

## Report on IEC/TC60 Meeting

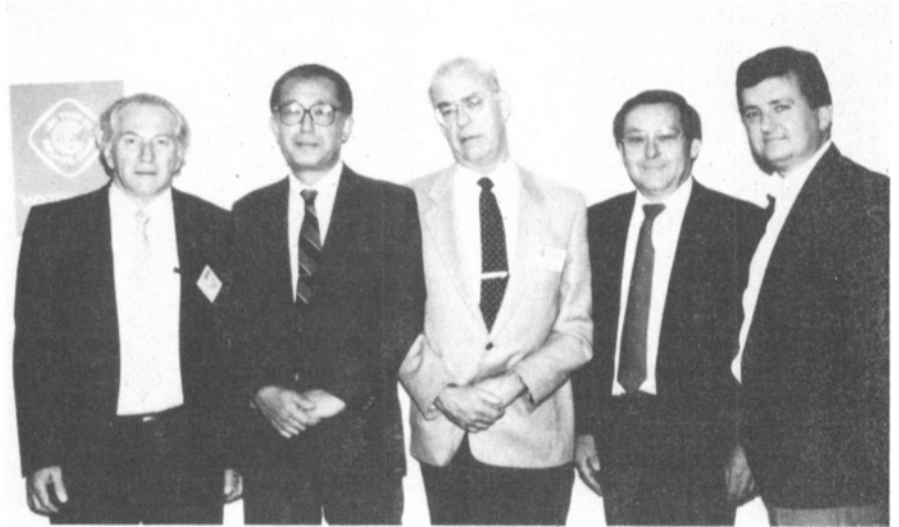
Beijing, P. R. China, September 28–October 3, 1987

By Joseph Roizen

The International Electrotechnical Commission, headquartered in Geneva, Switzerland, is the world body charged with setting technical standards in the electronics field. Its Technical Committee 60 (TC60) is the one that deals with such standards in the audio/video field, and there are two Sub-Committees: SC60A, whose scope covers audio recording media and devices, and SC60B, which covers the same in video recording. The current Chairman of TC60 is Werner Habermann of the Institut für Rundfunktechnik in Munich, West Germany, and the Sub-Committee Chairmen are W. H. Andriessen of Germany for SC60A, and Fred Remley, U.S., for SC60B.

The meetings are usually held in host countries at intervals of between 12 and 18 months. Invitations by National Committees of member countries are usually extended to specific Technical Committees who then vote on the suitability of such invitations. The November 1985 meeting of TC60 was held in Prague, Czechoslovakia, and the most recent meeting was held from September 28 to October 3 in the Fragrant Hills Hotel, on the outskirts of Beijing, in the People's Republic of China.

IEC Committees and Sub-Committees have numerically designated Working Groups (WG) which meet separately and work out the details of the standards documents in question. Documents are then submitted for review and approval to the Sub-Committee and subsequently to the Technical Committee, after which the Central Office in Geneva is notified to publish and distribute them. IEC documents are usually published in English and French, the official languages, and standards matters are coordinated with such organizations as the CCIR, OIRT, ISO, the EBU,



*U.S. National Committee delegates to the IEC/TC60 meeting in Beijing. (L–R) Joseph Roizen, Past Chairman of SC60B, Koichi Sadashige, Secretary of WG7, Fred Remley, Chairman of SC60B, Roger Granlund, 3M Co., and Steve Smith, Ampex Corp., delegates to SC60B.*



*The Chinese support staff and a few members of their delegation in the lobby of the Fragrant Hills Hotel.*

SMPTE and others, who often send observers to the IEC meetings.

The SMPTE is particularly involved with IEC work, since it coordinates the activities of the U.S. National Committee members who serve

on Sub-Committees that deal with standards in the audio, video, and film media. Many of these USNC members are also members of the SMPTE committees which create the Recommended Practices and other stan-

Joseph Roizen, Telegen, Palo Alto, Calif., attended the Beijing meeting as Past Chairman of SC60B.

dards documents that go out under the SMPTE banner.

At this year's IEC meeting in Beijing, M. Carlos Kennedy, SMPTE President, was on hand at the opening Plenary Session of TC60, and later in the week, Roland Zavada, the former SMPTE Vice-President of Engineering, joined the TC60 meetings as an ISO observer and met with the USNC members for consultation.

It should also be pointed out that a large proportion of the delegates of TC60, from all of the countries that were represented, are also SMPTE members, and often serve on SMPTE Standards Committee meetings held in the U.S. or elsewhere.

### The Beijing Meeting

The Chinese National Committee arranged for TC60 to hold its first meeting in the People's Republic of China at the Fragrant Hills Hotel, a modern resort facility designed by I. M. Pei, the well-known Chinese-American architect. It is situated in a heavily wooded forest on the slopes of Mount Liu. The location was sufficiently remote from Beijing to provide a quiet and isolated environment that helped delegates concentrate on their standards work.

In keeping with past traditions, the host country also provides the support staff to handle document generation and duplication, as well as other administrative services. In view of the language problem, the crew was somewhat larger than usual, totalling about 25 people. Only English was used at this meeting; however, French is one of the official languages of the IEC.

At the opening Plenary meeting on September 28, there were 83 delegates from 13 countries, as well as 3 observers, present. As they were in their own country, the Chinese National Committee had by far the largest delegation, with 29 members; Japan was second with 17 members; West Germany had 6; the U.S. 5; and the Netherlands and France each had 4. The rest of the European countries had smaller numbers of representatives. The list of attendees and their affiliation is given at the end of this report.

### The Opening Plenary Meeting of TC60

Mr. Habermann, Chairman of TC60, opened the first Plenary meeting and Zhang Feng-Chao, Chairman



Fred Remley, Chairman of SC60B, preparing his report for the closing Plenary Session of TC60.



A working group having a productive session in the hallway by the committee meeting room. Shown in this picture are: (L-R) Mr. Granlund (USNC), Messrs. Lacotte and Farjaudon (French NC), Mr. Heinz (German NC), and Mr. Blagdon (UKNC).

**TIME TABLE OF THE TRIP**  
SUNDAY, SEPTEMBER 29 AND RELATED WG MEETINGS

Collection	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Meeting Room No.
IEC/TC60	X					X	805
WG 1		X					
WG 4				X	X		
WG 14		X	X				
WG 17				X	X		
WG 15		X	X	X	X		
WG 20		X	X	X	X		
WG 5	X						
WG 7	X	X	X	X	X		
WG 8	X	X	X	X	X		
Total WG	3	5	4	5		1	
WG. Meetings							

Notes:  
 \* 09:00-11:00 hours  
 \*\* starting at 11:00 hours  
 \*\*\* starting at 3:00 hours  
 \*\*\*\* in case of need, date and time to be indicated during the first plenary of TC60  
 Normal meeting hours 8:00 to 12:00 AM  
 1:30 to 5:30 PM

**WEATHER IN BEIJIN**

· OCTOBER ·	2
Min.(°C)	12
Max.(°C)	26
Weather	CLEAR

**PSD BULLETIN**

Beijing, 1st October 1987  
 To The Staff and members of the Chinese National Committee of the IEC  
 The undersigned for their groups, congratulate you with the commemoration of the National Day of the Peoples Republic of China 1st October 1987

Secretary TC60 J. W. Tonison	Chairman TC60 W. Habermann
Secretary SC60A J. J. J. J.	Chairman SC60A Andriessen
Secretary SC60B P. Mulla	Chairman SC60B F. Remley

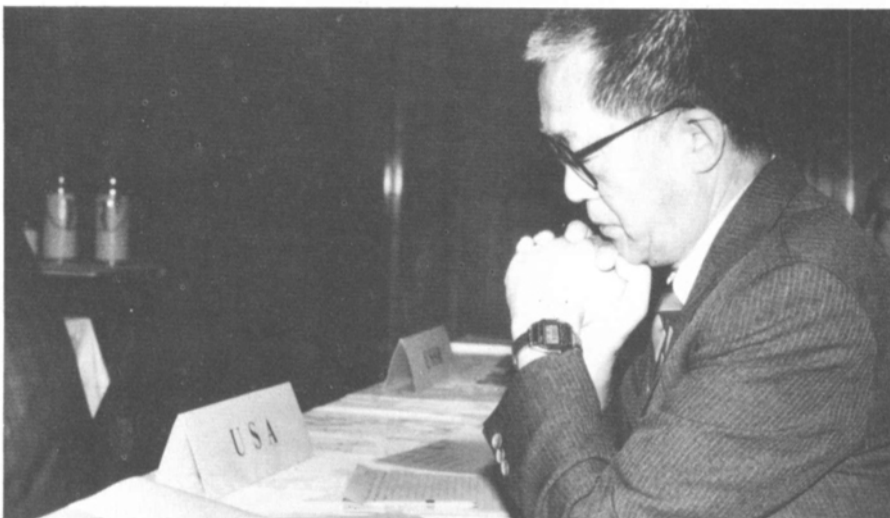
The bulletin board on National Day (October 1) giving work schedules, weather, and other pertinent information.



Roland J. Zavada, ISO observer and former SMPTE Vice-President of Engineering, attending the TC60 Plenary.



Opening Plenary Session of TC60. On the dais (L-R) were Mr. Herrmann, the Assistant Secretary; Mr. Gaiser, Secretary; Mr. Habermann, Chairman; Mr. Zhang Feng-Chao, Chairman of the Chinese delegation; and Mr. Sheldon of the IEC Central Office.



Koichi Sadashige, Secretary of SC60B/WG7, reviewing his documents for his report on the WG activities.

of the Chinese National Committee, delivered a welcoming address to the delegates. Mr. Zhang expressed his great satisfaction at seeing so many recording experts from distant parts of the world gathered together for the first time in Beijing. He pointed out the commonality of mutual interests that brought all of these delegates to China, and stated emphatically that the Chinese Government attaches great importance to international standardization. He ended by wishing the delegates success in their work, as well as enjoyment of their stay in China. The delegates responded with heartfelt applause and Habermann then continued with the business of this session.

Habermann introduced the other members at the dais, and regretfully announced the retirement of Mr. Gaiser, the longtime TC60 Secretary. He will be succeeded by Mr. Herrmann, who served as Assistant Secretary during the Plenary Sessions. Habermann also acknowledged the observers present for the EBU, Messrs. Farjaudon (France) and Blagdon (U.K.); for the CCIR, Mr. Heegaard (Denmark); the OIRT, Mr. Kachel (Director, Technical Centre of OIRT, Prague); the ISO, Mr. Zavada (U.S.); the SMPTE, Mr. Kennedy (U.S.); the IEC Central Office, Mr. Sheldon (Geneva); and IEC TC84, Mr. Gaiser (Netherlands).

He also welcomed as guests the representatives from the press and television, including reporters from the *China Daily*, *People's Daily*, *Economic Daily*, *China Electronic*, and *Guan Ming Daily*. An ENG crew from China Central Television was also on hand to record the highlights of this meeting.

The Chairman proceeded through the agenda, getting delegates' approval for the minutes of the Prague meeting, and going on to the long list of items that had been accumulated in the interim. After an appropriate review and voting on agenda items, the Plenary meeting closed at 11:00 a.m. and the Sub-Committee meetings of SC60A and SC60B were opened at 11:30 a.m.

### SC60A Meetings

Mr. Andriessen, the Chairman of SC60A, welcomed the delegates to the first meeting and reminded the group that new working group members must be nominated by the National Committees in written form.



*Opening Plenary Session of TC60 showing the members of the National Committee delegation.*

He also accepted Mr. Sohma's offer to be the Secretary for WG16, and asked the Japanese National Committee to formalize this appointment.

After several other business items for SC60A had been discussed, the Chairman reviewed the activities of WG16, 17, 18, 19, and 20, quoting the reports of the respective Secretaries: Mr. Sohma, Mr. Hoeve, Mr. Kosaka, and himself. Mr. Celen, the Secretary of 60A, reported on the results of the various votes taken, and on the documents to be revised or issued.

Among the principal items agreed to were:

*WG16 Professional Digital Audio Recording on Tape.* It was unanimously agreed that Document 60A(Beijing/WG16)18A, which will result from redrafting by Mr. Sohma, will enter the accelerated procedure.

*WG17 Digital Audio Recording on Disc.* Mr. Hoeve reported that he expects the work on item 6 on Document 60A (Beijing/WG17)22 to be ready after the meeting of TC84 in November 1987.

*WG18 Domestic Digital Audio Recording on Tape.* That the DAT System document would be accepted as new work, and as soon as the document was available it would follow the Six Months Rule procedure (WG18).

*WG20 Digital Audio Tape Properties.* That the documents on Magnetic Tape and Calibration Tape would be accepted as new work, and that they would both proceed as new work under the Six Months Rule.

Mr. Andriessen thanked the members of the working groups for the excellent work they had done. On general SC60A business matters, the

Chairman acknowledged the statement by Mr. Kosaka that close liaison with TC60 was necessary on the subject of digital interfaces. He also stated that no changes were necessary in the working groups. It was also agreed that Mr. Hoeve will prepare amendments which have to be considered for future work, especially that dealing with compact discs.

There was also a question of revising parts of documents more than five years old (Document 94), and it was agreed to have the Secretariat of 60A send a questionnaire to the National Committees on that subject. If necessary, a working group can be formed at the next meeting to deal with this.

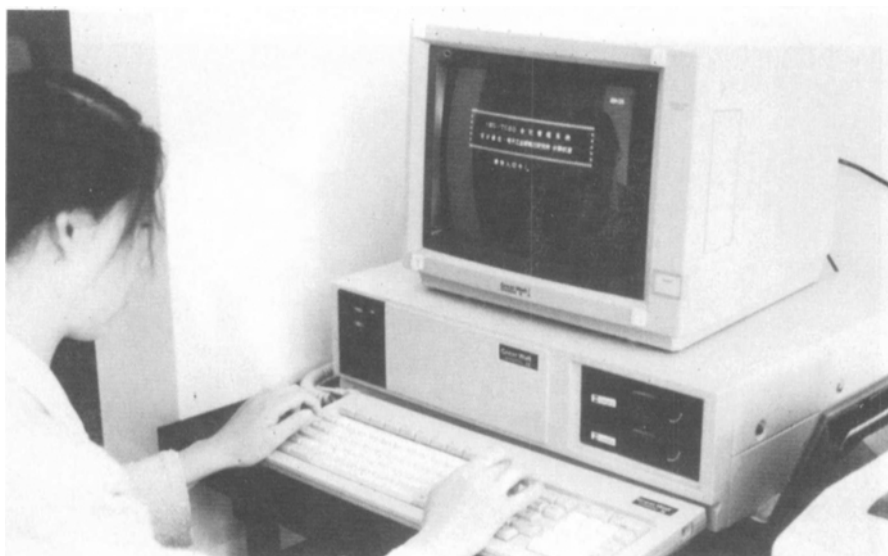
The majority of the members of 60A felt that the earliest possible date for a next meeting was in November 1988.

At the close of the last meeting of SC60A, Mr. Andriessen directed a special word of appreciation and thanks to the Chinese delegation and their support staff for preparing and carrying out the Beijing meeting in such an excellent manner.

He also reminded everyone that from the audio perspective, this meeting in Beijing had several historical "firsts" that could be noted. This was the first time ever that the SC60 gathering took place in the People's Republic of China, and it was also the first meeting with full emphasis on digital audio recording.

### **SC60B Meetings**

The Chairman of SC60B, Fred Remley, welcomed the 49 members and delegates and pointed out the importance of this committee's work in



*A Chinese-built, IBM-compatible PC called the Great Wall, and used by the Chinese staff for the administrative aspects of the TC60 meetings.*



SC60B opening meeting with NC members: (L-R) Mr. Gontcharov (USSR), Mr. Muller, Secretary (Germany), Mr. Remley, Chairman (U.S.), Messrs. Lacotte, Ronsin, and Farjaudon (France), and Mr. Blagdon (U.K.).

relation to future broadcasting, HDTV, disc recording, and digital techniques. He also noted that the quality gap between professional and consumer recording equipment is getting narrower, especially with the introduction of such VCRs as S-VHS and ED-Beta.

Mr. Remley also announced several changes in Working Group Secretariats, with Mr. Obremski of the German National Committee taking over WG5 on behalf of Mr. Call, who could not attend. Mr. Sadashige, of the U.S. National Committee, also took responsibility for the Secretariat of WG7 on behalf of Mr. Dickens of the U.S., who also could not attend the Beijing meeting.

After review and approval of the SC60B Prague meeting minutes and discussion of other agenda items, the Working Groups 3, 5, 7, and 8 were charged with the tasks of generating the proposals and documents that would be submitted to TC60 and the Central Office for action on their part.

Each of the working groups had

several meetings during the week, and the individual Secretaries reported their progress at the closing meeting of SC60B on October 2. At this meeting, Mr. Remley congratulated the 32 delegate members and observers (representing 11 countries) for the work that had been accomplished, and special thanks were expressed to the Chinese hosts for their diligent assistance.

The reports of the working groups went as follows:

#### **WG3 Measuring Methods for Video Recorders and Tape Properties**

The Secretary of WG3, Mr. Heinz, reported that EBU Documents 11 and 12 were reviewed and decisions to circulate these under the Six Months Rule were made. Document EBU 13 on alignment and reference tapes will be circulated to National Committees together with a questionnaire about where such tapes are used. Document EBU 15 on measuring techniques for analog component VTRs will be circulated in the same way.

Publication 698 on "Measuring

Methods for Television Tape Machines" will be revised and circulated. Publication 735 will be revised and forwarded to the Secretariat.

Proposals for new work were accepted by Working Group 3 members. It was also unanimously agreed that the Secretariat of WG3 would circulate a document stipulating that future submissions of new formats for tape or disc recording must also include descriptions of reference and calibration tapes or discs for these systems.

#### **WG5 Non-Broadcast Helical Scan Recorders**

Mr. Obremski of the German National Committee served as the temporary Secretariat on behalf of Mr. Call, and he reported the following decisions. Four unanimous votes were obtained on various documents dealing with:

(a) Measuring Methods for Color Under VTRs (136)

(b) FM Audio for Beta and VHS Format Machines (133, 138, 139, 140)

(c) Measuring Methods for Camcorders (agreed to as new work)

(d) A 6MR document to be issued for Beta format FM audio recording systems in both 525/60 and 625/50 configurations

The WG also agreed to petition TC60 to enlarge the scope of SC60B to include electronic image capturing devices. Magnetic disc video recording was also discussed, and this new item was accepted as new work with a majority vote.

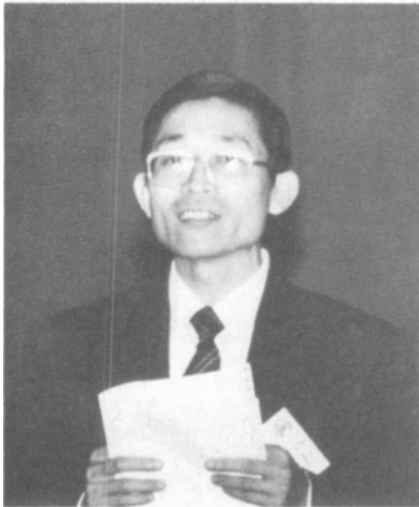
#### **WG7 Professional Broadcast VTRs**

Koichi Sadashige, of the U.S. National Committee, served as the Secretary for WG7 in place of Bernard Dickens. Mr. Sadashige reported the following decisions made by WG7 delegates:

On M formats, the original M for-



Mr. Muller, Secretary of SC60B, and Mr. Arpe, of the German NC, enjoying a brief respite in the lobby of the Fragrant Hills Hotel.



Zhang Feng-Chao, Chairman of the Chinese National Committee, making his welcoming address to the delegates.

mat which has been approved is considered no longer an ongoing format, and it was proposed that the Central Office keep it in manuscript form and not print it up for circulation.

On the MII format, no document has yet been submitted by the Japanese National Committee, and they agreed to provide one before the next meeting.

The German National Committee withdrew the Lineplex format described in Document 60B(Secretariat) 117.

The D-1 digital component format has been favorably accepted, but there are some improvements to be made. A corrected document on D-1 will be circulated under the Two Months procedure.

A Six Months Rule document will be circulated on U-matic format modifications, and the U-matic SP format decisions were postponed awaiting submission of documents.

No contributions have yet been received on a questionnaire asking for information on HDTV recording formats. A questionnaire on the subject of Polarity of Magnetization will be circulated with SMPTE RP134-1986 attached.

A discussion on the USNC submission of a new digital format called D-2 which uses the D-1 cassette but records a composite (rather than component) digital signal on tape, 60B (U.S.)51/57, covering 525/60, resulted in strong objections from various National Committees that this document was not in IEC form, that it covered only the NTSC version, and that it was not in conformity with the

CCIR 601 standard for digital recording. As a result the document was withdrawn by the U.S. National Committee; however, Mr. Sadashige stated that it would be resubmitted when it was fully compliant with IEC requirements.

### **WG8 Non-Broadcast Video Disc Systems**

Mr. Lacotte of the French National Committee, the Secretary for WG8, reported the following decisions or action taken by his working group:

Two Six Months Rule documents on the subject of "Push-Pull Tracking" based on 60B(Secretariat)146 and 148 will be circulated.

A Secretariat document under the accelerated procedure will be circulated in the near future combining all the elements on digital sound covered by proposals from China and the Netherlands.

Another accelerated procedure Secretariat document will be circulated on matters relating to the LV 625/50 system (except for drop frame counting).

The proposal for a sound multiplex system for LV 525/60 (No. 857) was withdrawn.

A new Secretariat document on Measuring Methods for Video Discs will be circulated.

A decision was made not to start any work on standardizing companding systems.

After the completion of all of the working group reports, the Chairman of SC60B, Mr. Remley, thanked all of the delegates and Secretaries for their fine work, and expressed appreciation

to the Chinese hosts for their excellent work as well.

### **TC60 Closing Plenary Session**

The closing meeting was held on Saturday morning, and Mr. Habermann invited the Chairmen of SC60A and SC60B to report on the work done in their respective subcommittees. After accepting these reports and getting appropriate votes from the full committee on those items requiring such approval, he also asked for a review of other matters that concern TC60. These included reports on the efficiency studies and the work of the TC60 Working Groups 1 and 4.

Several documents covering proposals on efficiency, new nomenclature, and a proposal for a merger of WG1 and WG4 were circulated. Mr. Habermann also asked for a vote on the date for the next meeting, indicating that the Turkish National Committee had offered to host TC60B in conjunction with a general IEC meeting in Istanbul in November 1988. It was the consensus of the delegates that this date was too soon, and that an invitation from the French National Committee to act as host for TC60 in March 1989 might be better. No final decision was taken on this matter.

Mr. Habermann closed the meeting by expressing his appreciation to the delegates for their good work, and by congratulating the Chinese delegation and their support staff on the excellence of the arrangements they had made to handle this historic first meeting of TC60 in the People's Republic of China.



The Fragrant Hills Hotel on the slopes of Mount Liu.