

Achievements and Responsibilities

By BARTON KREUZER,
SMPTE President

AT OUR LAST MEETING, I reported to you concerning the progress of the Society. At that time there were student chapters and the newly founded Canadian Section to welcome. These are milestone events, occurring at intervals and resulting in some cases from years of planning and effort.

In the last six months since our previous Convention, there has been much progress also — although of a different nature.

Our membership growth, stimulated by the efforts of Ed Warnecke and his Membership Committee, continues at the high rate of recent years and now numbers nearly 6,000. In parallel fashion, Reid Ray, as Chairman of the Sustaining Membership Committee, reports the total of sustaining members as 121, including several prominent newcomers. Our papers program is full and the Board of Governors has been willing to break with precedent and try this "split-week" type of Convention.

In the midst of technical paper sessions and what we trust will be pleasant social events, other serious Convention activity takes place. Perhaps not everyone realizes that some 17 engineering, editorial, and other committee meetings during the week will continue preparing standards, which may be adopted, some of which will become international and all of which will further the solution of industry's technical problems; and others will be improving our *Journal* and other publications and operations. It should be noted that these meetings are open to all.

There has been much accomplished through the courses of study sponsored by Past-President John Frayne's Educational Committee in Hollywood, as well as the courses provided similarly by Subchairmen Jim Kaylor and Ed Schuller and their committees in the East under Vice-Chairman Herb Barnett.

There is further accomplishment in Section Vice-President Ed Stifle's continuing effort, not only with respect to Sections' activities but on behalf of student chapters and the Student Paper Competition; the assemblage of outstanding technical programs by Ben Plakun and his co-workers, with Deane White primarily responsible for the 82d Program; and last, but certainly not least, the continuous improvement of the Society's *Journal* by the staff, our Editorial Vice-President Glenn Matthews, and the Board of Editors under the able chairmanship of Pierre Mertz.

All of these, I am sure, will agree they have been able to build well because of the foundation supplied by their predecessors in office.

New Trends

In checking further on progress: in our Convention technical program and recent *Journals* we find papers on videotape recording, on military television applications, on new phases of high-speed photography, on international television, and on instrumentation, as well as the more familiar SMPTE topics. These are trends which in many ways began last spring in Washington.

Other changes are manifest in the several industries of which our Society is a part. Television is adding color to monochrome pictures as films did long ago.

Closed-circuit television is active in many guises. In one form, as "pay" or "toll" TV, it has been reviewed recently by the FCC and a way opened for possible test programs. As a tool for sales promotion it has been used recently to bring a new product message in color to some 15,000 dealers, newsmen, and others in private showings in 150 cities.

In entertainment form, less than two weeks ago it brought a championship boxing match to more than a half million sports fans in 174 theaters in 131 cities. Some of these, as our Canadian members have undoubtedly noted, were located for the first time in three Canadian provinces.

Those who attended the interesting session at the Walter Reed Hospital in connection with the Convention last spring in Washington know of closed-circuit television progress for medical usage. Scarcely a week passes that does not herald some further usefulness in the educational field of closed-circuit television and sound motion pictures.

These are the types of changes that spell progress for the industries with which our Society is associated, and also progress for the Society and our members, provided, of course, that each of us stays alert and recognizes both our responsibilities and our opportunities as they arise. I believe, too, that the past can be drawn upon for some supporting evidence.

The formation of SMPE in 1916 by a handful of engineers coincided with a public acceptance of silent motion pictures. In the home, aural entertainment was provided by a wind-up phonograph, piano, and other musical instruments. In theaters, the silent motion picture attracted an increasing audience. Even the titles of that era emphasized that the picture was visual only. *Vita-graph's Silent Strength*, *Paramounts' Silent Partners*, and *Universal's Silent Lady* were typical titles.

In 1922, along with Jackie Coogan, Norma Talmadge and Rudolph Valentino, the American public saw, or rather heard, radio. No more than 100,000 home radios were in use by the end of 1922. By 1928, these numbered approximately 8,000,000, and by 1928 our membership had more than tripled to about 350 active members. Then came sound motion pictures, a story too well-known to repeat here, but as the motion-picture industry expanded, the membership of this Society continued to grow.

The war years brought about broader use of films for military as well as civilian purposes, and when peace came, drive-in theaters provided an additional stimulus.

Radio sets had now risen to about 50,000,000 units, but a new form of home entertainment appeared. Some five television stations broadcast programs sporadically to a handful of TV receivers. By 1946 our members reached 2,300.

By 1950 there were over 10,000,000 television receivers; SMPE became SMPTE; and membership stood at 3,200. Last year there were 42,000,000 sets and 5,600 members.

Presented at the Get-Together Luncheon on October 4, 1957, at the Society's Convention at Philadelphia.

With statistics like these a matter of record, it is not surprising that the eyes of many in the several industries involved have focused on the Bartlesville, Oklahoma, closed-circuit television venture which started about a month ago. Certainly it is too early to draw conclusions about the future of Telemovies, but one wonders whether Warner Brothers' *Pajama Game* will have the same effect on entertainment as did their release of *The Jazz Singer* 30 years ago.

Motion pictures, after all, represent more than half of the total television time each week. These shows are programmed by two major sources: first, releases of pre-1948 motion pictures; and second, films produced principally for television. The first group is of particular importance to the motion-picture industry since pre-1948 pictures will mean extra income of over \$140 million over a period of several years. The second group may eventually top the first. By the end of 1957, 39 producers will have produced 108 individual telefilms for a gross of \$115 million, and SMPTE membership will have risen to 6,000.

Educational Crisis

We have talked briefly of the educational uses of closed-circuit television, but certainly a moment's additional attention to this important field seems appropriate. The educational crisis is a problem of which we are all aware. More students, inadequate facilities, and fewer teachers will make this problem greater each year. The techniques of using television and motion pictures for education are in their infancy, but they do offer great hope.

This year about \$2.5 million will be spent for television equipment in schools, principally by the Ford Founda-

tion and its agencies. Within five years this expenditure will approach \$20,000,000. There is a challenge for Society members in the modification for educational purposes of the equipment and techniques developed for entertainment purposes, whether TV or motion picture.

Technical Library Facilities

If we return now to the proposal to acknowledge both our opportunities and responsibilities, I would nominate for consideration the goal, for our members and their industries, of improved technical library facilities. It is too early to predict the method — it is unlikely that the Society will suddenly appear as the owner of a marble building full of books and adequately staffed; it may be that facilities exist that could be more effectively utilized through association in some way with the Society. I am sure that the best procedure is not yet known to us, but we are examining the situation further. If anyone has any ideas on the subject, may I suggest sending them to Society headquarters.

The combination of national security requirements, accelerated technological achievements, increasing population, higher personal incomes, shorter working hours, more leisure time, demands for better health and better education, offer a challenge far greater than we have ever faced before. In the past our Society and the industries with which it is associated have met many challenges, and as I have shown you, it has grown with each: with radio, with sound, and with television.

If, both as individuals and collectively, we continue to exert the same effort and creativity as in the past, I am certain our Society will grow with the challenges posed by the many new fields of technical endeavor in which we are engaged.

Some Engineering of the Past and for the Future

By T. A. SMITH

(These are the remarks made at the Get-Together Luncheon at Philadelphia, October 4, 1957, by Mr. Smith, who is Executive Vice-President, Industrial Electronic Products, Radio Corporation of America. Except for very minor changes, Mr. Smith's engineering "editorial" is presented below.)

FOR HISTORICAL REASONS and for present interests, it is especially appropriate that your Society should meet in Philadelphia. Not only is the Philadelphia area, or as it has become increasingly known, the Delaware Valley area, an electronics center, but also it has been a center of science as far back as the time of the eminent Dr. Franklin. For those who are not well acquainted with Philadelphia, may I say that practically everything here, with a few exceptions, was started by William Penn or Benjamin Franklin. One such exception is, of course, Eldridge Johnson, of Victor Talking Machine fame, who invented the Victrola. Here, too, in the Delaware Valley, radio found its later development and some of the birth pangs of television took place.

In this locale some of the very first sound motion pic-

tures were produced — not just scored or dubbed (they did that, too), but actually photographed. Years later the same studios were pressed into service once more for some of the first theater or large-screen television development work.

So it is appropriate that, at a time when the long-forecast marriage of the motion-picture and television industries seems to have settled down and to be producing healthy offspring, the Society should honor this city with its presence.

Just as the motion-picture, television and related industries represented here today have broadened their spheres of interest, and in so doing expanded the base of your Society, so, too, has electronics greatly broadened its outlook.

The Beginnings of Electronics

The initial effort of electronics engineers was devoted to telegraph communications. Then came broadcasting and audio transmission. The joining of electronics with