



THE INSPECTOR

JUNE 1989

HAPPY 70TH BIRTHDAY, C. S. A.

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On April 24th the members of the Electrical Inspectors Association were royally entertained when they were hosted to dinner and a tour of the facilities by Serge Bousquet, Manager of the Pacific Region on CSA, in honour of the Seventieth Birthday of CSA.

Dinner was enjoyed at the Monterey Restaurant, followed by a short business meeting.

CSA lapel pins were distributed to everyone. A special feature of the dinner was an enormous birthday cake.

Serge Bousquet gave a short talk outlining the organization's 70 years of service

"1989 is particularly meaningful for CSA - as we are celebrating our 70th year of operation" said Serge. He went on to outline how four days before Christmas in 1918, a committee on Canadian Engineering Standards decided to establish the Canadian Engineering Standards Association (CESA).

A "Memorandum of Agreement" was developed and subsequently signed on January 9th, 1919, with the first charter being issued by the Federal Government; on January 21st, 1919.

.....over

C. S. A. continued

The Agreement constituted the Association's first bylaws and established a main committee (known today as the Board of Directors) to govern CESA. In 1944 the name CESA was changed to CSA - The Canadian Standards Association.

CSA has had a long and successful history. It is well recognized, both in Canada and abroad, and with this as background, there can be no doubt of an exciting and challenging future.

"CSA has maintained a facility in British Columbia for over 30 years. Since that time the office has grown from one engineer and a secretary in a rented office to today, where we have a diverse staff of 70, consisting of technical experts in multiple fields. Our main two-story facility houses administration, engineering and testing services.

The CSA Field Service Representatives, Audits and Investigations and Information Services are located nearby in a separate building.

"Our main facility comprises 18,000 sq. ft., the annex 4800 sq. ft. and an external warehouse 1,000 sq. ft., for a total of 24,000 sq. ft."

The primary function of the Pacific Region office is to assist manufacturers in obtaining certification of their products and services. We are equipped to handle mainly electrical and electronic products such as home entertainment equipment, EDP Information processing equipment and electro-medical equipment. We are also equipped to test and certify products such as plumbing fixtures, industrial control equipment, lighting products and recreational vehicles.

Serge also mentioned that CSA is coming out with the next edition of the Canadian Electrical Code and that it will be distributed through the office in looseleaf and bound format. It is expected to be published around the same time as the Electricians' Handbook.

Following the illuminating talk, the group then went to the main CSA facility at 5760 Minoru Boulevard, where they were separated into four main groups to facilitate the tours of inspection. While two groups were touring the office and laboratory facilities, two groups viewed "CSA - a Part of your Life" video.

Serge Bousquet, Denis Hegan, Layton Newman and Bill Hegel, CSA staff, were tour guides. Bill Simpson, Audits and Investigations, gave each group a talk on his specific function, and showed the groups his investigation room where he examines equipment.

Four technicians from CSA were also on hand to demonstrate and answer questions on various laboratory tests that are part of the certification process.



WHO'S IN THE NEWS?

ALF LITJENS has retired from his work in Surrey, and has moved to Gibson's. All wish him well in his retirement.

WALTER BRUGGER, formerly an Inspector for the Branch in Langley, is now an Inspector with the City of Vancouver.

PRESIDENT'S MESSAGE

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Once again I have received the courtesy of an invitation from the Electrical Contractors Association for myself and my wife to attend the President's Ball, part of their Annual General Meeting.

This year the meeting was held at the new Coast Bastion Inn in Nanaimo. Facilities were first rate and the program and entertainment were certainly enjoyable, especially the "manufacturers' night" complete with an "oom-pah-pah" band.

Joe Laminski, Provincial manager of Field Operations, and Wilf Glue, Provincial Safety Branch electrical inspectors supervisor in Nanaimo, were present.

There is great satisfaction to me in the cooperation we enjoy with such organizations as the Electrical Contractors Association and the Electric Service League. Such liaison cannot fail, in my opinion, to broaden our sphere and keep our members more aware of what is happening in allied areas.

Activity within our own organization will slacken a little for the summer holiday time and I hope our fall meeting will have a bumper attendance of enthusiastic members with lots of progressive ideas.

Have a good summer!

E. S. A. C. REPORT

Jim Barker, who is the representative from the Electrical Inspectors Association to the Electric Safety Advisory Committee reports that at the most recent meeting of that Committee nothing definitive was decided. Central to the discussion and careful thought was the General Safety Regulation.

As the work of the present committee has continued, it has become apparent that reaching a consensus is proving harder to achieve than was at first thought. With such wide representation, however, committee members believe that whatever effort is required to reach agreement is warranted.

To continue the work of coordination a new five-member sub-committee was struck to deal with the main issues. Dave Jackson, for the Municipalities; Joe Laminski for the Electric Safety Branch; Chris Pilkey for the Electric Contractors Association; Chris MacGregor, Professional Engineer; and Ivan Herick for B. C. Hydro.

Jim Barker is optimistic that the June 21 meeting will have some substantial results to show for the effort.

LETTERS TO THE EDITOR

Following the article in the Newsletter about GFCIs a letter was received by the Editor from which this is an excerpt:

".....it behooves me to put in a plug for safety.

"You have written on the subject of Ground Fault Circuit Interrupters - 'The GFCI instantly senses unwanted leakage current on the ground wire and turns off the power...' While this statement is correct, it would perhaps be more accurate to have said that the GFCI operates when a current DIFFERENTIAL exists between a hot and a neutral conductor of the protected circuit.

"My point is not to be pedantic, however, but rather to draw attention to the fact that this kind of chatter about GFCIs often leaves the lay public with the impression that GFCIs are the be-all-end-all safety device that will protect them from electrocution. In this sense, we are doing the public a serious disservice. What we should also be telling people is that just one 15A GFCI is capable of electrocuting the whole neighbourhood IF CONTACT IS MADE BETWEEN ONLY THE HOT AND THE NEUTRAL CONDUCTORS of a GFCI 'protected' circuit.

Douglas Warrington.

EDITORIAL BOARD

Ernie Mortimer has just resigned from his service on the Association's Editorial Board, due to his new location in Maple Ridge and the inconvenience of attending meetings.

Ernie will be missed. He has been on the Editorial Board ever since he held office as President of the Association.

Because of this and other changes, an appeal is being

made by the Editor at this time for any member who might be interested in becoming part of the Editorial Board.

This Editorial Board meets once every couple of months. Some knowledge of and interest in journalism would be helpful although actual experience is not really necessary.

Any member interested should phone the Editor at 430-3469 and discuss the matter.

CONFUSION OVER FUSION

by

GEORGE WARD

When B. Stanley Pons of the University of Utah and Martin Fleischmann of the University of Southampton called a press conference on March 23 of this year they catapulted the scientific community into one of the most exciting and controversial debates of this century. If their claims were true the utopian dream of cheap energy that would last forever, that would not deplete the resources of our planet, and that would not have any byproducts that would pollute our environment, would finally come true.

Scientists have been seeking for this energy for most of the twentieth century and billions of dollars have been spent in experiments and for equipment ranging all the way from intense heat and pressure devices to high powered lasers. Now these two chemists claim to have created fusion in a test tube using a platinum anode, a palladium cathode, deuterium (heavy water) and a twelve volt automobile battery.

Understandably the scientific world greeted the announcement with scepticism and even derision. Dr. Erich Vogt of TRIUMPF has been particularly critical of the claims for cold fusion. However, many laboratories, including one at Simon Fraser University, have rushed into action in an attempt to duplicate the experiment. Now, after three months, the critics seem to have established that the announcement of cold fusion in a test tube was premature at least, and an outright hoax at worst.

Regardless of the outcome of this debate, we do know that the practical applications of fusion energy to such uses as electrical power generation are not likely to be available to us until well into the next century, perhaps thirty or forty years from today.

But it is interesting to us, as people involved in the use and safety of electrical

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TRIBUTE

The members of the Electrical Inspectors Association were recently saddened by the passing of DENIS HEGAN, Assistant General Manager of the Pacific Region of the Canadian Standards Association

His untimely death took place very suddenly in Richmond on May 3, 1989, at the age of 60 years. He is survived by his wife, Pat, his son and daughter as well as a grandson and his mother, living in Northern Ireland. Denis was born in Linavady, Northern Ireland, and came to Canada with his wife in July 1957.

Denis' career at CSA began in June 1958 as an engineer and he progressed through various levels and management positions before his transfer to Vancouver in 1976. Since 1976 he was Assistant Region Manager, Pacific Region, providing a valuable link in continuity as the region grew from a handful of workers to nearly seventy employees.

Although he did not belong to the Electrical Inspectors Association, Denis worked closely with some of the members and assisted with many of the special activities undertaken by the Association. He will be missed.



FUSION (continued)

energy, to imagine what the world would be like if fusion generators were practical.

Such a generator would require a source of water, energy input which would probably be electricity, and very little else.

If it were possible to build fusion generators in sizes ranging from 20 kw and up, we could place them in every occupancy; each home, factory, shop or building would have its own source of power. The fusion generator would produce steam that could drive a small turbine which would be the prime mover for a generator or generators, if both AC and DC were required in a building. The exhaust from the turbine would provide heat for a home, or process steam for a factory.

Such a power source would make unnecessary power utilities, generating stations, whether hydro, oil or coal fired, atomic, or even fusion.

Transmission lines would become a thing of the past and we could tear up the "Rules for Overhead Lines". Our great hydro dams would join the pyramids as artifacts of the past and OPEC would have to resort to setting world prices for camels and dates.

Perhaps a fusion generator might some day become light enough to be placed in a vehicle or even an aircraft, and then there would be no need at all for

hydrocarbon fuels. This may never be practical, but it is certain that if unlimited electricity were available from fusion generation, the incentive to produce a practical battery driven car would be very great and the automobile engine would be found only in museums.

The only certainty, however, is that this is now only a dream and that it is far in the future. Your present car will no doubt wear out long before fusion makes it obsolete and the "Rules for Overhead Lines" will be with us for many years to come.

welcome new members

A warm welcome is extended to all the new members of the Association:

TED ASHMAN, City of Vancouver, Inspector.

ERNIE LOFSTROM, City of Vancouver, Inspector.

IVAN PYE, Electric Safety Branch, Abbotsford, Inspector.

LUIS CORDEIRO, Fred Welsh Electric, Associate.