

MINUTES  
of  
TSCC MEETING  
Held  
October 23, 2006  
San Diego, CA  
Town & Country Hotel

The meeting was called to order by Chairman James Yates at 0800 hours.

Members and Alternates present:

Scott Brierley	Member
Tim Chalfont	Alt-Pozmontier
Daniel M. Dawson	Member
Lee Eccles	Member
Jean Claude Ghnassia	Guest
David Grebe	Member
Ed Greenberg	Alt-JPL/NASA
Sheila Horan	Member
Freemon Johnson	NASA GSFC
Sid Jones	Member
Greg Kazz	Member-JPL/NASA
Merv MacMedan	Member Emeritus
George Manz	Member
Michael Marcellin	Guest-Subcommittee Member
Gerhard Mayer	Member
Paul Norris	Guest Speaker
Jean Yves Plasse	Alt-Airbus
Bill Rymer	IFT Representative
Dan Skelley	Guest Speaker (INet)-NAVAIR
Duane Wheaton	Guest-Data Mux Subcommittee
James Yates	Member

**ATTENDANCE AND DETERMINATION OF QUORUM**

David Grebe

There was a quorum present.

**REVIEW AND APPROVE AGENDA**

James Yates

Review and approved agenda without change.

**OFFICER REPORTS**

Chair

James Yates

James reported that the web site updates are complete and expressed a thank you to Dan and Marge at Wiley Labs for a great job in making the web site upgrade this year. The chairman also called for the subcommittees' membership list to be updated during the summer and most folks have, a few haven't. But some of those committees are being reassigned and that should be corrected in the near future. There is also a call for the subcommittees to update a list of the standards for which they're responsible and that the action items should happen by each of the subcommittee chairs this fall. And he also reported that there are membership changes and updates and vacancies that need to be filled due to retirements.

Vice Chair

Sheila Horan

Sheila made a suggestion to add links on the web site that folks could click on and go to the standards which each committee is responsible to review. She also pointed out that the bi-laws require the TSCC to identify the standards that are germane to each subcommittee. Sheila underscored the chairman's call for having the web site contain that information.

Secretary-Treasurer

David Grebe

The minutes were reviewed and approved as originally distributed.

Financial Report

The financial report was presented and included the activity for past year as well as the proposed budget for next year, primarily involving web site hosting, membership plaques, the spring meeting expenses and again a plaque for the Larry Rauch award.

## **COMMITTEE REPORTS**

**Nominating Committee**

Lee Eccles

Dan Bonham, John Cox, Gene Law and Ed Snyder have retired. Cliff Aggen has moved on and is now off of the committee. These folks need to be replaced. The recommendations for additions were Sid Jones, Steve Nicolo, Tim Chalfont and Russell Jedlicka. After review and discussion of the sponsoring agencies' type to assure a balanced mix of Government, Academic, International and Manufacturer it was moved, seconded, discussed and accepted that they would become members. Merv brought up the point that Larry Rauch cannot fulfill his membership requirements and he should also have his position filled. Dan Dawson proposed that the nominating committee should consider John Kolb as a possible replacement. With Ed Snyder's retirement we need a second member for the nominating committee and George Mann volunteered to fill that position. Tim Chalfont raised the issue of including International Representation. Our bi-laws do allow up to 25% which is four members of which we currently only have one membership. So in summary there are still two openings to bring us up to a full membership of 16.

**Radio Frequency**

Scott Brierley

The Radio Frequency committee had nothing to report.

**Data Multiplex**

There was no report from the Data Mux Committee. The chair pointed out that we needed to fill the vacancy of the Data Mux committee and George Manz volunteered to be committee chairperson.

**Networking and Protocols**

Dan Dawson

Dan reported that there have been no standards to review but there have been presentations that various members have attended for INet and there's more to come on that later in this meeting. There is also a TM over IP ad hoc committee headed by Brian Esslinger at Edwards' Air Force Base and the committee may want to watch the activities of that group.

### **Transducers (DG needs to see in print)**

Lee Eccles

1451.1 (RF Wireless) is in the final stage of balloting. 1451.0 requires one more round of balloting but that expects to be done in the November time frame. There is group working on the 232/422 interface to replace the 1451.2 communication layer. And lastly the “.6” group is working on intrinsic safety; contact Lee if interested in obtaining more information on this.

### **Coding / Data Compression**

Sheila Horan

Sheila has put more members on her committee and she has also accumulated information to put up resources on compression on the web site for her committee’s area. Ed Greenberg also reported that LDPC which is a low density parity code was discussed as a new compression code. He commented that there’s very small performance differences between that and turbo codes but the LDPC is capable of higher data rates than turbo code, greater than 100 megabits per second due to ease of implementation. There’s also an orange book coming out from NASA on this code and should be available, you could see Greg Kazz for that.

### **Recorder / Reproducer**

David Grebe

Nothing to report. No standards to be reviewed during the period.

Also reported that due to lack of participation Mr. Grebe recommended that a new chair be found with greater ties to the recording community and Tim Chalfont agreed to take over that position.

### **ETTC**

Gerhard Mayer

Gerhard reports that ETTC there were four papers presented. Very low participation, perhaps only 300 people. They hoped that there will be better participation in 2008 at Garmish. The 2007 event will be held in Toulouse, France.

### **Old Business**

Lee Eccles

Lee Eccles reported on the TSCC paper session at this ITC. There are two papers that have made it into the Proceedings. There was another paper promised and that didn’t make it to Proceedings but it will presented during the session and there’s one missing which Lee expects that he will be able to help fill in with.

### **Web Site**

On the web site there was another round of appreciation applause for Jim. Merv MacMedan pointed out that there was no spacecraft pictured on the web site and Jim Yates will get an approved picture to fill that need.

### **TSCC Paper Award**

This past Fall, the committee went through the procedure of evaluating and selecting papers and picked the paper for The Larry Rauch Award which was concerned with Chapter 10 Recording Standard. Merv provided background information on the award to the new members and alternates that were present today: Two years ago there was a desire to show standards work and the importance to the community and so after a few iterations the idea of plaque presented for best standards paper moved forward and IFT approved it. This award will be given out during the blue ribbon session at ITC. It’s an award also in recognition of Larry Rauch, who was one of Telemetry’s pioneers. He wrote a book entitled “Radio Telemetry” for the Army Air Force in World War II and in 1954 it became released after it was declassified. It’s basically the first book written on telemetry. He was an early pioneer of fast, accurate radio transmission and this was first used on the P59 Jet Aircraft Test. He recognized the need to create standards to eliminate the need to start from scratch on every project and every development that the Air Force was doing at the time.

**INet Presentation**

Dan Skelley introduced Bill Cookson. He's the program manager and he gave a CTEIP intro. That was followed by Brian Tilson, a Boeing Senior Engineer who talked about the system engineering aspects of moving INet forward after starting with studies of 52 scenarios and trying to come up with the best architecture to enhance the delivery of telemetry data using internet protocols.

Thomas Grace provided a presentation concentrating on the vehicle networks, the interconnect peripherals on test articles, how to manage the data flow, distribute time, talked about 1588 time distribution, and basically pointed out that a homogeneous switched network was the architecture to be used. It runs on gigabit Ethernet.

This INet presentation continued almost to the lunch hour.

**New Business**

There was a discussion of the Spring meeting time and place. We're currently looking at having a combined meeting again with the RCC TG which we believe is going to be held the first week in March in El Paso, Texas. As the chairman finds more information, he'll get that word out to the members.

Having no further business the meeting was adjourned at 1159 hours.