

# American Railway Engineering Association (AREA)

## *Some Way to Run a Railroad!*



*(The following information on the American Railway Engineering Association was provided to the Transportation Research Board by Louis T. Cerny, Executive Director of AREA, who serves on TRB's Committee on Highway-Railway Grade Crossings. As an organization whose activities complement those of TRB and that works closely with TRB, the activities of AREA should be of special interest to the readers of "Transportation Research News." Editor)*

The American Railway Engineering Association (AREA) is an organization of approximately 4000 individuals who are engaged in railway civil engineering and associated fields, primarily subgrade, track structure, and bridges. The objective of the AREA established at its

founding in 1899 is the advancement of knowledge pertaining to the scientific and economic location, construction, and maintenance of railways.

The AREA is unique among professional societies in that it also serves as an organizational element in the Association of American Railroads (AAR). The AAR Engineering Division responsibilities include developing standards and recommending practices related to fixed property matters of railroads and recommendations for needed research to the Research and Test Department of the AAR. The standing committees of AREA are used to carry out the Engineering Division's responsibilities. The annual meeting of the Engineering Division is held jointly with the AREA annual meeting.

AREA's objective is achieved through the work of a board of direction, a headquarters staff, and 21 technical committees. The storehouse for the accumulated knowledge is the Manual for Railway Engineering, which has been published since 1905, and an annual series of bulletins. The technical committees, which are limited to a maximum of 70 members each, operate through nearly 160 subcommittees. The committees listed here are each responsible for a chapter in the manual, except for committees 24 and 32:

1. Roadway and Ballast,
3. Ties and Wood Preservation,
4. Rail,
5. Track,
6. Buildings,
7. Timber Structures,
8. Concrete Structures and Foundations,
9. Highways,
10. Concrete Ties,
11. Engineering Records and Property Accounting,

13. Environmental Engineering,
14. Yards and Terminals,
15. Steel Structures,
16. Economics of Plant, Equipment, and Operations,
22. Economics of Railway Construction and Maintenance,
24. Engineering Education,
27. Maintenance-of-Way Work Equipment,
28. Clearances,
32. Systems Engineering,
33. Electrical Energy Utilization, and
34. Scales.

The Manual for Railway Engineering is intended to be a set of recommended practices. The committees work constantly to update the contents of the manual. A general requirement is that recommendations published in it should be based on proven field experience. Therefore, new products may appear that are more suitable than are the manual recommendations based on field experience. The manual is not intended to be used as a barrier to the use of new products. A supplement is published each August. Committee decisions on changes come from the experience of the individual members, their knowledge of recent research and development results, and information they have gathered from many sources. Committee 5 is also responsible for a companion reference, the Portfolio of Trackwork Plans, which gives detailed plans for many trackwork components and is revised yearly.

The goal of advancement of knowledge is pursued through technical conferences and publication of technical papers. The AREA Bulletin, first published in 1900, is the vehicle for dissemination to the entire membership of proposed changes to the manual and pertinent technical papers. The technical papers include those presented at annual meetings and regional meetings. The annual technical conference is held in Chicago, the home of many major railroad organization meetings. Regional conferences intended to provide an opportunity to participate in a technical meeting for members who cannot attend the annual meeting are held in a different location each year.

Committees often undertake activities other than work on the manual; for example, the Buildings Committee sponsors an annual Architectural Student Design Competition. The first prize of \$1200 is awarded in March at the annual meeting. The present competition is anticipated to attract between 500 and 700 entries. The Engineering Education Committee also works with students and university faculties to encourage interest in railroad engineering education.

Ad Hoc Committees are formed when needed to undertake special projects. One has been formed earlier this year to improve communications between AREA and the Facility for Accelerated Service Testing (FAST) at the U.S. Department of Transportation's Test Center in Colorado. AREA members can gain better insights into the test results from the track experiments at FAST and, in return, the expertise of AREA members will be of benefit to the FAST projects.

The AREA Board of Direction consists of a president, two past presidents, two vice presidents, and 12 other members elected by the membership. President for 1980-1981 is Mike Rougas, Chief Engineer of the Bessemer and Lake Erie Railroad.

The headquarters staff consists of an executive director, a director of engineering, and a manager-headquarters who manages the remainder of the staff. Cerny reports to the Board of Direction.

In 1979, the AREA headquarters staff offices were moved from Chicago to Washington, D.C. This move, as expected, has improved coordination between AREA and AAR and the Federal Railroad Administration.

AREA has undertaken an arrangement believed to be novel among professional organizations. The monthly Newsletter is now published in *Railway Track and Structures* magazine. Each member receives a subscription to the magazine paid for out of dues.

AREA is looking forward to a future of continued service to the railway engineering profession, to the railroad industry, and to society as a whole in fulfilling its responsibilities. Information on membership or publications can be obtained from AREA, Room 403, 2000 L Street, N.W., Washington, DC 20036.