encouraging to the photogrammetrists since radar is capable of being improved and, in fact, experimental models have been built which exceed this accuracy by a considerable margin. The angular or bearing accuracy is not quite as good because of lost motion in the mechanical linkages within the radar system itself so that bearings are accurate within plus or minus one degree. Here again, experimental models exceed this accuracy and on special order, commercial models could be made to exceed this performance. The narrower the beam width and the shorter the pulse length of a radar, the more accurate will be the presentation of the chart by the radar itself.

For a detailed specification of good radar equipment, it is suggested that the general form of the specification drawn up for the Lake Carriers' Association by Jansky and Bailey be followed in selecting a radar for charting purposes. All

present commercial radars will follow this specification rather closely.

There is one note concerning the radar which should be made. Radar is a piece of electronic equipment which requires skilled maintenance in order to keep it in proper adjustment. It will be essential for the survey contractor to invest

in the services of a better-than-average radar technician.

The camera which has been developed for radar photography is quite different from conventional cameras but has been used in the field over a period of years. One camera has already made more than 5,000,000 photographs and is still in constant use in the field, so it is apparent that the photographic equipment and the radar equipment are available. The next step is to refine the field and office techniques.

It is hoped that this thumbnail sketch of radar charting and some of its possibilities will sufficiently interest the mapping experts gathered here so that they will give some thought to the problems involved in radar charting and in this way advance this new photogrammetric technique to a point where it will be as well understood and as well documented as the present science of aerial

photogrammetry now is.

PRESIDENT MASSIE: Thank you, Mr. Podeyn, for the paper on this new sub-

ject. I am quite sure it is new to most of us.

The next speaker is the last speaker on our program. We do have a movie following him. I think in some respects it is very fitting that this speaker come at this time. We have been talking in terms of our own work, thinking in terms of our National Society.

We have been fortunate to have our neighbors and friends speak to us. Our next speaker is to talk to us in terms of the International Society. There is

no one, I believe, who is any better qualified to talk to us.

Dr. Scherpbier is Secretary-General of the International Society, and when because of duties of state the President was not available, Dr. Scherpbier carried the entire load. It is with much pleasure that I introduce to you Dr. Scherpbier.

DR. B. Scherpbier: Mr. President, Ladies and Gentlemen: First of all, as President of the Netherlands' Society of Photogrammetry, I convey our most cordial greetings to you and our best wishes for the welfare of our big brother, the American Society of Photogrammetry.

It is a great pleasure for me to have the opportunity to attend your annual meeting and it is a great honor indeed be to allowed to say a few words at this gathering about the Sixth International Congress and Exhibition of Photo-

grammetry which will be held in The Hague in September 1948.

In 1936, when on a visit in Washington, a number of the members of your Society met together to hear me tell something about an aerial survey in New Guinea which had commenced in 1934 and which was one of the first aerial sur-

veys over a large area in a remote tropical country in which modern wide-angle photogrammetric cameras were used. In that year I also attended the meeting of your Society in Chattanooga.

In 1946 when in Washington I again had the pleasure, during an informal meeting of your Society, to tell something about the photogrammetric work carried out in the Netherlands during the war years and about the recuperation

of the International Society of Photogrammetry.

'What I have just said is a kind of illustration of the fact that I have had personal ties—and I am proud of this fact—with the American Society of Photogrammetry which date back to its early years as an infant in the International family of Photogrammetric Societies.

That is why I feel quite at home here among so many friends of long stand-

ing.

Let me first give you a brief historical review of the International Society for Photogrammetry by which the International Congresses and Exhibitions are organized.

The International Society was founded in Austria on July 4, 1910. One of the

main promotors was Prof. Dr. E. Dolezal.

The second International Congress took place in Berlin in 1926, the third in Zurich in 1930, the fourth in Paris in 1934 and the fifth in Rome in 1938.

In Rome the choice of the headquarters of the Board of the International

Society and of the next Congress and Exhibition fell to the Netherlands.

Before the war the reports of the Congresses were published in the *Internationales Archiv für Photogrammetrie*. In 1938 a periodical *Photogrammetria* was started by the International Society for Photogrammetry. This periodical ceased to appear as a result of the war. We are now trying hard to infuse new life into it and we hope to be able to resume its publication toward the end of this year.

Before the war the International Society accomplished a great deal in bringing into contact, photogrammetrists of the various countries, thus bringing about

a valuable exchange of thought on this new branch of applied science.

Personally I am indebted for many of the contacts I made, to the International Society and especially to the Congresses; moreover, I personally can claim by experience that attending these Congresses broadens one's views and brings new ideas which can be applied in practical work. What I would say is that for the members of the national societies, it pays for their societies to belong to the International Society and it pays to attend the Congresses. The fruits of such a Congress, and again I speak from personal experience, are very often reaped directly.

As you may have read under "Resolving Power" of the September 1947 volume of Photogrammetric Engineering, the Sixth International Congress and Exhibition for Photogrammetry will be held in the Netherlands from the 1st

to the 10th of September 1948.

This fits in very well between the International Geodetic Congress to be held in Oslo in the second half of August and the International Geographical

Congress to be held in Lisbon in the second half of September.

We had first planned to have the Congress in Amsterdam, but it transpired that early in September of this year two other International Congresses will be held in Amsterdam, so that it would be out of the question to find adequate accommodation for those attending. We therefore decided upon The Hague and found excellent accommodation for the Congress and the Exhibition in two hotels on the beach of Scheveningen, a seaside resort quite near The Hague.

The first circular letter with particulars about this Congress and the Exhibition has just been sent to all National Societies. It has taken more time than usual to get the organization of this Congress running and I fear there will still be many snags.

It proved to be very difficult to get the National Societies to the point of nominating reporters on the various committees, and even now I have received

the names of the reporters of only part of the National Societies.

It is evident that because of this, many reminders had to be sent by me to our easy-going brothers in photogrammetry, and this was rather annoying, especially as everybody all over the world seems to be very busy nowadays and I

am afraid I am no exception to this.

From the Societies to which Committees have been entrusted, namely the American, the Swiss, the French and the Swedish Societies, the questionnaires have been sent to the various countries. Only France has still not sent the questionnaire on Committee V₂. I have again written them a reminder and I trust that we shall all receive this questionnaire, although overdue, still in time to have a final report on the subject of this Committee submitted to the Congress.

There are altogether six Committees:

Committee I on Photography and its technique (including electronic methods) and

Committee VI on Training terminology and bibliography have been entrusted to your Society.

Committee II on Plotting and

Committee III on Aerial Triangulation are handled by Switzerland.

Committee IV Application of photogrammetry and aerial photography for surveying the earth's surface is entrusted to Sweden.

Committee V₁ Application of photogrammetry in various spheres and

Committee V₂ Application of photogrammetry in medicine are being taken care of by France.

I would stress once more the necessity of sending in the answers to the questionnaire to the above-mentioned Societies as soon as possible so that these societies can prepare the final reports in time.

We have found Mr. J. M. H. Heines of the Cadastral Survey in Holland and Mr. J. H. Bramlage of the Topographical Survey in the Netherlands willing to see to the local organization of the Congress and Exhibition respectively, and

we trust that these gentlemen will make a good show of it.

In order to organize the Congress, we should have a fairly exact estimate of the number of persons attending as soon as possible, because, as the first half of September is still the good season for Scheveningen, accommodation should be reserved in time. Moreover, in September we hope to celebrate the 50 years' jubilee of the reign of our beloved Queen Wilhelmina. This will give our country and especially The Hague a festive appearance, but it may cause also some difficulty in finding accommodation.

I would therefore kindly request those who intend to attend the Congress or who wish to exhibit, to send in the completed application forms which can be

obtained from the Secretary of your Society, as soon as possible.

This Sixth International Congress and Exhibition affords a good opportunity of renewing international contacts and obtaining a general survey of what has been achieved in the field of photogrammetry in the various countries since 1938.

I can assure you that it will be a pleasure for us to see many of you and your

ladies come over to our country in September next.

PRESIDENT MASSIE: Thank you, Dr. Scherpbier. I sincerely hope that you

will get a good representation from this country and all other member countries of the International Society.

This concludes our meeting. We have a film which portrays topographic mapping by photogrammetric methods. It is a color film, sponsored by the Commission on Cartography, Pan American Institute of Geography and History, and the U. S. Geological Survey. Portions of this film are prepared for three-dimensional viewing.

I want to again tell you of the splendid efforts on the part of the Program Committee and thank them for their cooperation. I want also to thank each and every one of you for attending this meeting. I have not heard the figure, but I know that registration has been in excess of 850, and is closer to 900 now. I believe it is the largest meeting we have ever had. If we keep on, I am afraid that we are going to have to do something about getting a bigger hall. We do hope in this coming year to be able to arrange for a semiannual meeting.

We are required by the Constitution to have our business meeting here in Washington, but in the past years we have had the opportunity of affording our friends in the commercial field an opportunity to put on a show for us, and they have come through admirably in the past. We hope that we can arrange for one more this year. We will try to get arrangements started so that you can plan to attend that meeting.

At the end of the film the meeting was adjourned.