

H. Cole  
1955/56

# INSTRUMENT SOCIETY of AMERICA

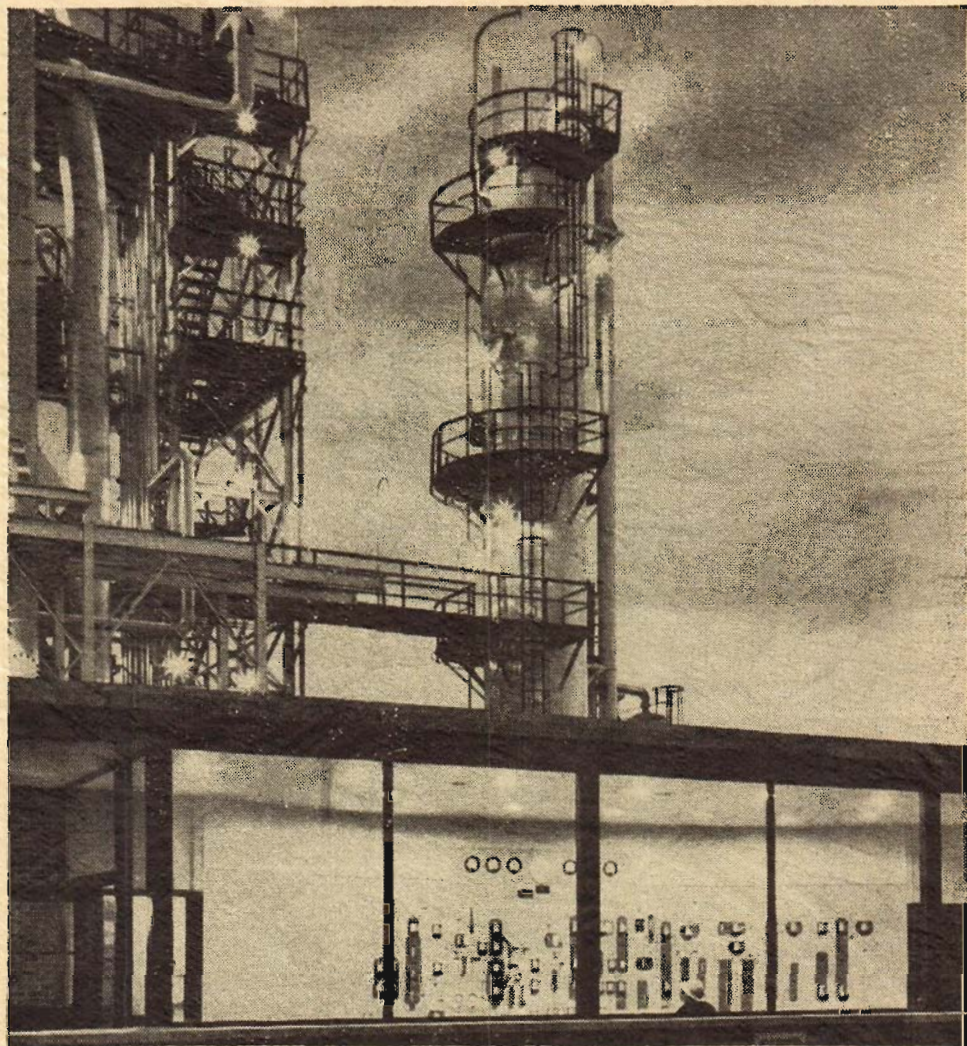


SARNIA SECTION



Monthly Bulletin





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# *The Instrument Society of America*

## **SARNIA SECTION**

has as its objective the advancement of the arts and sciences associated with the theory, design, and use of measuring and control instruments in the various industries in the Sarnia area.

The immediate benefits derived by the Sarnia members include a monthly meeting at which a qualified speaker discusses an instrument subject after which members fraternize with other instrument men and interchange ideas and news at a social hour, a subscription to the "I.S.A. JOURNAL", a subscription to the Sarnia Section "BULLETIN", access to all technical data, servicing techniques and standardization policies developed by the National Committees of the ISA and an annual school for mechanics and technicians.

As a member of the National body of the Instrument Society of America, a rapidly growing and influential technical society, the member partakes indirectly in the progress of instrumentation made possible by the work of the various National Committees.

Executive Officers for the 1955-56 season are:

Honorary President	F. A. BAIN Chief Refiner, Sun Oil Co. Ltd.
President	LARRY HALL Sun Oil Co. Ltd.
Vice-President	HAROLD KOHLMEIER Polymer Corp. Ltd.
Secretary	RON ASSELSTINE Canadian Oil Refineries Ltd.
Treasurer	R. J. ROSE Catalytic Const. Ltd.

Meetings are held on the fourth Monday of each month from September to May inclusive at 8.00 P.M. The meetings are held at the Sarnia Y.M.-Y.W.C.A. unless otherwise announced.

Anyone earning his livelihood through the manufacture or use of instruments and who is acceptable to the executive body may become a member of the Sarnia Section, I.S.A. Dues are \$12.00 per annum. Associate Members are those who are associated with instruments but who do not earn their livelihood directly from them, such as stationary engineers, process operators, etc. Their dues are \$7.50 per annum.

Correspondence relating to the general activities of the Sarnia Section should be addressed to the Secretary, Mr. Ron Asselstine, 891 Burr Street, Sarnia, Ont. Dues should be made payable to the Sarnia Section, Instrument Society of America and sent to the Treasurer, Mr. R. J. Rose, 675 Woodhaven, Sarnia, Ont.

Correspondence concerning programs should be sent to the Program Chairman, Mr. J. Heatley, 240 Kathleen Ave., Sarnia, Ont.

Copy for "THE BULLETIN" should be sent to the Managing Editor, Mr. H. Hobbs, 122 Cameron Street, Sarnia, Ontario.



# PRECISION INSTRUMENTS AND CONTROLS



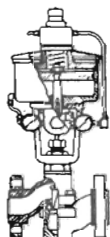
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**BARTON DP FLOW-METERS**—with stainless steel, rupture-proof bellows. Indicators, recorders and pneumatic transmitters are available (electric contacts optional).



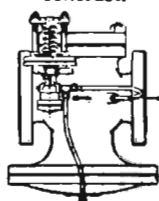
**ALNOR**

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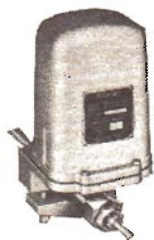
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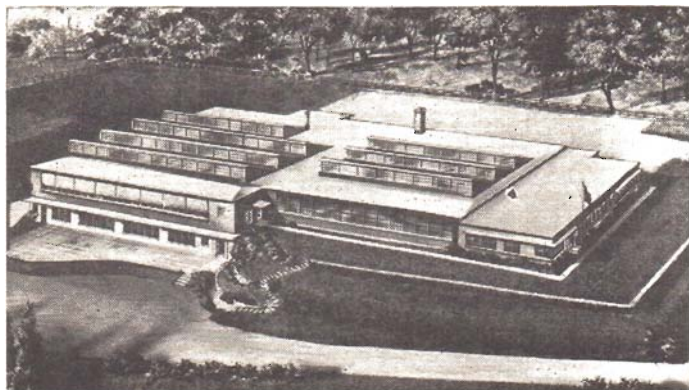
M/40 Recording Controller

## PROCESS MEASUREMENT AND CONTROL

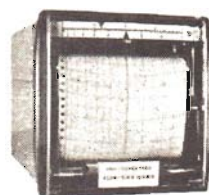
Complete process measurement and control instrumentation covering such variables as temperature, pressure, flow, liquid level, humidity, pH, conductivity, density, dew point, viscosity, force, speed, position, etc. etc. Instrument designs to suit conventional or graphic type panels — controllers for board or local mounting.

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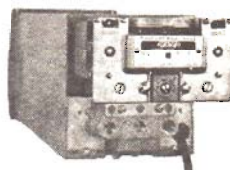
Pictured below is the Canadian home of Foxboro instruments — Canada's largest and most up-to-date process instrument manufacturing plant.



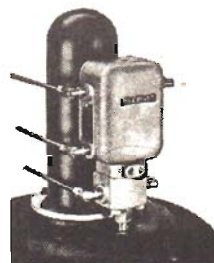
M/52 Consotrol Indicating Controller



M/53 Consotrol Recording Station



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# The "BULLETIN"

VOLUME 5 No. 7

MARCH 1956

Managing Editor: H. Hobbs

Illustrator: N. Knowles

"Written on a Roll Chart": H. Hobbs

Polymer Reporter: Ed. Brown

I. O. L. Reporter: Joe Woodcock

Canadian Oil Reporter: T. J. McLean

Dow Reporter: Tom Scarsbrook

## EDITORIAL

The month of strong winds is here, (no reference is intended to Larry's article) and the street is full of Insurance Adjusters, sady making calculations about toppled TV. aeriels. Surely, we will soon be turning off the steam-tracers, and our wrists can have a few months to heal completely. After being branded in this manner for many years now, I feel a strong sympathy for the cows in the TV. epics of the old west. My small daughter may be torn between Gene and Roy, but my best wishes go to old whiteface with the raised lettering on his rump.

We are deeply indebted this month to our old friend, Fred Croft of Canadian Oil, for his excellent and detailed report on our February meeting. We regret very much the necessity of cutting down a bit on Fred's effort, but space is a major consideration. Thanks, Fred. We may call on you **again** when our magazine, as sometimes happens, runs short of material.

Once more our esteemed President, Larry Hall, has climbed aboard the moon-rocket and taken us on a jaunt through some rarefied atmosphere. You make us dream some pleasant dreams, Larry, but I don't think I'll rush right down and get measured for a tail-coat. Still, maybe they make them with pockets for adjustable wrenches.

H. Hobbs

## FEBRUARY MEETING

We should like to mention before turning you loose at the Croft Report, that the February meeting was attended by about 60 members and guests, and the speaker was introduced by our Program Chairman, Jack Heatley of Imperial Oil. Now, take it away Fred.

H. Hobbs

## SYNOPSIS OF MR. FOX'S ADDRESS

The Sarnia Section was very fortunate on the night of February 27th. Our guest speaker was Mr. J. H. Fox, one of Honeywell's and Canada's outstanding Instrument Engineers.

After graduating from the U. of T. as a Mechanical Engineer in 1926, Mr. Fox lectured there as a Professor in Hydraulics. In 1928, he started his career as an Industrial Instrument Engineer. In 1934, he commenced his work with Minneapolis-Honeywell Regulator Co., Ltd., where he has had continuous service—except for his valuable leadership as a Lt.-Colonel with the Ordnance Corps — overseas during world war two.

Therefore, it was more than a coincidence that such a gentleman should speak on "How Automatic Can We Get?", when most of humanity is concerned about the impact of Automation on society. The Sarnia Executive of the I. S. A. should indeed be congratulated for bringing us such a well known "down to earth" experienced Engineer and last, but not



least, a leader of men — especially at a time when all the newspapers are headlining Automation.

The writer considered himself honoured when he was asked to thank our guest speaker and later on to summarize the talk for our "Bulletin".

To try and condense such a timely speech would be sheer folly.

Larry Hall was fortunate in obtaining a copy of Mr. Fox's speech from Minneapolis-Honeywell Regulator Co., Ltd., and we are having many copies made. All I can do is to encourage every Instrument Mechanic and Engineers (including our wives) to faithfully read the text of this speech.

I stress the point that Mr. Fox frequently digressed from his text. After all, the morning headlines in many newspapers were muddling through the symposium on Automation being held in Toronto by Organized Labor. Those members and non members (it was an open meeting) who missed the speech will have to find out from the lucky ones present about interesting "off-hand" comments made by the speaker.

I'll just quote a few of the statements he made on Automation with the hope it will give the readers of the "Bulletin" an appetite to digest a copy of the original text.

"It is the multiplication of man's effort through mechanical aid which is essential to the well-being of all — and not the replacement of a man or several men by the machine.

"I am confident that, come what may, there is going to be room in this world of ours for **men of flesh and blood** to work and to an even greater extent than they do today, enjoy the fruits of their labours."

He reviewed the history of Automation, giving out a little blue technology dictionary on modern Automation to help understand the new vocabulary that the vacuum tube "snowballed".

One chapter of the text is particularly interesting to Refinery Personnel. Mr. Fox reviewed the history of Instrumentation in the Oil Refineries. "They are carried closer to their logical evolution of Automatic Control than any other plants. However, a certain number of men have to be present on the job in case of emergency.

"The type of gasoline demanded by today's engines just couldn't be produced by old type manual methods.

"The whole thing has just gotten too big and too hot and too precise for manual co-ordination and adjustment. There's no turning back. And Refinery Operators at least, wouldn't have otherwise."

He went on to say "speed with which we attain a greater measure of Automation is dependant on many things. One being laborers attitude. Human beings are human beings and the "bogey" of what increased Automation might do is difficult to dispel.

"No one can pinpoint what Automation is going to do to the worker" but Mr. Fox said he would stake everything he owned that the worker would eventually benefit and he proved this point with some very worthwhile examples.

He spoke of the impact of Automation on clerical workers due to electronic computers. Digressing from his notes, he gave some startling examples.

"In the final analysis the answer to "How Automatic Can we Get" cannot be divorced from the effect of Automation on Society."

Proceeding, he stated: "Industry is planning for the future. The best possible equipment must be selected — including Instrumentation at all



points in the manufacturing operation." Brown calls this "System Engineering". It is an entirely new field. "Management has to understand more and more about what Instrumentation can do."

This is the part that all our wives should read: "Students today must concentrate much more than they have on fundamentals, such as Mathematics and Science." Digressing, he mentioned how grades 9 to 13, in particular, lack sufficient Maths and physics. "Inadequate preparation could be just as big a contribution to future unemployment as the new machines could be."

In closing he stated "How Automatic Are We Now?" A very worthwhile chapter in his text. Quoting again: "Another force which operates against an overnight turnover in our manufacturing processes is the lack of trained personnel, or rather a lack of those with the technological know-how."

"Much Automation is now as close as the nearest Instrument Engineer and Master Mechanic. The technology is all around us, ready to use. All we lack is sufficient personnel to make greater practical application of it right away."

"Automation is really just more of the kind of stuff that has been taking work out of work — creating more and better jobs — and raising our level of living with each improvement since the invention of the wheel."

Mr. Fox closed his speech with a statement made by Mr. Henry F. Dever, President of the Brown Instrument Division of Minneapolis-Honeywell. "It is perhaps true, that because of the amazing acceleration of technical progress, we are the first generation of those who can see what tomorrow can be like."

The writer came away from this monthly meeting not only proud to say that he was earning a living as an Instrument Mechanic but also fully realizing "the tide of public opinion ebbing and flowing like the sea" is rolling down on Automation. It in turn is like a tidal wave of evolution—not revolution—breaking over the industrial world.

## **THE PRESIDENT'S CORNER**

### **The Operator of The Future**

There is an increasing trend in the refineries and chemical plants of the process industries, which everyone familiar with their operations, has noticed.

They are getting more automatic.

It doesn't take too old a man to remember, when the Operators' only Instruments were a pressure gauge and a thermometer. Even the middle aged Operator remembers the local mercury manometers with their big round faces scattered about the plant, near the hand valves with which he "controlled" his process.

Later, came the control valve, in general use not more than twenty years, and with it the "controller", also locally mounted and locally set by the Operator making his rounds.

It was about this time that the queer hybrid, the Instrument man, was born of a combination of a Pipefitter, a Millwright, and an Electrician—or, even, an Operator. He evolved along with his Instruments until he became a specialist without whom the Operator could not operate.

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### WRITTEN ON A ROLL CHART

Note: At the risk of super-saturating an already soggy audience, I continue in the same vein as Mr. Fox and his disciple Mr. Croft.

#### Automation

In the brief and busy span,  
Given to each mortal man,  
In the space 'twixt birth and death,  
Angry cry to faltering breath,  
Scarcely three score times and ten  
We round the sun and back again.  
There's much to see and more to learn,  
While in its path the earth doth turn,  
And none can hope to learn it all,  
In seventy trips on a whirling ball,  
But a useful study, if so inclined,  
For man, the study of mankind.  
And such a student soon must face  
One fact. We are a faddish race.  
We thrive on catch-words and cliches  
That haunt our nights and din our days,  
We change our haircuts, cars and clothes,  
At one time ladies rolled their hose,  
(The above reported as strictly true,  
By someone older than me or you.)  
There are old codgers, I'll be bound,  
Who danced the Charleston first time round,  
Others who now do mostly knitting,  
Recall the fad for flagpole sitting,  
Others look back on earlier days,  
When goldfish swallowing was the craze,  
And later, educated varmints,  
Plotted theft of feminine garments.  
Some recall the fervent cheer  
That greeted the sale of four-four beer.  
Some recall with tear-stained cheek  
The closing of their favourite "speak"  
And many oldsters rue the might  
Of the final Dempsey-Tunney fight.

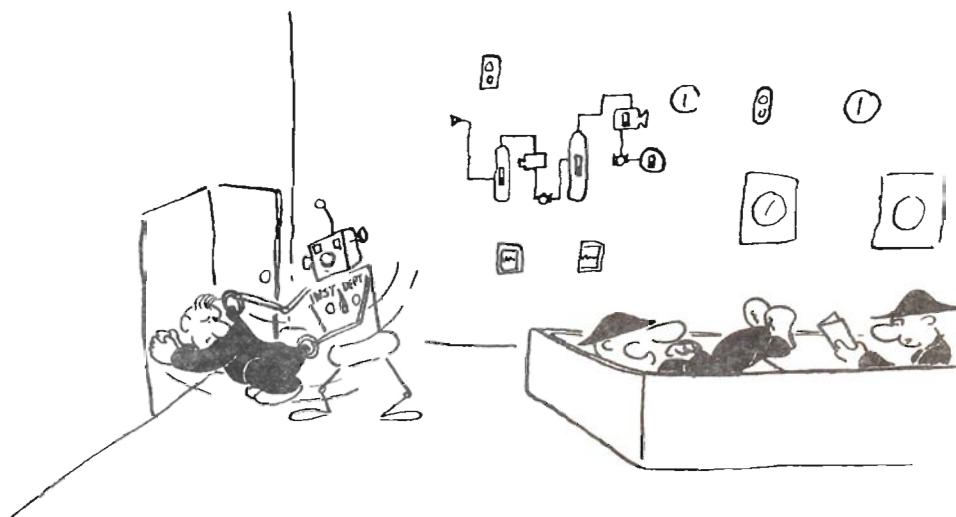
These happenings all intrigued our race,  
And filled a great newspaper space.  
Each made the press and air waves thunder,  
And faded soon, a nine-day wonder.  
But while the nine days lasted, each,  
Became the topic of our speech,  
Commented on by low and high  
Until the matter needs must die.  
And every member of our herd  
Would burst if he could not add **his** word.

---

And thus, today, the entire nation,  
Loudly ponders AUTOMATION,  
All across the printed page  
Doth the controversy rage,  
Onion farmers, labour leaders,  
Master tailors, rabbit breeders,  
Elegant french pastry-bakers  
Alligator suitcase-makers  
All feel much impelled to speak.  
(Their verbiage leaves me wan and weak)  
And one thing I have surely found  
They all stand on the firmest ground,  
For even from an onion farm,  
One can "view this with great alarm".  
And nothing arouses the public moan,  
Like a wholesome fear of the great unknown.  
Have patience folks, 'twill soon die out,  
Some new catch-word will bounce about,  
And get a world newspaper flurry,  
When sermonized by Canterbury.  
As for the dire results you fear,  
They may not come for many a year,  
And though mayhap dismissal lurks,  
For erstwhile filing-cabinet clerks,  
Don't hurry, for awhile, to greet  
New talent entering Jarvis street.  
This transformation takes so long,  
That you, who are now young and strong,  
Will be by then, both old and bent,  
Fit subject for their merriment,  
And safe may walk that dismal lane  
With never a rap on the window-pane.

—H. Hobbs





WHATS ALL THIS TALK ABOUT AUTOMATON?  
YOU WILL NEVER CONVINCE ME THAT  
A MACHINE WILL EVENTUALLY TAKE  
OVER MY JOB.



THERE'S ONE FATALITY THAT WON'T  
MAR OUR NO LOST TIME RECORD.  
THE BOSS HAS JUST OFFICIALLY  
FIRED HIM, THEREFORE HIS NAME  
IS NO LONGER ON THE PAYROLL.

## COMMITTEE CHAIRMEN FOR 1955-56

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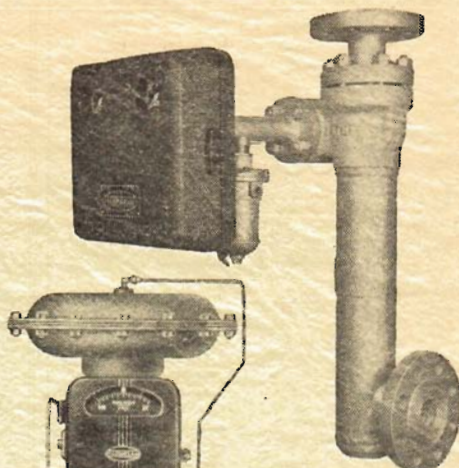
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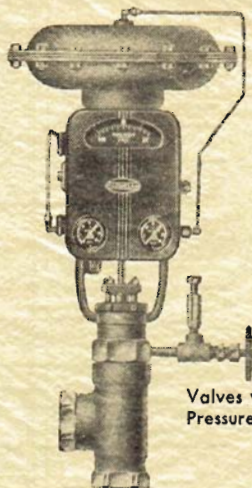
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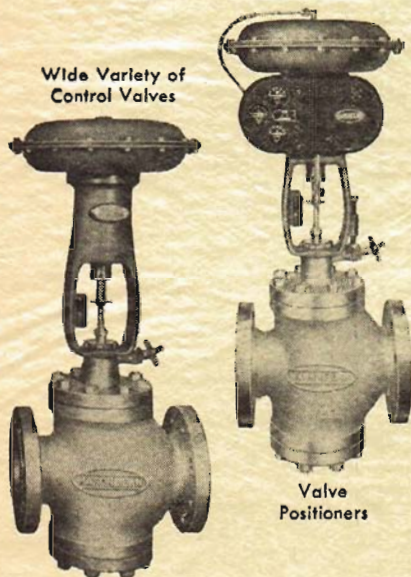


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