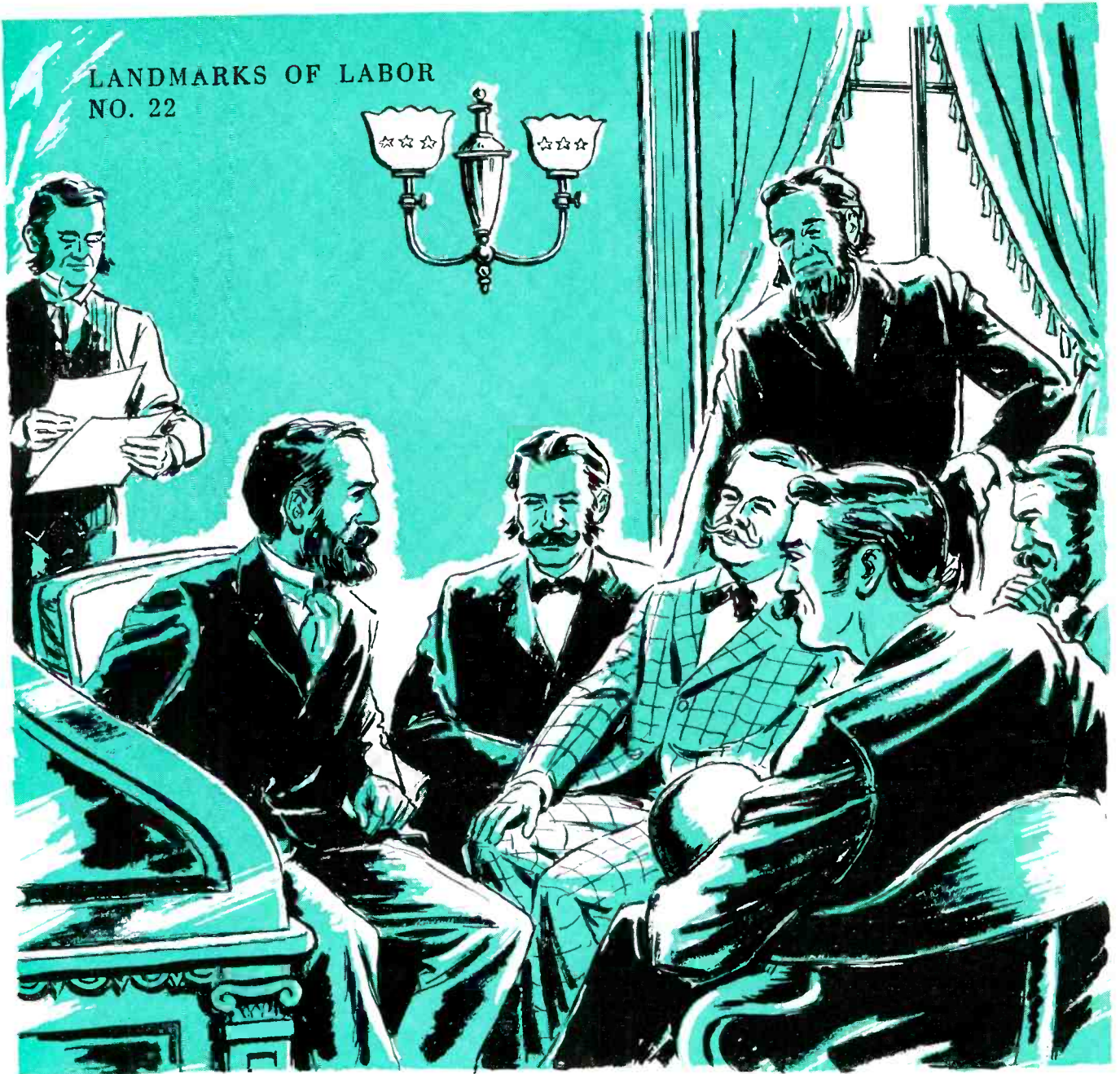


TECHNICIAN ENGINEER

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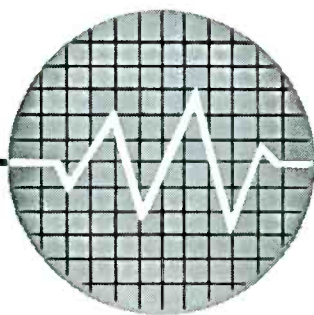


TOP
MANAGEMENT
BARGAINS
WITH
LABOR
— 1885

Bargaining between labor unions and top management is an accepted procedure today, but this has not always been the case in the tempestuous history of American labor relations. The commonplace of today was a significant step forward yesterday.

What was probably the first — certainly one of the first — significant examples of bargaining between executive management of a nationally important concern and representatives of trade unions occurred in 1885. The parties: Jay Gould, railroad tycoon and financier who controlled the Southwest System of railroad properties and the Noble and Holy Order of the Knights of Labor.

The Knights retaliated through strike action against layoffs on the Wabash Railroad and the strike spread throughout the Southwest System. The paralyzing effect compelled Gould to meet with the Knights for what was probably the first time the executive board of a national labor organization bargained with one of the nation's greatest rail systems. Concessions were won. And while ultimate and permanent success lay in the future, the fact that a labor union could effect a meeting with top management represented a great step forward and is certainly a landmark in the history of labor.



TECHNICIAN ENGINEER

VOL. 10 NO. 3

ALBERT O. HARDY, Editor

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the cover

Members of Local 45, Hollywood, Calif., enjoy a break in a "Person to Person" video tape recording session at the Malibu Beach estate of Raymond Burr, television's "Perry Mason." The burro at lower left, one of many animals in Burr's private zoo, complains about the size of his role in the network production. His master, who remains calm, is at upper right.

index

For the benefit of local unions needing such information in negotiations and planning, here are the latest figures for the cost-of-living index, compared with 1960 figures: January, 1960—125.8, January, 1961—127.4.

COMMENTARY

No matter which measure is used, union families generally show a higher level of income than non-union families. This holds true even though there are relatively more non-union families in the highest income group.

Almost one-half of union families have incomes over \$6,000 per year, making them part of America's "middle-income" families. At the upper end of the income scale, about 7 per cent of both union and non-union families have incomes above \$10,000; above \$15,000 there are relatively more non-union families.

Another way to look at the financial status of union families is to examine their total financial resources rather than their current income. On this point the survey collected information on the families' bank accounts, both checking and savings, their holdings of savings bonds, life insurance, and real estate.

Over three-quarters of union families have some type of liquid assets, with the average holding between \$500 and \$1,000. The most popular form is a savings account

which makes up about half the total liquid assets of union families.

Nearly 90 per cent reported that they hold life insurance policies, but the proportion of union families reporting that they own stock in publicly held corporations was only 8 per cent compared to 13 per cent for non-union families and 24 per cent for the third group that includes professional persons, retired couples and college-trained executives.

The survey results point up the cumulative effect of the changes in American life over the past 25 years. The status of the average union member and his family has improved to the point where they stand generally above their non-union counterpart. More and more union families are part of America's "middle-income" group.

The figures are a useful reminder that with changes in union membership, union policies must be constantly re-examined to keep pace with these developments.

—PETER HENLE in the AFL-CIO Federationist.

Some 3,200 building tradesmen moved into Washington for a four-day stand to prod a narrowly-divided Congress into action on labor's legislative program. IBEW General Counsel Louis Sherman in fast-paced, pointed style, sized up the current situation on Capitol Hill. Here are excerpts from his address:



IBEW General Counsel Louis Sherman Speaks.

Labor's Legislative Problems On the New Frontier

PRESIDENT HAGGERTY, Secretary Bonadio, Distinguished General Presidents of the International Unions affiliated with the Department, Representatives to this Seventh Annual Legislative Conference, and visitors:

It is good to be with you, as it always has been in the past, at these meetings and at the conventions of the Building and Construction Trades Department. As you gentlemen who have been here before know, this is a work session. The addresses which you are hearing today are intended not only for their own interest; they are intended to provide you with information.

You know that the correct approach to a legislative measure, whichever side a man may be on, is the informed approach, the discussion of a bill in terms of the merits of the issue.

However, you will find, with many of the Congressmen on the Hill and the Senators that they have been subjected to a barrage of propaganda through the press and by means of individual letters which convey some of the wildest and most extravagant charges that those experienced in the legislative process have seen, and apparently it is *their* Object No. 1 to defeat the on-site picketing bill.

Now, you are well aware of the merits of our proposal. You are well aware of the careful and lengthy consideration given by the Congress of the United States to this measure. Yet you will find that there have been constructed charges against the bill which I can only repeat are "wild."

Nevertheless by their repeated reiteration they are having an effect and, therefore, I want to discuss them with you today, so that tomorrow and the next day when they are presented to you in the small rooms on the Hill, you can answer them.

First, strangely enough, you will find that the word

"situs" has become an important item in the discussion of this measure. A distinguished journalist in a responsible newspaper wrote a piece in which he claimed that the use of the word "situs" was a trick; that it was intended to fool the people, and, why?—because it is a Latin word.

We are all well aware of the great contribution of Rome and the Latin language to all civilization. Any first year student in high school knows what the word "situs" means. Nevertheless, this distinguished journalist, pondered on the use of that word.

So I think if you are faced with that argument, please explain to them that the word "situs" in Latin means "place" or the word "site," and in plain language it means the place where the building construction job is being carried forward.

Now, why is that important? Because when a building job is going on, there are a number of contractors on the job, and when the unions in the building trades seek to exercise their basic right of economic action or free speech, the mere fact that there are a number of contractors on the job means that under the Taft-Hartley Act their basic right to express themselves has been taken away. It was realized after the decision of the Supreme Court by the important organs of legislative opinion that this was unfair; that it was wrong to say that the exercise of basic rights by the building and construction tradesmen was a secondary boycott.

You will recall that as long ago as 1954 President Eisenhower in a message to the Congress made it entirely clear that situs picketing was not a secondary boycott and the law should be changed. He repeated that recommendation in two other presidential messages over a period of five years, during which there was certainly adequate opportunity for all of the lawyers, economists and the like, who are employed by the Fed-

eral Government, to ascertain whether there were any tricks or any gimmicks in this bill.

This is obvious nonsense. There are no tricks. It is a simple proposition. If we have not got the right to engage in peaceful picketing on the job, then the wage standards of the building and construction trades will be driven down.

We said that twelve full years ago when the National Labor Relations Board mistakenly exercised its expertise on this issue and concluded that it was a secondary boycott. What are the simple facts of the Denver building trades case? There, the non-union contractor was paying forty-two and a half cents an hour less than the union contractor. I don't have to go through the simple elementary economics of what that means. How could a union contractor compete against a non-union contractor with that kind of wage differential?

We made the prediction as to what the result would be, and there were some who said, "You are overheated. Nothing is going to happen." Well, let them tell that to the people in Baltimore, because what has happened there—and this is a matter of official record in the House records of the Labor Committee—there were 58 general contractors on an all-union basis before the Denver Building Trades Rule. Now there are four. The wage differentials at some points are as high as seventy per cent, and an increasing proportion of the work is going over to non-union contractors. And while we say that, are we yelling because they are not members of our particular crowd?

The difference between the union contractor and the non-union contractor has something to do with the wages, the hours and the working conditions of the man on the job. We know that if the non-union condition spreads—and we know in that connection that there are some very large companies operating through this country now on a non-union basis—the worker is the one who will suffer. This is what the situs picketing bill is about. It is not a gimmick around a Latin word, but an effort to restore—not to give but to restore—the basic economic right of the building and construction tradesman to protect his wages.

Now, I want to go into detail about some of these other objections you will hear about. You are probably well aware of the fact that this bill is written word for word, period for period, comma for comma, from a bill originally introduced in 1959 by the Administration which then controlled the Government.

It was not written by us. We accepted it, but it was formulated by the Administration, and although we could find many ways to improve it, we have recognized what your great President of the AFL-CIO has pointed out, that this is a tough legislative situation. We have retained that language. It is the same language which has been supported by then Senator Kennedy and now our President. It is the same language which was sup-

ported by the Administration and approved by Senate and House labor committees.

Our opponents do not comment on the bi-partisan support for the bill. It is a very curious thing, but in all their statements and all their writings they never once mentioned the fact that this bill had the support of President Eisenhower and was an important item in Senator Kennedy's legislative position.

They don't mention it, I suppose, for a simple reason—for what man with any experience in this field would believe that a bill which has been gone over so carefully, that bill which had earned the support of very conservative people indeed, could have all the little things in it that they say it has? The answer is that it does not have those things, and that actually, our opponents cannot meet the issue on the merits.

For example, this same distinguished journalist to whom I referred made the interesting comment that if this bill were enacted a couple of pickets would address themselves to the painters who were working in the "gents' wash room" (of all places); and thereby shut down a manufacturing plant employing thousands and thousands of people.

Now, if a man would look at the bill, he would see that as a result of the legislative process, and in an effort to accommodate all interests, this bill is limited as the Denver Building Trade situation was limited, to employes primarily engaged in the construction industry. A manufacturing plant is not in the construction industry. Therefore, the picketing of the gents' wash-room could not have the sensational effect which has been stated.

In other words, this bill had to do with our problems in the construction field. It has nothing to do with the problems of a manufacturing plant, and I think this is a point which you should bear in mind for a variety of reasons; this bill is limited to employers primarily en-



Secretary of Labor Arthur Goldberg confers with Building Trades President James Haggerty at the Washington conference.

gaged in the construction industry and others in the manufacturing field will not be adversely affected by it.

The other point which was made or tried to be made was that if this bill passed, there would be such a rash of jurisdictional strikes, it would not be funny.

Well, the answer to that point is to be found again in the language of the bill and as President Haggerty has told you, you have in your legislative kit the text of the bill and also a brief explanation of it.

If you look at the text, you will see that the relief provided in the bill, applies only to "lawful" disputes and therefore, if there were an unlawful jurisdictional dispute, the bill would have no application.

Perhaps the people who oppose us assume that our folks don't read English as well as Latin, but if you read the bill and if you call that language to the attention of the Congressman who is asking the question, I think it is a complete and adequate answer as far as jurisdictional strikes are concerned. Then, they bring back that old bogey man, the closed shop.

Everybody knows that the closed shop is prohibited by the National Labor Relations Act and again, under this bill, the allowance is given only if there is a "lawful" dispute. So that here, too, the concern and fear is not warranted. We have, as I said before a simple issue—the issue of whether the Building and Construction Tradesmen shall have the same basic right of economic action and freedom of speech through picketing as have the employees of industrial plants to protect his wage standards.

Now, I would like to turn from our Object No. 1 the on-site picketing bill to the question of the Davis-Bacon Act.

You know, I am sure, that in previous legislative conferences, we have had a very comprehensive measure. It was quite long and a great effort has been made by the forces ranged against us to do some violent things to the Davis-Bacon Act.

After a review of the entire situation, it was decided to take a practical and hard hitting approach, focussing on the most important issue which we have under the Davis-Bacon Act. That arises as you know, as you have heard this morning, from the out of date language of the Davis-Bacon Act which limits the pre-determinations only to hourly wage rates.

The events of the industry have been such that much of the compensation is based on fringe benefits as well as the hourly wage rate and so what this bill does, is a simple thing. A single thing. It authorizes the Secretary of Labor to include in its present determinations, the fringe benefits of the pensions and health and welfare purposes.

There also may be included apprenticeship and training fund payments.



ABOVE: AFL-CIO President George Meany addresses a session of the Building Trades legislative conference.



LEFT: A view of the 3,200 building tradesmen in Washington on behalf of legislation.

Now, we left the vacations out because the Department of Labor did manage to work out administratively. You will find in your kits the bill to accomplish this purpose, and the explanation thereof.

Once again, we come back to the same problem we have in the onsite picketing bill and that is the competitive disadvantage of the union contractor against the non-union contractor. If the non-union contractor can bid on government work on a basis of the hourly wage alone, and not be forced to include a payment equal to the fringe benefit, he has an advantage which cannot be surmounted and which has especially adverse effects on the building and construction tradesmen in the field of government construction.

This bill, I want to point out to you, would cover not only the area of the Davis-Bacon Act as such but also all the other acts in which there have been included Davis-Bacon Act procedures, such as the Housing Act; the Airport Act, and the like.

We come now to an additional problem. That is with respect to the matter of overtime. We do have an eight-hour law and it does require the contractors and subcontractors to pay time-and-a-half over eight; but they are pretty clever and some of them have figured out a means of getting overtime under that law without paying for it.

What they do is work their men eight hours per day but then they work seven days per week. A man therefore, may work 56 hours a week and there is no overtime.

Certainly this is a proposition which should appeal to the sense of justice and fairness of the Representatives on the Hill and we have a bill in there, which would establish a 40-hour workweek and which would require the payment of minimum overtime of at least time-and-one-half for the basic hourly rate.

We have all heard from President Haggerty this morning, about the Wage Hour law. We have always supported the amendments of the Wage Hour law, because of their general beneficial effect but this year, there is a special problem. This very problem that I pointed out to you before, about the 40-hour workweek, and that is true in so many parts of the country, in so many parts of the building and construction industry, which are not protected by union contract, the men are employed at rates without overtime and that arises because the fair labor standards act today applies to building and construction only in a spotty way.

Of course, we have the same interest that other people of the community have. We want to see that everybody gets a fair shake whether they are members of the union or not; but we have a special interest in this particular phase of the problem and that arises because the non-union contractor, who does not have to pay overtime by agreement, should be required at least to pay time and one-half by law.

In other words, this portion of the Wage and Hour Law would help to reduce the differential between the union contractor and the non-union contractor.

This is provided by Section 1 of the Roosevelt Bill. I want to mention that so that you will bear it in mind because as you go down on the Hill tomorrow or the next day, you will find yourselves caught up in the great controversies that are going to take place on the floor of the House, with respect to this Wage and Hour law. When you are down there, it would be very helpful if you pointed out not only our desire to have the Roosevelt Bill enacted and the Kitchin Bill defeated but also that there be retained the provision in the Roosevelt Bill—Section 2-C—which would provide for coverage of employers engaged in construction and reconstruction where their gross annual volume is at least \$350,000 a year.

And now, gentlemen, I would like, if I may, to bring you up to date on a few legal developments which have occurred that may be of interest to you in your daily affairs.

The Hiring Hall cases including the Brown-Olds Doctrine—and I need not describe either problem to you—are pending before the Supreme Court of the United States. There should be a decision forthcoming in the near future. Although nobody could predict what the outcome may be, I think I should mention to you that with respect to the Brown-Olds Doctrine when it reached the Supreme Court, there had been seven Circuit Courts of Appeal who had held that it was arbitrary, unreasonable, and an excess of power. Only one or two had approved; and when the case was presented by the National Labor Relations Board attorneys, they made it clear to the Supreme Court that the Solicitor General of the United States through whom all briefs must clear, when presented to the Supreme Court, had not signed the brief, from which it was inferred that the Solicitor General was not in agreement with the Board's position.

From this, one might conclude that the result might be a happy one but the Supreme Court cannot be predicted.

However, I think in conducting your affairs, you should take this into account; that there should be a clarification by the Supreme Court of the Brown-Olds Doctrine and the Mountain Pacific Case. Those of you who have established referral systems will be particularly interested in this future development.

Another item that I think you will be interested in is a decision of the National Labor Relations Board, in the American Cynamid Company case which involved the Pensacola Building Trades Council, which sought a maintenance unit. For some strange reason, the National Labor Relations Board concluded that if a maintenance unit is sought but another union comes in for the whole plant, that makes the maintenance unit wrong.

President Haggerty instructed me to file a brief on behalf of the Building and Construction Trades Depart-

ment which I did and in that brief, we made some appropriate comments about midnight judges and midnight rules because two of the Board members who made up the three-man majority, were on the eve of departure. We did not think they should be changing 17-year-old rules the day before they left and we are pleased to advise you that the Board has stayed the election in that case, and is reconsidering the matter, we hope to our favorable conclusion.

Finally, just a few words relative to the N.L.R.B. We have two new members appointed by our great President, John F. Kennedy, and they are Frank McCulloch, the new Chairman, who comes from Senator Douglas' office and the second gentleman is Gerry

Brown, who was the Regional Director in San Francisco, California. Everything we hear about them, promises good, and we certainly hope that we will not be faced with the situation that we have had for the last eight years or so, in which decisions have been rendered by that Board, which have earned not only our condemnation but what is more important, stern rebukes from the Supreme Court.

I might mention in that connection that in a recent case involving the jurisdictional disputes provisions of the Act, we managed to get a unanimous decision of the Supreme Court reversing the position taken by the so-called experts in the field—the National Labor Relations Board.

New CBS Agreement Ratified

A POLL of the IBEW membership working under International Agreement with CBS, Inc. resulted in a vote of 692 to 190 for acceptance of a new agreement covering the technical operations of the network's owned-and-operated radio and television stations in six major markets and its International short-wave stations operating in the Voice of America service. The ballots were counted on March 10 by the six Local Unions involved.

The negotiations began in New York on January 16 and were removed to Washington on January 23. The negotiations were concluded with a final offer by the Company on February 13; during the last two weeks of the sessions the parties were assisted by Commissioner Gilbert McCutcheon of the Federal Mediation and Conciliation Service. At the conclusion of negotiations an agreement was reached that the new pact would be retroactive to the anniversary date of its predecessor, February 1, 1961, and that it would be effective to July 31, 1963.

The Agreement covers KCBS, San Francisco; KMOX, St. Louis; KNX, Los Angeles; WBBM, Chicago; WCBS, New York; WEEI, Boston; and the FM stations in those cities, WBBM-TV, WCBS-TV, KNXT, and the shortwave transmitters at Wayne, New Jersey, Brentwood, New York and Delano, California. Aside from the usual features of clarifying language and a considerable redrafting of provisions of previous agreements, a new arbitrational system, a clearly defined concept of territorial jurisdiction, and an extended schedule of severance pay is included. In the area of economics, the wage escalator has been short-

ened from four to three years with step increases every six months and the starting wage has been set at \$115.00 per week and reaches a maximum of \$200.00. Assistant Supervisors, Technical Directors and Supervisors will receive commensurate increases under the new wage schedule. Additionally, the Company will now include its Technicians in a comprehensive medical insurance plan on a non-contributory basis.

As a move toward equity in the operation of the twelve-hour rest period between shifts, it has been agreed that a completely cancelled rest period will result in the payment of rest period pay for the entire twelve hours and a new understanding was reached on the computation of payment for work which extends into one or more of the customary days off.

Other changes of various nature were agreed upon, largely as the result of experience in interpretation and application of the predecessor agreement. In this regard, the power of an arbitrator to determine arbitrability, the new severance pay schedule, deletion of special severance liability formerly effective in cases of automation, etc., has resulted in rather sweeping changes in language and understanding. A wholly new provision which affirms the jurisdiction of work in logic circuits, storage or memory circuits and similar devices has been added to the agreement.

The agreement was negotiated by Business Managers and representatives of Local Unions 4, 45, 202, 1212, 1220 and 1228 with assistance from the staff of the International Office and with consultation and advice from International President Freeman.

More on Cryogenics*

Liquid Hydrogen Speeds Studies Of Cold Circuitry

produce enough power to activate a superconductive circuit. Experiments validated Allen's belief and opened a new door to space travel. Soon, it may be possible for big liquid-fueled rockets to use their propellants to generate enough electricity to power the superconductors that guide man through his space adventures.

One of the characteristics of the super-cold condition is the resistance of some metals to magnetic fields. To demonstrate the behavior of an element in a "frozen" magnetic field, cryogenics laboratory scientist Dr. Frederick Paul, uses a simple experimental device. It is a brass column little over a yard tall, which houses a flask within a flask, like the construction of a huge thermos bottle. One flask contains liquid nitrogen to insulate the inner flask of even colder liquid helium.


At the base of this apparatus is an electric coil arranged to produce a sufficient magnetic field. A lead-coated sphere is lowered into the inner chamber and resists and compresses the magnetic field until the field "fights back" with force. The result is a ball of metal that appears to defy gravity.

But, Allen and his colleagues will quickly rebuke the suggestion that they have an anti-gravity machine. The real purpose of the floating ball experiment is the

* See "The Molecules Almost Stand Still," Page 8 of the February, 1961, issue, *TECHNICIAN-ENGINEER*.



Richard Allen, scientist and project leader of the Martin Company's cryogenics laboratory at Baltimore, Md., experiments with electronic circuits so small that their detail must be viewed through a microscope.



Martin Engineer Angelo Guimento transfers liquid nitrogen to a small Dewar flask in preparation for a cryogenics experiment. Rubber tubing leading into the flask has frozen into a rigid, brittle state.

FIFTY years ago, scientists discovered that electrical current moves through certain metals with absolutely no detectable resistance at temperatures hundreds of degrees below zero—a situation called superconductivity.

Since space rockets use liquified gases, called cryogenic fuels and oxidizers, the propellant provides a convenient environment for the application of superconductors. By using cryogenic fuels to aid in obtaining low temperatures, engineers of The Martin Company envision missile-borne computers as small as a one-inch cube. Besides saving vital room and weight aboard the rocket, such computers will not overheat—a condition which plagues other modern electronic devices and causes their failure in a relatively short time.

Recently, some of the philosophy behind the successful development of a thermoelectric generator at Martin was applied to the science of cryogenics. Thermoelectric generators produce electricity by a heat differential acting between dissimilar metals. As greater heat is applied to one strip of metal, the heat differential increases and a greater flow of electrical energy results.

Richard Allen, scientist and project leader of the cryogenics laboratory, believed that if cryogenic temperatures were applied to one of the metals, normal room temperature acting on the other metal would

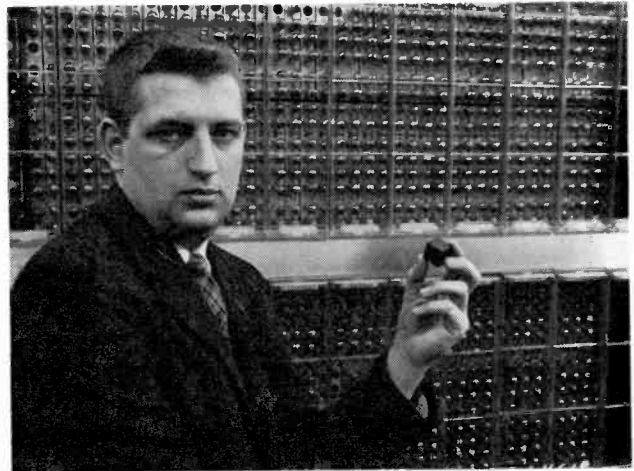
development of a superconducting inertial space platform—the automatic pilot in space rockets.

The Martin Company is engaged in cryogenics research and development at its RIAS, and Orlando facilities as well. RIAS, initials of the Research Institute for Advanced Studies, cloistered in what was once a mansion in fashionable Ruxton, Maryland, is conducting experiments on the interaction of non-superconductive and superconductive metals.

Martin-Orlando plans to study superconducting masers—electronic amplifier with very low internal noise, the use of which increases range in radio receivers. At Martin-Denver, cryogenics research concentrates on improving rocket propellants and associated equipment.

Visualize a block of ice the size of the Washington Monument and you get a picture of the tremendous volume of cryogenic liquids used by the Martin Company over the past decade. Prime users of the 12.5 million gallons of liquid oxygen, nitrogen, hydrogen and helium have been the VIKING, VANGUARD and TITAN vehicles built, tested and flown by the Company.

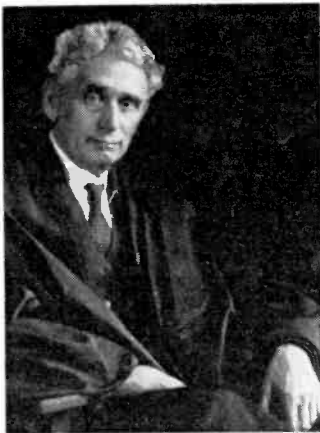
In research activities alone, 500 gallons of liquid



ALLEN holds a one-inch tube to contrast its size with the wall of electron tubes behind him. Aim of the cryogenics expert is to develop an electronic brain the size of the tube which will utilize microscopic semiconductor circuits instead of the thousands of electron tubes normally required. (All photographs accompanying this article by Martin Company.)

hydrogen are used each week, a figure that will be upped considerably when full operations begin at a new liquid hydrogen research and testing facility near Denver.

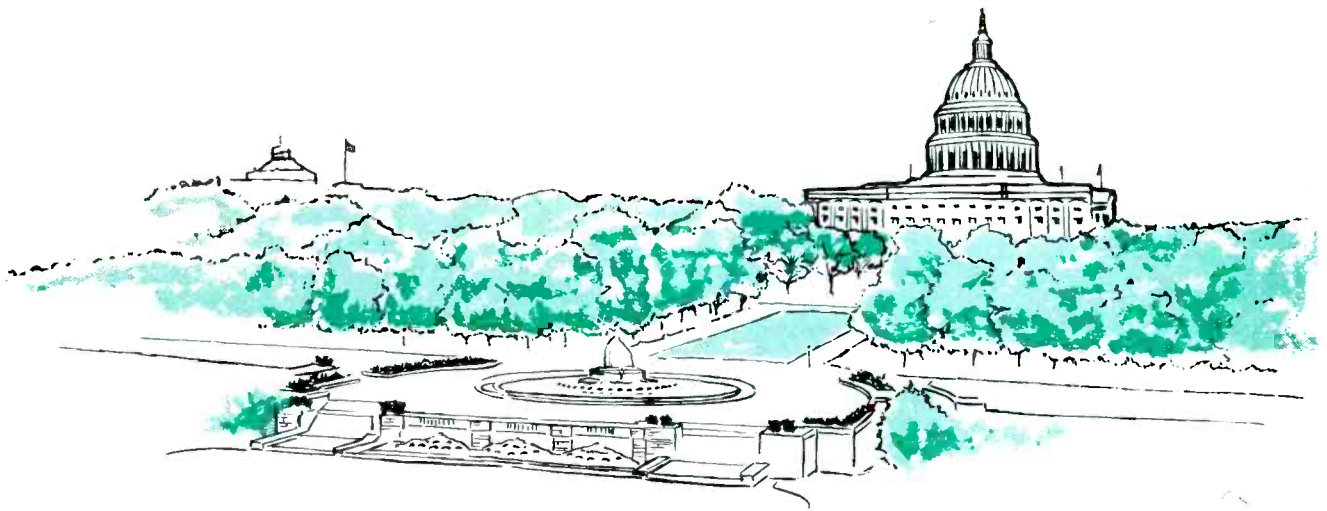
The Value of Trade-Unionism



JUDGE BRANDEIS

“The right of labor to organize is recognized by law, and should be fully recognized by employers. There will be in most trades little probability of attaining the best conceivable conditions unless in some form a union of employees exists. It is no answer to this proposition to point to instances of trade-union excesses and of the disasters which attended them. We believe in democracy despite the excesses of the French Revolution. Nor are claims of the trades unions disproved by pointing to the instances where the best results have been attained in businesses in which no trace of unionism existed. Wise, far-seeing employers act upon the spirit or the hint of union demands instead of waiting to have them enforced. ‘A word to the wise is sufficient.’ The steps in advance have been taken often for the express purpose of preventing trades-unionism from finding a lodgment, often, unconsciously, as a result merely of the enlightenment which comes with the necessary thinking that trade-union agitation compels. Such successful businesses are, indeed, the greatest triumphs of unionism, and their marked success is due in large part to the fact that they have had all the advantages of unionism without having to bear the disadvantages which, in their imperfect state, attend the unions. We must not forget the merits of unionism in our righteous indignation against certain abuses of particular unionists.”

—LOUIS D. BRANDEIS, for 22 years a United States Supreme Court Justice, in an address delivered in Boston, April 21, 1904



Recent Developments in Washington

Fair Labor Standards Act Is Reported to House

The Committee on Education and Labor recently sent to the Committee of the Whole House its completed work on Amendments to the Fair Labor Standards Act (Wage-Hour Law). A compromise measure, its main and most controversial feature is to increase the Federally-regulated minimum wage to \$1.25 per hour by providing for a minimum of \$1.15 per hour during the first two years and \$1.25 thereafter.

The usual, relatively-complicated exceptions in the present Law are enlarged by this proposed amendment, taking into account the special problems in seasonal industries, in Puerto Rico and the Virgin Islands, etc. Employees of carriers subject to either the Interstate Commerce or the Railway Labor Act are also exempt. The exemption of particular interest to the broadcasting industry is the provision that neither the minimum wage nor the overtime provisions of the Act will be applicable to stations in small towns; the exemption reads as follows:

“(a) The provisions of Sections 6 and 7 shall not apply with respect to —

(10) any employee employed as an announcer, news editor, or chief engineer by a radio or television station the major studio of which is located in a city or town of fifty thousand population or less, according to the latest available decennial census figures as compiled by the United States Bureau of Census, except where such city or town is part of a standard metropolitan area as defined and

designated by the Bureau of Census, which has a total population in excess of one hundred thousand.”

While this new Bill, H. R. 3935, is a great improvement over H. R. 2746 reported in the Feb. 1961 issue of the **TECHNICIAN-ENGINEER**, it admittedly is a “foot in the door” for the small broadcasters and whose original exemption proposals to both the Senate and the House were much more sweeping.

A concurrent FLSA Bill is active in the Senate. Known as S. 895, it contains no provision for exception of the broadcasting industry. It is interesting to note, however, that both this Bill and H. R. 3935 would wholly exempt “any employee employed in a motion picture theatre”. This latter exception purports to recognize the precipitous state of the motion picture theatre industry.

Bill on Editing Recorded Material Is Introduced

As the result of extensive editing of a tape recording recently broadcast, Rep. Clarence J. Brown (R., Ohio) introduced a bill in the House of Representatives which is designed to prohibit the use of edited material if the alteration of the recording has not met with the consent of the participants.

The bill, H. R. 4232, is so sweeping as to raise questions of its administrability, however admirable the motives of its sponsor. It provides that the written consent of each participant must be obtained and that each and every change made must be covered by the written consent. While this amendment to the Communications

Act is aimed to curb irresponsible or even capricious editorial judgments it could well result in restricting the volume of spontaneous interviews. By nature, many interviewees are quite verbose and the necessary editing and subsequent solicitation of written consent could be so time-consuming as to make the broadcast of the material impractical or untimely. Further, the judgment of whether the issues are of "public importance" seems difficult. It would appear that almost any subject of sufficient importance to be broadcast may be important to the public.

The amendment would add a new section to the end of part I of title III of the Communications Act of 1934, as follows:

"Prohibition Against Broadcasting Altered Recordings of Interviews or Discussions on Issues of Public Importance:

"Section. 330. (a) It shall be unlawful for the licensee of a broadcasting station to broadcast any recording of an interview or discussion on issues of public importance knowing or having reasonable grounds for believing that such recording has been changed from the original recording by the omission of matter, the insertion of matter, the rearrangement of matter, or otherwise, unless, before the broadcast, the written consent of each person participating in the interview or discussion has been obtained to each such change.

"(b) Whoever violates subsection (a) shall be fined not more than \$10,000 or imprisoned not more than one year, or both."

New Navy Fuel Cell Converts Chemical Energy

The U. S. Navy is using a new type of fuel cell, designed to convert chemical energy directly into electricity, in an experimental power plant.

The unit, developed by Dr. Ernest Yeager, Dr. Harry Dietrick and Dr. R. R. Witherspoon, all of Western Reserve University, has no moving parts and does not contain a flame.

Most fuel cells to date have used hydrogen and oxygen. The new cell uses oxygen and a sodium Amalgam composed of sodium dissolved in mercury. Through a chemical reaction in the cell energy is released in the form of an electric current.

Wages, Salaries Down In February Report

The impact of the recession showed up in February as personal income dropped for the second straight month with wages and salaries taking the biggest loss.

Total personal income dropped \$700,000,000 over the month and, at an annual rate of \$405,900,000,000, was a billion off the December figure. Wages and salaries were running at a \$270,500,000,000 rate, down almost \$900,000,000 from January. The commodity producing industries alone cost \$1,000,000,000 in wages over the month because of heavy unemployment.

Rental income held steady at a \$12,500,000,000 rate as did personal interest income at \$27,700,000,000, almost a billion more than the 1960 rate.

Farm income showed a rise for a February rate of \$13,000,000,000 up a hundred million over January and a billion more than in 1960.

Recent Appointments To Federal Agencies

Frank W. McCulloch, for the past dozen years administrative assistant to Sen. Paul H. Douglas (D., Ill.), was recently picked by President John F. Kennedy to be chairman of the National Labor Relations Board.

The President also selected William E. Simkin of Wallingford, Pa., a noted labor arbitrator and former member of the National War Labor Board, for the post of director of the Federal Mediation & Conciliation Service.

McCulloch replaced Arthur A. Kimball, an Eisenhower recess appointee who was not confirmed by the Senate. The previous NLRB chairman, Boyd Leedom, remains on the board as one of its five members. His term runs to December 16, 1964.

McCulloch, 55, was one of the founders of Americans for Democratic Action in 1947 and has been a member of its board of directors ever since.

A native of Evanston, Ill., he was graduated from Williams College, Williamstown, Mass., and received his law degree from Harvard University in 1929. In the middle '30s he was industrial relations secretary of the Congregational-Christian Church Social Action Council and served for three years as director of the Labor Education Division of Roosevelt College in Chicago.

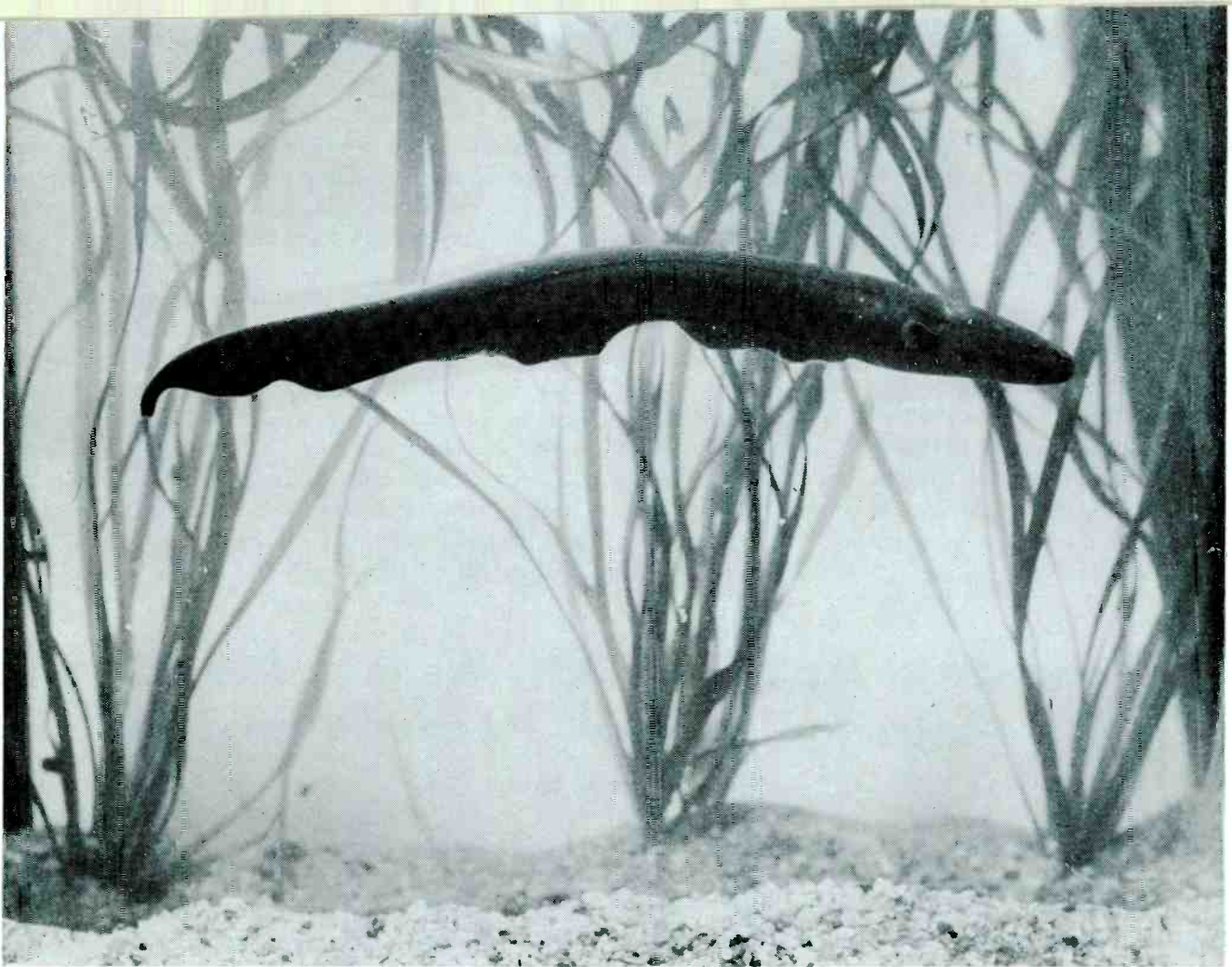


Simkin



McCulloch

Technician-Engineer



New York Zoological Society Photo

Power-Packed Denizen of the Deep

Some Facts About Electric Eels Are Literally Shocking

The zoological shockers of the animal world are the electric fishes, chief among which are the electric eels. These aquatic dynamos can generate a jolt that will knock down a horse. There have even been reports of people being killed by these waterborne shockers. Grounding seems to do no good, as well as being extremely difficult in the watery world in which these dynamic denizens of the deep circulate.

Largest of the current-carrying creatures is *electrophorus electricus* of tropical South America. This electric eel can outshock a storage battery of equal weight. It is greatly feared by the people of the Amazon and Orinoco River regions.

These eels reach shocking sizes, too, sometimes getting as big around as a man's leg. Four-fifths of its entire anatomy is devoted to its powerhouse. A full-grown fish can give off up to 600 volts in one lightning discharge. They can continue to give out ohm after

ohm for long periods of time without visibly tiring. (*This has been referred to as their ohming instinct.*)

An eel's electric shock moves 15 or 20 times faster than human nerve impulses. This makes it extremely difficult for people to move out of the way. (*It also gives rise to the theory that, if humans could speed up their nerve impulses considerably, they, too, might be able to electrocute each other.*)

Circuitry of an electric eel is not too involved. The scientists theorize that the head is negative and the tail is positive, because the greatest shock comes when both the head and the tail are in contact with an enemy's body. Evidently this completes the circuit with the eel, being in the middle, coming through unscathed.

An explorer in Venezuela in the 1800's saw the natives driving wild horses into shallow water where the eels shocked them. This made the horses even wilder, but, in time the eels were exhausted and the natives

captured them and ate them. (*When these eels congregated in large numbers, they constituted the nautical equivalent of a traffic jam but, in this instance, the native name for the condition, loosely translated, came out as "current jam."*)

There are also, in the Nile, electric catfishes. Plato wrote of the torpedo fish, an electric ray common in the eastern Mediterranean.

Sometime before sulfa and the wonder drugs, electric fish were used in the treatment of various ailments. Moslem doctors treated epileptics but it only caused them to jump about a bit more and was eventually discarded. Torpedo rays were employed by Romans as shock treatment for gout and headaches.

When fishing in electric-eel-infested waters, the careful fisherman uses rubber gloves. The discharge can travel up a wet fishing line. When harpooning electric eels, the prudent harpooner avoids metal-shafted harpoons.

Some electric fish discovered recently in South Africa, *gymnarchus niloticus*, has a kind of piscine radar and is thought to be equipped with both a sending and receiving set. These fish can use this "radar" to navigate backward as well as forward. (*This is considered to be alternating current.*)

(EDITOR'S NOTE: Some of the foregoing fish story has been in italics. For the veracity of this portion we will not be held accountable. The National Geographic Society can be charged with the rest.)

Probers Accuse Chicago Papers Of Fakery About 'Vote Frauds'

Reprinted from LABOR

Widely-printed charges of massive vote frauds in Chicago last November were "baseless and unsubstantiated," three University of Chicago political science professors have concluded after looking into the available evidence. They noted that these charges still keep popping up in the press "as though they had been fully established."

The fraud charges originated with Republican politicians, who tried to make out that the Democratic "machine" in Chicago had stolen Illinois' big bloc of electoral votes for John F. Kennedy by widespread vote rigging in the Windy City. Kennedy carried Illinois by less than 10,000 votes out of 4.7 million cast.

The three professors—Herman Finer, Jerome G. Kerwin and C. Herman Pritchett—devoted much of their report to showing how the daily press, especially in Chicago, built up the flimsy vote fraud charges into a supposed major scandal.

"The newspapers themselves became participants in the campaign to picture the election as fraudulent, and on their own account repeated, multiplied and pyramided the charges of fraud in a day-to-day crescendo," the professors concluded.

"To meet the requirements of the campaign," the professors found, "minor incidents and irregularities were repeatedly blown up into the appearance of major, intentional frauds."

A prime example, they said, concerned one Chicago precinct where the number of votes cast admittedly topped the number of people then living in the precinct. This happened not by skullduggery, however, but rather

because "in this precinct most of the houses had been recently demolished (and) the former inhabitants had returned on Election Day and been permitted to vote."

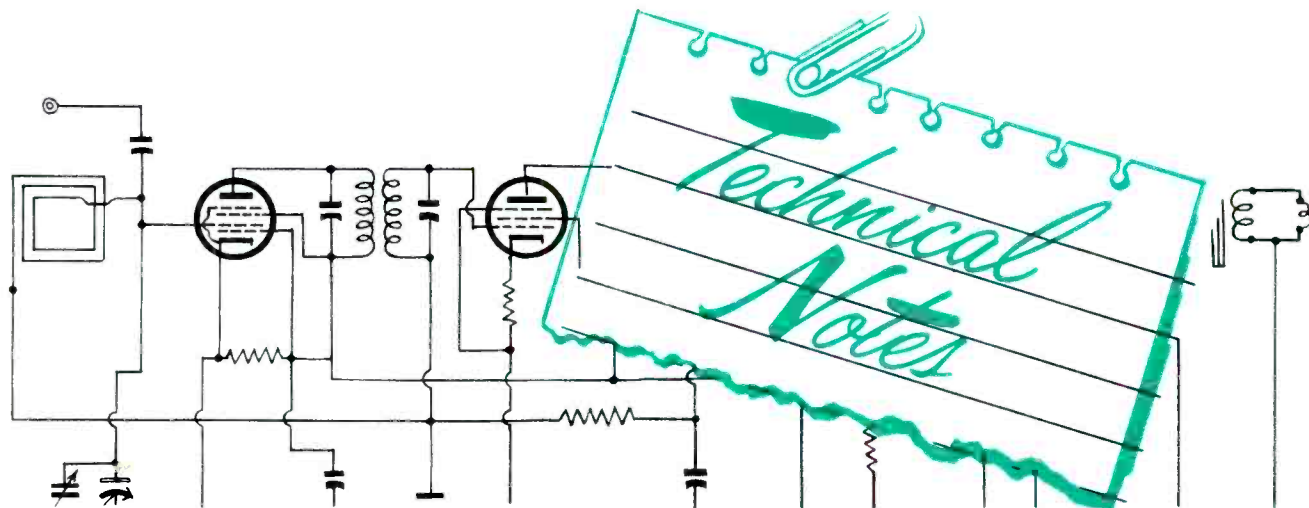
Summing up the truth as known so far, the professors cited such facts as these: "A recheck of the voting machines in Chicago resulted in a net gain of 312 votes for Nixon out of a total of 1,780,000 votes cast."

Also, the professors noted, "the State Electoral Board, composed of four Republicans and one Democrat, certified the Kennedy victory in the state on the ground that there was not sufficient evidence of fraud in Cook County (Chicago) to change the canvass." They noted further that the U. S. district attorney in Chicago, Robert Ticken, a Republican, described the 1960 election there as "cleaner than usual."

After the professors issued their report, the Chicago Tribune attempted to sneer them off as "three blind mice." The Chicago dailies generally made much of the fact that the three professors are Democrats and that their investigation was commissioned by Mayor Richard Daley, also a Democrat.

In their report the professors said Chicago's four dailies have done "constructive work" on many occasions. But they cited the facts to show that it does not promote wholesome reporting of political news with all four newspapers following one (Republican) party line on national questions.

"If it is worth while in our politics to have a vigorous two-party system, it is worth while to have a two-party press," the three professors suggested.

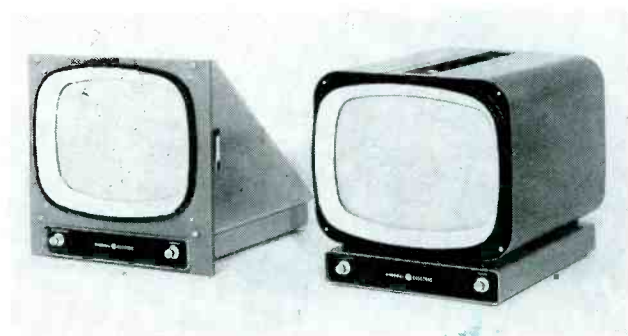


New TV Monitors

A new series of television monitors has been developed by General Electric Company to fill the varied needs of broadcast stations. The versatile models have been functionally designed to combine attractive styling and easy accessibility to all parts. And they operate with any standard monochrome camera.

For maximum flexibility in filling broadcast industry needs, General Electric provides the monitors in cabinets or rack mounting and in three screen sizes—14, 17 and 21-inch. An advanced design technique prevents interaction of controls. Thus size, focus and linearity controls are operated individually, and adjustment of one has no effect on the others. Virtual freedom from geometric distortion in the picture and the 800-line minimum horizontal resolution contribute further to excellent image quality.

In designing the new monitor series, General Electric engineers also placed emphasis on accessibility to parts. As a result, no major disassembly is necessary in any normal servicing or adjusting. Either side of the cabinet can be removed easily with the loosening of three screws. Removal of a side panel exposes parts for simple maintenance. The monitor's functional design also makes possible the operation of set-up adjustments



New GE monitors

by one man looking squarely at the tube. All other primary picture adjustments are on the front panel. Wiring and components are accessible through removal of the bottom cover panel. It is not necessary to separate the chassis from the cabinet for accessibility to any parts. The picture tube face and the glass faceplate also are easily accessible for cleaning, again through the simple loosening of four screws.

World's Fastest Camera

The world's fastest camera, capable of shutter speeds up to $2\frac{1}{2}$ billionths of a second—twice as fast as any previous photographic technique—is being demonstrated for the first time at the New York Coliseum. Developed by Space Technology Laboratories, Inc. The camera employs a new RCA developmental tube, less than 10 inches long, that serves as the electronic shutter of the device.

Dr. George L. Clark, developer of the STL Image Converter Camera, said that "successful tests in our laboratory indicate that the tube and camera combination enables scientists to make pictures at ultra-high speeds never before obtainable. "This new research tool is expected to be extremely valuable in the growing field of plasma physics including propulsion systems for space vehicles," he said. "This area of physics deals with the study of extremely hot gases influenced by electric and magnetic fields.

"The camera makes it possible to photograph objects with shutter speeds as fast as $2\frac{1}{2}$ billionths of a second. In this time, the fastest jet fighter plane travels only a few millionths of a foot or a hundredth of the thickness of a sheet of paper."

Dr. Clark said that the unusual speed of the camera, which will take 20 million frames a second, is attained by the combination of image-converter techniques and new concepts of fast pulse circuitry developed at STL.



STATION BREAKS

Retraining Proposed

The retraining of workers displaced by automation as one of the prime answers to the job losses caused by automation is finally beginning to get major attention in Congress.

With many industries showing clear signs that productivity is far outstripping available jobs, Congress already has taken two steps to launch retraining programs in limited fields.

The Area Redevelopment Act as passed by the Senate includes a section authorizing the expenditure of \$4,500,000 annually for training workers in specific redevelopment areas, including "retraining subsistence payments" for 16 weeks while they undergo retraining for new jobs.

Not Seen on Television

The surrealist artist, Pablo Picasso, saw a burglar fleeing from his studio . . . He made a sketch of the burglar for the police who immediately went out and arrested the Finance Minister of France, a washing machine and the Eiffel Tower.

Union Industries Show

Labor unions and their fair employers all over America are readying their colorful action-packed exhibits in preparation for the grand opening of the massive 1961 AFL-CIO Union-Industries Show scheduled for April 7 through April 12 in Cobo Hall at Detroit, Michigan. Several branches of the Federal government are also completing their arrangements for participation in this the world's largest labor-management display which will have exhibits valued at over \$22 million.

Joseph Lewis is Secretary-Treasurer for the AFL-CIO's national Union Label and Service Trades Department, which sponsors and produces the huge free annual event. He recently announced that reports coming in from exhibitors indicate that the Detroit Union-Industries Show will feature even more attractive action displays than were included in past record-breaking shows. Lewis is director for the Union-Industries Show which has been put on in a major American city each year since 1938 except during World War II years.

Progress Meeting

The 1961 Progress meeting of the IBEW Radio, TV and Recording Division will be held in Minneapolis, Minn., August 15, 16, and 17, and local unions will soon be getting reservation instructions from the International Office.

Top Brotherhood leaders have been invited to attend, and the agenda will be filled with organizing and negotiating topics of interest. Your local union should be represented by delegates.

LAST LAUGH



"Ed won't be there tonight. He's quit the union and joined the Untouchables."

Technician-Engineer