

AMERICAN INSTITUTE *of*  
ELECTRICAL ENGINEERS

1884



1930

Forty-sixth

**SUMMER  
CONVENTION**

Royal York Hotel  
Toronto, Canada

June 23-27

1930

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**P R O G R A M**

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## Ladies' Program

The ladies are invited to all events, the following being listed as of special interest to them.

### Monday, June 23

- 10:30 a.m. Opening of Convention  
President's Address, Harold B. Smith
- 2:00 p.m. Drive about City followed by Afternoon Tea at  
Granite Club
- 9:00 p.m. President's Reception—dancing

### Tuesday, June 24

- 12:30 p.m. Trip across Harbor to Luncheon and Bridge at  
Royal Canadian Yacht Club
- 7:00 p.m. Get-Together Dinner and Entertainment

### Wednesday, June 25

- 12:30 p.m. Drive to Old Mill for Luncheon, to be followed by  
Golf on miniature course, or Bridge
- 7:00 p.m. Convention Banquet
- 8:15 p.m. Medal Presentation
- 9:30 p.m. Dancing—cards

### Thursday, June 26

- 9:00 a.m. Boat leaves for trip to new Welland Canal  
Lunch at St. Catharines
- 2:00 p.m. Drive to Niagara Falls
- 9:00 p.m. Dancing on boat

### Friday, June 27

- 12:30 p.m. Luncheon—Presentation of Prizes
- 4:30 p.m. Afternoon Tea

Other entertainment will be announced at the convention.

# Summer Convention of the A. I. E. E.

Toronto, Canada, June 23-27, 1930



THIS program gives an outline of events, a ladies' program, a list of technical sessions together with the papers to be presented at each session. Other information pertaining to the business features, inspection trips, sports and social functions of this convention is contained on the following pages.

Additional information on all features of the convention may be obtained at the Convention Registration Desk.

## Registration

All members and guests should register promptly after arrival at the Convention Registration Desk, Convention Floor, Royal York Hotel.

Tickets for the various events are available in book form and should be secured, as far as possible, at time of registration. Tickets not required will be removed from the book with corresponding reduction in charge. Separate tickets can be secured later when change of plans of any member makes this necessary.

## Convention Rooms

The Convention Floor of the Royal York Hotel contains the Banquet Hall, Concert Hall, and Ball Room as well as some minor rooms. All technical sessions and all social events held at the hotel will take place in one or other of these rooms. The assign-

ment of rooms for the various events is posted on the bulletin board at the Registration Desk.

### **Annual Business Meeting**

The 1930 Annual Business Meeting of the Institute will be held at 10:30 A.M., Monday, June 23. Following the address of welcome, the annual report of the Board of Directors will be presented in abstract. The Committee of Tellers will announce the election of officers for 1930-1931 and report on Constitutional Amendments. The President-Elect will be introduced, the National Prizes for papers will be presented, and President Harold B. Smith will deliver the presidential address.

### **Conference of Officers, Delegates, and Members**

The Conference of Officers, Delegates and Members will be held at 2:00 p.m., Monday, June 23, and continued at 2:00 p.m., Tuesday, June 24. These conferences will be attended by Institute officers and delegates, and all members who are interested are invited to participate.

### **Lamme Medal Presentation**

The Lamme Medal awarded by the Institute for the year 1929 to Mr. R. E. Hellmund, East Pittsburgh, Pa., "for his contributions to the design and development of rotating electrical machinery" will be presented to him at 8:15 p.m., Wednesday, June 25, the evening of the Convention Banquet.

### **President's Reception**

The President's reception will take place on Monday evening, June 23rd. This will be followed by a brief organ recital, after which there will be dancing.

### **Get-Together Dinner**

The purpose of this event is indicated by the name. It is scheduled for Tuesday evening. There will be no formal speech-making, but many entertaining features designed to make an enjoyable evening. Tickets will be \$2.50.

### **Convention Banquet**

The Convention Banquet will be held on Wednesday evening, June 25th. The Lamme Medal will be presented. The chief speaker will be Mr. C. A. Magrath, Chairman of the Canadian Section of the International Waterways Commission and Chairman of the Hydro-Electric Power Commission of Ontario. Tickets \$5.00 per person.

### **Excursion and Inspection Trip**

Thursday an all-day trip has been arranged. Members and guests taking this trip will leave Toronto at 9:00 a.m., crossing Lake Ontario by boat, to view the new Welland Canal. Luncheon will be served at St. Catharines, followed by a drive to Niagara Falls and inspection of the Queenston Plant of the Hydro-Electric Power Commission or other power plants at Niagara Falls. There will be dancing on board the boat during the return to Toronto. The charge will be \$4.00 per person, including meals.

### **Ladies' Entertainment**

In addition to the foregoing, many entertainment features are listed in the ladies' program. Drives in and about the city, followed by luncheons, afternoon teas, golf on a miniature course, or bridge are arranged for their entertainment.

On another afternoon it has been planned to take the ladies for launch rides along the lake shore, in

the vicinity of the harbor and have tea served afterwards at the Royal Canadian Yacht Club. There will be two dances during the Convention, in the evening.

A large local Committee of Ladies will do everything possible to look after the comfort and pleasure of visiting ladies, both individually and collectively.

### **Rules on Presenting and Discussing Papers**

At the technical sessions papers will be presented in abstract, ten minutes being allowed for each paper unless the presiding officer meets with the others preceding the session to arrange the order of presentation and allotment of time for papers and discussion.

Any member is free to discuss any paper when the meeting is thrown open for general discussion. Usually five minutes is allowed to each discussor.

It is preferable that a member who wishes to discuss a paper give his name beforehand to the registration bureau or to the presiding officer of the session at which the paper is to be presented.

Each discussor is to step to the front of the room and announce, so that all may hear, his name and professional affiliations.

**NOTICE**—Discussions at the technical sessions will not be taken down by a reporter. Each discussor should prepare and submit his remarks in writing. Discussion received by the Editorial Department by July 10 will be considered for publication.

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# PROGRAM

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Eastern Daylight Saving Time is indicated throughout this Program

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## Monday, June 23

- 9:00 a.m. Registration
- 10:30 a.m. Annual Business Meeting of the Institute  
Address of Welcome  
Annual Report of Board of Directors (in abstract),  
F. L. HUTCHINSON, *National Secretary*  
Report of Tellers' Committee on  
(a) Election of Officers; Introduction of and  
response from President-Elect  
(b) Constitutional Amendments  
Presentation of Prizes for Papers  
Presidential Address, HAROLD B. SMITH
- 2:00 p.m. Conference of Officers, Delegates, and Members  
Qualifying Round for Mershon Trophy  
Tennis  
Ladies' Drive about City followed by Afternoon Tea  
at Granite Club
- 4:30 p.m. Afternoon Tea
- 9:00 p.m. President's Reception—dancing

## Tuesday, June 24

- 9:00 a.m. Registration
- 9:30 a.m. Two Technical Sessions:  
(a) Protective Devices (Symposium on  
Transmission Line Relays);  
(b) Transportation
- 12:30 p.m. Section and Branch Delegates' Luncheon  
Ladies' Trip across Harbor to Luncheon and  
Brigade at Royal Canadian Yacht Club
- 2:00 p.m. Conference of Officers, Delegates, and Members  
—continued  
Trips as scheduled  
Sports as scheduled—First Round for Mershon  
Trophy
- 4:30 p.m. Afternoon Tea at Royal Canadian Yacht Club
- 7:00 p.m. Get-Together Dinner and Entertainment

**Wednesday, June 25**

- 9:30 a.m. Three Technical Sessions:  
(c) Automatic Stations;  
(d) Selected Subjects and Technical Committee Reports;  
(e) Transmission
- 12:30 p.m. Directors' Luncheon and Meeting  
Ladies' Drive to Old Mill for Luncheon, to be followed by Golf on miniature course, or Bridge
- 2:00 p.m. Trips as scheduled  
Sports as scheduled—Second Round for Mershon Trophy
- 4:30 p.m. Afternoon Tea
- 7:00 p.m. Convention Banquet
- 8:15 p.m. Medal Presentation
- 9:30 p.m. Dancing—Cards

**Thursday, June 26**

- 9.00 a.m. Boat leaves for trip to new Welland Canal  
Lunch at St. Catharines
- 2:00 p.m. Inspection of Welland Canal  
Trips to Queenston and Niagara Falls  
Finals—Golf and Tennis
- 9:00 p.m. Dancing on boat

**Friday, June 27**

- 9:30 a.m. Two Technical Sessions:  
(f) Electrical Machinery and Transmission (Symposium on Coordination of Line, Station, and Apparatus Insulation);  
(g) Communication
- 12:30 p.m. Luncheon—Presentation of Prizes
- 2:00 p.m. Technical Session:  
(h) Electrical Machinery and Power Generation
- 4:30 p.m. Afternoon Tea



# TECHNICAL SESSIONS

## Tuesday

9.30 a.m.—Parallel Sessions A and B

### (A) Protective Devices—Symposium on Transmission Line Relays

E. A. HESTER, *Chairman*

1. The Problem of Service Security in Large Transmission Systems  
PAUL ACKERMAN  
Consulting Electrical Engineer
2. Transmission System—Relay Protection, No. III  
W. W. EDSON  
The Edison Electric Illuminating Company of Boston
3. Modern Requirements for Protective Relays on Important System Interconnections  
O. C. TRAVER and L. F. KENNEDY  
General Electric Co.
4. Directional Ground Relays  
E. E. GEORGE and R. H. BENNETT  
Tennessee Electric Power Co.
5. High-Speed Protective Relays  
L. N. CRICHTON  
Westinghouse Electric & Mfg. Co.

### (B) Transportation

SIDNEY WITHINGTON, *Chairman*

- Electric Power Consumption for Yard Switching  
P. H. HATCH  
N. Y., N. H. & H. R. R. Co.
- Control Systems for Oil and Gasoline Electric Locomotives and Cars  
N. L. FREEMAN  
Westinghouse Electric & Mfg. Co.
- Electric Transmission and Control of Power from Internal Combustion Engines for Transportation  
S. T. DODD  
General Electric Co.
- Auxiliaries for High-Voltage Direct-Current Multiple Unit Cars  
C. J. AXTELL  
General Electric Co.
- Auxiliary Circuits for High Voltage D-C. Motor Car Equipments  
O. K. MARTI and W. A. GIGER  
American Brown Boveri Co., Inc.
- Railbonding Practice and Experience on Electrified Steam Railroads  
H. F. BROWN  
N. Y., N. H. & H. R. R. Co.

# Wednesday

9.30 a.m.—Parallel Sessions C, D and E

## (C) Automatic Stations

F. ZOGBAUM, *Chairman*

An Electron Tube Telemetering System

A. S. FITZGERALD  
R. C. A. Victor Company, Inc.

Development of a Two-Wire Supervisory Control System with Remote Metering

R. J. WENSLEY and W. M. DONOVAN  
Westinghouse Electric & Mfg. Co.

Centralized Control of System Operation

J. T. LAWSON  
Public Service Electric & Gas Co.

Automatic Power Supply for Steel Mill Electrification

ROBERT HARRY  
Alliance Machine Co.

1000-Kw. Automatic Mercury Arc Rectifier Substation of the Union Railway Company, New York

W. E. GUTZWILLER and OTTO NAEF  
American Brown Boveri Co.

Miniature Switchboards

PHILIP SPORN  
American Gas & Electric Co.

## (D) Selected Subjects and Technical Committee Reports

Professor C. E. MAGNUSSON, *Chairman*

Rural Line Construction in Ontario

R. E. JONES  
Hydro-Electric Power Commission of Ontario

Mutual Impedances of Ground Return Circuits—Some Experimental Studies

H. E. BOWEN  
American Telephone & Telegraph Co.  
C. L. GILKESON  
National Electric Light Association

Effects of the Magnetic Field on Lichtenberg Figures

C. E. MAGNUSSON  
University of Washington

A Survey of Room Noise in Telephone Locations

W. J. WILLIAMS  
National Electric Light Association  
R. G. McCURDY  
American Telephone & Telegraph Co.

Reports of Technical Committees reviewing the advances in theory and practise throughout the year in various fields of the electrical industry are listed as follows. These reports will not be presented but copies will be available and they may be discussed during this session.

AUTOMATIC STATIONS	F. Zogbaum, Chairman
ELECTRICAL COMMUNICATION	G. A. Kositzky, Chairman
ELECTRICAL MACHINERY	P. L. Alger, Chairman
ELECTRIC WELDING	A. M. Candy, Chairman
ELECTROPHYSICS	O. E. Buckley, Chairman
GENERAL POWER APPLICATIONS	J. F. Gaskill, Chairman
INSTRUMENTS AND MEASUREMENTS	E. S. Lee, Chairman
APPLICATIONS TO IRON AND STEEL PRODUCTION	M. M. Fowler, Chairman
PRODUCTION AND APPLICATION OF LIGHT	G. S. Merrill, Chairman
APPLICATIONS TO MARINE WORK	W. E. Thau, Chairman
APPLICATIONS TO MINING WORK	Carl Lee, Chairman
POWER GENERATION	F. A. Allner, Chairman
POWER TRANSMISSION AND DISTRIBUTION	H. R. Woodrow, Chairman
PROTECTIVE DEVICES	E. A. Hester, Chairman
ELECTRICAL TRANSPORTATION	Sidney Withington, Chairman

## (E) Transmission

H. R. WOODROW, *Chairman*

### The 220,000-Volt System of the Hydro-Electric Power Commission of Ontario

E. T. J. BRANDON  
Hydro-Electric Power Commission of Ontario

### The Analytics of Transmission Calculations

T. R. ROSEBRUGH  
University of Toronto

### Study of the Effect of Short Lengths of Cable on Traveling Waves

K. B. McEACHRON  
General Electric Co.  
J. G. HEMSTREET  
Consumers Power Co.  
H. P. SEELYE  
Detroit Edison Co.

### Buried Distribution Type Transformers

C. E. SCHWENGER  
Toronto Hydro-Electric System

### Dancing Conductors

A. E. DAVISON  
Hydro-Electric Power Commission of Ontario

# Friday

9.30 a.m.—Parallel Sessions F and G

## (F) Electrical Machinery and Transmission— Symposium on Coordination of Line, Station, and Apparatus Insulation

H. R. WOODROW, *Chairman*

1. Rationalization of Station Insulating Structures with Respect to Insulation of the Transmission Line  
C. L. FORTESCUE  
*Westinghouse Electric & Mfg. Co.*
2. The Effect of Transient Voltages on Dielectrics—IV;  
Law of Impulse Sparkover and Time Lag  
F. W. PEEK, JR.  
*General Electric Co.*
3. Rationalization of Transmission Insulation Strength, II  
PHILIP SPORN  
*American Gas and Electric Co.*
4. Recommendations on Balancing Transformer and Line Insulations on Basis of Impulse Voltage Strength  
V. M. MONTSINGER  
*General Electric Co.*  
W. M. DANN  
*Westinghouse Electric & Mfg. Co.*
5. Coordination of Insulation as a Design Problem  
G. D. FLOYD  
*Hydro-Electric Power Commission of Ontario*
6. Standards of Insulation and Protection for Transformers  
J. A. JOHNSON  
*Buffalo, Niagara and Eastern Power Corp.*  
E. S. BUNDY  
*Niagara, Lockport & Ontario Power Co.*
7. Essential Factors in the Coordination of Line, Station,  
and Apparatus Insulation  
A. E. SILVER and H. L. MELVIN  
*Electric Bond and Share Co.*

## (G) Communication

G. A. KOSITZKY, *Chairman*

### I. Symposium on Toll Telephone Service

1. General Switching Plan for Telephone Toll Service  
H. S. OSBORNE  
*American Telephone & Telegraph Co.*
2. Long Telephone Lines in Canada  
J. L. CLARKE  
*Bell Telephone Company of Canada*

3. Long Distance Cable Circuit for Program Transmission  
A. B. CLARK  
American Telephone & Telegraph Co.  
C. W. GREEN  
Bell Telephone Laboratories, Inc.
4. Transmission Characteristics of Open-Wire Telephone Lines  
E. I. GREEN  
American Telephone & Telegraph Co.
5. Study of Telephone Line Insulators  
L. T. WILSON  
American Telephone & Telegraph Co.

## II. Symposium on Two-Way Television

1. Image Transmission  
H. E. IVES, F. GRAY and M. W. BALDWIN  
Bell Telephone Laboratories, Inc.
2. Synchronization System  
H. M. STROLLER  
Bell Telephone Laboratories, Inc.
3. Sound Transmission System  
D. G. BLATTNER and L. G. BOSTWICK  
Bell Telephone Laboratories, Inc.

2 p.m.—Session H

### (H) Electrical Machinery and Power Generation

P. L. ALGER, *Chairman*

Effects of Lightning Voltages on Rotating Machines and Methods of Protecting against Them

F. D. FIELDER and E. BECK  
Westinghouse Electric & Mfg. Co.

Voltage Oscillations in Armature Windings under Lightning Impulses—I

E. W. BOEHNE  
General Electric Co.

Vertical Shaft 25,000 Kv-a. Synchronous Condensers

H. A. RICKER, J. R. DUNBAR and R. E. DAY  
Canadian Westinghouse Co., Ltd.

Metal-Clad, Gum-Filled Switchgear

L. B. CHUBBUCK  
Canadian Westinghouse Co., Ltd.

East River Generating Station of the New York Edison Company

C. B. GRADY, W. H. LAWRENCE and R. H. TAPSCOTT  
New York Edison Co.

Present Day Hydro Power Practise in Central Europe

A. V. KARPOV  
Aluminum Company of America

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# T R I P S

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**WELLAND CANAL**—The outstanding trip will be an all-day outing, crossing Lake Ontario to visit the new Welland Canal, which embraces some features excelling anything hitherto undertaken in canal construction. Those desiring to do so will be able to spend the afternoon at the Queenston Plant of the Hydro-Electric Power Commission or at various power plants at Niagara Falls. Special entertainment features are being arranged in connection with this trip in a way that will ensure a day of general relaxation and enjoyment.

The charge for the Welland Canal Trip will be \$4.00 per person, including meals.

**LEASIDE STATION**—The Leaside Station of the Hydro-Electric Power Commission on the outskirts of Toronto is Canada's first 220-kv. receiving station. It has many interesting features, including two 25,000-kv-a. outdoor synchronous condensers.

#### OTHER POWER STATIONS

H. E. P. C.—Bridgeman—110-kv. Station.  
 Wiltshire—110-kv. Station.  
 Strachan Ave.—110-kv. Station and Laboratories.

#### Toronto Hydro-Electric System

Automatic High Power Mercury Arc Rectifier  
 Railway Station.  
 Supervisory Control Substations.  
 Local Dispatching Office in Duncan Street  
 Station.

#### ELECTRIC MANUFACTURING PLANTS

Davenport Works—Canadian General Electric Co.  
 Hamilton Works—Canadian Westinghouse Co.  
 Mount Dennis Plant—Ferranti Electric Limited.

#### POINTS OF INTEREST

Hillcrest Shops—Toronto Transportation Commission.  
 Toronto Harbor Development.  
 University of Toronto Buildings.  
 Royal Ontario Museum.

There are also many manufacturing plants to which trips will be arranged as desired.

Inquiries concerning the scheduling of the above trips should be made at the Convention Registration Desk.

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# S P O R T S

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## GOLF

The main event for golfers will be the annual tournament for Mershon Trophy, which will be played over the course of the Weston Golf and Country Club.

As it is proposed to present the prizes at the luncheon on Friday, and as the match play in this competition will consume all other available time, it is essential that the qualifying round be completed on Monday. This will mean that guests arriving after Monday will be unable to enter the Mershon Cup competition.

The competition will consist of a qualification round (handicap medal play) of eighteen holes, followed by match play (handicap)

The sixteen low net scores will qualify for the match play rounds, which will be played on Tuesday p. m., Wednesday p. m., and Thursday, a. m. and p. m.

Arrangements will be made by the Committee so that officers, section delegates, et. al., may play their qualification rounds at any particular time on Monday, so as to avoid missing their scheduled meetings.

The Committee are also arranging other events, the details of which will be given out at registration. These events will not be confined to the course of the Weston Golf & Country Club, as arrangements are being made to allow members and registered guests to play over a number of courses in the Toronto vicinity, and all scores will count in these competitions.

It is hoped that the chief among these additional events will be an International Team Competition for the American Canadian Team championship of the Institute, arrangements for which are now being worked out.

No greens fees will be charged members or registered guests for any play during the Convention, and transportation to and from all courses will be provided.

## TENNIS

The annual Mershon Trophy competition in Men's Singles will be played, together with Men's Doubles, and if sufficient entries can be secured, Ladies' Singles and Mixed Doubles will also be arranged.

The courts on which these events will be played will be announced later, but tennis players can be assured that excellent courts (probably clay) will be available for all who wish to use them.

Entries for all these events should be in the hands of the Committee not later than Monday afternoon.

# Officers

1929-1930

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## PRESIDENT

Harold B. Smith

## JUNIOR PAST PRESIDENTS

Bancroft Gherardi

R. F. Schuchardt

## VICE-PRESIDENTS

E. B. Merriam

Herbert S. Evans

H. A. Kidder

W. S. Rodman

W. T. Ryan

C. E. Fleager

B. D. Hull

E. C. Stone

G. E. Quinan

C. E. Sisson

## DIRECTORS

I. E. Moulthrop

J. Allen Johnson

H. C. Don Carlos

A. M. MacCutcheon

F. J. Chesterman

A. E. Bettis

F. C. Hanker

W. S. Lee

E. B. Meyer

J. E. Kearns

H. P. Liversidge

C. E. Stephens

## NATIONAL TREASURER

George A. Hamilton

## NATIONAL SECRETARY

F. L. Hutchinson



## Meetings and Papers Committee

A. E. KNOWLTON, *Chairman*

C. S. RICH, *Secretary*

P. L. Alger	H. A. Kidder
F. A. Allner	S. M. Kintner
Edward Bennett	G. A. Kositzky
P. H. Brace	Carl Lee
O. E. Buckley	E. S. Lee
V. Bush	G. S. Merrill
A. M. Candy	L. W. W. Morrow
H. P. Charlesworth	C. E. Skinner
M. M. Fowler	W. E. Thau
J. F. Gaskill	Sidney Withington
W. H. Harrison	H. R. Woodrow
E. A. Hester	T. A. Worcester
	F. Zogbaum

## General Convention Committee

C. E. Sisson	.....	<i>Chairman</i>
A. H. Hull	.....	<i>Vice-Chairman</i>
W. L. Amos	.....	<i>Secretary</i>
A. E. Knowlton	.....	<i>Meetings and Papers</i>
W. B. Kowenhoven	.....	<i>Sections</i>

### OTHER MEMBERS

W. C. Adams	H. Milliken
C. V. Christie	J. Morse
J. L. Clarke	W. F. McKnight
J. R. Cowley	J. Teasdale
E. P. Fetherstonhaugh	J. B. Woodyatt
	J. A. Johnson

### Sub-Committee Chairmen

W. P. Dobson	.....	<i>Meetings and Papers</i>
W. A. Bucke	.....	<i>Finance</i>
H. U. Hart	.....	<i>Finance</i>
A. B. Cooper	.....	<i>Entertainment</i>
H. C. Don Carlos	.....	<i>Sports</i>
J. F. Neild	.....	<i>Transportation</i>
M. B. Hastings	.....	<i>Trips</i>
F. F. Ambuhl	.....	<i>Hotels and Registration</i>
F. R. Ewart	.....	<i>Publicity</i>
H. C. Barber	.....	<i>Ladies</i>

## Convention Sub-Committees

### LOCAL MEETINGS AND PAPERS

W. P. Dobson, <i>Chairman</i>		
B. L. Barnes	T. W. Eadie	Prof. H. W. Price
Prof. C. V. Christie	G. D. Floyd	C. E. Schwenger
L. B. Chubbuck	D. A. McKenzie	E. M. Wood

### FINANCE

W. A. Bucke, <i>Chairman</i>		
H. U. Hart, <i>Vice-Chairman</i>		
E. T. J. Brandon	A. S. Edgar	C. C. Rathgeb

### ENTERTAINMENT

A. B. Cooper, <i>Chairman</i>		
F. F. Ambuhl	C. H. Hopper	A. S. McCordick
H. C. Barber	T. C. James	J. F. Neild
E. T. J. Brandon	A. G. Lang	H. C. Parker
H. C. Don Carlos	G. D. Y. Leacock	C. C. Rathgeb
W. P. Dobson	Scott Lynn	A. Schofield
M. B. Hastings	Wills MacIachlan	J. Showalter

### SPORTS

H. C. Don Carlos, <i>Chairman</i>		
W. B. Buchanan	A. S. Edgar	C. W. Hookway
L. B. Chubbuck	A. H. Frampton	W. R. McRae
G. F. Drewry	S. E. M. Henderson	John Murphy
	P. B. Yates	

### TRANSPORTATION

J. F. Neild, <i>Chairman</i>		
H. T. Gibbs	M. J. McHenry	T. R. Millar
J. B. Kitchen	W. R. McRae	J. H. Morrice
	E. B. Walker	

### TRIPS

M. B. Hastings, <i>Chairman</i>		
J. Dibblee	W. J. Gibson	A. L. Mudge
	J. Showalter	

### HOTEL AND REGISTRATION

F. F. Ambuhl, <i>Chairman</i>		
A. W. Bradt	T. R. C. Flint	D. A. McKenzie
J. W. Chipperfield	G. D. Floyd	F. Sutherland
T. W. Eadie	G. L. Lillie	E. M. Wood
	J. Showalter	

### PUBLICITY

F. R. Ewart, <i>Chairman</i>	
G. A. Brace	Osborne Mitchell

### LADIES

H. C. Barber, <i>Chairman</i>		
Mrs. Amos	Mrs. Cooper	Mrs. Hull
Mrs. Archer	Mrs. Dobson	Mrs. McTavish
Mrs. Barber	Mrs. Fraser	Mrs. Mickler
Mrs. Brandon	Mrs. Hastings	Mrs. Neild
Mrs. Bucke	Mrs. Hinch	Mrs. Saunders
Mrs. Caster	Mrs. Hookway	Mrs. Sisson

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MEMORANDUM

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