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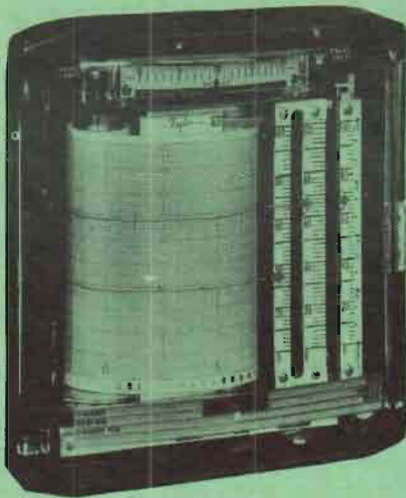


SARNIA SECTION



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 1958-59 season are:

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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 Vendome Hotel 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.

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

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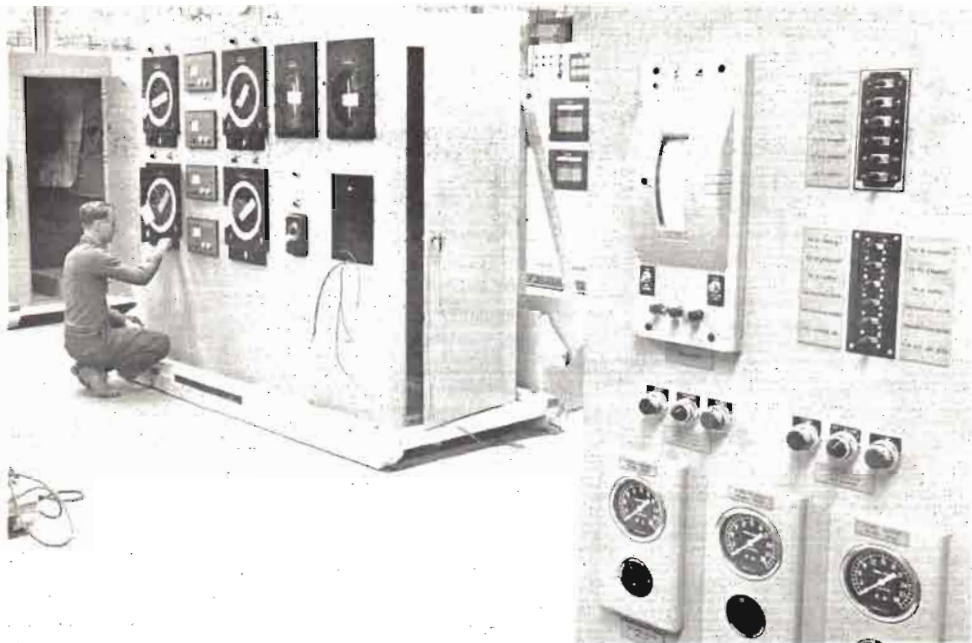
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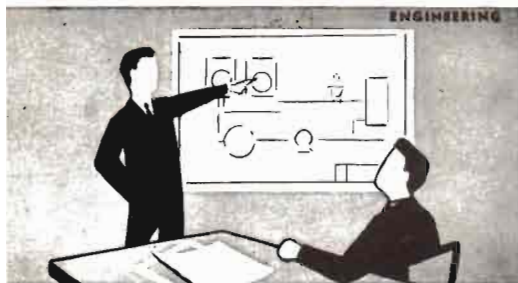
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# The "BULLETIN"

VOLUME 8: No. 4

DECEMBER, 1958

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## EDITORIAL

In this December Bulletin, our contributors are few, and our activities, insofar as the Society is concerned, are almost non-existent.

At the year's end it seems appropriate to remark that the Executive feel pleased with the progress of the section and I see little need that this feeling should not be expressed in print. Our membership is increasing, our financial position is sound and the attendance at our meetings is improving. The meetings themselves have been of a uniformly high quality, and future items on our program indicate that this standard will be maintained.

I am sure that everyone can understand and appreciate our feeling of smug satisfaction at our successful past, and will join us in our optimistic faith in a bright future.

\* \* \*

## WHAT PRICE A "SMILE"

To make people laugh, is to make them forget. What a benefactor on earth is he who can bestow forgetfulness..

—Hugo

Contributed by J. R. Graham

\* \* \* \*

## NOVEMBER MEETING

The regular monthly meeting of the Sarnia Section, I.S.A., for November, was held the evening of November 24th at the Guildwood Inn. This meeting, as advertised, was a dinner meeting and can only be described as an outstanding success. The desired number of tickets were sold, with little or no effort on the part of our group of low-pressure salesmen, and a very pleasant time was had by all. So much so, in fact, that no one complained of the absence of dancing girls.

Bob Connell turned in his usual superlative performance as program chairman by producing a speaker of great renown, Mr. David M. Boyd, Jr., Head Instrument Engineer, Universal Oil Products Company, Des Plaines, Illinois. I enjoyed Bob's outline of Mr. Boyd's background and manifold interests, as much as Mr. Boyd's enlightening lecture.

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It appears, from this lecture, that the performance of electronic instruments in a refining operation gave results far superior to that which comparison tests of individual control system versus their pneumatic equivalents had led Mr. Boyd's organization to expect.

It is concluded that this superiority stems from the lack of hysteresis which is a property of modern electronic measuring devices, which, unlike earlier types, and all pneumatics, have no moving parts. We were shown temperature charts of incredible smoothness, which demonstrated the validity of this assumption. We were given a simplified formula for calculating control settings which cut a wide swathe through the rank undergrowth of confusing equations, planted and cultivated by many theorists. The more I look at Mr. Boyd's dandy little set of figures the more they look like what an ordinary Instrument Mechanic would do by instinct, when confronted by a strange control system. Has the wheel turned full circle? Have we swung from rule-of-thumb to calculus and back again?

If Mr. Boyd has navigated us to such familiar shores once more, we owe him a vote of thanks far more resounding than is in our power to give. We must, we **do**, remain in his debt. Thank you very much.

\* \* \*

The following is contributed by our President, Mr. Mike Hicks.  
From PUNCH, or THE LONDON CHARIVARI, September 18, 1935.

### **Business for Pleasure**

#### VI. On Research

"Once we lost our turnip crop  
While he was inventing a gun."—Bill Grubbins.

It is not absolutely necessary to have a research department — at least, not one of your own. In fact, probably the most efficient and economical type of research department is to have an employee whom you can really **trust** working in the research department of your principal competitor..

Moreover, not every type of business calls for research, because —

(1) In some businesses there isn't really much left to find out. It would be a waste of money, for example, to have a perfectly equipped research laboratory if you are making hansom-cabs.

(2) Research is a long-term affair, and in some types of business the long term may only come after the business has come to an end. It is useless to get a research department to work on some deep technical problem



in the manufacture of, say, shoelaces, since in twenty years' time, when the problem is finally solved, you may be — (a) making wallpaper; (b) in liquidation; (c) in for life.

On the other hand, if there seems to be any likelihood that your business will go on and become an Old Established Concern, money spent on technical research may be a very real investment. Nay, more, it will probably be an Absolutely Typical Investment, since, (a) it costs a lot; (b) it never pays a dividend; (c) if you get tired of it, you cannot sell it.

### How to Run a Research Department

(1) In dealing with all research problems the greatest desideratum is Patience. The greatest of all the research problems is the people who do the research, and in dealing with them Patience is not only a virtue but a necessity. Remember that the research worker's motto is "Rome was not built in a day, and we don't work nightshifts." So the 366 days of a leap year, when the research department doesn't discover anything, are presumably some of the days when Rome was not built. ,

(2) It is worse than useless to point out to the research department that sales are falling, that profit margins are non-existent, and that they haven't turned out a new idea for 15 years. You can't expect them to be interested in your beastly sordid business. They are scientists, and you can't hurry science. It was precisely to avoid being hurried by this sort of nonsense that they became research workers.

(3) Resist the temptation to ask the research department what the blazes is the use of anything it is doing. There are at least six very crushing replies which research people keep for those who ask this question. "Sir," as Faraday said to Mr. Gladstone, "can you tell me the use of a new born child?"

So, if you are making straw hats, and you find your research department deeply engrossed in inventing a a new ferrochrome alloy, just be quietly encouraging and go away. Who knows, if war broke out, you might be able to turn the place into a steel helmet factory and make a fortune.

(4) If you are going to have a research department at all, go the whole hog and enter into the spirit of the thing. Build a laboratory and place in it a lot of bottles and benches. Then call a few people from the universities with First Class Honours degrees in chemistry (they are quite cheap at the summer sales). Turn them loose in the laboratory and leave them. For a few days they will probably wander restlessly around, scratching at the doors and howling. But after a while they will settle down and start bending glass tubing and filtering things, perfectly happily. And you

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will be able to show them to visitors, which is a nice thing to be able to do.

(5) Try not to interrupt the research department with petty matters. It is a common mistake when some technical problem arises for the Managing Director to say, "Well, why shouldn't we get the research people in on this? After all, what are they there for?" Now this not only shows an entire lack of understanding of the meaning of research, but it is liable to cause difficulties. For with problems of this kind, an answer is usually required quickly — say before the following Winter — and when we consider that the research department will have to set to work and bend special glass tubing and filter Heaven knows what before it can begin, it is clear that to demand an answer to a question before next Winter is very like trying to build Rome.

It is far better, if you need a quick answer on some technical problem, to get a roughly approximate one from old Joe Binks, the foreman, who hasn't had the disadvantage of a scientific education. Give the research department only big long-term problems and leave the results in trust for your heirs.

To sum up, the following are the main advantages and disadvantages of a research department:

(1) It does no harm.

(2) Visitors and shareholders are impressed by the sight of so much science and the smell of so much sulphuretted hydrogen.

(3) It provides congenial employment for a number of people who otherwise would invariably be reduced to teaching small boys that  $2\text{HCL} + \text{Zn} = \text{ZnCL}_2 + \text{H}_2$ .

(4) One of these days some one may find out something which will make all the difference to your business. The thing is at least statistically possible.

(5) Scientists are usually nice quiet lads without vice.

Disadvantages:

(1) Cash.

We cannot visualize any business man, comparing the advantages with this single slight impediment, being in any doubt as to what he should do. Money isn't everything, and you can always get somebody eminent to come down and open the Research Block.

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*Best Wishes  
of the Season*

*to our*

**READERS**

*and*

**ADVERTISERS**



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## WRITTEN ON A ROLL CHART

### THE CASE FOR LEVITY

For more years than I care to think about, I have been employed at instrument work. The jobs I have had, have given me enjoyment and education, as well as filling the primary purpose of financial sustenance. During this period, I have learned, and forgotten, a great deal about our work and the technical side of industry. This, however, has formed only a minor part of the education, I mentioned acquiring. Far more than this has been the study of human behaviour afforded me by the multitude of people, with whom my work has brought me in contact. This study continues, and I expect to never reach conclusion, but certain facts appear inescapably true.

Abraham Lincoln once said, "Nearly everyone can stand adversity, but the true test of a man's character is to give him power." This is a quotation, that my own observations bear out. We have all heard it said about someone, — "Old so-and-so is nasty at work, but get him at a party and he is swell!" How much better than such a man is one, who does his job properly and remains a member of the human race both places.

There are others, who while they have no Captain Bligh tendencies, go at their work with the dedicated fervour of a Crusader. There is no room for real enjoyment in the lives of such people. The job goes home with them, and home, in fact becomes merely an accessory to their chosen pursuit. Such are often popular with employers, who may judge men by outward appearance and feel that merit accompanies the furrowed brow. They are also popular with their juniors, who foresee early demise and room for promotion. We all know that the work we do, must be performed properly and that it is of vital importance to the industry we serve. Our job, or anyone's job, however, should not be a sort of sacred cow to be always approached with ceremonious reverence. It is often the case, that a worker, who can see the humour in life about him, will have more tangible results to show for each day's work than his neighbour the sacred cow-boy.

My contention is that we can all be happier, and accomplish more for our employers, and our families, if we keep the human side uppermost and look at ourselves with the humorous penetration that this column has ever aimed for.

I cannot close without a little poetry, so here is something from an author too long dead to prosecute.

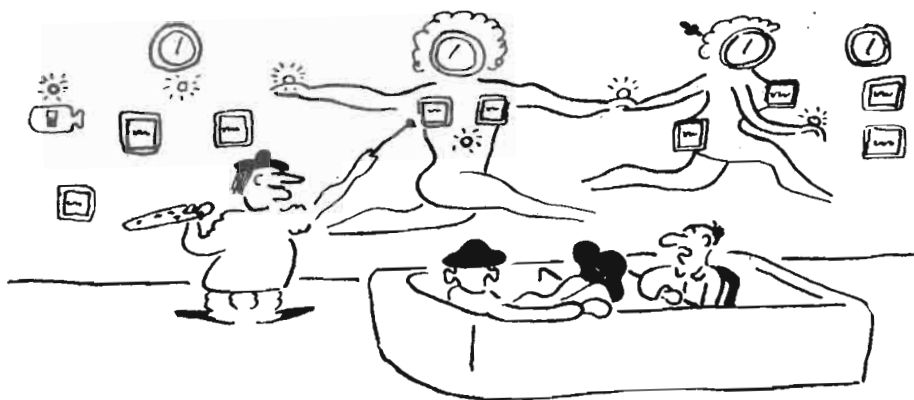
—H. Hobbs.

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Let me play the fool:  
With mirth and laughter let old wrinkles come,  
And let my liver rather heat with wine  
Than my heart cool with mortifying groans.  
Why should a man, whose blood is warm within,  
Sit like his grandsire cut in alabaster?  
Sleep when he wakes and creep into the jaundice  
By being peevish? I tell thee what, Antonia—  
I love thee, and it is my love that speaks—  
There are a sort of men whose visages  
Do cream and mantle like a standing pond,  
And do wilful stillness entertain,  
With purpose to be dress'd in an opinion  
Of wisdom, gravity, profound conceit,  
As who should say "I am Sir Oracle,  
And when I ope my lips let no dog bark!  
O my Antonia, I do know of these  
That therefore only are reputed wise  
For saying nothing, when, I am very sure,  
If they should speak, would almost damn those ears  
Which, hearing them, would call their brothers  
fools.

The Merchant Of Venice. Act I Scene I.

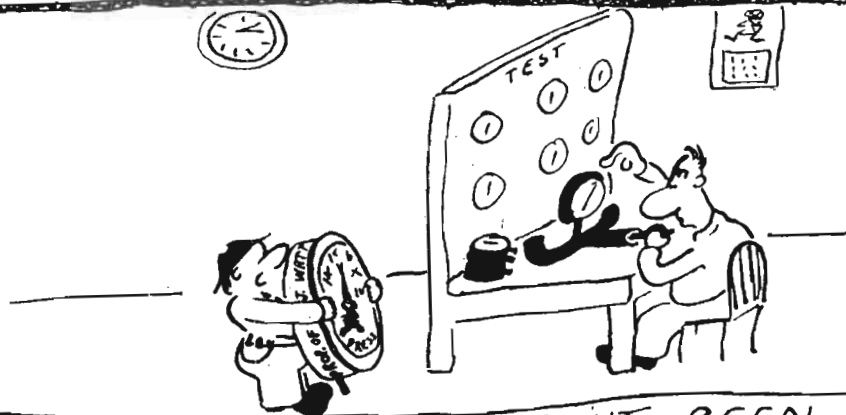
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IT SURE IS A SNEAKY WAY OF  
GETTING US TO WATCH THE  
PANEL BOARD

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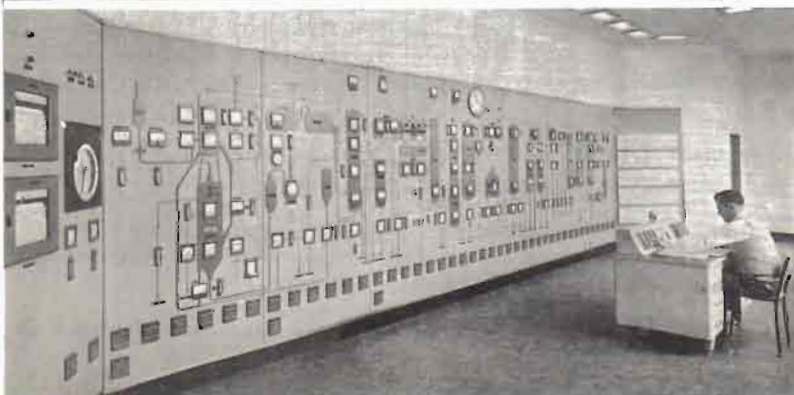
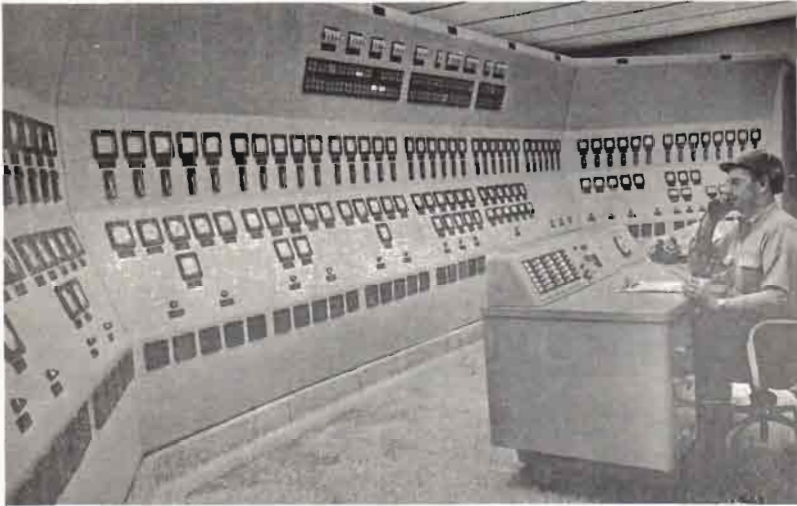
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CHANGED FOR SOME TIME. I FOUND  
IT ON A STEAM PUMP BEHIND  
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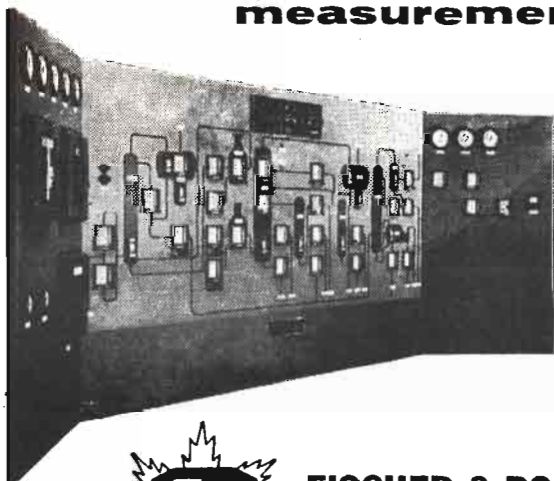
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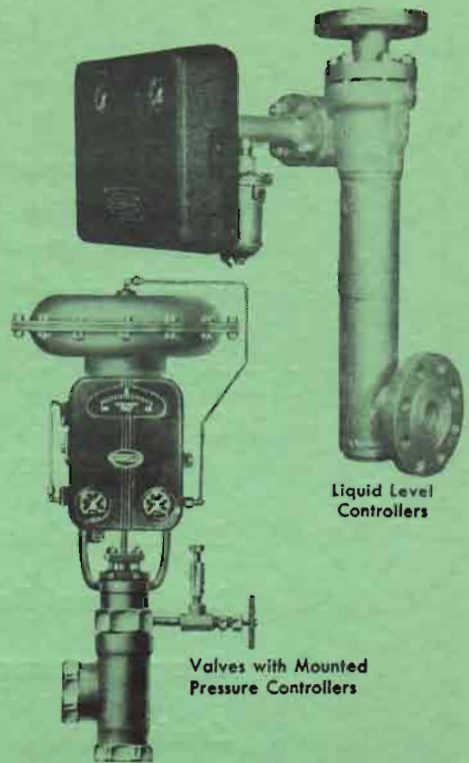
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