

# Commission Summaries Plenary Session

## Plénière - Résumés des commissions

### Kommissionsberichte bei den Vollversammlungen

#### Program

##### Opening

*G. Konecny*

##### Summary of Commission Activities:

- Commission I - *M. Barbosa*
- Commission II - *K. Szangolies*
- Commission III - *Li Deren*
- Commission IV - *T. Hirai*
- Commission V - *A. Gruen*
- Commission VI - *J. Badekas*
- Commission VII - *F. Hegyi*

##### Resolutions of the General Assembly

*G. Konecny*

##### Summary of the Exhibition

*I. Katzarsky*

##### Summary of Other Technical Events

*K. Atkinson*

##### Appreciation to Commission Presidents

*K. Torlegård*

##### Honorable Mention

*K. Torlegård*

##### Closing

*G. Konecny*

##### Summary of Commission Activities

*Commission Presidents*

Each of the Commission Presidents presented a summary of their Commission activities at the Congress. (For a complete summary of all activities of the Commissions during the 1988-1992 term - See the *Summary of the Scientific Program.*)

##### Resolutions of the General Assembly

*G. Konecny*

Highlights of the 1992-1996 Resolutions as approved by the General Assembly were presented. (See *Resolutions of the Technical Commissions.*)

#### Summary of the Exhibition

*I. Katzarsky*

Mr. Chairman, Council Members, Commission Presidents, Ladies and Gentlemen, Dear Colleagues

Some of you probably know that the Outgoing ISPRS Council had a meeting in Cape May, NJ, before its arrival in Washington, DC. Besides the other agenda items, the Council discussed the program of this Commission Summaries Plenary Session, and it was decided for me to summarize the Exhibition. I promised to do it in my way. The Secretary General asked me how many minutes I would need, and my answer was less than five. So that within this time limit, I shall say something about the Exhibition.

During my two year's duty with Survey of India in the UN Training and Pilot Map Production Centre in the city of Hyderabad, I had the honor to have consultants well-known photogrammetrists: Gottfried Konecny from University of Hannover, Gerry Schut from National Research Council of Canada, and Jan Visser from ITC, Netherlands.

In this Centre we had sophisticated for that time, almost twenty years back, photogrammetric equipment, including Gigas-Zeiss Orthoprojector. It was very easy for every photogrammetrists to recognize a particular instrument from a distance more than 20 meters, which is about 65 feet for those who still do not use the metric system.

The situation was the same during the Lausanne ISPRS Congress in 1968. However the things changed. No more just analogue stereoplotters in the exhibition, no more attractive rectifiers or old-fashioned orthophotosystems. Everywhere software and somewhere hardware.

I remember the motto of Survey of India: "From the Ocean to the Himalaya". Now I could say that the exhibition of the XVII ISPRS Congress was from terrestrial and aerial photogrammetry to satellite imagery, from micro- to macro-world, from analogue through analytical and digital photogrammetry.

The Congress Director reported at one of the Sessions of the General Assembly that 132 companies and organizations were represented, occupying a total of 4780 sq. meters net area. Some of the companies are moderate in size, and the other are large and even too

large. But let us remember the motto of Olympic Games: "It is not essential to win, but to participate". I am abstaining to mention any particular company or a particular system presented at the commercial exhibition.

We have seen analytical stereoplotters, GPS receivers, spectroradiometers, systems for geographical data compilation and revision, terrestrial and aerial cameras, systems for photogrammetry and land information, computer supported interpretation instruments, systems with color superimposition, three-dimensional mapping and terrain visualization from scanned aerial photographs and satellite images, digitizers, digital mapping interfaces, processors for aerial films, digital orthophoto systems, combinations of traditional photogrammetric technology with state-of-the-art digital techniques, conversion of analogue stereoplotters into analytical plotters, stereo image systems, digital photogrammetric stations, and many other instruments and systems

One could subdivide the companies at the commercial exhibition into three kinds: offering instruments, software or services.

Finally one could denote that besides the strong tendency to digital photogrammetry there is a tendency to convert the analogue stereoplotters into analytical, and many companies offer less accurate, but very practical and in some sense cheaper versions of their instruments.

Thank you for your kind attention.

## Summary of Other Technical Events

*K. Atkinson*

The XVIIth Congress of ISPRS featured 33 sessions which have been outside or which have transcended the bounds of the ISPRS Technical Commissions. These have included three Tutorial Workshops (TU), three United Nations Interregional Seminars for Developing Countries (UN), four United Nations International Space Year Workshops (IS), nine Technical Sessions of the International Union for Surveys and Mapping (IU), as well as 14 Special Sessions (SS), several of which have had direct links with specific technical commissions.

The three tutorial workshops each lasted for one day and were concerned with computer vision, fundamentals of real time photogrammetry and modern trends in photogrammetry. This third tutorial was dedicated to the memory of Giovanna Togliatti and Konecny reviewed her considerable contribution to the development of space photogrammetry. The tutorial also considered SAR interferometry from ERS-1 for digital terrain modelling; the potential of digital photogrammetric workstations, which are on the verge

of replacing analytical stereoplotters; digital close range photogrammetry in the context of a robot vision system; mathematical aspects of digital photogrammetry; and, in contrast, teaching photogrammetry in developing countries. The tutorial on fundamentals of real time photogrammetry concentrated on algorithms and software aspects, and low and medium level image data processing. In particular, linear filtering, image restoration and enhancement, image matching and object reconstruction were demonstrated.

The three well attended UN interregional seminars concentrated on technology transfer to, the educational requirements of, and the integration and management of technology in developing countries. They have helped to strengthen the good relations which already existed between ISPRS and the UN.

The ISY workshops were conducted jointly under the aegis of ISPRS and the Outer Space Affairs Division of the UN. The four sessions were held over two days and about 35 people participated. They were concerned with data formats, data processing, data interpretation with computer assistance, digital mapping, and integration of remote sensing data and GIS. One speaker is reported as advocating common sense in preference to statistical analysis on some occasions! Interesting studies in Japan and Amazonia were described. Conclusions emphasized the need for greater international collaboration and recommended a Commission VI WG on technology transfer.

IUSM held sessions of its WGs on education, automated control measurements, GIS and GPS. The WG on education attempted a review of the present status and new trends in surveying and mapping education. About 50 people attended the sessions on automated control measurements and issues like perception, object reconstruction and high accuracy triangulation were addressed. Those present (from IAG, ISPRS, FIG and ICA) wish to continue the establishment procedure of the WG within IUSM. The IUSM WG on GIS/LIS concentrated on GIS, remote sensing and cartographic data integration and on GIS in a global environment.

The IUSM WG on GPS conducted two sessions, the first of which was devoted to GPS activities in IAG, ICA, FIG and ISPRS while the second concentrated on the use of GPS in photogrammetry and remote sensing. More than 100 participants took part and discussion was lively. The integrating effect of GPS on all fields of surveying and mapping was noted. The IUSM user community should also benefit from the International GPS Geodynamics Service in coming years.

The first of 14 Special Sessions was devoted to the presentations of best papers by eight young authors, the recipients of ISPRS awards funded by the Japanese and Swiss Societies. There is no doubt of the success of these awards and one only hopes that similar funding

may become available to provide encouragement for young authors at the Vienna Congress in 1996.

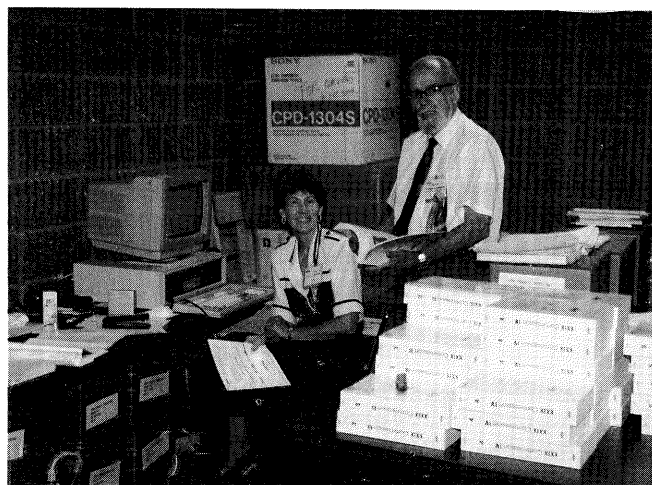
Commission V held a special session to deal with dimensional inspection and quality control in manufacturing industry. A panel discussion examined the current status of available technology and user requirements in terms of performance and cost.

Another Commission V special session concentrated on recording our architectural and archaeological heritage. It was estimated that only 1% or 2% of historic monuments have been recorded. Photogrammetrists must find better ways of speeding up the rate of recording. It is also important for the recorders to include value judgements so that photogrammetry is more than just a tool in the hands of technicians.

Commissions I and VII jointly considered early warning systems and the monitoring of natural disasters. At another special session organized by Commission VII, participants concentrated on the International Geosphere/Biosphere Program. In a further 4 sessions linked to Commission VII, the International Union of Forestry Research Organizations dealt with the automation of air photo-interpretation in resource inventories, a summary of World Forest Watch, remote sensing applications in resource inventories and special remote sensing applications in forestry.

In preparing this summary, I am greatly indebted to those session reporters who returned their reports punctually. My incomplete coverage of events is definitely not their fault!

I would like to draw your attention to one more special feature of this Congress. E. H. Thompson used to say that if you wanted to hide your published work, then the best place to do so was in the unindexed and then unpaginated *International Archives of Photogrammetry*. That is no longer the case. Larry Fritz and James Lucas have produced an Index to Volume 29 of the *Archives* of this Congress and we are and will continue to be indebted to them.



## Honorable Mention

*K. Torlegård*

On behalf of Council, the President of ISPRS confers the award of Honourable Mention to an outstanding member of each of the Technical Commissions who has been nominated by the Commission President. The recipients of the Certificate of Honourable Mention as cited for the 1988 - 1992 term are:

- Comm I **J. L. Aguirre**, Brazil  
"...with organizing international activities dealing with primary data acquisition and navigation for photogrammetry and remote sensing"
- Comm II **K. H. Marek**, Germany  
"...with organizing international activities dealing with systems for analysis of photogrammetric and remote sensing data"
- Comm III **H. Ebner**, Germany  
"...in theory for analysis of photogrammetric and remote sensing data, and in algorithmic aspects of digital photogrammetric workstations"
- Comm IV **P. Newby**, United Kingdom  
"...with organizing international activities dealing with cartographic and data base applications with emphasis on map revision"
- Comm V **E. Baltsavias**, Switzerland  
**H. Beyer**, Switzerland  
"...with organizing international activities dealing with close range photogrammetry and machine vision"
- Comm VI **G. Lindig**, Germany  
"...with the ISPRS Multi-Lingual Dictionary"
- Comm VII **D. Goodenough**, Canada  
**B. Ryerson**, Canada  
"...with organizing international activities dealing with interpretation of photographic and remote sensing data"

Previous winners of the Presidents' Honourary Mention are:

For 1984 - 1988 Council Period

- Comm I **K. Szangolies**, German D.R.  
Comm II **Z. Jaksic**, Canada  
Comm III **W. Foerstner**, F.R. Germany  
Comm IV **G. C. Agarwal**, India  
Comm V **S. El Hakim**, Canada  
Comm VI **G. Latarche**, France  
Comm VII **G. Guyot**, France