

attention. The Signal Corps displayed a model of the "G-string" transmission system which may eventually replace coaxial cables for television networks. The system works on the principle that an electromagnetic wave can be propagated along the surface of a dielectric-coated single wire conductor over large bandwidths and with little attenuation. A number of improved versions of World War II communications equipment, such as walkie-talkies, were on view. The principal improvement in the new models was in the considerable reduction in weights and sizes through the use of printed circuits, miniature components, and plug-in subassemblies.

HIGH SPEED PHOTOGRAPHY

FEATURED AT SMPTE MEETING

Methods of taking and projecting high-speed and time-lapse three-dimensional motion pictures and techniques developed for making x-ray motion pictures by photographing fluoroscopic images were described in papers highlighting three sessions on high-speed photography at the sixty-ninth semiannual convention of the Society of Motion Picture and Television Engineers, held from April 30 to May 4 in New York City. A paper on three-dimensional pictures was presented by Major R. V. Bernier of the Wright-Patterson Air Force Base at Dayton, Ohio. Another, on methods and applications of cinefluorography, was co-authored by S. A. Weinberg, J. S. Watson, Jr., and G. H. Ramsey, all of the University of Rochester School of Medicine and Dentistry.

Other papers on related subjects included a description of a high constant-speed rotating mirror, suspended in a high vacuum by a magnetic field and capable of rotation at extremely high speeds that can be held constant to one part in 10 million, presented by J. W. Beams and J. M. Watkins, of the University of Virginia. Another, by Alseide W. Hogan of the Naval Ordnance Laboratory, described the use of an image phototube as a high-speed camera shutter.

EXPLORATION GEOPHYSICISTS

JOINT MEETING HELD IN ST. LOUIS

The twenty-first annual meeting of the Society of Exploration Geophysicists, held jointly in St. Louis during the week of April 23rd with the American Association of Petroleum Geologists and the Society of Economic Paleontologists and Mineralogists, was the largest meeting in the Society's history, with a total attendance of over three thousand scientists from all parts of the world.

Keynoting the meeting, George E. Wagoner, retiring president of the Society of Exploration Geophysicists, pointed out in his presidential address that by now nearly all of the prospective oil areas of the United States have been explored by geophysical methods applied by competitive companies and operators. The geophysical frontier, therefore, is no longer the virgin area. Present-day frontiers are those of skilled interpretation

of old and new geophysical data, research into improved methods, and engineering development of field techniques and instruments. No new method of oil finding is at present in sight, he continued, and the discovery rate of the great proven oil reserves of the United States is still directly proportional to the amount of geophysical exploration done. Wagoner concluded that the record of the immediate past indicates that adequate future reserves will be discovered by present geophysical and geological methods, and that, across the frontier, as always, success will lie for the careful, for the exacting, and for the ingenious operator.

Technical sessions featured twenty-nine addresses by leading geophysicists covering the most recent advances in prospecting techniques, with considerable emphasis placed upon applications of gravity and magnetic methods as well as upon seismic research and interpretation. In addition to its own program, the SEG participated in several joint sessions with the other societies.

The meeting was initiated with a group of geophysical papers of general interest which included descriptions of survey records made during studies of particular regions and discussions of certain interpretive methods in geophysical exploration. The session also included an address by David M. Delo, executive director of the American Geological Institute, who reviewed the AGI's activities in response to the national emergency, most of which have had to do with problems of the training and utilization of scientific manpower.

During the last day of the technical sessions, W. Heiskanen, director of the Finnish Geodetic Institute and a consultant with the Mapping and Charting Research Laboratory of the Ohio State University, described the Laboratory's world-wide gravity program. The program has as its aim, he said, the conversion of North American, European, Russian, and various other geodetic systems to a generally accepted world geodetic system on which might be computed the geographical coordinates of any important point in the world where astronomical observations have been made or which is plotted on a local map with a reliable grid. The program also involves studies of the size and shape of the earth and computations of the distances and directions between specific points in the world.

The increased use of geophysics in the search for essential metallic ores has led the SEG to consider the organization of a mining section, and an informal group discussion took place during the meeting to explore the possibilities for such a section. Sigmund Hammer, who served as SEG vice president during the past year, pointed out that although the Society was originally organized (in 1930) to promote the use of geophysics in oil exploration, many of the methods developed during the following years have been used also by mining scientists seeking new metallic ore deposits. A mining geophysics section within the Society, he continued, would provide a better opportunity for oil and mining geophysicists to exchange ideas and thus aid in the development of more efficient techniques in both industries.