUM

From:

n: B.J.O'X felf CAPT

MLELANT (1)

Reply to:

(tp-1)

Attn of:

Ernestine Cook

(757) 628-4051

To:

COMDT (G-DPM-3)

Subj:

VISUAL TEMPEST INSPECTION FOR USCGC MANITOU (WPB 1302)

Ref:

- (a) NSTISSAM TEMPEST 2-95 Red/Black Installation Guidance
- (b) DON IA PUB 5239-31 Shipboard Red/Black Installation
- (c) COMDT COGARD Washington DC 042137Z Mar 04
- 1. ITC Kevin Priddy and ELC2 David Beaver of ESU St. Louis conducted a Visual TEMPEST Inspection (VTI) of the Secure Electrical Information Processing System (SEIPS) onboard CGC MANITOU on 23 January 2006. The inspection was conducted as required by references (a) and (b). A summary of minor discrepancies is listed in enclosure (1).
- 2. No serious TEMPEST hazards were noted; therefore you may continue normal operations. In accordance with reference (c), discrepancies must be corrected within 90 days. You should contact Ms. Ernestine Cook to schedule a re-inspection. This summary also provides a record of the installation at the time of inspection. Modifications or changes to the SEIPS shall not be made without the approval of TISCOM (isd-3b) or MLCA.
- 3. This summary and amendments to this summary shall be retained in the cutter's SEIPS TEMPEST documentation file.

Ħ

Enclosure: (1) Visual TEMPEST Inspection Summary

Copy: COMDT (CG-6)

TISCOM (isd-3b) LANTAREA ESU St. Louis

ESU New Orleans

ESU Miami

CGC MANITOU

Visual TEMPEST Inspection Summary

CGC MANITOU

The Secure Electrical Information Processing System was inspected.

List of spaces with secure processing equipment inspected by the visual TEMPEST inspector:

- 1. Radio Room (Secure space)
- 2. State Rooms (Port & Starboard)
- 3. Bridge

Discrepancy form legend:

Column A: Sequential discrepancy number

Column B:

SF Correction of the discrepancy is within the capability of ship's force.

SFC Correction of the discrepancy was completed by ships force prior to completion of inspection visit.

IA Indicates that the assistance of an industrial activity is probably required to properly correct the discrepancy.

IAC Indicates that an industrial activity corrected the discrepancy.

SA Indicates that the assistance of a support activity is probably required to properly correct the discrepancy.

SAC Indicates that a support activity corrected the discrepancy.

CA Indicates that a Contractor activity is required to correct the discrepancy.

Column C: Document Reference to which the installation does not conform.

Narrative: A brief description of the discrepancy found.

Enclosure (1)

Discrepancies and Corrective Action Report

1. Radio Room (Secure Space) 2-29-2-Q:

| Α | В | С | Narrative |
|-----|----------|---------------|---|
| 001 | WAIVED | NSTISSAM | Red printer less than 1M separation from IFF |
| | į | 2-95 | transmitter. |
| | | Rec I | , |
| L | | Paragraph 1.A | |
| 002 | CA | NSTISSAM | Classified LAN in same wire bundle as black signal |
| | | 2-95 | cables. |
| 1 | | Rec I | |
| | ĺ | Paragraph 2.A | |
| L | | Note 2 | |
| 003 | IAC | NSTISSAM | Commercial Television cable entering a secure |
| | | 2-95 | space requires use of an amplifier/attenuator at the |
| | | Paragraph | entry point of the space to provide one way filtering |
| | <u> </u> | 4.9.6 | of electronic signals. Corrected. Filter is in rack. |
| 004 | WAIVED | NSTISSAM | The printer (red) along with Classified LAN line |
| | | 2-95 | runs parallel with IFF antenna line. There is no |
| 1 | | Rec I | separation of these lines. |
| | | Paragraph 2.A | |
| 005 | WAIVED | NSTISSAM | There is no 1 meter separation between printer (red) |
| 1 | , | 2-95 | and IFF transmitter RF cable. |
| | | Rec I | |
| | L | Paragraph 1.B | |
| 006 | WAIVED | NSTISSAM | There is no 1 meter separation between printer (red) |
| | | 2-95 | and IFF transmitter black power line. |
| | | Rec I | |
| L | <u> </u> | Paragraph 1.B | |

2. State Rooms 1-16-1-L/1-16-2-L:

| 001 | CA | NSTISSAM 2-95 Rec I Paragraph 2.A Note 2 | Classified LAN lines are run with BLACK wire lines (no 5 centimeter separation). |
|-----|----|---|--|
| 002 | CA | NSTISSAM 2-95 Rec I Paragraph 2.B Note 2 | Classified LAN lines are run with 120VAC power lines (no separation). |
| 003 | CA | NSTISSAM 2-95 Rec I Paragraph 2.A | Class LAN box located adjacent to BLACK LAN box. |

3. Bridge 03-14-01:

| 001 | CA | NSTISSAM 2-95 Rec I Paragraph 1. A & B | RED processor less than 1 meter from BLACK power lines and BLACK equipment. KITE-1 handset (2 each) physically cannot separate the lines. KITE-1 is an integrated remote hand set for RED and BLACK equipment. |
|-----|----|---|--|
| 002 | CA | NSTISSAM 2-95 Rec I Paragraph 1. A | Less than 1 meter of separation between RED processor and BLACK equipment on STBD side. |
| 003 | CA | NSTISSAM 2-95 Rec I Paragraph 1. B | Less than 1 meter of separation between RED processor and BLACK wire lines on STBD side. |
| 004 | CA | NSTISSAM 2-95 Rec I Paragraph 1.A | Less than 1 meter of separation between RED processor and BLACK power on STBD side. |
| 005 | CA | NSTISSAM 2-95 Rec I Paragraph 2. B | Less than 5 centimeters of separation between RED wire line and BLACK wire line on STBD side. |



DEPARTMENT OF THE NAVY

COMMANDER OPERATIONAL TEST AND EVALUATION FORCE 7970 DIVEN STREET NORFOLK, VIRGINIA 23505-1498

3980

Ser 76/2 3

APR 2 7 2005

From: Commander, Operational Test and Evaluation Force

To: Commandant, United States Coast Guard

Subj: UPDATE OF THE 123-FOOT PATROL BOAT (123' WPB)

OPERATIONAL ASSESSMENT ANALYSIS (OAA) OF 29 SEP 04

Ref: (a) COMDT COGARD WASHINGTON DC 101705Z Mar 05

(b) COMOPTEVFOR ltr 3980 Ser 76/580 of 29 Sep C4

(c) COMOPTEVFOR ltr 3980 Ser 91/494 of 18 Jul 03

Encl: (1) OAA Update Matrix and Comments

1. PURPOSE. Reference (a) requested COMOPTEVFOR to provide an update to the 123' WPB upgrade OAA report (reference (b)).

CAVEAT: This observation does not constitute a formal phase of operational testing (OT), but rather a demonstration in which OT testers are actively involved, providing operational perspective and gaining valuable hands-on familiarity with the system. Data and findings from this observation may be used to supplement formal OT data, provided certain criteria are met. This observation does not resolve critical operational issues (COI) and does not reach conclusions regarding effectiveness or suitability.

2. BACKGROUND. COMOPTEVFOR conducted a review and update of the 123' WPB Upgrade OAA, including the supporting command, control, communications, computers, intelligence, surveillance and reconnaissance (C4ISR) and Logistics Information Management System (LIMS) as they applied to both the cutter and the supporting operational and maintenance organizations. Observations were conducted in cutters MATAGORDA, METOMPKIN, PADRE, and NUNIVAK at U.S. Coast Guard Sector Key West and included observations at all immediate supporting organizations. This update period was not planned or coordinated by a program test and evaluation master plan and was not part of the 123' WPB OAA test plan (reference (c)). A separate test plan was not developed for this update. A review of the significant risks and associated recommendations provided in reference (b) was conducted and will provide the Deepwater program with current operational assessment of those significant risks to operational effectiveness and suitability, whose associated recommendations should be implemented prior to operational evaluation (OPEVAL).

3. RISK SUMMARY. The following table depicts the current level of risk assessed to be associated with the successful resolution of COIs prior to OPEVAL. Risk assessment is based upon a comparison of previously reported risks with 123' WPB and associated support system program improvements since completion of the OAA.

| COI Assessments | OAA (9/29/04) | OAA Update (4/29/05) | Note |
|--|------------------|-------------------------|------|
| Surveillance, Detection, Classification, Identification and Prosecution (SDCIP) | Red | Red | |
| Tactics | Red | Red | |
| Survivability | Red | Red | |
| Joint Interoperability | White | <u>Yellow</u> | 1 |
| Connectivity | Red | Red | |
| Information Assurance (IA) | Yellow | Red | 2 |
| Electromagnetic Environmental Effects (E ³) | Red | Green | 3 |
| Reliability | Red | Red | |
| Maintainability | <u>Yellow</u> | Red | 4 |
| Availability | Red | Red | |
| Logistic Supportability | Red | Red | |
| Compatibility | <u>Yellow</u> | Yellow | 5 |
| Interoperability | Yellow | Yellow | |
| Training | Red | Red | |
| Human Factors | Yellow Yellow | Yellow | |
| Safety | Red | Red | |
| Documentation | Yellow | Red | 6 |

Color codes for OAAs are:



- High level of risk identified.
- Yellow Moderate level of risk identified.
- Green Little or no risk identified.

White - Not evaluated or assessed as a result of system immaturity or lack of information.

Notes:

- 1 Risk increase due to C4ISR system displaying no improvement in obtaining interface with other service/agency systems. There was no capability for track input, sharing, or for email/chat.
- 2 Risk increase due to decertification of the capability of the C4ISR installation to meet IA requirements on any cutters.
- 3 Risk mitigation due to TEMPEST certification and continuing resolution of identified discrepancies.
- 4 Risk increase due to insufficient progress on developing or updating training and certification programs, operating manuals, technical manuals, maintenance procedures, etc.
- 5 Although outside the scope of this assessment, it appears that the modifications to the 123' WPB may have contributed to the degradation of the structural integrity of the hull and overall compatibility with the operating environment.
- 6 Risk increase due to continued lack of operational and maintenance documentation despite significant program experience and cutter delivery.

Subj: UPDATE OF THE 123-FOOT PATROL BOAT (123' WPB) OPERATIONAL ASSESSMENT ANALYSIS OF 29 SEP 04

4. RISK UPDATE COMMENTS. Enclosure (1) provides recommendations from reference (b) and the associated risks that provided the foundation for those initial recommendations. The last column of enclosure (1) provides comments resulting from this update period.

5. SIGNIFICANT OBSERVATIONS

a. 123' WPB

- (1) Command and Control (C2). The C2 equipment and associated software packages provided with the modification have not demonstrated the capability to generate a local tactical picture (LTP), contribute to a collective tactical picture, or receive the Atlantic Area managed common operational picture (COP). Interoperability on classified voice circuits was limited to USCG shore stations, cutters, and aircraft. The C4ISR system was not working as designed and the systems were not capable of operating or maintaining a basic capability in accordance with the CONOPS.
- (2) LIMS. The LIMS logistics system (including both the ELLIPSE in-port functionality and the Fleet Logistics Management System (FLMS) underway) has had a negative impact on the maintenance and supply functions of the cutters. Of the twelve projected "iteration zero" capabilities, eleven have not yet been provided.
- (3) Short Range Prosecutor (SRP) Recovery. SRP recovery evolutions in higher sea states are being conducted without proven or validated procedures and have the potential to be done at levels of risk beyond what is acceptable for personnel and equipment safety. Decrease in communications capability of the SRP and resulting degradation of C2 between the cutter and the SRP impact operational effectiveness and safety during recovery operations.
- (4) Documentation. LIMS operating manuals, C4ISR system technical and operating manuals, training and personal qualification program documentation, towing and SRP recovery equipment certifications, and system operating procedures were either not provided or are incomplete.
- (5) Situational Awareness. Various new installations on the cutters provided improvements individually. As a collection of standalone capabilities, they included the digital global positioning system, automated identification system, and the infrared camera system. The crews were able to combine some of the individual outputs of

Subj: UPDATE OF THE 123-FOOT PATROL BOAT (123' WPB) OPERATIONAL ASSESSMENT ANALYSIS OF 29 SEP 04

these equipments and obtain an increased situational awareness during patrols. These equipments were not integrated and were not capable of contributing to a networked tactical picture.

- **b.** The following observations and recommendations are deemed significant beyond the 123' WPB upgrade in that the associated risks may impact other Deepwater program assets, C4ISR and logistics domains, or the Integrated Deepwater System overall.
- (1) LIMS/ELLIPSE/FLMS lack of functionality and increased level of effort is currently isolated to the cutters in Sector Key West. The capability to deal with the deficiencies of the system is only possible as a result of tremendous effort by the ICGS on site representative and the District and Sector maintenance organizations. Extension of the LIMS program in its current state to other USCG locations should be carefully considered pending a near complete development and validation of LIMS capability and functionality.
- (2) The C4ISR equipment and software installed in the 123' WPB are initial production iteration installations for all subsequent Deepwater program assets. The inability to generate a LTP and to contribute to the COP or to receive and display the COP need to be resolved by equipment/software grooms, improved maintenance capability, and better training.
- (3) The SRP recovery system in the 123' WPB serves as a bellwether for future design and installations in the national security cutter, offshore patrol cutter, and the fast response cutter. The critical equipment and safe and effective procedures for conducting astern recoveries in higher sea states for both the SRP and the long range interceptor should be developed and proven by an effective and integrated test and evaluation process prior to continued program development.
- 6. RECOMMENDATIONS. Within the scope of this assessment, I recommend formal and documented validation of correction of deficiencies be conducted for those risks identified in reference (a) prior to conducting the operational test readiness review for OPEVAL. If the major effectiveness and suitability risks associated with the 123' WPB modification can not be mitigated, continued conversion of operationally capable 110' WPBs is not recommended. Current mitigation efforts, if not pursued more aggressively, will adversely impact the effectiveness and safety of operations. For those Deepwater program assets who share the critical components

Subj: UPDATE OF THE 123-FOOT PATROL BOAT (123' WPB) OPERATIONAL ASSESSMENT ANALYSIS OF 29 SEP 04

operations, continued program development for those assets should include a comprehensive test program that is structured to provide timely risk assessment and recommendations to the program manager.

DAVID ARCHITAEL

Copy to:
COMDT HQ (G-O, G-D, G-OC, G-OCU, G-OCD)
COMLANTAREA (AOF)
CCGDSEVEN MIAMI
COMCOGARD SECTOR KEY WEST FL

123' WPB OAA Update Matrix and Comments

| Recommendation from OAA Report | Risk# | Associated Risk from OAA Report | OAA Report Update Comments |
|--|--------|---|---|
| The following must be implemented prior to OPEVAL: | | High Risks associated with prior to OPEVAL recommendations | |
| 1.1 Develop and publish detailed procedures, including tabular reference, for recovery of the SRP aboard the cutter in all potential sea states from 0 through 4. Procedures should include the recommended ships course relative to the seas and the recommended ordered speed. Procedures should also address the shaft engagement/disengagement considerations (see page 13, par. 4.3.3). (Tactics) | 4.3.3 | The propeller wash and "rooster tail" of the 123' WPB created a potentially unsafe environment for boat operations in sea states 1 and higher. In order to recover the SRP, the cutter was required to establish a procedure to provide the dynamic conditions at the ramp for each sea state that provided acceptable conditions for boat recovery. Recovery with no way on was difficult in any sea state, as the stability of the cutter and the SRP jet drive maneuverability was dependent on movement. Higher speed meant more control. The 123' WPB was required to clutch in on one or both shafts in order to establish steerageway and obtain the best relative seas. When clutched in, the 123' WPB generated a significant propeller wash which could not be overcome by the SRP, requiring the 123' WPB to declutch its engine(s) just prior to the commitment of the SRP coxswain to a recovery. Timing was critical. The 123' WPB would lose steerageway and provide an unsafe condition if the SRP was not immediately recovered. This process in heavier seas resulted in a smaller time window for the coxswain to make his approach into the ramp, subjecting the SRP to increased propeller wash during recovery. (This may have significant implications for similar recovery processes in the larger cutter classes (WMSL, WMSM, WPC)). | SRP draft recovery procedures were developed by the contractor subsequent to the OAA report. These procedures were generic, untested, and had not been demonstrated by the developer on any of the delivered cutters. None of the four cutters observed during this assessment review period had been provided with a copy of the procedures for review or possible implementation. Each cutter was developing its own unique set of recovery procedures. Some recovery procedures varied significantly in fundamental processes and each with its own unique safety considerations. While there may be more than one set of procedures developed by individual cutters in order to safely recover the SRP in lower sea states, there was significant risk to personnel and equipment because tested and proven procedures were not developed for this evolution in higher sea states. Safety of recovery remains a significant risk to the effectiveness of the stern notch recovery system. |
| 1.2 Test, certify, and provide documentation validating the safety of all components of the SRP recovery system (see page 53, par. 18.2.1.1). (Safety) | 18.2.1 | The SRP recovery line and securing equipment were unsafe. The cutter's recovery line parted during a recovery attempt and the default solution was to "use a larger line" without a tested and certified replacement. Results of a dynamic study and certification were not available identifying the proper size and length of line for SRP capture. The bits that terminate the securing line had no test certification. The winch assembly (drum, line, and recovery hook) had no certification. Upon completion of the SRP recovery, while the weight of the boat stresses the winch line, the on deck line handler was required to attach the securing cable to the prow of the SRP keel which required reaching between the life rails and under the bow of the SRP and the tensioned recovery line in order to attach the securing hook. | There was no standard SRP recovery line on the cutters. Each of the cutters was delivered a different line and there were no specifications provided for line composition, size, or length. Three of the cutters had replaced the line provided by the developer after they had been evaluated by the cutter as unsuitable or unsafe for use. The length and elasticity of the recovery line are critical design parameters impacting the operational loads that will be experienced by the SRP recovery system components. Risks associated with the large forces generated during SRP recovery compounded by the variation in recovery equipment configurations remain high. None of the bits that are used to recover the SRP had been certified for the function they are performing. |
| 1.3 Replace the prescribed 4-inch nylon tow line (breaking strength of 38,400 lb) on the 123' WPB with a tow line of breaking strength below the safe working load of the tow bit (currently 14,400 lb). This is essential to eliminate the reality of bit failure before line failure (see page 53, par. 18.2.1.3). (Note that | 18.2.1 | The tow bit static load test report certified a safe working load which was less than the safe working load of the tow line. This is a significant safety hazard as the bit is subject to failure before the line. | There were three different sized tow lines provided to four of the cutters, each one with a breaking strength that significantly exceeds the safe working load of the towing bit. Two of the tow lines have a breaking strength that is over twice the 150% static test load of the towing bit. There is no documentation provided to the cutters that provides the static and dynamic forces expected to result from a 500 long ton tow that will be transferred to the unusually high tow post and taff railing. The potential heeling moments and |

| CGC METOMPKIN was provided with a 5-inch tow line of 60,000 lb safe working load.) (Safety) | | | stability documentation was not available for cutter use and there was no certification data for any of the towing tackle. This remains a significant safety issue. |
|---|--------|---|--|
| 1.4 Require the immediate installation of equipment, software, security, and certifications necessary for implementation, testing, and operation of the COP. This is a significant increase in advertised capability that has not been demonstrated after four deliveries (see page 11, par. 3.3.1). (SDCIP) | 3.3.1 | The sensor suite equipment (including receivers, processing units, and display equipment) was installed but was not delivered by the contractor in a configuration capable of providing a COP. The first two cutters of the 123' WPB class were observed during this test period and were delivered without a secure communications capability or the authority to operate via tactical circuits and were in the same condition 3 months after delivery. The cutters were severely restricted in their capability to conduct SDCIP in accordance with the CONOPS. As delivered, they were limited to use of generic on-board sensors. The new 123' WPB integrated sensor suite was designed to have the capability to provide a significant level of tactical awareness to the 123' WPB crew. The complete sensor suite has an undemonstrated potential for significant capability. It was determined that it may not be possible to effectively employ the suite due to the physical location of equipment and the resulting modifications required of watch stander responsibilities in order to support the equipment. | The equipment and software designed for generation of a local tactical picture (LTP) and contribution to and display of a common operational picture (COP) had been installed and loaded in each cutter. However, the installation had not been groomed for operations and was unable to be certified by SPAWAR. There still was no authority to operate the required C4ISR systems and the COP was not available in the cutters. There were no cutters capable of demonstrating the ability to generate a LTP or that could receive and display a COP. The inability to provide input to and receive a COP in accordance with the CONOPS remains a significant risk. Limited connectivity was demonstrated one time on one cutter, but this was conducted as a focused and dedicated proof of concept requiring significant effort and time. While there was limited equipment familiarity training provided at delivery, there had been no training provided that established a baseline of operator proficiency. |
| 1.5 Resolve the reliability and availability of the modifications to the 123' WPB systems, including the C4ISR equipments and network, logistics support system, and the SRP recovery system, to reduce or eliminate the impact on overall cutter availability. The lack of a functioning C4ISR system, a reliable SRP and SRP recovery system, and a reliable logistics support system has the potential for significant impact on not just cutter, but Group/Sector availability to respond to mission tasking (see page 36, par. 12.3.1). (Availability) | 12.3.1 | The inability of the 123' WPB and its new systems to be ready for test event tasking provides a significant risk to the cutter being supportive of single asset or overall system readiness for real world mission tasking. The reliability and readiness of the various equipments and software supporting the C4ISR, logistics system, and the SRP and its recovery system contributed to an overall lack of availability of the 123' WPB. | The reliability and availability of C4ISR equipments and software applications for both C4ISR and LIMS systems continued to be significant in the lack of overall cutter availability to perform missions in accordance with the CONOPs. During installation grooms, significant software instability required frequent reboot which was very time consuming. When on station, mission performance continued to be limited by unreliable and unavailable software systems and certifications. Even in its limited state of functionality, the LIMS functionalities embedded in ELLIPSE and FLMS were unable to be manipulated by the crews due to availability or deficiencies in system operation manuals and a lack of operator training. SRP and recovery system component reliability and availability displayed some improvement. The cutters were generally capable of meeting mission sortie and on station requirements, although they were significantly limited in their effectiveness by operational speed and sea state restrictions imposed as a result of structural defects, which could be attributed to the hull modifications. |

| 1.6 Obtain damage control plates and stability diagrams, as well as the documentation and certifications that the cutter is capable of handling potential upsetting forces that may be encountered during operations. Those forces include the pulls applied to the elevated tow bit and the resulting moments towards instability during the static and dynamic forces applied by a 500 ton tow, and the potential moments encountered with the addition of the weight of 150 migrants distributed across the main deck in a standing position (see page 54, par. 18.2.1.5). (Safety) | 18.2.1 .5 | There were no stability calculations, plans or damage control plates available to validate the stability of the 123' WPB in the following situations:- response to the lateral force potentially applied to the elevated tow bit and the resulting moment towards instability during the static and dynamic forces applied by a 500 ton tow response to the additional weight of 150 migrants on deck for 24 hours while in sea state 3 or higher. Partial deck loading was conducted pier side with 75 personnel on the main deck which had obvious impact on cutter trim and list conditions. During the test period, all 75 personnel were shifted to the right of centerline which resulted in a 12 degree list on the cutter while pierside. | Damage control plates and stability documentation have not been provided to the cutters. The stability and loading data report generated by the shipyard did not specifically address the stability impacts of a 7 foot high towing point nor the impact of 150 migrants on the main deck. Interpolation of diagrams included in the stability and loading data report did not provide the detail required for operational decisions that will result in significant impacts on shifts in the center of gravity. |
|--|--------------|---|---|
| 1.7 Relocate the SRP recovery winch so that it is not subject to impact from the SRP upon recovery and subsequent loss of capability (see page 18, par. 5.5.1). (Survivability) | 5.5.1 | The impact of the SRP into the recovery winch could put the winch out of commission. Should this occur, the recovered SRP will be secured by the recovery line but the SRP stern will extend beyond the length of the ramp and the ship's stern door will not be able to be closed. The SRP can not be secured in the ramp without winching it in from the recovered position and there is no back up winch system. | The winch remained susceptible to being struck by the SRP during recovery and had been rendered inoperable at least once on each of three cutters. One cutter had reduced the risk of winch strike by lengthening the SRP recovery line which captured the SRP further away from the end of the notch and the winch mounting location. However, this modified procedure resulted in the SRP being in a captured condition while not completely contained in the notch of the ship with the increased potential of the SRP coming "alive" in the notch with the right sea condition. The winch was required to retrieve the SRP into the notch rather than serving as the final few feet of the securing process. Documentation certifying that the winch is rated or designed for this purpose was not available. |
| 1.8 Eliminate the potential for electrical shock underneath the bridge console (see page 56, par. 18.2.2.9). (Safety) | 18.2.2 .9 | The video recorder operator on the bridge was subject to electrical shock when accessing the computer mouse from its storage location inside the ship control console via an access panel. | This risk has been eliminated by redesign of the installation. |
| 1.9 Install a second egress for main deck berthing and the electronics work spaces. The condition of a single egress from both situations could be corrected by installation of escape scuttles to the main deck (see page 54, par. 18.2.1.6). (Safety) | 18.2.1 | A single point of egress from berthing and working spaces is a significant survivability and safety issue. There are two such instances on the modified 123' WPB. There is only one egress route from the main deck berthing spaces (CO, XO, and three other staterooms). An internal fire on the main deck blocking the ladder to the bridge would trap personnel in their staterooms. A second instance is from the COMSEC and electronics working spaces aft. Escape is not possible in the event of an electronics or engine room fire which restricts egress through the forward part of the electronics work space. (Uncorrected from COMOPTEVFOR letter of concern, reference (e).) | Unchanged. Recommend USCG validate the safety requirement for secondary egress route from berthing and working spaces to the main deck. |

| 1.10 Obtain TEMPEST and COMSEC certifications for all cutters. Require certifications prior to acceptance of future cutters, including crypto installation, software load, and authority to operate for all equipments (see page 22, par. 7.11.1.1). (Connectivity) | 7.11.1 | The complete C4ISR suite was either not functioning or the functionality was inaccessible due to installation faults, COMSEC problems, or incomplete documentation/training. The identification, friend or foe (IFF) equipment was not functional. MILSATCOM was not available as the ARC-210 had TEMPEST problems and was not programmable. The F77 primary underway INMARSAT data path and the Coast Guard data network (plus) (CGDN+) were not available due to an expired interim authority to connect (IATC). There was no SIPRNET path since the cutter did not meet TEMPEST and COMSEC requirements and there was no IATC. MILSATCOM voice communications were not available because a FORTEZZA card was not loaded after cutter delivery. | TEMPEST and COMSEC certifications are now being conducted satisfactorily within a few months after delivery. Additionally, equipment operational problems have been corrected for IFF, MILSATCOM, and SIPRNET installations. |
|---|--------------|---|---|
| 1.11 Verify the ability of the networks architecture to provide security to all classified information prior to cutter delivery/acceptance (see page 26, par. 8.21.1). (Information Assurance) | 8.21.1 | The inability of the cutter to pass TEMPEST and to verify secure communications operational capabilities made it impossible to verify the network's capability of securing sensitive information. | Defense Information System Agency (DISA) information assurance security standards were not able to be achieved. As a result, the cutters are not being granted the required authority to operate. |
| 1.12 Develop the tactics and associated checklists for the effective launch of the SRP for all mission requirements in the CONOPS (see page 13, par. 4.3.1). (Tactics) | 4.3.1 | There were no procedures for SRP launch or associated operating tactics developed or published for the cutter to support the mission requirements of the CONOPS. Although the crews of the two delivered cutters were developing their own procedures for various sea states, the design concept for a stern launch in support of various mission scenarios had not been operationally validated by the developer prior to delivery. The lack of a proven process provides high risk to the safety of the crew while experimenting with options for boat operations. | While SRP recoveries remain a significant risk, the tactics and procedures for SRP launches, although not specifically developed, presented a less severe risk to operational effectiveness of the 123' WPB. Numerous launches of the SRP in many operational situations have demonstrated that the launching procedure is relatively uncomplicated and safely executed when positive control is properly exercised by the bridge watch team and the fantail. Documented procedures and checklists for SRP launches in all sea states are still recommended. |
| 1.13 Resolve access deficiencies with ELLIPSE and validate software and system performance on all delivered cutters. Require program/contractor validation and demonstration of FLMS and ELLIPSE software and system performance prior to acceptance of all future cutters, including the interface with the shore and deployable tool sets (see page 31, par. 10.4.1.1). (Reliability) | 10.4.1 | The ELLIPSE logistics management program was delivered to the cutter with serious access deficiencies. Crew members, working with the Integrated Coast Guard System (ICGS) site representative, were able to resolve access and password discrepancies. However, the capability to display a common product structure that combines legacy and IDS data was not demonstrated. Configuration of the on-board asset by feeding information from maintenance and inventory software was not demonstrated. Interface with the shore and deployable tool sets has not been demonstrated. | LIMS software is installed on all cutters but is unable to provide the required functionalities, either in port with ELLIPSE or underway with FLMS. ELLIPSE capabilities were limited to work order generation and shore side PMS. This is only about 10% of the twelve projected "iteration zero" ELLIPSE system capabilities. The following ELLIPSE functionalities were not able to be demonstrated: shipboard PMS (due to the lack of the scheduling module being available), financial tracking, report generation, configuration management, parts requisitioning, man-hour tracking, inventory management, work order alert notification, MILSTRIP processing, PHS&T management and purchasing management. FLMS operational functionality could not be demonstrated by any of the cutters. |
| 1.14 Resolve the inability of the cutters to create logistics work orders via the ELLIPSE system. The capability to conduct inventory management, maintenance scheduling, and finance interfaces must also be resolved (see page | 10.4.1 .3 | The capability to push mobile requisitions to the operations support center was demonstrated with limited success. During the test period, only one requisition was successfully processed. The crew has reverted to the casualty reporting process to fill requisitions for critical parts. The system did not demonstrate the capability to conduct inventory management, maintenance scheduling, and finance interfaces. The system was able to | All four cutters were using ELLIPSE to generate work orders on their local terminals, but manual intervention was required at the next level (Sector, District, or ICGS site rep) to make documents visible on the shore maintenance side of the system. All four cutters observed in Key West remained unable to conduct inventory management and maintenance scheduling using ELLIPSE. They were also |

| 32, par. 10.4.1.3). (Reliability) | | generate internal work orders after several days of on-the-job training by the site representatives; however, those work orders are not available to be accessed within the ELLIPSE system. | unable to track any financial data that is a requirement for not only Deepwater supported parts, but for legacy equipment as well. Also, in order to print a work order, the text had to be copied to a word document and then printed, which was an extra step that added time to the work day when compounded by each cutter and their individual work orders. ELLIPSE did not provide any financial accounting, so the MAT reverted to using paper logs. There was no capability for the project engineers of Lockheed Martin in Moorestown to participate or observe any work done against a work order due to firewall issues with CGDN+connectivity in Moorestown. Accordingly, all Lockheed Martin work order responses were being accomplished by either e-mail or telephone. |
|--|--------------|--|--|
| 1.15 Provide ELLIPSE system functionality to all delivered cutters enabling them to generate supply requisitions. Require system capability prior to acceptance of all future cutters (see page 32, par. 10.4.1.5). (Reliability) | 10.4.1 | The supply department at Group Key West received no requisitions during the test period. The one requisition processed, was handled by the ICGS site representative, therefore this capability has not been demonstrated. Legacy requisitions could not be generated by ELLIPSE. Numerous legacy requisitions were attempted, but all attempts failed. | Supply requisitions were not being generated by the cutters because of difficulties in using the catalog function of ELLIPSE. Locating the ELLIPSErequired "stock code" was a tedious and time-consuming effort that had too little return for the amount of work required. Parts requisition function was not possible as it required a "stock code" which could not be found by the crew in the ELLIPSE catalog. The Site Rep had become the single source of Deepwater supply for the Sector Key West cutters. Sector Key West personnel had received LIMS training but were still unable to process requisitions using ELLIPSE. The permissions and approval processes were not clear to all users. The lack of financial tracking capability rendered the tool ineffective to the shore side supply activity. As a result of the cumbersome requisition processes, many items were being procured commercially. |
| 1.16 Install, test and exercise the FLMS at-sea portion of LIMS. Require FLMS system capability prior to acceptance of all future cutters (see page 32, par. 10.4.1.6). (Reliability) | 10.1.4 .6 | The fleet logistics management system (FLMS) portion of LIMS was not demonstrated during the test period. | FLMS software was installed and basic connectivity was demonstrated with limited success amongst the cutters. However, FLMS was not able to demonstrate an at sea operational capability. |
| 1.17 Establish a billet capable of managing the new C4ISR computer suite and to perform COP track data management, including required training for operation, system administration, and operational maintenance (see page 40, par. 13.7.1.5). (Logistic Supportability) | 13.7.1 | The new upgrade contains a networked C4ISR suite including navigation, radar, and a COP. This enterprise contains six servers; two UNIX based and four Windows based. This points to a strong requirement for either OS or ET functionality to manage the computer suite and to perform track data management. There are no billets or training identified to support the system on board. All system administration functions are planned to reside ashore in the electronic support units/detachments. The level of C4ISR expertise for current 110' WPB crew and shore support facilities is minimal and the planned training in support of the 123' WPB upgrade appears insufficient. (Uncorrected from COMOPTEVFOR letter of concern, reference (e).) | The proposed changes to the Master Training List for the 123' WPB include the recommendations for adding CG-C2 equipment operation and bridge watch standing courses of instruction for the CO, XO, and four BMs. An undefined but limited portion of the C2 maintenance and management course of instruction has been recommended for the XO and a BM1. There appears to be a misalignment between required tasks to operate and support the C4ISR system and the practical factors of the billets assigned to the 123' WPB. |

| 1.18 Conduct a thorough review of formal training courses being developed to support the new cutter systems. Ensure that appropriate training courses and lesson plans, for both schoolhouse and self-study, are adequate for formal training and shipboard study and are being provided to the USCG training commands for implementation (see page 46, par. 16.3.1). (Training) | 16.3.1 | IDS training was not compatible with legacy training systems for an experienced 110 crew who transferred to the 123' WPB (CGC NANTUCKET to CGC MATAGORDA). Training for ELLIPSE/COMDAC INS/EO/IR Surveillance System was found to be severely inadequate and there were many areas where the crew received no training at all. There were no formal training course handouts, no electronic on-board training programs, no revised or new personnel qualification standards documents, and no formal lesson plans provided to USCG training commands to support current operators and maintainers. Delivery training may prove adequate for current crews, but there is no pipeline training planned for follow-on crew members or support personnel. | A draft 123' WPB Master Training List (MTL) is in the early stages of development as well as identification of possible courses of instruction that may be possible for inclusion in the TRACEN training architectures. The processes required to create the required courses and develop the administrative and personnel infrastructure to support their effectiveness will take time. Nine new courses of instruction are currently included in the draft 123' WPB MTL. In the interim, there are no self study courses, no electronic onboard training courses, no updated PQS booklets, or other training systems developed to fill the period until and if formal courses of instruction can be developed. While the current crews of delivered cutters were provided some introductory level of training by the developer at delivery, that training was not sufficient to give even these now experienced crews the ability to effectively operate and maintain their new equipments. There is no process in place to train the relieving crewmembers arriving this summer for those cutters already delivered. Because of this, the long-term sustainability of current/qualified crews for the 123' WPB in the Coast Guard's existing personnel accession, training, and assignment process is at risk. |
|--|--------|---|---|
| 1.19 Install a second ARC-210 UHF transceiver so that the 123' WPB can conduct simultaneous line-of-sight and satellite communications (see page 22, par. 7.11.1.2). (Connectivity) | 7.11.1 | The 123' WPB was provided with a single ARC-210 UHF transceiver which replaced two UHF transceivers currently in use on the 110'. During representative missions, a WPB routinely requires both UHF radios to be in simultaneous use. The 123' WPB ARC-210 can function in either line-of-sight or satellite communications (SATCOM) mode but not simultaneously. This represents a loss of functionality and a single point of failure with respect to UHF communications. | This remains a reduction in capability from the 110' WPB. The current performance of the ARC-210 was hampered by lack of training for both operations and the programming and loading of crypto material. With the elimination of UHF satellite radio redundancy, there was a single point of failure in satellite comms that impacts the capability for both voice and tactical data (COP) connectivity. |
| 1.20 Incorporate special emergency operations training and onboard team training including update of drill and grade sheets based on revised navigation standards and main space fire doctrine (see page 46, par. 16.3.1). (Training) | 16.3.1 | IDS training was not compatible with legacy training systems for an experienced 110 crew who transferred to the 123' WPB (CGC NANTUCKET to CGC MATAGORDA). Training for ELLIPSE/COMDAC INS/EO/IR Surveillance System was found to be severely inadequate and there were many areas where the crew received no training at all. There were no formal training course handouts, no electronic on-board training programs, no revised or new personnel qualification standards documents, and no formal lesson plans provided to USCG training commands to support current operators and maintainers. Delivery training may prove adequate for current crews, but there is no pipeline training planned for follow-on crew members or support personnel. | An updated main space fire doctrine had been drafted and was being exercised by the crews, and satisfactory execution was part of the ready for operations certification by Sector Key West. No other updates were observed that modified other onboard operational procedures, training packages and drill sheets for ship evolutions that have been impacted by the modifications. |



Commander U.S. Coast Guard Telecommunication & Information Systems Command

7323 Telegraph Road Alexandria, VA 23115 Staff Symbol: TISCOM (isd-3b) Phone: 703.313.5631 Fax: 703.313.5640 Email: rporter@tiscom.uscg.mil

2241 July 12, 2005

MEMORANDUM

From: Mr. Ronald T. Porter

CG TISCOM (isd-3b)

Reply to TISCOM (isd-3b) Attn of: Ronald T. Porter

703.313.5631

To:

Commander, Maintenance and Logistics Command Atlantic (t)

DIRECTOR, Deepwater Integrated Coast Guard Systems

Subj: 123 WPB CLASS TEMPEST WAIVER

Ref:

(a) NSTISSAM TEMPEST 2-95

(b) IA PUB 5239-31 INFORMATION ASSURANCE SHIPBOARD RED/BLACK

INSTALLATION PUBLICATION

- 1. The Secure Electrical Information Processing System (SEIPS) on CGC MATAGORDA was inspected by Ronald Porter, USCG TEMPEST Program Manager on 14 December 2004. The inspection was conducted using criteria listed in references (a) and (b), and below is the list of discrepancies waived. If there is a configuration change which includes, but is not limited to replacement of Classified server(s) with different model(s) or addition of equipment in the Secure Communications space, an Instrumented TEMPEST Survey will be required. DWICGS shall identify funding for future Instrumented Testing.
- 2. Below waivers are class-wide and should be considered when reviewing Visual TEMPEST Inspection Reports.
- 3. A waiver is granted for the location of the RT-1794 (p/o AN/ARC-210) transceiver within three meters of Classified servers. This waiver is based on the results of the Instrumented TEMPEST Test
- 4. A waiver is granted for three meter separation between RED and BLACK cables entering the MARCOM switch. Subject switch provides adequate isolation and is approved for multi-level signal switching.
- 5. A waiver is granted for three meter separation between cryptographic equipment and RT9000 transceiver. The distance is approximately one meter, however a bulkhead separates the Unclassified and Classified equipment racks. Due to a favorable Instrumented TEMPEST test, and the fact that the RT-9000 transceiver is enclosed in its original metallic enclosure, and there are metal side panels on the equipment racks.
- 6. A waiver is granted for three meter separation between RED printer and IFF Transmitter (UPX-28). Subject equipment is also less than three meters from Classified Servers. Subject transmitter is enclosed in its original enclosure and there is a metallic barrier on the side of the RED server rack adjacent to the UPX-28.

Subject: Visual TEMPEST Inspection Summary

- 1. This Visual TEMPEST Inspection Summary is for the FTA Visit
- 2. The entire Secure Electrical Information Processing System was inspected.
- 3. List of spaces with secure processing equipment inspected by the visual TEMPEST inspector:

A. Visited space

4. Discrepancy form legend:

| Column A: | Sequential discrepancy number |
|------------|---|
| Column B: | |
| SF | Correction of the discrepancy is within the capability of ship's force. |
| IAC | Correction of the discrepancy was completed by ships force prior to completion of inspection visit. |
| IA | Indicates that the assistance of an industrial activity is probably required to properly correct the discrepancy. |
| IAC | Indicates that an industrial activity corrected the discrepancy. |
| SA | Indicates that the assistance of a support activity is probably required to properly correct the discrepancy. |
| SAC | Indicates that a support activity corrected the discrepancy. |
| CA | Indicates that the Contractor Activity is probably required to properly correct the discrepancy |
| CAC | Indicates that the Contractor Activity corrected the discrepancy. |
| Column C: | Reference of the paragraph in designated manuals to which the installation does not conform. |
| Narrative: | A brief description of the discrepancy found. |

5. Discrepancy

| A | В | C | Narrative |
|----|-----|--|---|
| 01 | CA | NSTISSAM TEMPEST 2/95 PG 27 Para 2a/pg16 para 5 IA Pub 5239-31 A.1.1.1 a, b | Processors. This items is waived as the result of the Instrumented FEMPEST Inspection. Any reconfiguration of equipment, which includes new equipment or replacement of existing CPUs with a different model would require another Instrumented Inspection. |
| 02 | CA | NSTISSAM TEMPEST 2/95 PG 27 Para 2b | Cabinet 3: Red processor less than one meter away from power line to black transmitter (RT-1794 p/o ARC-210). Refer to Item #1. |
| 03 | CA | NSTISSAM TEMPEST 2/95 pg 27 Para 2a | Cabinet 3: Red processor less than one meter away from black signal lines connected to RF transmitter (RT-1794) Refer to Item #1. |
| 04 | CA | NSTISSAM TEMPEST 2/95 pg 27 Para 4, Para 4.4.1.1, 4.1.1.2 IA PUB 5239-31 Para A.1.7.1 IA PUB 5239-31 MIL-STD 188- 124B Para 5.2.12 | Red data cables for RED LAN have aluminum/mylar shielding. Manufacturer data: DRAKA COMTEQ (F) ShipLan Cable 4PR 24 AWG Screened 307650. Subject cable may pose a TEMPEST hazard. B.1.2.5 (5239): Approved cables. Mil-C-17 (ref k), or MIL-C-915 (reference(l)), MIL-C-24640(reference(n)) or MIL-C-24643 (reference (o)). Researched cable and found that it does NOT meet any of the above MIL-SPECs. Draka sells data cables that are MIL- DTL-24643 compliant. Subject cables are CAT 5e Shiplan '59W', '59' and '59S' Marine data cables. The cables listed all have a braided shield in addition to the aluminum mylar tape. The braided shield allows for a flexible ground. Resolved. Subject cable passed Instrumented TEMPEST test. Both RED and BLACK cables are grounded to the aluminum mylar shield. Recommend use shielded braid cable. |
| 05 | CA | NSTISSAM TEMPEST 2/95 PG 27 Para 2a/pg16 para 5 IA Pub 5239-31 A.1.1.1 a, b | BLACK transmitters (RT-9000) within 3 meters of RED processors. Waived. Subject transmitters are enclosed in metallic case and bulkhead separates the cabinets containing the transmitters and RED processors. |
| 06 | CAC | IA Pub 5239-31 Para B.1.2.6.16 pg B-8 and B-9 | Missing pins on CRYPTO cable to KYV-5. Missing ground terminal connection on backshell. Completed. |
| 07 | CAC | IA Pub 5239-31 Para B.1.2.6.16 pg B-8 and B-9 | ANDVT cable has no ground terminal connection on backshell. Strain relief clamp is not on outer coating of cable. Redo connection. Completed. |
| 08 | CAC | IA Pub 5239-31 Para B.1.2.6.10 | AN/UPX-28 has inadequate green wire ground. Replace with Class C bond strap. Completed. |
| 09 | CAC | IA Pub 5259-31 | Remove external tooth washers on ground connectors to cabinets. |

| | | | Use lock washers and lug nuts per IA Instruction 5239-31 Figure B- |
|----|-----|--|--|
| | | | 5. Completed |
| 10 | CAC | NSTISSAM TEMPEST 2/95 PG 27 Para 2a/pg16 para 5 IA Pub 5239-31 A.1.1.1 a, b | UPX-28 is less than 3 meters from RED printers and processors. Waived, UPX-28 is in original enclosed cabinet and favorable instrumented test. |
| 11 | CAC | IA Pub 5239-31 Para B.1.2.6.10 | Remove green wire grounds from CRYPTO rack and replace with Class C solid bond strap. Completed. |
| 12 | CA | IA Pub 5239-31 Para A.1.1.3 | Telephone cables connected to shore tie via telephone switch cannot be routed with red cables Resolved. Marcom switch provides adequate isolation. |
| 13 | CA | IA Pub 5239-31 Para A.1.1.7. | ARC-210 Secure voice cables. Transmit and receive audio lines need to be shielded. Resolved. Subject lines are shielded per TISCOM TEMPEST PM communication Harris Corp. Only unshielded cables are BLACK. |
| 14 | CAC | NSTISSAM 2-95 Recommendation I Pg 27 Para 3 Notes: 2 | Operator position in Classified C4ISR room has cables from two UNCLAS LAN and three CLASSIFIED LAN connections. Require 2 inch (5 cm) separation. Completed. |

Bridge

| 15 | CAC | NSTISSAM TEMPEST 2/95 PG 27 Para 2a | Motorola VHF FM DES transceiver less than three meters from C2 Network flat panel display monitors LC 06-04-16, LC 06-04-72 and LC 06-04-84. Completed. Monttors replaced by TEMPEST compliant models. |
|----|-----|--|---|
| 16 | CAC | NSTISSAM TEMPEST 2/95 PG 27 Para 2a | Cellular phone next to Secure LAN junction box less than three meters from flat panel display monitors LC 06-04-82 and LC 06-04-72. If a RED laptop uses the Secure LAN junction box, it will be less than three meters from cellular phone Resolved. RED LAN cables rerouted and LAN box relocated |
| 17 | CAC | IA Pub 5239-31 Para B.1.2.6.13 | No metal-to-metal contact for ground strap from ARC 210 Tray to ground on shelf. Recommend use Class C ground strap and remove paint for proper bonding. Completed. |
| 18 | CA | IA Pub 5239-31 Para A.1.1.7.2 Pg A-3 | Unshielded cable connected to connector J3 on ARC-210 Tray. Twisted red wires (four) runs to C4ISR Cabinet #3. Replace cable run with proper cable. Resolved. Wires are used for control circuitry only. |
| 19 | CA | NSTISSAM TEMPEST 2/95 | Issue of wireless bridge for RHIB comms. RESOLVED. Wireless connectivity is via exterior antenna. PDAs will not use wireless connectivity |

Other:

| 20 | CAC | NSTISSAM 2-95 Recommendation I Pg 27 Para 3 Notes: 2 | CO's cabin. RED and BLACK LAN ports have no cable separation. Recommend 2 inch separation. RED/BLACK cable is tied together. Corrected. |
|----|-----|---|---|
| 21 | CA | NSTISSAM 2-95 Recommendation I Pg 27 Para 1 | CO's cabin. Proposed RED laptop on desk top less than 20 inches (20 cm) from black phone. Warved due to space limitations. |
| 22 | CAC | IA Pub 5239-31 Para A.1.1.7.3.1.b | RED fiber optic cable goes through space adjacent to black racks that contains hasp for locking. If the cable passes though normally locked spaces (for example, voids, staterooms, etc), that portion of the cable shall be contained in a metallic conduit (PDS). Completed. Cage will be constructed that will provide complete viewing of the space. |
| 23 | CAC | NSTISSAM 2-95 PARA 4.9.6 | Television and shipboard video (external cameras) can be viewed from the same VIDEO output jack. The shipboard video has been designated RED. Corrected. CATV isolator will be installed in Rack #5 to prevent compromising emanations from exiting inspectable space. |

Derived From:

NSTISSAM TEMPEST 2/95 with Amendment 2-95A

Department of the Navy (DoN) Information Assurance (IA) Publication Module 5239-31



Commander
U.S. Coast Guard
Telecommunication & Information
Systems Command

7323 Telegraph Road Alexandria, VA 23115 Staff Symbol: TISCOM (isd-3b) Phone: 703.313.5631 Fax: 703.313.5640 Email: rporter@tiscom.uscg.mil

2241 July 12, 2005

MEMORANDUM

From: Mr. Ronald T. Porter

CG TISCOM (isd-3b)

Reply to TISCOM (isd-3b) Attn of: Ronald T. Porter

703.313.5631

To:

Commander, Maintenance and Logistics Command Atlantic (t)

DIRECTOR, Deepwater Integrated Coast Guard Systems

Subi:

123 WPB CLASS TEMPEST WAIVER

Ref:

(a) NSTISSAM TEMPEST 2-95

(b) IA PUB 5239-31 INFORMATION ASSURANCE SHIPBOARD RED/BLACK

INSTALLATION PUBLICATION

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- 4. Discrepancy form legend:

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| Narrative: | A brief description of the discrepancy found. |

5. Discrepancy

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|----|-----|--|---|
| 01 | CA | NSTISSAM TEMPEST 2/95 PG 27 Para 2a/pg16 para 5 IA Pub 5239-31 A.1.1.1 a, b | BLACK RF Transmitter (RT-1794) is in the same rack as RED Processors. This items is warved as the result of the Instrumented TEMPEST Inspection. Any reconfiguration of equipment, which includes new equipment or replacement of existing CPUs with a different model would require another Instrumented Inspection. |
| 02 | CA | NSTISSAM TEMPEST 2/95 PG 27 Para 2b | Cabinet 3: Red processor less than one meter away from power line to black transmitter (RT-1794 p/o ARC-210). Refer to Item #1. |
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| | | | * * |

| | | | Use lock washers and lug nuts per IA Instruction 5239-31 Figure B- |
|----|-----|---|--|
| | | | 5. Completed |
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| 13 | CA | IA Pub 5239-31 Para A.1.1.7. | ARC-210 Secure voice cables. Transmit and receive audio lines need to be shielded. Resolved. Subject lines are shielded per TISCOM TEMPEST PM communication Harris Corp. Only unshielded cables are BLACK. |
| 14 | CAC | NSTISSAM 2-95 Recommendation 1 Pg 27 Para 3 Notes: 2 | Operator position in Classified C4ISR room has cables from two UNCLAS LAN and three CLASSIFIED LAN connections. Require 2 inch (5 cm) separation. Completed. |

Bridge

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Other:

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|----|-----|---|---|
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Derived From:

NSTISSAM TEMPEST 2/95 with Amendment 2-95A

Department of the Navy (DoN) Information Assurance (IA) Publication

Module 5239-31

STEPS TO CGC MATAGORDA RECEIVING ATO

| | PHYSICAL SECURITY | | | | | | |
|--|--|------------------------------|-----------|-------------|--|--|--|
| ACTION ITEM | SUB-ELEMENT | RESP PARTY | STATUS | DUE DATE | COMMENTS | | |
| Complete Physical Security Inspection | | D7/D8 Security Manager | Completed | 12/14 | All Physical Security Discrepancies Have Been Corrected And Letter Issued | | |
| Correct Physical | Correct Door Discrepancies | | Completed | 12/14 | | | |
| Security | Install Peep Hole | | Completed | 12/14 | | | |
| Discrepancies | Install Security Lock | | Completed | 12/14 | | | |
| | Install Automatic Door Closure | | Completed | 12/14 | | | |
| | Install Vent Louver | | Completed | 12/14 | | | |
| Submit Physical Security Correction Letter | PMRO | PMRO | Completed | 12/14 | | | |
| Final Physical Security Letter Issued | | D7 Security Manager | Completed | 12/14 | | | |
| | TEMPEST IN | | N | | | | |
| ACTION ITEM | SUB-ELEMENT | RESP PARTY | STATUS | DUE DATE | COMMENTS | | |
| Complete | Complete Instrumented Inspection | IANTI | Completed | 12/14 | | | |
| Instrumented | Correct Instrumented Identified Discrepancies | | Completed | 12/14 | | | |
| Inspection | Re-inspect???? | | Completed | 12/14 | | | |
| | Submit Required Documentation | | | 12/14 | | | |
| Physical Inspection | Complete TEMPEST Physical Inspection | | Completed | 12/14 | | | |
| TEMPEST Waiver | Submit Waiver Request | Porter | | 12/17 | | | |
| | Waiver Request Approved | | | | | | |
| Correct Physical Inspection | Radio Room 2-28-O-Q: There Is No Separation Between Classified LAN And Unclassified LAN Outlets | | Completed | 12/14 | | | |
| Discrepancies | Radio Room 2-28-O-Q: Classified LAN Lines Are Run With 120VAC Power Lines (No Separation) | | Completed | 12/14 | | | |
| | Radio Room 2-28-O-Q: Coax TV Line Runs Along With Classified LAN Line. | | Completed | 12/14 | | | |
| | Radio Room 2-28-O-Q: There Is No Separation Between Alarm Panel Line And Classified LAN Line. | | Completed | 12/14 | | | |
| | Radio Room 2-28-O-Q: The Printer (Red) Along With Classified LAN Line Runs Parallel With IFF Antenna Line. There Is No Separation Of These Lines | | Completed | 12/14 | | | |
| | Radio Room 2-28-O-Q: The Printer (Red) Uses Black Power. The Printer Router (Red) Uses Black Power | | Completed | 12/14 | | | |

| | Radio Room 2-28-O-Q: There Is No 3-Meter Separation | Porter | | 12/14 | Waiver Request |
|---|--|---------------------|----------------------|-------------|--|
| | Between Printer (Red) And IFF Transmitter. Radio Room 2-28-O-Q: In Rack #3, There Is No 3-Meter Separation Between Red And Black Cables Before Entering The Marcom Switch. | Porter | | 12/14 | Waiver Request |
| | Radio Room 2-28-O-Q: In Rack #3, There Is No 3-Meter Separation Between Cryptographic Equipment And RT9000 Transceiver | Porter | | 12/14 | Waiver Request |
| | Radio Room 2-28-O-Q: There Is Not A Secure Protected Distribution System (PDS) Leaving Radio Room. LE Locker Behind Secure Space. | Sconiers | | 12/14 | RED cables identified in space. Awaiting determination for fix. |
| | Radio Room 2-28-O-Q: Cable TV System Needs To Use An Amplifier/Attenuator At The Point Of Entry Into The Secure Space And Needs To Be A Type That Provides One-Way Filtration. | | | 12/14 | Resolution agreed upon. Will be implemented upon receipt of parts (filter/attenuator). |
| | Stateroom 1-16-1-L / 1-16-2-L: There Is No Separation Between Classified LAN Outlets And 117 VAC, Unclassified LAN, And TV Jack Outlets | | Completed | 12/14 | |
| | Stateroom 1-16-1-L / 1-16-2-L: There Is No Separation Between Classified LAN Line And MF/HF Line | | Completed | 12/14 | |
| | In Stateroom 1-16-2-L: Classified LAN Line Runs Parallel With Horn Generator Line | | Completed | 12/14 | |
| | Bridge: There Is No 3-Meter Separation Between Red Output And Black Lines For The Kite Handset #1 And #2 | | | | Not a Tempest Issue per Ron Porter |
| | Bridge: Classified LAN Line Runs Parallel With 117 VAC, Black Data Lines, And Cellular Antenna Line | Harvey/ Sconiers | Completed | 12/14 | Verify/Moved |
| Complete TEMPEST Physical Security Re-inspection ?? | | | Completed | 12/14 | CWO Sconiers to arrange with D8 |
| Issue TEMPEST Letter | | Porter | | 12/17 | Waiver Request |
| | SOFTWAR | F UPDATE | <u> </u> = | | |
| ACTION ITEM | SUB-ELEMENT | RESP PARTY | STATUS | DUE DATE | COMMENTS |
| Update Version 5.3.2 | Update Software To Correct Venerability Issues | Merideth | | 12/3 | L. Merideth / B. Mclaverty to deliver plan to accomplish by 12/3 |
| Install Updated Version Of Software | | Merideth | | 12/3 | L. Merideth / B. Mclaverty to deliver plan to accomplish by 12/3 |
| Scan Updated Version Of Software | | Merideth | | 12/3 | L. Merideth / B. Mclaverty to deliver plan to accomplish by 12/3 |

| Submit Updated Scan Data To ???? | | Merideth | | 12/3 | L. Merideth / B. Mclaverty to deliver plan to accomplish by 12/3 |
|---|---|------------------|-----------|-------------|--|
| | SOFTWARE & HARDWARE CONF | IGURATIC | N MANAGE | EMENT F | PLAN |
| ACTION ITEM | SUB-ELEMENT | RESP PARTY | STATUS | DUE DATE | COMMENTS |
| Hardware | Develop Detailed Configuration Management Plan IAW CSEL | | Completed | | B. Mclaverty / H. Colella to verify CSEL addresses |
| Software | Develop Detailed Software Configuration Management Plan Including Software Update Management Responsibilities | Colella | | 1/12 | H Colella to review plan with CDR Wood prior to CDR |
| | SSAA PA | ACKAGE | | | |
| ACTION ITEM | SUB-ELEMENT | RESP PARTY | STATUS | DUE DATE | COMMENTS |
| What Is Needed For | | Talley- Green | | | Needs input by 12/22 |
| Documentation To Complete SSAA Package ???? | | | | | |
| | A ⁻ | ГО | | | |
| ACTION ITEM | SUB-ELEMENT | RESP PARTY | STATUS | DUE DATE | COMMENTS |
| What Is Needed To Issue ATO ??? | | CG6 | | | Need Input by 1/10 |
| | OTHER | ITEMS | | | |
| ACTION ITEM | SUB-ELEMENT | RESP PARTY | STATUS | DUE DATE | COMMENTS |
| Cop Training | Conduct Cop Training | | | | To be scheduled on BSI Departure |
| Arc–210 Correction | | | | | Ongoing |
| HF Voice And Data Comms | | | | | Ongoing |

General Questions:

- 1. TEMPEST Physical Inspection:
 - What items have been corrected?
 - Waiver:
 - a. Specifically what items will a waiver be requested for?
 - b. Will the waiver apply to all vessels (delivered and under conversion)?

- c. Will the waiver be a dated waiver (i.e. must be corrected within a specific time or waiver will be good for an indefinite time)?
- d. Has the waiver request been submitted? If so:
 - i. Who submitted the request?
 - ii. What is the status of the request?
 - iii. Specifically what items were identified in the request?
- Will a re-inspection be required after the discrepancies have been correct? If not:
 - a. What action is required to close the loop?
 - b. Who will complete the required action?

Items copied and pasted from Mr. Ron Porter's discrepancy list:

Subject: Visual TEMPEST Inspection Summary

- 1. This Visual TEMPEST Inspection Summary is for the FTA Visit
- 2. The entire Secure Electrical Information Processing System was inspected.
- 3. List of spaces with secure processing equipment inspected by the visual TEMPEST inspector:
 - A. Visited space
- 4. Discrepancy form legend:

| Column A: | Sequential discrepancy number | er |
|-----------|-------------------------------|----|
| | | |

Column B:

SF Correction of the discrepancy is within the capability of ship's force.

IAC Correction of the discrepancy was completed by ships force prior to completion of inspection visit.

IA Indicates that the assistance of an industrial activity is probably required to properly correct the discrepancy.

IAC Indicates that an industrial activity corrected the discrepancy.

SA Indicates that the assistance of a support activity is probably required to properly correct the discrepancy.

SAC Indicates that a support activity corrected the discrepancy.

CA Indicates that the Contractor Activity is probably required to properly correct the discrepancy.

Column C: Reference of the paragraph in designated manuals to which the installation

does not conform.

Narrative: A brief description of the discrepancy found.

5. Discrepancy

| Α | В | C | Narrative |
|----|----|-----------------|---|
| 01 | CA | NSTISSAM | Cabinet 3: Black RF transmitter (RT-1794) in same rack as |
| | | TEMPEST 2/95 | Red Processors. Recommend moving 3 meters away or in |
| | | PG 27 Para | adjacent Black Equipment Room. Recommend placing entire |
| | | 2a/pg16 para 5 | ARC-210 system on Bridge. |
| | | IA Pub 5239-31 | Anticipate waiver w/caveat from Ron Porter. |
| | | A.1.1.1 a, b | |
| 02 | CA | NSTISSAM | Cabinet 2: RF transmitter (PCRP 211/802) in same rack as |
| | | TEMPEST 2/95 | Red Processors. Recommend moving 3 meters away or in |
| | | pg 27 Para | adjacent Black Equipment Room. |
| | | 2a/pg16 para 5 | Anticipate waiver w/caveat from Ron Porter. |
| | | IA Pub 5239-31 | |
| | | A.1.1.1 a, b | |
| 03 | CA | NSTISSAM | Cabinet 3: Red processor less than one meter away from |
| | | TEMPEST 2/95 | power line to black transmitter (RT-1794 p/o ARC-210) |
| | | PG 27 Para 2b | Anticipate waiver w/caveat from Ron Porter. |
| 04 | CA | NSTISSAM | Cabinet 3: Red processor less than one meter away from |
| | | TEMPEST 2/95 | black signal lines connected to RF transmitter (RT-1794) |
| | | pg 27 Para 2a | Anticipate waiver w/caveat from Ron Porter. |
| 05 | CA | NSTISSAM | Signal cable used with RED processors, BLACK processors, |
| | | TEMPEST 2/95 | ISDN telephones are not terminated. Red data cables for |
| | | pg 27 Para 4, | RED LAN have aluminum/mylar shielding. Manufacturer |
| | | Para 4.4.1.1, | data: DRAKA COMTEQ (F) ShipLan Cable 4PR 24 AWG |
| | | 4.1.1.2 | Screened 307650. Subject cable may pose a TEMPEST |
| | | | hazard. |
| | | IA PUB 5239- | |
| | | 31 Para A.1.7.1 | B.1.2.5 (5239): Approved cables. Mil-C-17 (ref k), or MIL- |
| | | * | C-915 (reference(1)), MIL-C-24640(reference(n)) or MIL-C- |
| | | IA PUB 5239- | 24643 (reference (o)). Researched cable and found that it |
| | | 31 | does NOT meet any of the above MIL-SPECs. Draka sells |
| | | MH GED 100 | data cables that are MIL-DTL-24643 compliant. Subject |
| | | MIL-STD 188- | cables are CAT 5e Shiplan '59W', '59' and '59S' Marine |
| | | 124B Para | data cables. The cables listed all have a braided shield in |
| | | 5.2.12 | addition to the aluminum mylar tape. The braided shield allows for a flexible ground. |
| | | | NSTISSAM 2-95: RED processors meeting the requirements |

| | | | of NSTISSAM TEMPEST/1-92 (Levels I, II, or III) must use optical or shielded wire cables if specified as part of the manufacturer's installation specification, or if specified for compliance with TEMPEST certification. Paragraphs 4.4.1.1, and 4.1.1.2 defines cable characteristics and shield termination. IA Pub 5239-31: RED Shielded Metallic Wire Cable. RED metallic wire cables in all locations shall be shielded, with the exception of desktop computer cables that are provided by the manufacturer, where there is not an offered shielded cable option. This requirement is not applicable to RED fiber optic cables. |
|----|----|---|--|
| | | | MIL-STD-188 "Foil shields are not acceptable for peripheral bonding and do not provide mechanical durability" IA Pub 5239-31 pg B-9 Para d. Note: "If both ends of the cable will not have the shield taken to ground, approval by the cognizant CTTA should be obtained prior to installation." |
| | | | Other source (AFMAN33-214V2 DATED 21SEP2001) states that foil shielding is intended for voice or digital signals less than 5Kbps. Passed during instrumental inspection. |
| 06 | CA | NSTISSAM TEMPEST 2/95 pg 28 Para 6 | RED processors and RF transmitters in Cabinet 2 and Cabinet 3. RED processors should not be powered from the same circuits as RF transmitters. Passed during instrumental inspection. |
| 07 | CA | IA Pub 5239-31 Para B.1.2.6.16 pg B-8 and B-9 | Missing pins on CRYPTO cable to KYV-5. Missing ground terminal connection on backshell. Completed |
| 08 | CA | IA Pub 5239-31 Para B.1.2.6.16 pg B-8 and B-9 | ANDVT cable has no ground terminal connection on backshell. Strain relief clamp is not on outer coating of cable. Redo connection. Completed |
| 09 | CA | IA Pub 5239-31 Para B.1.2.6.10 | AN/UPX-28 has inadequate green wire ground. Replace with Class C bond strap. Completed |

| 11 | CA | IA Pub 5239-31 | On racks, install ground cables per IA 5239-31. Where required, use soldered connectors vice crimping. |
|----|----|--|---|
| | | | Completed |
| 12 | CA | IA Pub 5259-31 | Remove external tooth washers on ground connectors to cabinets. Use lock washers and lug nuts per IA Instruction 5239-31 Figure B-5. Completed |
| 13 | CA | IA Pub 5239 B.1.2.6.12 | Keyboard and Monitor in Cabinet #1 has non –manufacturer supplied power cable. Bond shelf to rack. Completed |
| 14 | CA | NSTISSAM 2- 95 Para 3 Notes 3 | RED/BLACK cable separation. Two inch minimum separation requirement. Six inch separation requirement for RED/BLACK cables that run in parallel for 100 ft runs. No way to physically identify RED/BLACK data cables from each other or from the ISDN phone lines. Anticipate waiver w/caveat from Ron Porter. |
| 15 | CA | NSTISSAM TEMPEST 2/95 Recommendatio n I Pg 27 | PCRP (Model 211/802) is Black transmitter in RED Cabinet #3. PCRP (RADAR) is less than three meters away from RED processing equipment. Recommend moving outside of C4ISR Classified Room. Completed |
| 16 | CA | IA Pub 5239-31 Para B.1.2.6.10 | Remove green wire grounds from CRYPTO rack and replace with Class C solid bond strap. Completed |
| 17 | CA | IA Pub 5239-31 Para A.1.1.3 | Telephone cables connected to shore tie via telephone switch cannot be routed with red cables. More info on MARCOM switch required. Completed (per Harris input) |
| 18 | CA | IA Pub 5239-31 Para A.1.1.7. | ARC-210 Secure voice cables. Transmit and receive audio lines need to be shielded. Completed (per Harris input) |
| 19 | CA | | Request complete wiring diagram of Marcom Compact IVCS Switch with PABX. Issue is port isolation for RED/BLACK connections. All ISDN phones, cellular wireless, shore connection box and KITEs have inputs to MARCOM. TISCOM TEMPEST program manager will check on configuration on SIPRNET. Wireline inputs to MARCOM in current configuration appear to be unshielded. During discussion with SPAWAR and L3, it was not clear if the MARCOM switch would be used in the same configuration it was approved for. Not sure if this has been given to Ron Porter. |

| 20 | CA | NSTISSAM 2- | Operator position in Classified C4ISR room has cables from |
|----|----|------------------|--|
| | | 95 | two UNCLAS LAN and three CLASSIFIED LAN |
| | | Recommendatio | connections. Require 2 inch (5 cm) separation. |
| | | n I Pg 27 Para 3 | Completed |
| | | Notes: 2 | _ |

Bridge

| 22 | CA | NSTISSAM TEMPEST 2/95 PG 27 Para 2a NSTISSAM TEMPEST 2/95 PG 27 Para 2a | Motorola VHF FM DES transceiver less than three meters from C2 Network flat panel display monitors LC 06-04-16, LC 06-04-72 and LC 06-04-84. Pending Instrumented Test. Waived w/caveat from Ron Porter. Ross VHF FM transceiver less than three meters from C2 Network flat panel display monitors LC 06-04-16, LC 06-04-72 and LC 06-04-84. Pending Instrumented Test Waived w/caveat from Ron Porter. |
|----|----|--|---|
| 23 | CA | NSTISSAM TEMPEST 2/95 PG 27 Para 2a | Cellular phone next to Secure LAN junction box less than three meters from flat panel display monitors LC 06-04-82 and LC 06-04-72. If a RED laptop uses the Secure LAN junction box, it will be less than three meters from cellular phone. Request information on proposed operation (will cellular phone be ON within X miles of coast, or will it be left OFF while in the cabinet.). What is the composition of the enclosure? Does it provide shielding? Request information on external antenna (is the cellular antenna disabled when connected to the external antenna?). Completed/Moved |
| 24 | CA | IA Pub 5239-31 Para B.1.2.6.13 | No metal-to-metal contact for ground strap from ARC 210 Tray to ground on shelf. Recommend use Class C ground strap and remove paint for proper bonding. Completed |
| 25 | CA | IA Pub 5239-31 A.1.1.7.2a | Not clear if Shielded Twisted Pair is used for voice and control wirelines. SPAWAR will inspect and test during Instrumented TEMPEST test. |

| | | | Completed |
|----|----|----------------|--|
| 26 | CA | IA Pub 5239-31 | Unshielded cable connected to connector J3 on ARC-210 |
| | | Para A.1.1.7.2 | Tray. Twisted red wires (four) runs to C4ISR Cabinet #3. |
| | | Pg A-3 | Replace cable run with proper cable. |
| | | | Resolved |
| 27 | CA | NSTISSAM | Issue of wireless bridge for RHIB comms. RESOLVED. |
| | | TEMPEST 2/95 | Wireless connectivity is via exterior antenna. PDAs will not |
| | | | use wireless connectivity. |

Other:

| 28 | CA | NSTISSAM 2- 95 Recommendatio n I Pg 27 Para 3 Notes: 2 | CO's cabin. RED and BLACK LAN ports have no cable separation. Recommend 2 inch separation. RED/BLACK cable is tied together. Completed |
|----|----|--|---|
| 29 | CA | NSTISSAM 2- 95 Recommendatio n I Pg 27 Para 1 | CO's cabin. Proposed RED laptop on desk top less than 20 inches (20 cm) from black phone. Resolved due to space limitations in stateroom. |
| 30 | CA | IA Pub 5239-31 Para A.1.1.7.3.1.b | RED fiber optic cable goes through space adjacent to black racks that contains hasp for locking. If the cable passes though normally locked spaces (for example, voids, staterooms, etc), that portion of the cable shall be contained in a metallic conduit. Resolution options being researched. Not complete to date. |
| 31 | CA | NSTISSAM 2- 95 Para 4.9 | Does security system enunciator go through MARCOM switch or does it bypass the switch? If it bypasses the switch, is an isolator used? Resolved |
| 32 | CA | NSTISSAM 2- 95 PARA 4.9.6 | Television and shipboard video (external cameras) can be viewed from the same VIDEO output jack. The shipboard video has been designated RED. Resolution agreed upon. Will be implemented upon receipt of parts (filter/attenuator). |

Derived From: NSTISSAM TEMPEST 2/95 Page 104 of 134

Department of the Navy (DoN) Information Assurance (IA) Publication
Module 5239-31
MIL-STD-188-124B Grounding Bonding Shielding for Common Long
Haul/Tactical Communications Systems
Air Force Manual 33-214, Volume 2, Communications and Information Emission Security Countermeasures Review

Additional items noted during secondary inspection:

- 1. Secure grounds for ARC-210. Ground is loose (I anticipate resolution today).
- 2. Recommend Class/Unclass stickers on LAN drop boxes. Class (red) and Unlcass (green) stickers.



Commander Maintenance and Logistics Command

300 East Main Street, Suite 700 Norfolk, VA 23510-9103 Staff Symbol: (tp-1) Phone: (757) 628-4051 Fax: (757) 628-4035

2241 05.0041 8 March 2005

MEMORANDUM

From:

Reply to (tp-1)

Attn of:

Ernestine Cook

(757) 628-4051

To:

CGC PADRE (WPB 1328)

Subj:

TEMPEST INSPECTION OF USCGC PADRE (WPB 1328)

Ref:

(a) NSTISSAM 2-95 Red/Black Installation Guidance

- (b) DOD IA PUB 5239-31 Information assurance Shipboard Red/Black
- (c) COMDT COGARD Washington DC//CG-62//042137Z Mar 04
- 1. ET2 Timothy Cole, ESD New Orleans, conducted a re-inspection of the Secure Electrical Information Processing System (SEIPS) on CGC PADRE on 28 January 2005. The re-inspection was conducted as required by references (a), (b), and (c).
- 2. Enclosure (1) is a summary of minor discrepancies with the SEIPS. No serious TEMPEST hazards were noted; therefore, you may continue normal operations. In accordance with reference (c), discrepancies must be corrected within 90 days. You should contact Ms. Ernestine Cook to schedule a re-inspection. This summary also provides a record of the installation at the time of inspection. Modifications or changes to the SEIPS shall not be made without approval of TISCOM (isd-3d) or MLCA.
- 3. This summary and amendments to this summary shall be retained in the unit's SEIPS (TEMPEST) documentation file.

#

Enclosure: (1) Visual Tempest Inspection Summary

Copy:

COMDT (CG-6, G-DPM-3)

LANTAREA (40FC)

TISCOM (isd-3b) ESU New Orleans

ESD New Orleans

ESU Miami ESD Key West

Visual TEMPEST Inspection Summary

The entire Secure Electrical Information Processing System was inspected.

List of spaces with secure processing equipment inspected by the visual TEMPEST inspector:

- 1. Radio Room
- 2. State Rooms
- 3. Bridge

Discrepancy form legend:

Column A:

Sequential discrepancy number

Column B:

SF Correction of the discrepancy is within the capability of ship's force.

SFC Correction of the discrepancy was completed by ships force prior to completion of inspection visit.

IA Indicates that the assistance of an industrial activity is probably required to properly correct the discrepancy.

IAC Indicates that an industrial activity corrected the discrepancy.

SA Indicates that the assistance of a support activity is probably required to properly correct the discrepancy.

SAC Indicates that a support activity corrected the discrepancy.

Column C:

Document Reference to which the installation does not conform.

Narrative:

A brief description of the discrepancy found.

Discrepancies and Corrective Action Report

1. Radio Room 2-28-O-Q

| Α | В | С | Narrative |
|-----|-------|---|--|
| 001 | IA/SA | NSTISSAM 2-95 Rec I Paragraph 3.B Note 2 | There is no separation between Classified LAN and Unclassified LAN outlets. CORRECTED |
| 002 | IA/SA | NSTISSAM 2-95 Rec I Paragraph 3.B Note 2 | Classified LAN lines are run with 120VAC power lines (no separation). CORRECTED |
| 003 | IA/SA | NSTISSAM 2-95 Rec I Paragraph 3.B Note 2 | Coax TV line runs along with Classified LAN line. CORRECTED |
| 004 | IA/SA | NSTISSAM 2-95 Rec I Paragraph 3.B Note 2 | There is no separation between alarm panel line and Classified LAN line. WAIVED |
| 005 | IA/SA | NSTISSAM 2-95 Rec I Paragraph 2.B | The printer (red) along with Classified LAN line runs parallel with IFF antenna line. There is no separation of these lines. WAIVED |
| 006 | IA/SA | IA PUB 5239-31 Paragraph A.1,1,2 | The printer (red) uses black power. The printer router (red) uses black power. WAIVED |
| 007 | IA/SA | NSTISSAM 2-95 Rec I Paragraph 6 | There is no 3-meter separation between printer (red) and IFF transmitter. WAIVED |
| 008 | IA/SA | NSTISSAM 2-95 . Rec I Paragraph 6 | In Rack #3, there is no 3-meter separation between red and black cables before entering the Marcom switch. WAIVED |
| 009 | IA/SA | NSTISSAM 2-95 Rec I Paragraph 6 | In Rack #3, there is no 3-meter separation between cryptographic equipment and RT9000 transceiver. WAIVED |
| 010 | IA/SA | IA PUB 5239-31 Paragraph A.1.1.7.3.1.B | There is not a secure Protected Distribution System (PDS) leaving Radio Room. LE Locker behind Secure Space. WAIVED |
| 011 | IA/SA | NSTISSAM 2-95 Paragraph 4.9.6 | Cable TV system needs to use an amplifier/attenuator at the point of entry into the secure space and needs to be of a type that provides one-way filtration. CORRECTED |
| 012 | SA | IA PUB 5239-31 Paragraph B.1.2.6.2 | IFF transmitter needs ground. Removal of paint and dirt from ground. NEEDS TO BE COMPLETED |

强烈 (48)的 (2)

2. State Rooms 1-16-1-L / 1-16-2-L

| 001 | IA/SA | IA PUB 5239-31 Paragraph B.1,2.6.2 | There is no separation between Classified LAN outlets and 117 VAC, Unclassified LAN, and TV Jack outlets. WAIVED |
|-----|-------|--|--|
| 002 | IA/SA | NSTISSAM 2-95 Rec I Paragraph 3.A | There is no separation between Classified LAN line and MF/HF line. CORRECTED |
| 003 | IA/SA | NSTISSAM 2-95 Rec I Paragraph 3. | In State Room 1-16-2-L, Classified LAN line runs parallel with horn generator line. CORRECTED |

3. Bridge

| Α | В | C | Narrative | | | | | |
|-----|--|--|---|--|--|--|--|--|
| 001 | IA/SA | NSTISSAM 2-95 Rec I Paragraph 6 | There is no 3meter separation between red output and black lines for the Kite handset #1 and #2. WAIVED | | | | | |
| 002 | DO2 1A/SA IA PUB 5239-31 Paragraph B.1.2.6.2 | | Classified LAN line runs parallel with 117 VAC, Black Data lines, and cellular antenna line. CORRECTED | | | | | |
| 003 | SA | IA PUB 5239-31 Paragraph B.1.2.6.2 | Need to remove paint and add clean ground for RCU-9310 radio. NEEDS TO BE COMPLETED | | | | | |



Commander Maintenance and Logistics Command

300 East Main Street, Suite 700 Norfolk, VA 23510-9103 Staff Symbol: (tp-1) Phone: (757) 628-4051 Fax: (757) 628-4035

2241 05.0041 8 March 2005

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From:

Reply to (tp-1)

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Ref:

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- 3. This summary and amendments to this summary shall be retained in the unit's SEIPS (TEMPEST) documentation file.

#

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Copy:

COMDT (CG-6, G-DPM-3)

LANTAREA (40FC)

TISCOM (isd-3b)

ESU New Orleans

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Visual TEMPEST Inspection Summary

The entire Secure Electrical Information Processing System was inspected.

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Sequential discrepancy number

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Column C: Document Reference to which the installation does not conform.

Narrative: A brief description of the discrepancy found.

Discrepancies and Corrective Action Report

1. Radio Room 2-28-O-Q

| A | В | С | Narrative |
|-----|-------|---|--|
| 001 | IA/SA | NSTISSAM 2-95 Rec I Paragraph 3.B Note 2 | There is no separation between Classified LAN and Unclassified LAN outlets. CORRECTED |
| 002 | IA/SA | NSTISSAM 2-95 Rec I Paragraph 3.B Note 2 | Classified LAN lines are run with 120VAC power lines (no separation). CORRECTED |
| 003 | IA/SA | NSTISSAM 2-95 Rec I Paragraph 3.B Note 2 | Coax TV line runs along with Classified LAN line. CORRECTED |
| 004 | IA/SA | NSTISSAM 2-95 Rec I Paragraph 3.B Note 2 | There is no separation between alarm panel line and Classified LAN line. WAIVED |
| 005 | IA/SA | NSTISSAM 2-95 Rec I Paragraph 2.B | The printer (red) along with Classified LAN line runs parallel with IFF antenna line. There is no separation of these lines. WAIVED |
| 006 | IA/SA | IA PUB 5239-31 Paragraph A.1.1.2 | The printer (red) uses black power. The printer router (red) uses black power. WAIVED |
| 007 | IA/SA | NSTISSAM 2-95 Rec I Paragraph 6 | There is no 3-meter separation between printer (red) and IFF transmitter. WAIVED |
| 008 | IA/SA | NSTISSAM 2-95 Rec I Paragraph 6 | In Rack #3, there is no 3-meter separation between red and black cables before entering the Marcom switch. WAIVED |
| 009 | IA/SA | NSTISSAM 2-95 Rec I Paragraph 6 | In Rack #3, there is no 3-meter separation between cryptographic equipment and RT9000 transceiver. WAIVED |
| 010 | IA/SA | IA PUB 5239-31 Paragraph A.1.1.7.3.1.B | There is not a secure Protected Distribution System (PDS) leaving Radio Room. LE Locker behind Secure Space. WAIVED |
| 011 | IA/SA | NSTISSAM 2-95 Paragraph 4.9.6 | Cable TV system needs to use an amplifier/attenuator at the point of entry into the secure space and needs to be of a type that provides one-way filtration. CORRECTED |
| 012 | SA | IA PUB 5239-31 Paragraph B.1.2.6.2 | IFF transmitter needs ground. Removal of paint and dirt from ground. NEEDS TO BE COMPLETED |

强烈 (48)的 (2)

2. State Rooms 1-16-1-L / 1-16-2-L

| 001 | IA/SA | IA PUB 5239-31 Paragraph B.1.2.6.2 | There is no separation between Classified LAN outlets and 117 VAC, Unclassified LAN, and TV Jack outlets. WAIVED |
|-----|-------|--|--|
| 002 | IA/SA | NSTISSAM 2-95 Rec I Paragraph 3.A | There is no separation between Classified LAN line and MF/HF line. CORRECTED |
| 003 | IA/SA | NSTISSAM 2-95 Rec I Paragraph 3. | In State Room 1-16-2-L, Classified LAN line runs parallel with horn generator line. CORRECTED |

3. Bridge

| A | В | C | Narrative | | | | |
|-----|--|--|---|--|--|--|--|
| 001 | IA/SA | NSTISSAM 2-95 Rec I Paragraph 6 | There is no 3meter separation between red output and black lines for the Kite handset #1 and #2. WAIVED | | | | |
| 002 | 002 IA/SA IA PUB 5239-31 Paragraph B.1.2.6.2 | | Classified LAN line runs parallel with 117 VAC, Black Data lines, and cellular antenna line. CORRECTED | | | | |
| 003 | SA | IA PUB 5239-31 Paragraph B.1.2.6.2 | Need to remove paint and add clean ground for RCU-9310 radio. NEEDS TO BE COMPLETED | | | | |

MATERIAL INSPECTION AND RECEIVING REPORT

Form Approved OMB No. 0704-0248

Page 114 of 134

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SEND THIS FORM IN ACCORDANCE WITH THE INSTRUCTIONS CONTAINED IN THE DEARS, APPENDIX F-401.

| SE | ND THIS FORM IN | CCORDAN | CE WITH THE INSTRU | ICTIONS | CONTA | INED IN | THE DE | ARS, APPENDIX | (F-40 | 1. |
|---|--|-----------------------------------|--|------------------------|---|-------------------|---|--|-------------------------|---------------------------------|
| | INSTRUMENT IDENTIF | CATION | ORDER NO. | 6. INVO | ICE NO./ | DATE | 17 | . PAGE OF | 8. AC | CEPTANCE POINT |
| (CONTRACT) NO DTC | o. G23-02-C-2DW00 | 1 | 03-F-2DW247 | ICGS | 03002 | 3 06/24/ | 04 | 1 2 | , | D |
| 2. SHIPMENT NO. | 5. DISCOUNT TERMS | | | | | | | | | |
| NA | 24 Jun 04 | TCN NA | | None | | | | | | · |
| 9. PRIME CONTRAC | CTOR CODE | 1UYZ2 | T: | 10. ADN | VINISTER | RED BY | *************************************** | CO | DE | |
| Integrated Coast Arlington, VA 2 | Guard Systems, 1, 22209, USA | 530 Wilson | Blvd., Suite 400, | | | | | . Coast Guard I , Arlington, VA | | |
| 11. SHIPPED FROM | (If other than 9) COD | E - | FOB: | 12. PAY | MENT V | VILL BE M | ADE BY | | DE | |
| PO Box 250 8365 Highway 3 Lockport, LA. 70 | 0374-0250 | | · . | Second | St. SV | V, Room | | | C 20: | quarters, 2100 591-0001, USA |
| 13. SHIPPED TO | | WPB - 132 | | 1 | RKED FC | | | co | DE | |
| USCGC PADRE 8365 Highway 3 Lockport, LA. 70 | | O Coast G | uard | LT. Ha | mmon | d | | | | |
| 15. 1 ITEM NO. | 6. STOCK/PART NO. (Indicate nu. | nber of shippi ntainer - conta | DESCRIPTION ng containers - type of iner number.) | | | IANTITY REC'D* | 18. UNIT | 19. UNIT PRICE | | 20. AMOUNT |
| 0055 EB S | Services and Suppl | | | | | 1/1 | Lot | \$7,080,060.0 | 00 | \$7,080,060.00 |
| | WPB 123 convers | ion, | | | | , | | | İ | |
| | | | wing components: D | etails | | | | | | |
| | n Certificate of Co | | | | | | | | | |
| | n Ceruncate of Co Frial Cards | mormance | | | | 1 | Lot | \$114,850.0 | 00 | \$114,850.00 |
| | rovisioning and Sp | pares | | | | 1 | Lot | \$35,433. | 1 | \$35,433.50 |
| | Training | ,4105 | | | | 1 | Lot | \$10,0 | 1 | \$10,000.00 |
| | CDRL Exceptions | | | | | 1 | Lot | \$17,500. | | \$17,500.00 |
| | QUALITY ASSURAN | ICE | | | | | | CEIVER'S USE | | |
| a. ORIGIN | ACCEPTANCE of listed | 1 | CQA ACCEPT | ANCE of li | etad itam | ne hae | | cities shown in colu ent good condition | | |
| has been made by | me or under my supervontract, except as note | rision and | been made by me or unconform to contract, exc supporting documents. | der my sup | ervision | and they | DATE RECEIVED SIGNATURE OF AUTHORIZED GOVERNMENT REPRESENTATIVE | | | OF AUTHORIZED - |
| on supporting doct | · · | | | | | ` | TYPED NAME: Daniel Hartinger | | | |
| DATE | SIGNATURE OF AUTHO | DRIZED | DATE SIG | NATURE OF RNMENT RE | AUTHOR | IZED | TITLE: | Contract O | tricer | |
| | GOVERNMENT REPRESE ficate of Conforman | 1. | GOVE TYPED NAME: | RNMENTR | PRESENT | ATIVE | U.S. C | MAILING ADDRESS: U.S. Coast Guard Deepwater SIPO | | |
| TITLE: | ricule of Commentum | | TITLE: | | | | 1530 COMME | | | 0, Arlington, VA |
| MAILING ADDRESS: | | 1 | MAILING ADDRESS: | | | | NUMBER | | | 8-3253 |
| COMMERCIAL TELEPHONE COMMERCIAL TELEPHONE NUMBER: | | | | | * If quantity received by the Government is the s as quantity shipped, indicate by (X) mark; if diffe enter actual quantity received below quantity ship and encircle. | | | | (X) mark; if different, | |
| 23. CONTRACT | OR USE ONLY | | | | | | | | | |

MATERIAL INSPECTION AND RECEIVING REPORT - CONTINUATION SHEET

PAGE 2

2

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SEND THIS FORM IN ACCORDANCE WITH THE INSTRUCTIONS CONTAINED IN THE DFARS, APPENDIX F-401.

| TOCK/PART NO. (Indicate num cont tinued pest POA&M sified Testing | DESCRIPTION ber of shipping containers - type of ainer - container number.) | QUANTITY SHIP/REC'D | UNIT | UNIT PRICE | AMOUNT \$0.00 |
|--|---|------------------------|-----------------|-----------------|------------------|
| pest POA&M | | | lot | | \$0.00 |
| - | | 1 | lot | | |
| sified Testing | | | | \$5,000.00 | \$5,000.00 |
| | | 1 | lot | \$3,000.00 | \$3,000.0 |
| MS2 C4ISR TRF | s / Problem Sheets | 1 | lot | \$3,000.00 | \$3,000.0 |
| C License Authori | zation | 1 | lot | \$4,000.00 | \$4,000.0 |
| Launch and Retr | ieval POAM | 1 | ea | \$0.00 | \$0.0 |
| IS POAM | | 1 | lot | \$600.00 | \$600.0 |
| l Service Inmarsa | t POAM | 1 | | \$600.00 | \$600.0 |
| Cable Replaceme | nt | 1 | | \$3,000.00 | \$3,000.0 |
| pec Adjustment | | 1 | | \$8,062.00 | \$8,062.0 |
| dit for Secure Cor | nm Lock | 1 | | -\$2,000.00 | -\$2,000.0 |
| dit for Move to N | ew Orleans | 1 | | -\$8,467.00 | -\$8,467.0 |
| 5EBB (de-obligat | e unexpended OE funds) | 1 | | \$21,496.29 | \$21,496.2 |
| 5EBA (de-obliga | e unexpended CA funds) | 1 | | \$2,803.42 | \$2,803.4 |
| ount Paid to Date | | 1 | | 35,746,348.00 | \$5,746,348.0 |
| | . D | 1 | | 61.114.834.29 | \$1,114,834.2 |
| | nt Paid to Date | | nt Paid to Date | nt Paid to Date | |



ICGS Certificate of Conformance:

Contract Number: DTCG23-02-C-2DW001

DTO Number: DTCG23-03-F-2DW247, CLIN 0055EB

Asset: CGC Padre, WPB 1328, 1 of 1

Description: This DTO provides the detailed design and construction for major modification of the 110-foot patrol boat Padre, including completion of all design, analyses, construction, and testing to deploy the lead vessel of the proposed 123-Ft Cutter Class, and to demonstrate compliance with requirements. Included in the modifications was an extensive ultrasonic survey of the hull was conducted resulting in the replacement of over 75 square feet of wasted hull plate; a new deckhouse providing an enlarged, 360-degree bridge and berthing for a dual-gender crew, a stern extension with a stern ramp and door for launch and recovery of the Short-Range Prosecutor; an upgraded C4ISR suite to ensure interoperability with the IDS; and all related logistics and training.

I certify that on 24 June 2004, the ICGS Deepwater Program furnished the supplies and/or services called for in accordance with all applicable requirements. I further certify that the supplies and/or services are of the quality specified and conform in all respects with the contract requirements, including specifications, drawings, preservation, packaging, packing, marking requirements, and physical item identification, and are in the quantity shown on the attached acceptance document.

Comment: This Certificate of Conformance is based upon;

- LM/MS2 Certificate of Conformance and supporting records.
- NGSS Certificate of Conformance and supporting records
- ICGS audits of LM/MS2, NG/SS, Chand, and Bollinger (BSI).
- Functional Configuration Audit and Physical Configuration Audit performed on 4 June 2004
- 123 Cutter Certification Matrix

COMDAC INS navigation system, gyrocompass, and Radar engineering changes have been installed in the CGC Padre. ICGS is in receipt of Amendment of Solicitation / Modification of Contract, Modification 002, requisition/Purchase Reg. No. 24-03-2332DW247, signed by Catherine A Martindale, Contracting Officer, United States Coast Guard, Date Signed, 9 June 2004, providing USCG unilateral determination of contract value to incorporate the COMDAC INS navigation system, gyrocompass, and Radar engineering changes into the installation for the USCG 110'/123' conversion of Padre. ICGS reserves its right to submit a Request for Equitable Adjustment (REA) to the value associated with the contracting officer's unilateral determination.

Exception(s):

- 1) Trial Cards (Attachment A)
- 2) Provisioning and Spares (Attachment B)
- 3) Training for the Padre crew
 - Common Operating Picture (COP estimated completion 30 days after Classified System IATO)
- 4) CDRL Exceptions (Attachment C)
- 5) Tempest POA&M, (Attachment D, with Enclosure 1)
- 6) Classified Testing (Attachment D)
- 7) LM/MS2 C4ISR TFR/ Problem Sheets (Attachment E)
- 8) UHF paging system/FCC License Authorization (9 Jul 04)
- 9) SRP launch and retrieval system POA&M, (Attachment F)
- 10) LIMS POA&M, (Attachment G)
- 11) Dual Service INMARSAT POAM (Attachment H)
- 12) IFF Cable Replacement
- 13) P-Spec Adjustment
- 14) Credit for Secure Comm Space Lock
- 15) Credit for Move to New Orleans

Date of Execution:

Domain Program Manager;

Quality Assurance Manager:

ICGS Signature:

Kevin J. O'Neill

Director of Contracts, ICGS LLC



Attachment A Padre Trial Cards

Disputed

| | | Dioparoa | y | | | |
|-------------------------|------|---------------------------------------|--|-----------|------------------------------|--|
| TRIAL CARD NUMBER | CODE | EQUIPMENT | DESCRIPTION | HOLD BACK | Estimated Completion Date | |
| CC0005001 | KA | Cable labels | All C4ISR cable labeling is not law with genspec. | \$5,000 | | |
| DK0004001 | KA | Deck plate in forward axuiliary space | Portion of deck in forward auxiliary space has belzona cover over pitted deteriorated metal and is in need of repair | \$15,000 | | |
| EL0085001 | KA | Number 1 SSDG (RPR) | Reverse power relay test unsatisfactory. Exceeded the hme-3 test requirement | \$2,000 | | |
| EL0088001 | KA | #2 SSDG RPR | RPR test was unsatisfactory. test exceeded hme-3 requirement of 4% (tripped at 40 Kw) | \$2,000 | | |
| EL0106001 | KI | Shore tie | No shoreline interface to remotely view video, video shore tie not provided. Also per section 3.2.4.1, shore f | \$7,500 | | |

Disputed Total \$31,500

Open

| | | | | | |
|-------------------------|------|---------------------|--|-------------|------------------------------|
| TRIAL CARD NUMBER | CODE | EQUIPMENT | DESCRIPTION | HOLD BACK | Estimated Completion Date |
| AX0025001 | KA | Water maker | Aft water maker out of commission | \$10,000 | 23 August 2004 |
| AX0029002 | KA | Port fin stabilizer | Port fin stabilizer is inoperable in manual and auto mode. | \$2,500 | 23 August 2004 |

| AX0030001 | KA | STBD fin stabilizer | STBD fin stabilizer is inoperable in manual and auto mode. | \$2,500 | 23 August 2004 |
|-----------|----|----------------------------|---|---------|----------------|
| CC0008001 | KI | LORAN-C | There is no power connector on the LORAN-C. gfe has been taken apart and modified for installation. | \$2,000 | 23 August 2004 |
| CC0010001 | KA | COMMS system | At demonstration BT event C4ISR-4 rev e the following steps failed | \$3,000 | 23 August 2004 |
| CC0011001 | KI | Demonstration | At sea SRP communications system demonstration BT event C4ISR-5 rev e the following steps failed | \$3,000 | 23 August 2004 |
| CC0012001 | KA | At sea radar/sensor | At sea radar/sensor demonstration BT event C4ISR-3 Rev "E" the following steps failed | \$3,000 | 23 August 2004 |
| DC0016001 | KA | Alarm tone generator | General alarm has wrong tones. | 0 | 23 August 2004 |
| EL0008001 | KA | Fin stabilizer panel | Fin stabilizer panel is missing dimmer knob and light cover | \$100 | 23 August 2004 |
| EL0027001 | KA | Classified lan | Classified Ian labels have inadequate separationg from power and unclassified LAN cables, also cable bend | \$5,000 | 23 August 2004 |
| EL0036002 | KA | HF Messenger Terminal | HFmessenger terminal board strips/end cables are not labelled | \$500 | 23 August 2004 |
| EL0080001 | KI | Ethernet cable | Excess ethernet cable loops. | \$250 | 23 August 2004 |
| EL0092001 | KA | Battery chargers | Both battery chargers show dc ground. | \$5,000 | 23 August 2004 |
| EL0097002 | KA | Port exhaust flapper valve | Port exhaust flapper valve is inoperative, stays open at all speeds | \$2,500 | 23 August 2004 |
| EL0098001 | KA | STBD exhaust flapper valve | STBD exhaust flapper valve is inoperative, stays open at all speeds | \$2,500 | 23 August 2004 |
| EL0099001 | KA | STBD shaft tach | New STBD shaft tachometer reading astern when shaft is turning for ahead | \$500 | 23 August 2004 |
| EL0100001 | KA | Power panel 2- 27-4 | Power panel 2-27-4 (24v)is indicating a ground | \$2,500 | 23 August 2004 |
| EL0101001 | KA | Power panel 2- 27-2 | Power panel 2-27-2(24v)is indicating a ground | \$2,500 | 23 August 2004 |





| EL0133001 | KA | #1 MDE hot start | #1 MDE hot start is inoperative at 6kw, 12kw, and 18kw. engine is being started coldas winnessed by at team. | \$7,500 | 23 August 2004 |
|-----------|----|-------------------------|--|----------|----------------|
| EL0134001 | KA | #2 MDE hot start | #2 MDE hot start is inoperative at 12kw,and 18kw. engine is being started at 110 degrees f | \$7,500 | 23 August 2004 |
| EL0138002 | KI | Port shaft tach | Port shaft tachometer is inoperative(local board) | \$2,000 | 23 August 2004 |
| EL0139001 | KA | STBD shaft tach | STBD shaf t tachometer is inoperative(local board) | \$2,000 | 23 August 2004 |
| EL0145001 | KA | Digital video record | Video recording system not tested | \$2,000 | 23 August 2004 |
| EL0146001 | KA | CCTV monitor (03-05- | Horizontal interference lines on monitor, possible emi related | \$500 | 23 August 2004 |
| EL0150001 | KI | Fax machine | Ships fax machine is not receiving incoming faxes | \$500 | 23 August 2004 |
| EL0152001 | KA | FLIR system | FLIR IR system not verified | \$1,500 | 23 August 2004 |
| MP0008001 | KA | MDE pyrometers | Pyrometers for both main diesel engines not working properly, they give erroneous temperatures. | \$10,000 | 23 August 2004 |
| RP0001001 | KA | Bilge plate | Bilge area on centerline, between Frame 13-13.5 show thick layers of rust/corrosion blooms | \$2,500 | 23 August 2004 |

Open Total

\$83,350

Total (Open and Disputed)

\$114,850



Attachment B

USCGC PADRE OBRP Shortage

| CatNum PartNum | Cage Num | Description | Qty | ExtCost | PONum | PODate | PromDate |
|-------------------------------------|---|--|-----|------------|-------|-----------|----------|
| CatNum PartNum 1061947 HQ-3000-TEST | 06UL2 | KIT,TEST | 1 | \$1,850.00 | 50215 | 5/20/2004 | 8/8/2004 |
| | any or year and a series and an arrangement of the series | NAME OF TAXABLE PROPERTY OF TAXABLE PARTY. | | | | | |

\$1,850.00

USCGC PADRE Insurance Spares Shortage

| 0.411 | PartNum | CageNum | Description | Qtv | ExtCost | PONum | PODate | PromDate |
|---------|---------|---------|-----------------|-----|-------------|-------|-----------|-----------|
| 1004430 | 5389110 | 64513 | Prop, Left Hand | 1 | \$33,583.50 | 49369 | 1/14/2003 | 7/30/2004 |

\$33,583.50



Attachement C Padre CDRL Exceptions

| ELIN | Title | Cost to | ECD |
|---------|---|----------|--|
| # | | Complete | |
| 1033-01 | 123 WPB Test Reports | \$1,500 | 7/23/2004 |
| L016 | Technical Manuals | \$4,000 | 7/23/2004 |
| S016 | 123 Cutter Certification Documents | \$10,000 | 8/7/2004 |
| S026 | Pollution Prevention Certificates of Compliance | \$500 | Not Required, to be adjudicated by 6/30/2004 |
| S027 | Certificate for Sanitary Compliance | \$500 | Not Required, to be adjudicated by 6/30/2004 |
| S035 | Cutter Information Booklet | \$1,000 | 7/23/2004 |
| | Total | \$17,500 | |



Attachment D **Padre Tempest and Classified Testing** POA&M

TEMPEST Visual Inspection Discrepancy Resolution. (Holdback \$2,000)



• ICGS to resolve all visual TEMPEST discrepancies as described in the Visual Inspection report (enclosure 1) date for closure is 60 days post DD250 sign-off.

TEMPEST Hardware Discrepancy. (Holdback \$3,000)



• ICGS will correct outstanding SPAWAR instrumented TEMEPEST survey hardware discrepancy on Padre.

Conduct Classified Testing. (Holdback \$3,000)

Conduct classified systems testing on CGC Padre. Target date for completion of classified testing is 15 days post USCG IATO for Padre. Prerequisite actions:



- ICGS to resolve all outstanding physical security discrepancies on the 123 to be used to execute classified testing. This must completed in order to hold the necessary classified keymat.
- ICGS to resolve all visual TEMPEST discrepancies
- Prior to performing any classified testing on a 123 WPB, the USCG must provide an IATO to allow transmit/receive of classified communications.
- ICGS will execute 123 classified tests (from AT procedures), with support as required from USCG personnel.

Enclosure: Visual TEMPEST Inspection Summary



Enclosure 1 to Padre Tempest and Classified Testing POA&M

Visual TEMPEST Inspection Summary

The entire Secure Electrical Information Processing System was inspected.

List of spaces with secure processing equipment inspected by the visual TEMPEST inspector:

- 1. Radio Room
- 2. State Rooms
- 3. Bridge

Discrepancy form legend:

Column A: Sequential discrepancy number

Column B:

SF Correction of the discrepancy is within the capability of ship's force.

SFC Correction of the discrepancy was completed by ships force prior to completion of inspection visit.

IA Indicates that the assistance of an industrial activity is probably required to properly correct the discrepancy.

IAC Indicates that an industrial activity corrected the discrepancy.

SA Indicates that the assistance of a support activity is probably required to properly correct the discrepancy.

SAC Indicates that a support activity corrected the discrepancy.

Column C: Document Reference to which the installation does not conform.

Narrative: A brief description of the discrepancy found.



Discrepancies and Corrective Action Report 1. Radio Room 2-28-O-Q

| A | В | С | Narrative |
|-----|---------|---------------|--|
| 001 | IA/SA | NSTISSAM 2- | There is no separation between Classified LAN and |
| 001 | 1111511 | 95 | Unclassified LAN outlets. |
| | | Rec I | |
| | | Paragraph 3.B | |
| | | Note 2 | |
| 002 | IA/SA | NSTISSAM 2- | Classified LAN lines are run with 120VAC power |
| | | 95 | lines (no separation). |
| | | Rec I | |
| | | Paragraph 3.B | |
| | | Note 2 | |
| 003 | IA/SA | NSTISSAM 2- | Coax TV line runs along with Classified LAN line. |
| | | 95 | |
| | | Rec I | |
| | | Paragraph 3.B | |
| | | Note 2 | |
| 004 | IA/SA | NSTISSAM 2- | There is no separation between alarm panel line and |
| | | 95 | Classified LAN line. |
| 1.1 | | Rec I | |
| | | Paragraph 3.B | |
| | | Note 2 | |
| 005 | IA/SA | NSTISSAM 2- | The printer (red) along with Classified LAN line runs |
| | | 95 | parallel with IFF antenna line. There is no separation |
| | | Rec I | of these lines. |
| | | Paragraph 2.B | |
| 006 | IA/SA | IA PUB 5239- | The printer (red) uses black power. |
| | | 31 | The printer router (red) uses black power. |
| | | Paragraph | |
| | | A.1.1.2 | |
| 007 | IA/SA | NSTISSAM 2- | There is no 3-meter separation between printer (red) |
| | | 95 | and IFF transmitter. |
| | | Rec I | |
| | | Paragraph 6 | |
| 008 | IA/SA | NSTISSAM 2- | In Rack #3, there is no 3-meter separation between red |
| | | 95 | and black cables before entering the Marcom switch. |
| | | Rec I | |
| | | Paragraph 6 | |



| 009 | IA/SA | NSTISSAM 2- | In Rack #3, there is no 3-meter separation between |
|-----|-------|-----------------|--|
| | | 95 | cryptographic equipment and RT9000 transceiver. |
| | | Rec I | |
| | | Paragraph 6 | |
| 010 | IA/SA | IA PUB 5239-31 | There is not a secure Protected Distribution System |
| | | Paragraph | (PDS) leaving Radio Room. LE Locker behind Secure |
| | | A.1.1.7.3.1.B | Space. |
| 011 | IA/SA | NSTISSAM 2- | Cable TV system needs to use an amplifier/attenuator |
| | | 95 | at the point of entry into the secure space and needs to |
| | | Paragraph 4.9.6 | be of a type that provides one-way filtration. |





Discrepancies and Corrective Action Report

2. State Rooms 1-16-1-L / 1-16-2-L

| 001 | IA/SA | IA PUB 5239-31 | There is no separation between Classified LAN outlets |
|-----|-------|-------------------|--|
| 1 | | Paragraph | and 117 VAC, Unclassified LAN, and TV Jack |
| | | B.1.2.6.2 | outlets. |
| 002 | IA/SA | NSTISSAM 2- 95 | There is no separation between Classified LAN line and MF/HF line. |
| | | Rec I | |
| | | Paragraph 3.A | |
| 003 | IA/SA | NSTISSAM 2- | In State Room 1-16-2-L, Classified LAN line runs |
| | | 95 | parallel with horn generator line. |
| | | Rec I | |
| | | Paragraph 3. | |

Discrepancies and Corrective Action Report

3.Bridge

| A | В | C | Narrative |
|-----|-------|--------------|---|
| 001 | IA/SA | NSTISSAM | There is no 3meter separation between red output and |
| | | 2-95 | black lines for the Kite handset #1 and #2. |
| | | Rec I | |
| | | Paragraph 6 | |
| 002 | IA/SA | IA PUB 5239- | Classified LAN line runs parallel with 117 VAC, Black |
| | | 31 | Data lines, and cellular antenna line. |
| | | Paragraph | |
| | | B.1.2.6.2 | |



Attachment E LM/MS2 C4ISR TFR / Problem Sheets

| Identification Number | Description | Cost to Complete | ECD | |
|--------------------------|----------------------------------|------------------|------------------------|--|
| Tiunibei | INSTALLATION OF CABINET 3 PS6 | Compiete | | |
| 513001 | CABLE | \$600 | 60 days after delivery | |
| 220200000407 | CACHE ENGINE GROUND CABLE IS | | · | |
| 328G0000048A | MISSING AND LW446 UNIT NOT | \$600 | 60 days after delivery | |
| (LC 061004 | INSTALLED PER ECN 373466 | | | |
| | UNIT IS NOT ADEQUATELY SECURED | | | |
| ' | TO THE CABINET FRONT RETMA RAIL. | | | |
| 328G0000033A | SOCKET HEAD SCREWS PREVENT THE | \$600 | 60 days after delivery | |
| (LC 060366) | UNIT FROM SEATING FULLY WHEN | φοσο | oo days after delivery | |
| | CLOSED. RESOLUTION WILL BE PER | | | |
| | ECN 373467 | | | |
| 328G0000058A | RETMA RAIL MOUNT SOCKET SCREWS | \$600 | 60 days after delivery | |
| (LC 060104) | | ΨΟΟΟ | oo days after delivery | |



Attachment F SRP Launch and Retrieval POAM 6/9/2004

Purpose

The purpose of this plan of action and milestone is to outline the steps to address the SRP stern launch and recovery process on the 123 Ft WPB. This plan is to address the failed sampson post experienced by the CGC MATAGORDA's SRP and to review capture mechanism process to correct any shortcomings. At the same time, this POAM will also address the metal to metal contact experience by the Matagorda and Metompkin's SRP prior to and during trials.

History

The Matagorda and SRP #1 was delivered to the Coast Guard 1 March 2004. At delivery, SRP #1 had a dent in stem approximately 12 to 18 inches below the bow eye. The cause of the dent was unknown but believed to have occurred during a recovery evolution either during trials or training prior to Matagorda delivery. During the Metompkin's Builder's Trials, the SRP #2 struck the stern of the Metompkin during an aborted recovery evolution. SRP #2 bow eye struck the stern plating on the Metompkin puncturing the shell plating above the waterline in the way of the fresh water tank. In addition, during the Metompkin's Builder's Trials, the retrieval lasso (constructed of 5/8 inch diameter braided nylon) became untied during the capture process as the SRP slide down the ramp taking a strain on the lasso. Prior to the Metompkin's Acceptance Trials, Metompkin's shell plating and retrieval lasso was repaired. In repairing the retrieval lasso, the loop was shortened. During Metompkin Acceptance Trials, the SRP either failed to accelerate high enough in the stern ramp or the retrieval lasso was too short to lasso the SRP Sampson post. As a result, there were numerous attempts in which the SRP was not captured by the retrieval lasso. Following Acceptance Trials during SRP training with Metompkin crew members, each crew member using a 6 ft long retrieval lasso captured the SRP the first time each time as the boat drove up the ramp.

Discussion

The 123 Ft stern ramp angle, 123 Ft trim, 123 Ft speed, relative speed between SRP and WPB as it drives into the ramp, sea state direction, shape of ramp, SRP hull lines, SRP full load weight, retrieval lasso length, retrieval lasso material, and strength of SRP sampson post are all critical factors of the retrieval system. Change the entering assumptions and the end product is affected. In order to analyze the SRP sampson post

failure and mitigate potential for retrieval difficulties, ICGS needs to validate the design and construction of the SRP and 123 Ft WPB retrieval system. Was the SRP constructed in accordance with the drawings? Has ICGS documented the operating envelop such as the relative speed to drive up the ramp, optimum retrieval lasso length, and has the retrieval lasso forces on the Sampson post been accurately modeled? Has the design considered the fatigue over the SRP life? Due to the failure of the SRP sampson post, the design assumptions must be documented, reviewed, and validated. Calculations must be reviewed including the cyclic loading on the capture mechanisms.

As a result of lessons learned on the first two WPBs, a wider range of approach angles must be considered in the SRP 123 Ft WPB interface. To accommodate a wider range of approach angles and to provide a greater "sweet spot" for recovery of the SRP, the "D" bumper which is currently at center of the aft edge of the 123 Ft WPB notch will be extended further off the centerline. The stern door will be modified to accommodate this enhanced bumper and still close tightly. This will greatly reduce the potential for metal-to-metal contact between the SRP hull and the 123 Ft WPB hull during a poorly-aligned recovery attempt or an attempt which is aborted while crossing the sill.

This enhanced design should be ready for delivery on Padre. As it requires a redesign of the stern door, it will be retrofit on Matagorda and Metompkin once the new doors are available

Process

ICGS will implement the following three step solution to resolve the launch and retrieval issues. The first step will be to implement corrections to SRP #1 (CGC MATAGORDA), SRP #2 (Metompkin), and SRP#3. This correction will enable the SRP to be fully operational. The second step will be a rigorous examination of the sampson post failure and documenting a final solution. The third step will address the metal to metal contact experienced during trials and post trial launch and retrieval process.

Implement sampson post corrections to SRP#1, SRP#2, and SRP#3

- 1. Perform a quick look to examine design strength and provide a more robust design.
- 2. Review the design with Coast Guard
- 3. Move SRP#1 to a repair facility, implement repairs and return to cutter.
- 4. Implement repairs on SRP #2 and #3

Develop integrated SRP retrieval system solution

- 1. ICGS will document the details associated with the failure of the sampson post for analysis:
 - a. Retrieval lasso length and material properties
 - b. Number of POB during the failure

- c. Sea state
- d. Speed
- e. Trim
- 2. Document the sampson post installation
 - a. Constructed in accordance with the drawings
 - b. Examine failure mode
 - c. Workmanship in accordance with applicable standards
- 3 Review and document all design assumptions associated with the capture mechanism and the capture loading.
 - a. Retrieval lasso length and material properties.
 - b. SRP full load weight.
 - c. Did we assume any WPB pitch?
 - d. Did we assume any dynamic trim?
 - e. Did we assume any acceleration and associated loading from a longer slide back due to longer retrieval lasso?
 - f. Did we make any fatigue assumptions based on a 15 year SRP service life?
- 4. Review all design assumptions with Coast Guard
- 5. Update the design calculations based upon the updated assumptions.
- 6. Validate design assumptions during a Hull #3 trials period to validate relative speeds to achieve ramp height, to validate retrieval lasso length, to validate sea condition assumptions.
- 7. Adjust SRP design consistent with revised calculations
- 8. Develop a plan to implement 123 or SRP changes
 - a. 123s and SRPs in production
 - b. Post production SRP not yet delivered to Coast Guard
 - c. 123s and SRPs delivered to Coast Guard
 - d. Update documentation Drawings, Cutter Information Book, and Training to include contingency retrieval methods.
- 9. Implement desired changes.

Address 123 Ft WPB D Bumper and Stern Gate

ICGS will implement the following to accommodate a wider range of approach angles and to provide a greater "sweet spot" for recovery of the SRP. The "D" bumper which currently protects the center aft edge of the 123 notch will be extended further off the centerline. The stern door will be modified to accommodate this enhanced bumper and still close tightly. This will greatly reduce the potential for metal-to-metal contact between the SRP hull and the 123 hull during a poorly-aligned recovery attempt or an attempt which is aborted while crossing the sill.



Milestones

| Step | Task | Milestone Date |
|--|--|----------------------|
| | Sampson post corrections (SRP#1 thru SRP#3) | · |
| 1 | Examine design strength and provide a more robust design. | 4/12/04 thru 5/21/04 |
| 2 | Review the design with Coast Guard | 4/12/04 thru 5/21/04 |
| 3 | Implement repairs and return to cutter | 5/28/04 |
| 4 | Complete repairs on SRP #2 and #3 | #2 by 5/28/04 |
| | | #3 by 6/4/04 |
| | | #1 by 6/11/04 |
| gar garant garage and garage delications and an artist and an artist and an artist and artist and artist and a | | #4 by 6/18/04 |
| | SRP Retrieval System Solution | |
| 1 | ICGS will document the details associated with the failure | Complete |
| | of the sampson post for analysis | • |
| 2 | Document the Sampson post installation | Complete |
| 3 | Review and document all design assumptions associated | Complete |
| - | with the capture mechanism and the capture loading | |
| 4 | Update the design calculations based upon the updated | Complete |
| , | assumptions | |
| 5 | Review all design assumption with Coast Guard | Complete |
| 5 | Complete SRP sampson post redesign | Complete |
| 6 | Validate design assumptions during a Hull #3 trials period | Hull #4 Trial period |
| | to validate relative speeds to achieve ramp height, to | |
| | validate retrieval lasso length, to validate sea condition | |
| <u> </u> | assumptions. | |
| 7 | Develop a plan to implement 123 or SRP changes | 5/26/04 |
| 8 | Implement desired changes | 5/26 - 7/26 |
| | | |
| - | 123 Ft WPB D Bumper and Stern Gate | |
| 1 | Analyze potential impact areas | Completed |
| 2 | Propose recommended solution | 6/16/04 |
| 3 | Review changes with Coast Guard | 6/21/04 |
| 4 | Prototype change on Attu | BT and AT |
| 5 | Evaluate installation on Attu | BT and AT |
| 6 | Coordinate update schedule with cutter's operational | 7/15/04 |
| | schedule to complete retrofit within two weeks of PDMA | |
| | delivery | |
| 7 | | PDMA plus two |
| · | ICGS will retrofit delivered cutters in their homeports | weeks |
| | | |



Attachment G LIMS POAM

| D . | Ð | Task Name | Duration | Start | Finish |
|-----|--|---|------------|----------------------|------------|
| 1 | | PADRE Support Schedule | 32 days | Tue 6/1/04 | Wed 7/14/0 |
| 2 | 111 | PADRE Delivery/Acceptance by USCG | 1 day | Mon 6/7/04 | Mon 6/7/0 |
| 3 | == | COBRA receives/processes/delivers data to CPM | 7 days | Tue 6/8/04 | Wed 6/16/0 |
| 4 | | CPM receives/processes/delivers data to ELLLIPSE | 5 days | Thu 6/17/04 | Wed 6/23/0 |
| 5 | | PADRE Support Prior to ELLIPSE Implementation | 32 days | Tue 6/1/04 | Wed 7/14/0 |
| 6 | | Site Reps on Site | 32 days | Tue 6/1/04 | Wed 7/14/0 |
| 7 | | Support Prior to FLMS load | 18 days | Mon 6/7/04 | Wed 6/30/0 |
| 3 | === | Site Reps capture LIMS transactions using Excel Spreadsheet | 18 days | Mon 6/7/04 | Wed 6/30/0 |
| 9 | | Provide Excel spreadsheets to Support Infrastructure | 3 days | Mon 6/7/04 | Wed 6/9/0 |
| 0 | | Load FLMS DB for PADRE | 10 days | Tue 6/1/04 | Mon 6/14/0 |
| 1 | | Modifiy and Test MATAGORDA FLMS data for PADRE | 8 days | Tue 6/1/04 | Thu 6/10/0 |
| 2 | | Perform initial FLMS data load | 2 days | Fri 6/11/04 | Mon 6/14/0 |
| 3 | | Support after FLMS load | 22 days | Tue 6/15/04 | Wed 7/14/0 |
| 4 | | USCG begins entering LIMS transactios using FLMS | 1 day | Tue 6/15/04 | Tue 6/15/0 |
| 5 | | Site Rep forwards FLMS DB to Supprt Infrastructure | 22 days | Tue 6/15/04 | Wed 7/14/0 |
| 6 | | PADRE ELLIPSE IMPLEMENTATION | 29 days | Tue 6/1/04 | Fri 7/9/ |
| 7 | V | ICED Dev Environment | 16.88 days | Tue 6/1/04 | Wed 6/23/ |
| 8 | V | Build Oracle database schema | 8 hrs | Tue 6/1/04 | Tue 6/1/ |
| 9 | 1 | Create Ellipse District | 13 days | Wed 6/2/04 | Fri 6/18/ |
| 20 | 1 | Configure District | 12.33 days | Wed 6/2/04 | Fri 6/18/ |
| 21 | 1 | Build Milstrip Structure | 1.88 days | Mon 6/21/04 | Tue 6/22/ |
| 22 | ~ | Test & Validation | 1 day | Tue 6/22/04 | Wed 6/23/ |
| 23 | + | CGDN+ Prod Environment - Test Instance | 4.5 days | Thu 6/17/04 | Wed 6/23/ |
| 24 | E | Build Oracle database schema | 8 hrs | Thu 6/17/04 | Thu 6/17/ |
| 25 | - | Create Ellipse District | 2.81 days | Fri 6/18/04 | Tue 6/22/ |
| 26 | | Configure District | 3.5 days | Fri 6/18/04 | Wed 6/23/ |
| 27 | | Build Milistrip Structure | 1.88 days | Fri 6/18/04 | Mon 6/21/ |
| 28 | | Test & Validation | 1 day | Mon 6/21/04 | Tue 6/22/ |
| 29 | + | CGDN+ Prod Environment - Production Instance | 16.94 days | Thu 6/3/04 | Fri 6/25/ |
| 30 | V | Build Oracle database schema | 8 hrs | Thu 6/3/04 | Thu 6/3/ |
| 31 | V | Create Ellipse District | 3 days | Wed 6/9/ 0 4 | Mon 6/14/ |
| 32 | | Configure District | 4 days | Mon 6/14/04 | Fri 6/18/ |
| 33 | \ <u>\</u> | Build Milstrip Structure | 2 days | Fri 6/18/04 | Tue 6/22/ |
| 34 | + | FLMS | 2 days | Tue 6/22/04 | Thu 6/24/ |
| 35 | 1 | Test & Validation | 1 day | Thu 6/24/ 0 4 | Fri 6/25 |
| 36 | + | QA CPM Data to Flat File | 8 days | Thu 6/24/04 | Mon 7/5/ |
| 37 | + | IMPORT DATA TO ELLIPSE | 8 days | Wed 6/30/04 | Fri 7/9/ |
| 38 | + | Cutter Inventory | 2 days | Wed 6/30/O4 | Thu 7/1/ |
| 39 | - | Standard Jobs | 2 days | Fri 7/2/04 | Mon 7/5/ |
| 40 | - | Equipment Register | 2 days | Tue 7/6/ 0 4 | Wed 7/7/ |
| 41 | | APLs | 2 days | Thu 7/8/04 | Fri 7/9/ |
| 41 | _ | Perform FLMS/ELLIPSE Synchronization - LIMS Fully Functional on USCGC | 2 days | Mon 7/12/04 | Wed 7/14/ |

Task
Split
External Tasks
Project: Metompkin 04152004 che
Date: Thu 6/24/04
Progress
Milestone
Summary

Task
Project Summary
External Milestone
Deadline

Page 1

Page 133 of 134



Attachment H Dual Service INMARSAT POAM

- This upgrade will establish Dual-Service INMARSAT F77 capability on 123'
 Patrol Boats by providing MPDS capability in addition to the existing ISDN
 capability. Requires the addition of two cables in C4ISR Cabinet 4 and C4ISR
 software changes.
- 123 P-Spec negotiations in Feb 2004 resulted in an agreement to waive compliance with the INMARSAT MPDS requirement for 12 months from Matagorda sell-off.

Implementation

- ECP # DW00000486 to add MPDS capability (Dual Service) to the INMARSAT F77 has been approved by the LM ERB. LM CCB approval is expected by 24 June 2004.
- Perform testing of the proposed upgrade at IS&S and MDAC by 30 June 2004.
- Procure 8 shipsets of cabling, and prepare/approve Cabinet 4 ECN and Field Modification Bulletin (FMB) by 31 July 2004.
- Begin installation on Commissioned 123 WPBs (notionally Hull #1) and 123 WPBs in construction (notionally Hull #6) by early August 2004. Complete installation on all 8 contracted WPBs prior to 31 December 2004, pending availability.
- Include MPDS capability in the baseline C4ISR configuration for Hulls 9 and follow, if contracted.

Holdback: \$600