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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	BLACK RF Transmitter (RT-1794) is in the same rack as RED 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(1)), 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.

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

## 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. Monitors 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