

## **August 10 & 11, 2006 Joint CTI and SCC-20 Hardware Interfaces Meeting Minutes**

Meeting held at Northrop-Grumman (Rolling Meadows) – Hicks Road

### **Attendance List (both days):**

	<b>Name</b>	<b>Representing/Affiliation</b>
1	Stephen Allen	Teradyne
2	Jim Babb	Boeing
3	Stan Baran	USN
4	Bill Birurakis	NAVAIR – Patuxent River
5	Richard Chaffin	USMC
6	Chris Clendenin	Boeing
7	Pat Cosgriff	Hill AFB
8	Dave Droste	DRS TEM
9	Martin Foor	MacPanel
10	Anthony Geneva	NAVAIR
11	George Hammontree	NGC
12	Orman (Bob) Horton	USMC (Albany)
13	Don Kump	NGC
14	Bill Maciejewski	DRS – SEI
15	Steve Mann	BCO
16	Tony Maynard	WR AFB
17	Scott Misha	Army
18	Frank Morana	Hypertronics
19	Jim Okon	Dytec/Midwest
20	Dick Patrick	MacPanel
21	Ralph Rolape	Lockheed Martin
22	Doug Salmon	VPC
23	Anthony Sedberry	MacPanel
24	Tom Sarfi	VXI Technology
25	Mike Stora	System Interconnect Technologies
26	Sandy Stowers	VPC
27	Martin Sweet	Joy Signal
28	Dave Tingen	Meritec/Joy Signal
29	Mario Tobias	WR AFB
30	Dave Wallhermfecht	Boeing

### **8/10/06 Meeting Minutes**

#### **CTI Portion of Meeting Minutes:**

Bill Birurakis requested that the initial portion of the meeting be defined as an industry-government CTI meeting. This portion of the Agenda ran from 8:30 until 14:30.

It was noted that the Common Test Interface (CTI) was a specific interface for DoD applications and, to date, focused on a limited number of legacy systems.

Jim Guzak presented pin map changes derived from the ARGCS contract. The summary is:

- Remote sense additions for Digital and addition of grounds
- Eliminate Probe for digital. Most legacy systems use separate panel.
- Noted 1x2 definition had an error - Math doesn't work. To be corrected.
- System Triggers were modified.

- An addition was made to accommodate an interlock for the Thinmint adapter, similar to existing adapter interlocks.
- The 25 digital inputs for ARB programming were being eliminated as it was determined no legacy system used them. Source of “requirement” was TETS and the USMC stated the current TETS upgrade was eliminating them.
- Synchro-Resolver changes (Minor)
- All changes were recommended to be incorporated into the 1505.1 standard.

#### Allocations to two-tier

- Jim Guzak gave summary of what got allocated to Tier two.
  - 302 signal
  - 78 power
  - 345 Coax
- Discussion led to determination that the current data did not account for all of the requirements for two-tier (or multi-tier) CTI systems. An action item for review by Teradyne, Boeing and Lockheed Martin resulted.

#### Jim Babb (Boeing):

Presentation made that gave several concerns over the current CTI position. Stated that a more thorough review of big-system requirements and some technical concerns is causing Boeing to re-consider original vote to support the 1505RFI as the basis for CTI. The summary of the presentation is:

- Used 050202BX spreadsheet for analysis
  - It was noted that this needs one later version that adds C-17
- Recommend Standardize on 4x24 for 1x8 and 4x24s
- HV Coax is lacking in current CTI
- Recommend go to 28 2x8s and each can replace two 1x4s
- Add pins to create Teradyne Hybrid pins generically (Digital that routes analog through SCPM). Long discussion how to implement w/o using Teradyne capability. Bill B. stated he dislikes multi-function pin capability (like instruments thru a matrix).
  - Noted by several that need to combine C-17 data from several sources.
- Note that presentation will be made available on IEEE web site (post by D. Droste) if space allowance is adequate.

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### **SCC-20 Hardware Interfaces portion of Meeting Minutes:**

Frank Morana (Hypertronics) gave over view of 300 pin connector  
500 Pin connector option was also discussed, but no presentation with technical details was provided. This is an action as the WG expressed interest in this option for CTI.

D. Droste went through presentation and discussion on Compliance. Several actions to update compliance with Keying consideration and addition of wording to provide more clarification on compliance. WG indicated material was correct, but inadequate for someone outside of the work group to understand. Redlines and notes were created in working document in real-time in the meeting relative to this topic.

### **8/11/2006 Meeting Minutes (SCC-20 HI)**

Tony stepped thru slides on Recommended Attributes of the Pin Map Annex of P1505.1

Tony noted the sources of data used. Ralph Rolape indicated he has further parametric that he provided (will provide) to Tony Geneva for further consideration.

It was discussed that we need to add considerations for the following for the single tier:

- B-1B Teradyne
- F-15 - Boeing
- CTMA – Boeing

D. Droste concluded with a slide showing the SCC-20 meeting announcement for immediately after AutoTestCon. Available times were all day (approximately 8:00am to 4:00pm) Friday and Saturday (9/23 and 9/24). It was noted that Hardware Interfaces intended to meet during this timeframe. Several in the group indicated they intended to attend.

#### **Summary Action Items (all days):**

1. Provide 500 pin connector block specifications so they can be included in future revisions of the 1505RFI standard - MacPanel
2. Update compliance write-up per notes made in 1505.1 working document - D. Droste
3. Provide keying write-up for 1505.1. Preclude one 4-slot block from being “mated” to another. Also address a lock-out keying definition for non-compliant categories (as defined above. – D. Droste/M. Stora
4. Annex A updates continue per comments and data provided. – Tony Geneva
5. SCC 20 Post updates to 1505.1 and Annex A when changes made. Notify distribution of update. – D. Droste
6. Population policy update – D. Droste

#### **CTI Action items:**

1. Provide pros and cons inputs for solutions against 10 CTI Objectives (Task group list)
2. Define multi-tier – issues. Create a requirements difference document from current Tier 1 - R. Rolape, S. Allen, J. Babb
3. Revision for multi-tier – draft to be posted
4. Consolidate and synchronize various data sources (spreadsheets, annex a) -