IAROO HISTORY

1892-TODAY

130 YEARS



BEGINNINGS 1893-94

Travelling Engineers Association

Firemen and Engineers reported to the Master Mechanic.

Travelling Engineers were appointed as supervisors.

Moved up through the ranks of management, often to General

Manager.

Had the support of monthly newspaper, Locomotive Engineering,

with circulation of 20,000; editors were Angus Sinclair and John Hill.



Travelling Engineers Association 1893 in Chicago

Sinclair and Hill were both experienced locomotive engineers with writing skills and were the proprietors/editors of the newspaper. This newspaper evolved over time to McGraw Hill Education and is still in existence today.

Locomotive Running and Management was published in 1885, a simple textbook that went through twenty-six editions and established them as leaders in the education of railroad operating employees.

Another book, Development of the Locomotive Engine, published in 1907, was still in publication in 1970.

In 1892 a notice was issued in the Traveling Engineers publication suggesting an association be formed for mutual benefit and the exchange of ideas and information. Mr. John Hill from New York would serve as secretary until a meeting of interested parties could be held.

A meeting was arranged for responding Traveling Engineers and held at the Lake Shore & Michigan Southern engine house in Chicago on November, 12, 1892. A committee was appointed to draft a constitution and by-laws and another committee to arrange an organization meeting in New York.

That meeting was held on January 9-11, 1893 with 18 participants in person and another 30 had been invited. A constitution was adopted, officers were elected, and topics were selected for the first annual meeting.

C. B. Conger, Chicago & Western Michigan Railway, was elected as the first president. He is credited with being the father of IAROO.

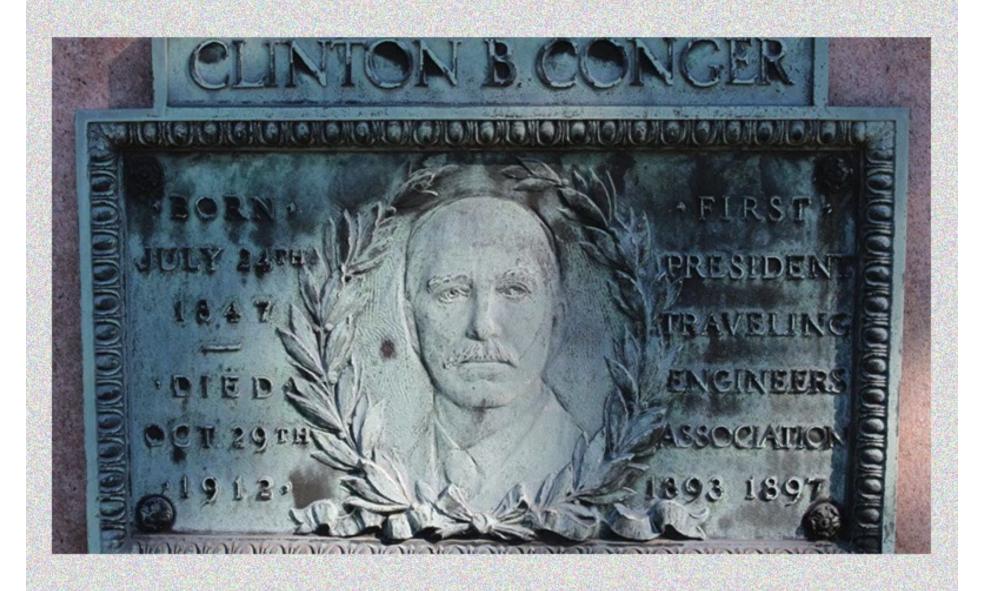
W. O Thompson, L.S. & M.S., was elected as the first secretary.

Both served in various capacities for many documented years.

The associations first annual meeting was held in Chicago Sept. 2-15, 1893 at the Hotel Hayes. In attendance were 68 members with total membership of 107.

Topics discussed included; Economical Use of Oil and Supplies; Examination of Firemen for Promotion; New Men for Employment;

The newly formed Air-Brake Men's Association spoke during the meeting, with both associations pledging to work together.



The Second Annual Meeting was held in Denver on Sept. 11-14, 1894. Membership was reported as 134 with 36 in attendance.

Examples of topics discussed: Safe Handling of the Air Brakes under all Conditions; How much knowledge of the air brake is necessary to be considered competent; Injectors and Lubricators; Best means of Saving Coal and Increasing the mileage per ton.

Management attitude and panic (recessions) of 1894 and 1895 made the next several years difficult, but it survived thanks to the popularity of its research and reports of loyalty of a few high railroad officials.

In 1906 the annual meeting was held in Chicago in August.

Topics discussed: New air brake developments presented by Westinghouse Air Brake; Advantages of committee reports to the general membership; Tonnage ratings by the latest methods; Handling Air Brakes in passenger service to avoid break-in-twos and passenger discomfort; Regularly Assigned vs Pooled Engines, the merits of each.

Total membership was reported as 587, with a 10% increase in the past year.

Internet sources were available to locate most of the previous information, but are not available afterward, perhaps later information was copyrighted.

The USA entered WWI in 1917 with railroads going under the control of the Federal Railroad Administration. Railroad traffic increased to the largest volume ever due to the war traffic. The committee elected to not have an annual conference that year so members could: "remain in their line of duty and assist in mobilizing the necessary war material".

The convention in 1918 was allowed due to greatly changed conditions brought about under government operation, and the convention would be all about "win the war".

Several government officials provided presentations pointing out ways the association members could help operate the railroads as efficient as possible to keep the war traffic on schedule. One topic subject was; Locomotive Cab and Cab Fittings from the viewpoint of enginemen.

At this time membership was reported as 1067.

A meeting was held in Chicago on November 20, 1908 for the purpose of organizing an association for the men engaged in the purchase, distribution, handling and accounting of fuel in the US, Canada, and Mexico.

The first annual meeting of the International Railway Fuel Association was held in Chicago, June 21-23, 1909. Total membership was about 200 with attendance at 117.

Presentation were all focused about various aspects of handling, weighing, stand designs for coaling stations, accounting and delivering.

This association held their 18th Annual meeting in 1926 in Chicago.

This is the first appearance of diesel power found in this research project.

Presentations revolved around diesel power; diesel cylinder types, theoretical advantages, actual performance, operation, maintenance costs, and purchase costs.

The association prepared reports on matters pertaining to the design and other relevant data, presented with a 64 item bibliography of diesel locomotive articles.

Membership was reported as 1195.

In 1936 the Traveling Engineer's Association merged with the International Railway Fuel Association and became **The Railway Fuel & Traveling Engineers Association**.

The move toward merging was first considered in 1915 when the groups agreed to meet the same week, allowing members to attend both meetings.

Committee reports at the annual meetings consisted of roughly half fuel and related subjects.

The balance being the popular topics of train handling, engine crew training, new equipment, and devices.

One of the committees pioneered the study of gas-turbine power starting in 1939 with reported activities through 1944.

There was an annual convention in 1941 followed by postponements until 1946, due to the war.

The diesel era began in late 1939 with road tests of EMD's game changing experimental diesel electric EMD 103. At the time, the national diesel-electric fleet consisted of 510 locomotives. Twenty one years later, in 1960, over 28,000 were in service.

Demand for more diesel electric topics accompanied the growing fleet in the post World War II years. As the industry transitioned to diesel, the focus caused the efficient use of fuel to take a back seat to storage and spillage issues. This remained the case until the 1970s and 80s.

In the 1950s presentations covered, as a few examples:

Education of Operating Personnel, Operating Difficulties on Line of Road, Improper Handling of Locomotives, Safety Precautions on Diesel Locomotives, Operation of Diesel Locomotives in Extreme Cold Weather.

In the early 1950s several train handling presentations were held in joint sessions with the Air Brake Association.

The challenges faced by supervisors during and after the transition to diesel were stated well in a paper presented at the 1959 convention:

"The change from steam locomotive to diesel locomotives was so rapid that all railroads experienced difficulty in establishing a training program for maintenance forces and the Road Foreman of Engines instructing his engine crews. Consequently, adequate individual instruction was impossible. The little knowledge obtained by engine crews during this transition, and I might say some by trial and error developed many bad habits. These bad habits that are abusive to the diesel locomotive are today's problem and we must exert every effort to correct them."

Turbine power began to be explored as a possible answer in the quest for single higher horsepower units instead of multiple unit consists in the early 1950s.

During the 1950s railroads became interested in in the role of the Road Foreman(traveling engineer) as an operating officer as TM/RF and other positions involved in operations.

Membership grew to 525 active members in 1956, with the name changed to Railway Fuel and Operating Association to more accurately define the members.

Train handling, multi-unit consists, cold weather operations, yard operations, terminal delays, damage prevention, and operating rules became common topics during the regular meetings.

Distributed power and simulator training in he 1960s began a new era of applied technology.

In 1963, it was reported the meeting held in Chicago featured; "the greatest display of railroad equipment ever before shown".

Membership peaked in 1974 to 1274.

In 1969 the association took an active role in improving locomotive performance in controlling heavy tonnage trains on descending grades with a 5 to 15 MPH speed limits, and excessive wheel slip on high horsepower locomotives. Rate of change wheel slip control and extended range dynamic brakes were developed.

In the early 1970s, the AAR developed the standard control stand with separate handles for the throttle and dynamic brake. The associations took an active role and designed a newsletter to solicit members input with problems and suggestions for improvement. The project became known as the "Locomotive Design Series".

Also, in the 1960s & 70s a rash of "unexplained" derailments involving gauge widening, rail overturn, harmonic rock, truck hunting, empty long drawbar cars jackknifing or derailing in curves, unexpected coupler failures, and increasing break-in-twos got the industries attention.

In response members of the association played an active role in the 1972 launched International Government/Industry/Track Train Dynamics program, commonly now referred to as TTD. About 80% of the members serving on this committee were association members.

Field investigators were at a loss to explain the causes of these new breed of derailments.

As a result of the committee's work, Manual R-122, "Track Train Dynamics to Improve Freight Train Performance. Due to the availability of computer analysis of train handling techniques, more was discovered and an updated revision of the manual was published in 1977 by the committee.

The significance of deregulation and mergers of the 1980s is well known, but it is also the time when the industry, through roadbed and equipment improvements, along with the application of preventive guideline measures the derailment trend was reversed.

In the early 1980s the TTD committee members recognized the importance of fuel conservation and formed a joint effort to bring together best ideas and techniques available to the industry. Again the association, was well represented on this new project with at least six members participating. The committee's work was published as AAR Track Train Dynamics Manual 506.

Over the existence of the association, providing educational opportunities to members has been the mission, it still is today.

Past members have written instructional manuals that have been used nationwide for engineer and management training.

The "Modern Locomotive Handbook" made its debut in 1974 and was revised in 2007.

"Fuel Conservation From an Operating Viewpoint" was first published in 1974, it is no longer available.

"Locomotive Engineer Question and Answer Study Guide for Modern Locomotives and Train Handling" was first published in 1991, the last printing was May, 2022.

"The 1st and 2nd Generation Locomotive Handbook" was copyrighted in 2005 and still in print today.

These publications were last written and revised by long time member, retired CSX officer, and recently deceased, John Kissinger.

The associations current name, International Association of Railway Operating Officers(IAROO), was adopted in 1988. We welcome members from all aspects of the industry; railroads, consultants, suppliers, government agency employees, and even those with merely an interest in railroading.

Over the past few decades topics of papers presented have covered a large variety of topics, new equipment, new technology, derailment investigation, safety issues, rule issues, government regulations, environmental issues, various changing standards, and a myriad of other pertinent and critical subjects.

The association has sponsored TTD seminars, one in 2006, and again in 2015, both presented by long time member, and recognized industry expert, Gary Wolf. After half a century of railroaders trying to understand and apply TTD it remains a favorite educational goal for many railroaders.



A timely update of a timeless subject

Track-Train Dynamics 2015 will re-connect with the groundbreaking international government-industry track train dynamics (TTD) research program that began in 1972. TTD was cutting-edge technology at the time and its' concepts remain imbedded in today's railroad industry.

For industry veterans, a chance to update
For less experienced employees, a "must
attend" career learning experience
The wide-reaching, information-packed
agenda includes state-of-the-art train
dynamics information while at the same
time reviewing railroad operations basics
and exploring new technologies.
Distinguished train dynamics expert Gary
Wolf's credentials include serving on
numerous AAR committees during the
Track/Train Dynamics years before founding

Topics include

- . Train Operation & Braking Issues
- Locomotive Basics
- Couplers/Draft Gears
- · Coupler Curving & Angling
- · Train Vehicle Harmonics
- Event Recorders/Video Cameras
- LNG/GenSet Locomotives
- Crew Attention Performance
- Trip Optimizer/LEADER
- Train Make Up PTC
- Train Handling RCL

One of several TTD seminars hosted by IAROO

IAROO HISTORY

Art Regenold, retired NS, and long time IAROO member, spent countless hours researching the history of our association, we are thankful to him for his efforts.

Art provided much more history that was impossible to share in the allotted time.

I have digital copies of all the material provided which I will make available upon request to any member.

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