# INTERNATIONAL SYMPOSIUM ON PLASTICS TESTING AND STANDARDIZATION

#### INTRODUCTION

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My function at this meeting is very largely to explain what the American Standards Assn. (ASA) is, and where it fits in this particular picture. For me, as an ASA man, this meeting has a particular and very important significance. It is perhaps not clear to our friends from abroad, and very likely not clear to most of the Americans present, but there is a very particular relationship between the ASTM and the ASA.

## AESC—Forerunner of ASA:

In 1918 ASTM joined with four other engineering societies, the Civil Engineers (ASCE), the Mechanical Engineers (ASME), the Electrical Engineers (AIEE), and the Mining Engineers (AIME) to form the American Engineering Standards Committee (AESC).

The first official act of that committee was to invite three of our Federal Government departments to join on an equal footing with the founding societies. The War Department, the Navy Department and the Department of Commerce, represented by the Bureau of Standards, joined, and those eight organizations developed the principles and the method of operation which today govern the operations of the American Standards Association.

One of the purposes of forming the AESC was to eliminate conflicts and duplications among the standards which these five societies were themselves producing, each society, competent in its own field, each issuing standards important in their field. Because engineering fields overlapped, the standards themselves overlapped, and there were conflicts and duplications, the five societies set up the AESC.

One of the things which they wanted to do was to make it possible for the standards from any one of the founding bodies to receive national approval, and for that purpose they selected the term "American Standard."

The standards which were approved by AESC became American Standards, so that today ASA derives its name not from the fact that it issues American standards, but because it is the association for approving American Standards.

One of the early provisions in the constitution and bylaws of the AESC was to provide a means whereby the standards already developed could be brought in, coordinated, and approved as American Standards. That system has been followed out, and today approximately one third of the standards on the ASA list of American Standards had their origin as ASTM standards.

Those standards retain their identity as ASTM standards. They receive, in addition, the designation as American

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Standards, and ASTM is assigned proprietary sponsorship which makes them responsible for keeping those standards up to date and submitting to ASA the revisions of those standards as they come along.

So I feel that this meeting has a particular significance because it brings to the surface and lays out for all to see the very important and close and very cordial relationships which exist between the ASA and the ASTM.

Obviously not all of the work of standardization can be handled by taking up standards already developed by other organizations, and so means were provided for establishing committees, particularly for the purpose of developing standards in any given field.

## ASA Basic Principles:

The basic principles under which ASA operates provide, first, that all work in the field of standardization shall be voluntary—the initiation of a project, attendance at conferences, the work of the committee, and finally, the application of the standard after it is has been approved.

The second principle is that if any committee be established for the development of standards, that committee must be so balanced among the various interests, the producers, the consumers, the distributors, the general interest, and regulatory bodies, if they be involved, that no one group may have a preponderance. No group by sheer weight of votes can force a standard through, nor, conversely, can any group by sheer weight of votes veto a standard.

What ASA requires in its procedures is that a standard be supported by a consensus. That word "consensus" is a loose word. It means "substantial agreement," not ninety-eight per cent agreement or one hundred per cent or seventy-five per cent or any specific figure but a

substantial agreement of those really concerned with the work.

### How a Project Is Started:

When a proposal is received by ASA that a project be established for the development of a standard in any particular field, it is examined by the staff first to check whether any work is already going on in that field. Assuming, for purposes of discussion, that the answer is no, then the project is further examined to see what groups are supposedly interested. Every effort is made to ensure that an invitation to attend the general conference goes to all groups conceivably interested, and those who have perhaps a fringe interest.

At the conference, it is explained how the ASA works, and then the proponent of the project is given an opportunity to present the problem to the conference. With the problem before the house, the meeting is thrown open for general discussion, and when the participants have talked themselves out, the chairman will inquire, what is the meeting's pleasure.

Out of that query comes a suggestion that the ASA be asked to establish a project for this particular field. If that proposal is accepted by the meeting, then the next question is, what shall be the limits of the field in which this work shall be done, what should be the scope of the project.

That established, the next thing is, who shall be the leader, because the ASA is simply a piece of machinery which can be used by the groups who are concerned. The proponent of the project is usually asked to take on the responsibility as sponsor, and the sponsor is required to see that the job goes forward, the meetings are called, the minutes are recorded, the documents are circulated, and so on.

The actual approval of the project is the responsibility of the appropriate Standards Board. The Standards Board is a group of volunteers, knowledgeable in the general field concerned. It is their duty to act on behalf of the Standards Council, which is the governing body, and to decide whether or not there is a consensus in support of this project.

Assuming that there is, then the project is authorized, the title assigned, together with ASA designation, a letter and a number, and the ASA staff works with the sponsor to form the sectional committee. From that point on it is the sponsor's responsibility, with the ASA staff ready to assist in any way that they may. The chairman of a sectional committee may be appointed by the sponsor or elected by the committee.

The committee, when it is formed, decides how to do the work, whether in a committee of the whole or by subcommittees or by working groups. Whatever method may be chosen, the final result of the committee's work must be subjected to a written letter ballot of all the members of the sectional committee.

Any member is privileged to vote in the negative, if he feels so inclined, but he must state his reasons for his negative vote. The purpose in that is to enable the reviewing board, the Standards Board concerned in the ASA, to have the basis for negative votes so that the ASA Standards Board can both count and weigh the votes.

There have been occasions where a single negative vote, supported by adequate reasons, has been sufficient to send a standard back to a committee for further work. There have been other occasions where a number of negative votes, supported by trivial reasons or from sources not importantly affected, have been noted by the Standards Board, and the standard has been approved as an American Standard so that those who want it and need it may have it for use, the objection to be considered when the standard comes up for revision, within a minimum of five years.

The AESC very shortly expanded at the behest of a large group concerned with industrial safety. They felt that the principles under which the AESC operated were entirely valid and could serve the purpose of developing industrial safety standards, but they wanted wider participation, and so after about a year's travail the AESC modified its constitution and added to the eight founding members a number of trade associations, and additional professional and technical societies.

#### International Standards:

At the same time, in modifying the constitution, a provision was put in which established the ASA as the authoritative link in international standards activities.

That change in the constitution was adopted in 1919, so for the past thirty-nine years, the ASA has been engaged in international standardization.

Now, remember that I said that the ASA was the machinery for standardization. The staff keeps the machinery oiled so that those who want to develop standards can do it themselves, with due consideration of each other's viewpoints.

In international standardization it becomes important for the ASA to have a means for determining what is the American viewpoint. If the subject matter of an ISO or an IEC project falls within the field or the scope of one of the standards or sectional committees already established under the ASA, the project is perfectly simple. All the documents are referred to that sectional committee, and as a representative and a balanced body, the ASA looks to that committee to determine the American viewpoint.

Not only is the American viewpoint determined, but providing a delegation to attend meetings abroad or at home is the responsibility of that sectional committee, and instructions to the delegates are also a function of that committee.

Further, when finished documents come to ASA from the ISO or the IEC for circulation among the member bodies of those two organizations and require a vote for or against, or the expression of dissent in greater or lesser degree, there must be some source from which the ASA staff can derive its instructions. There again it is the sectional committee concerned.

But if there be no sectional committee in this particular field, then the first recourse of ASA is to its member bodies or associate members to see whether any one of them is carrying on work in that particular field.

If there is no result there, then the ASA looks to the other societies cooperating in ASA work to see if there is anything in hand which would warrant turning to them for the formation of an American viewpoint.

And finally, if there is no help from that score, then an American group is developed with cooperation by organizations interested in the field and, if necessary, supplementing their representatives with members-at-large as experts in the field.

In the case of plastics, when the work of ISO/TC-61 got under way, the first recourse was to ASA's member bodies, and in the ASTM there was, of course, the highly competent Committee D-20 on Plastics. The request to ASTM Committee D-20 to undertake the job of

determining the American viewpoint in the field of plastics was accepted and the committee established an American group for ISO/TC-61.

The American Group contains not only representatives of ASTM's Committee D-20 but also representatives from the Society of the Plastics Industry, the Manufacturing Chemists' Association, and the Society of Plastics Engineers.

The ASA has two responsibilities, and under the bylaws of the ISO those responsibilities are separate and distinct. One is as a participating member of Technical Committee 61 (TC-61). In that respect the committee is to present the American viewpoint, to explain the basis for that American viewpoint, and to give the technical background so that the American viewpoint may be evaluated by those who are cooperating in the committee. On the other hand, as the secretariat for TC-61, the ASA is responsible for seeing that the work goes forward. In that connection, the responsibility is to the ISO Council, and on behalf of the Council the instructions come to ASA from the general secretariat in Geneva. That, in general, is how the ASA carries on its work in the international field of plastics.

Certainly, on behalf of the ASA staff, I can tell you how grateful we are to the ASTM Committee D-20 and the American Group for the guidance they provide which enables the ASA to carry out its part in this work.