

water transported into the area in question from the virtually unlimited supply of the open sea. That is, in a lake (of constant depth, for example) a uniform steady wind will produce a set-up of  $S$  feet at the downwind end and a lowering of water of  $S$  feet at the upwind end. On the other hand, in a bay of the same length and same constant depth subject to the same steady wind, the water level can be twice the value at the head of the bay (assuming that the wind is directed toward the head of the bay). Furthermore, on a very expansive continental shelf, the greater fetch of water under the action of the wind can lead to greater water level.

### Important Questions

Some of the important questions that must be answered before an adequate

prediction scheme is developed follow. (i) Under what conditions of the scale and intensity factors is it possible for the dynamic aspects of the water-level problem to become a significant part of the total storm tide? (ii) Under conditions where quasistatic conditions are nearly realized, how important are the two-dimensional aspects of the circulation of water (considering bottom friction) in governing the longitudinal and transverse gradients of water level? (iii) In the case of large scale storms on an open coast or over a moderately large basin such as the Gulf of Mexico, how important is the influence of Coriolis force in balancing the gradients of water level induced by the wind and atmospheric pressure anomalies? (iv) In determining the water level rise on a beach, what are the principal forces involved? (v) How important are the nonlinear aspects of the problem? Under what conditions can an abrupt

free surge develop? (vi) Of greatest importance is the question of the appropriate boundary conditions to be imposed at the coast for a gradually varying bottom slope terminating in a beach with no cliffs or sea wall at the shore.

### References and Notes

1. Contribution from the department of Oceanography of the Agricultural and Mechanical College of Texas, Oceanography and Meteorology Series No. 56. This paper is based on investigations conducted for the Texas A and M Research Foundation through the sponsorship of the Office of Naval Research.
2. Seiches are free standing waves in an enclosed or partially enclosed basin having a discrete spectrum.
3. The dynamic effects envisaged here include those associated with inertial force, Coriolis force, and frictional force. All of these are directly related to the motion (velocity and/or acceleration) of the water.
4. Actually this is one mode of attack on the problem of evaluation of the surface-resistance coefficient for wind stress.
5. B. Hauriwitz, *Beach Erosion Board Tech. Memo. No. 25* (1951).
6. J. Proudman, *Dynamical Oceanography* (Wiley, New York, 1953), pp. 295-301.

## Amendments to the AAAS Constitution

Dael Wolfe

At the 1953 meeting of the Association, the Council authorized appointment of a Committee on Constitution, Bylaws, and General Operations to review the Association's constitution and bylaws and to recommend appropriate changes. The committee consists of Wallace R. Brode, chairman, Roger Adams, Meredith F. Burrill, Clarence E. Davies, and Milton O Lee. Howard A. Meyerhoff and Dael Wolfe serve as advisers to the committee.

Amendments recommended by the committee were considered by the Board of Directors during their meeting 29-30 October. The board approved the committee's recommendations, with a few changes and additions, and authorized their submission to the Council at the annual meeting of 1955.

The constitution requires that proposed amendments be published in substance in *Science* and *The Scientific Monthly* at least a month before the Council meeting at which they are to be considered. Accordingly, the more im-

portant of the proposed amendments to the constitution are described in the following section. The next section lists several additional changes that are being recommended to clarify intent, remove ambiguities, or improve current practices.

### Constitutional Changes

*Article IV.* A quorum now consists of 20 members and the signatures of 20 members are required to call a special meeting of the Council. In both cases it is recommended that the number be increased to 30.

Ordinarily each Council member has one vote, but in a few cases a member represents two or more affiliated societies and the number of votes to which such members are entitled has not been clear. It is recommended that each member have only one vote.

The president presides over Council meetings. If the president is absent, the constitution provides for the election of a

chairman by the Council. It is recommended that the president elect serve in the absence of the president.

*Article VI.* A section committee now includes representatives from societies affiliated with that section and other Council members whose own scientific interests lie in the field of the section. Thus, some affiliated societies, such as state academies of science, may one year be represented in one section committee and the next year in another. It is recommended that representatives of societies that are not affiliated with a section that has a section committee not be made members of a section committee. If adopted, this change will mean that a society may be affiliated with one or more AAAS sections, that its representatives will serve as members of the section committees of such sections, but that the representatives will not be assigned to other section committees. To provide greater flexibility and to permit overlap of membership on section committees, it is recommended that the prohibition against serving on more than one such committee be abolished.

*Article VIII.* Affiliated societies have one or two representatives in the Council, depending upon the number of their members who are fellows of the AAAS. State academies of science have for some years been an exception to this rule, for regardless of size they have only one Council representative. It is recommended that this arrangement be continued and that it be specified in the constitution.

In order to make formal provision within the Association structure for such

agencies as the Gordon Research Conferences, it is recommended that a new section 4 of article VIII be adopted to establish a class of "participating organizations." Participating organizations are defined as ones whose activities are planned and directed in close association with those of the AAAS. To acquire the status of a "participating organization" will require approval of both the Board of Directors and the Council. Such organizations will be given representation in the Council as determined by the Board of Directors and the Council.

*Article XII.* The present amendment procedure is ambiguous, names the Board of Directors as the only agency with authority to initiate amendments, and does not provide any means whereby the Council can amend the constitution over the objection of the Board of Directors. It is recommended that a vote of the Council or a petition signed by 30 members of the Council also be authorized as means of proposing constitutional amendments. It is further recommended that the Council be given authority to adopt an amendment that is not approved by the board. To do so, under the proposed amendment, would require a majority vote of the Council at one meeting to place the proposed amendment on the agenda of a subsequent annual meeting, and for adoption would require a two-thirds vote of the Council at that subsequent annual meeting.

### Changes of Detail

The Board of Directors recommends that the title of the administrative secretary be changed to executive officer, and that the corresponding change of word-

ing be made throughout the constitution and bylaws.

*Article II.* It is recommended that only individual members—not institutions and organizations—be eligible for election as fellows.

It is recommended that the word *his* be inserted just before the last word of sections 5(a) and 5(b).

In section 5(c) it is recommended that institutions or organizations—as well as individuals—be given the right to establish and name sustaining memberships and to name the first incumbent of such memberships. It is further recommended that the board be given discretion as to the continuation of a sustaining membership after the death of an incumbent.

*Article III.* It is recommended that the term of office of the president elect and of the vice presidents be defined as 1 year.

It is recommended that the titles of assistants to the administrative secretary not be stated in the constitution but be left to the discretion of the Board of Directors, and that the board be authorized to designate which assistants shall be classed as administrative officers of the Association.

*Article V.* To avoid possible ambiguity, it is recommended that there be a slight rearrangement of the material of section 2. It is recommended that a quorum of the Board of Directors be changed from five members to six voting members. It is further recommended that the term of office of each member continue until his successor shall have signified in writing his acceptance of office.

*Article VI.* In the event of the death or resignation of an elected member of a section committee, it is recommended that a successor be elected by the section

committee instead of by the Board of Directors.

*Article XI.* In order to avoid confusion with other meanings of the term *trust funds*, it is recommended that this classification of the Association's funds be renamed *endowment, trust, and gift funds*.

*Article XII.* It is recommended that a new article XII be adopted, specifying that Roberts' rules of order, except when inconsistent with the constitution or bylaws, shall govern meetings of the Council.

It is recommended that the current article XII be renumbered XIII and that, in addition to the changes in amendment procedure already described, the language specifying that proposed amendments be published in *Science* and *The Scientific Monthly* be replaced by the more generally stated requirement that amendments be officially published.

*All articles.* It is recommended that all articles be given short titles, such as *purpose, membership, officers*, and so forth.

### Procedure

In advance of the 1955 Council meeting, members of the Council will be mailed copies of the constitution, and also of the bylaws, with the recommended changes indicated in detail. The Council will vote on these matters at the 1955 meeting. If the changes are approved, the revised constitution and bylaws will be published in *Science* and *The Scientific Monthly* early in 1956.

*This statement is also being published in December issue of The Scientific Monthly.*

*The child grows, but is still an experimenter: he grasps at the moon, and his failure teaches him to respect distance. At length his little fingers acquire sufficient mechanical tact to lay hold of a spoon. He thrusts the instrument into his mouth, hurts his gums and thus learns the impenetrability of matter. He lets the spoon fall, and jumps with delight to hear it rattle against the table. The experiment made by accident is repeated with intention, and thus the young student receives his first lessons upon sound and gravitation. There are pains and penalties, however, in the path of the enquirer: he is sure to go wrong, and Nature is just as sure to inform him of the fact. He falls downstairs, burns his fingers, cuts his hand, scalds his tongue, and in this way learns the conditions of his physical well being. This is Nature's way of proceeding, and it is wonderful what progress her pupil makes.—*  
JOHN TYNDALL, *Fragments of Science*, vol. 1, p. 283.