

The American Society of Mechanical Engineers

The American Institute of Electrical Engineers

The Engineering Institute of Canada

1962

# JOINT RAILWAY CONFERENCE

APRIL 9-10 MON-TUES

OF CONTRACTOR OF CONTRACTOR

TORONTO

KING EDWARD



## AVAILABILITY OF PAPERS BY MAIL

#### **CONFERENCE LOCATION**

All sessions and functions will be held at the King Edward Sheraton Hotel which will be the Headquarters for this conference. The Registration Desk will be manned at all times during meeting hours, and information may be obtained here regarding the conference and activities of the sponsoring societies.

#### REGISTRATION

All persons attending the conference will be required to register. The Conference Registration Desk will be located in the Parlour Floor of the King Edward Sheraton Hotel and will be open during the following hours:

			5:00				
Monday,	April	9 .	8:00	a.m.	to	5:00	p.m.
Tuesday.	April	10	8:00	a.m.	to	3:00	p.m.

#### CONFERENCE FEES

A conference fee of \$5.00 for ASME, AIEE, and EIC members\* and \$8.00 for non-members will be charged. A fee of \$1.00 will be charged to students and there will be no registration fee for the ladies.

\*NOTE—This also includes members of professional societies which have affiliation with EIC, such as I.Mech.E., members of societies in EJC and ECPD, and membersof ATA and NARET.

#### HOTEL RESERVATIONS

To assure that you will have a room for the conference, it is recommended that your hotel reservation be sent in early by mailing the Hotel Form in this program. The hotel has set aside a block of rooms for those attending the conference, which will be held until March 25th. Reservations should thus be made before this date. All reservations will be confirmed in writing.

#### **MEALS & SUBWAY INSPECTION TRIP**

Your cooperation in ordering your tickets for these events as soon as possible will be appreciated. This will help the Committee in the planning of these functions. Please fill out and mail the Advance Registration Form in this program.

#### TRANSPORTATION

Toronto, Canada, is served by the Canadian National, Canadian Pacific, and the Toronto Hamilton & Buffalo Railways. Good train connections exist from various points in the U.S. offering direct service to Toronto. Also, Trans Canadian Airline, American Airline, and others, offer direct flights into Toronto.

#### LADIES PROGRAM

There will be a program for the ladies who intend to join their men at the conference. Various activities have been planned which include a morning coffee hour on Monday and a luncheon and tour of the City on Tuesday.

No papers were available when this program went to press, therefore please do not order any papers listed in this program. Papers will be obtainable at the conference and also by mail upon completion of conference using the following procedure:

#### ASME PAPERS

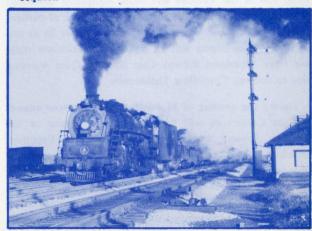
The final ASME listing of available technical papers will be found in the issue of MECHANICAL ENGINEERING containing an account of the conference. Prices are 50 cents to members of ASME; \$1 to non-members, plus postage and handling charges. Payment may also be made by free coupons, or coupons which may be purchased from the Society in lots of ten at \$4 to members; \$8 to non-members. You can save the postage and handling charges by including your check or money order made payable to ASME with your request and sending both to: ASME Order Department, United Engineering Center, 345 East 47th Street, New York 17, N. Y. Papers must be ordered by the paper numbers, otherwise the order will be returned.

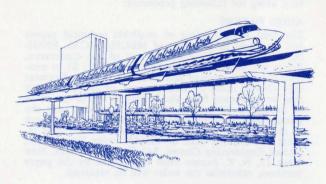
#### AIEE PAPERS

The availability list of AIEE technical papers can be obtained by writing to AIEE, United Engineering Center, 345 East 47th Street, New York 17, N. Y. Be sure to state that you would like to have the list of papers available for the 1962 Joint ASME-AIEE-EIC Railway Conference. After you have obtained the papers list of this conference, you may order the technical papers at the rate of 50 cents to members and \$1\$ to non-members. Be sure to include the paper number with your request.

#### **EIC PAPERS**

The availability list of EIC technical papers can be obtained by writing to EIC, Technical Papers Order Department, 2050 Mansfield Street, Montreal 2, Canada. Be sure to state that you would like to have the list of papers available for the 1962 Joint ASME-AIEE-EIC Railway Conference. After you have obtained the papers list of this conference, you may order the technical papers at the rate of 50 cents to members of EIC and \$1 to non-members, plus postage and handling charges. Be sure to include the paper number with your request. You can save the postage and handling charges by including your check or money order with your request.





## **METROPOLITAN TRANSPORTATION**

The Annual Railroad Conference, a joint activity of the American Society of Mechanical Engineers (Railroad Division) and the American Institute of Electrical Engineers (Land Transportation Committee) has been held in the past at various cities of the United States. In 1962 the Conference will take place at Toronto, and for this occasion the sponsorship is being shared by EIC, the Engineering Institute of Canada.

The theme of the 1962 Railway Conference is "Metropolitan Transportation". The technical sessions will emphasize subjects involved in Urban Transit, in Suburban Railroading, in the Transportation Aspects of Municipal Planning, and in the Vehicles and other equipment developed especially for Metropolitan services, and will be of particular interest to those whose activities or interests lie in any of these fields. Papers will be presented on subjects ranging from Aluminum Subway Cars through Train Automation to Subway Tunnelling Techniques.

During the evening of Monday, April 9th, those attending the Conference will be conducted on a tour of the Toronto Subway System's University Avenue Extension which is currently under construction. Conferees will be able to see some of the new 75' long, 64,000 lb. aluminum subway cars, whose design is outlined in one of the technical papers. In addition, they will examine the construction work on the subway structure itself in various stages rang-

ing from concrete freshly poured at one end to a well finished station at the other. It is anticipated that partial installations will be on view of escalator machinery, drainage pumping, ventilation, lighting, track and acoustic treatment, all in various stages of construction. This will provide an opportunity of learning how these are accommodated and of studying details of construction that are hidden when the equipment is completed. At one end of the construction the two level fly-over junctions or interchanges will be structurally complete, although not equipped, and will give an unusual opportunity of observing how the difficult and conflicting requirements of convenient train operation, safe

exchange of vehicles between different routes and easy passenger interchange have been combined within the closely confined area available in that part of the City.

Plans for social activities include conference luncheons on both April 9th and April 10th and a cocktail hour and buffet supper on the evening of April 9th, preceding the subway tour.

There will be a program for the ladies who plan to join their men at the Conference. Various activities have been planned, which include a morning coffee hour, luncheon, and tour of the City.

## MONDAY, APRIL 9

#### SESSION I

9:30 a.m.

#### Problems of Selecting a Type of Urban Transportation

W. E. P. DUNCAN, Toronto Transit Commission, Toronto, Canada.

(An ASME Paper)

## Rapid Transit Planning—The Backbone of Metropolitan Growth

S. D. FORSYTHE, National Capital Transportation Agency, Washington, D.C.

(An ASME Paper)

#### Railroad Noise Problems

T. D. NORTHWOOD, National Research Council, Ottawa, Canada.

(An EIC Paper)

#### SESSION II

2:00 p.m.

#### The Evolution of a Modern Transit Vehicle Structure

J. W. BORGER, Pullman-Standard Company, Chicago, Illinois.

(An ASME Paper)

#### **Aluminum Subway Cars for Toronto**

I. G. HENDRY, Toronto Transit Commission, Toronto, Canada, and D. H. HELLMANN, Vapor Heating Limited, Montreal, Canada.

(An AIEE Paper)

#### The Toronto Subway Tunnel Shields

T. M. NOSKIEWICZ and J. V. BARTLETT, W. S. Atkins and Associates, Toronto, Canada.

(An EIC Paper)

## TUESDAY, APRIL 10

#### SESSION III

9:30 a.m.

Some Problems Encountered in Design of Automatic Freight Train Controls

R. G. MC ANDREW, General Railway Signal Company, New York, N. Y.

(An AIEE Paper)

### Simulation of Train Operations on a Digital Computer

P. B. WILSON, C. J. HUDSON, and C. SANKEY, Canadian National Railways, Montreal, Canada. (An ASME Paper)

#### Modern Light Sources for the Railroad Industry

R. D. CHURCHILL and L. L. HENDERSON, General Electric Company, Cleveland, Ohio.

(An AIEE Paper)

#### SESSION IV

2:00 p.m.

#### Static Conductor Devices for Railroad Use With Particular Emphasis on Rapid Transit Cars

W. C. ALLISON, Canadian General Electric Company Peterborough, Ont., Canada.

(An AIEE Paper)

#### **Traction Motor Suspension Design**

CARL F. SIMON, JR., General Electric Company, Erie, Pennsylvania.

(An ASME Paper)

#### The Fundamentals of Infrared Hot Box Detection

E. G. MENAKER, General Electric Company, Waynesboro, Virginia.

(An AIEE Paper)

## Silicon Rectifier Cells for Power Rectification on Railway Vehicles

H. S. OGDEN and E. F. WEISER, General Electric Company, Erie, Pennsylvania.

(An AIEE Paper)

(All AIEE Lape

#### ADVANCE CONFERENCE REGISTRATION FORM

Please complete this form and mail it to:

Mr. H. J. Wilkinson 1350 Castlefield Ave., Toronto 19, Canada

	No. of
COMPLETE PACKAGE FEE	Tickets Price Total
Including registration fee, two	
luncheons, social hour, buffet	
supper, and subway inspection (non-members add \$3.00 to the	i trip his
price)	\$21.00
REGISTRATION FEES	
ASME, AIEE, or EIC Member	ers* 5.00
Non-Members	8.00
Students	1.00
Ladies	No fee No fee
MONDAY'S LUNCHEON MONDAY'S BUFFET SUPPER	4.00
SOCIAL HOUR	. α
(Includes cost of the Subway	
Inspection Trip which will be	
held after the Buffet Supper)	8.00
MONDAY - SUBWAY INSPECTRIP ONLY	4.00
TUESDAY'S LUNCHEON	1.00
TUESDAY - LADIES LUNCHI	4.00
& SIGHTSEEING TOUR	2.00
(All prices above include gratuit	
TO COVER THE ARO	TOTAL SUM \$
TO COVER THE ABO A CHECK IS ENCLOS	ED FOR: \$
Please make this check i	payable to
Mr. J. J. HARRIS	-
*NOTE—This also includes m	embers of professional so-
cieties which have af	filiation with EIC, such as
ECPD, and members	of societies in EJC and
PREPAID TICKETS WILL	
FERENCE REGISTRATION D	DESK LOCATED IN THE
KING EDWARD SHERATON	HOTEL.
NAME	
(Please Print—Las	t Name First)
SOCIETY AFFILIATION	
COMPANY AFFILIATION	
MAILING ADDRESS	·····
***************************************	*****************

## RAILWAY CONFERENCE—HOTEL RESERVATION Mail to: King Edward Sheraton Hotel 37 King Street East, Toronto, Canada

(Cut Here)

.... DEP. DATE.

Circle type of room wanted and also rate desired. Room and Bath for one ....\$ 6.50 \$ 7.50 \$ 8.50 Double-Bed for two ...... 12.50 11.50 14.50 Twin-Beds for two ..... 11.50 12.50 14.50 Suites for one person ...... 16.00 20.00 28.00 32.00 Suites for two persons ..... 20.00 25.00 33.00 38.50 Suites (2 rooms-parlor) for 4 ... 40.00 58.50 NAME ....

(Please print - Last name first)

ARR, DATE...

MAILING ADDRESS



You are cordially invited to attend the

1962 JOINT ASME-AIEE-EIC

RAILWAY CONFERENCE

April 9-10, TORONTO, CANADA

NON-MEMBERS WELCOME

ELECTRIC 345 East 47th S

AMERICAN INSTITUTE OF ELECTRICAL ENGINEERS 345 East 47th Street, N. Y. 17, N. Y.

U.S. Postage Non-Profit Org.

PAID

New York, N. Y. Permit No. 5884