

TECHNICIAN ENGINEER

OCTOBER, 1964

Published for the Employees of the Broadcasting, Recording and Related Industries

INTERNATIONAL BROTHERHOOD OF ELECTRICAL WORKERS — AFL-CIO

LaFOLLETTE CIVIL LIBERTIES COMMITTEE'S EXPOSE OF LABOR ESPIONAGE — 1939

The late 1930's were turbulent years for labor with the 1937 "Memorial Day Massacre" at Chicago punctuating with tragedy the struggle for labor to organize in the mass industries. During these years, Senator Robert M. LaFollette, Jr. was chairman of the Senate Civil Liberties Committee investigating labor espionage, secret anti-union activity, strikebreaking, etc. The findings of this committee were spectacular.

On May 25, 1939, Senator LaFollette during an expose of anti-union activity said, "Dishonesty is the basis of the labor espionage trade. Burglary, larceny, false pretenses are techniques of the labor spy. The agencies cheat their employes and their clients. The spies write false and inflammatory reports to create a continued demand for their services. But the final victims of the whole sorry business are the workmen who, in an effort to raise their living standards, innocently join a labor organization infested with spies. The committee found union after union reduced from a healthy bargaining agency to a skeleton organization dominated by the employer, its former leaders fired and blacklisted through the reports of the spy."

The sensational and shocking revelations of the LaFollette group went far toward closing a black era in American labor relations. The contributions of this committee comprised a real landmark in labor progress.



Reprinted with permission from **THE LABORER**, official publication of the International Hod Carriers', Building and Common Laborers' Union of America.

The INTERNATIONAL BROTHERHOOD OF ELECTRICAL WORKERS

GORDON M. FREEMAN

International President

JOSEPH D. KEENAN

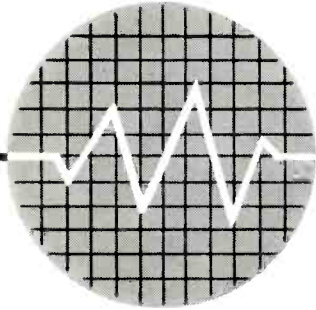
International Secretary

JEREMIAH P. SULLIVAN

International Treasurer

ALBERT O. HARDY

Editor, Technician-Engineer



TECHNICIAN ENGINEER



VOL. 13 NO. 9

ALBERT O. HARDY, Editor

in this issue	<i>Clear-Cut Choice Faces Voters</i>	4
	<i>How We Elect a President</i>	6
	<i>Labor Leaders Unanimous for Democratic Ticket</i>	7
	<i>Computer Patois</i>	8
	<i>The Labor-Management Whirl</i>	13
	<i>Technical Notes</i>	14
the cover	<i>Station Breaks</i>	16

How did your Congressman or Senator vote on key issues before Congress this year? To help you and every union member to know, the AFL-CIO Committee on Political Education has produced a leaflet to be distributed in your state (and 49 others for the other states)—listing the votes of representatives on 10 important issues—the tax cut, public works, and much more. These handy guides to voting wisely are shown on our October cover. If you can obtain one in time, take it with you to the polls.

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 1963 figures. August, 1964—108.2; August, 1963—107.2.

commentary

Sitting at the head table of International Democracy, the United States should be setting a shining example of total suffrage—a turnout of every eligible voter for every election—but the facts show we have not even been as politically vocal as some of the world's quasi-democracies.

The AFL-CIO Committee on Political Education points out that only 64 per cent of eligible Americans voted in 1960. In the 1962, off-year Congressional election, better than half of the U.S. electorate—52 per cent—sat on the sidelines.

But in turbulent Venezuela, threats of violence at the polls failed to dampen the voting enthusiasm of 95 per cent of the people. Almost anywhere else in the world, the record is better than ours. In Austria, 95 per cent voted in recent elections. In Italy, 93.8 per cent. In France, 82.7 per cent.

This year, the presidential contest is critical. Also at stake are all 435 seats in the House, and 26 in the Senate. The future of all these—and with them the future of our government—are in your hands.

Whatever your political inclinations, you can't afford to leave your future to anyone else. Exercise your voting right this November 3.

Meany Looks at the Issues:

Clear-Cut Choice Faces Voters In 'Pivotal' Presidential Election



AFL-CIO President George Meany talks sense about the real issues of the campaign in this article. Comparing the negativism of the Goldwater campaign to Johnson's record of accomplishment, Meany expresses his faith in labor's ability to judge the issues—and vote.

A MERICANS will go to the polls on Nov. 3 to choose a President and a Vice President, in what will be one of the few truly pivotal elections in the nation's history.

It will be pivotal because it does indeed offer a choice. The candidates of one party propose to continue and strengthen the 32-year partnership between the people and their government, a partnership dedicated to the ultimate achievement of the American dream of peace, freedom, prosperity and equal opportunity for all. The candidates of the other party call for a dissolution of that partnership, for a return to what they call "individualism" but which means the abdication by the federal government of its constitutional mandate to promote the general welfare.

But this election goes beyond domestic economic policy—far beyond it. The Republican convention, controlled by the backers of its eventual candidate, howled down the efforts of men like Governors Rockefeller and Scranton to inject a note of moderation into its platform. It refused

to denounce extremists of the left and right—Communists and John Birchers. It refused to endorse continued control of atomic weapons by the President alone. It refused to call for enforcement of the Civil Rights Act of 1964, the guarantee of American equality which a majority of Republicans in Congress helped to make possible.

Obviously this Republican convention paid little heed to the proposals offered by the AFL-CIO to both parties, in identical form. For the mood of this convention, and of its candidate, was not to build on the present, but rather to destroy it.

In striking contrast, the Democratic convention took the opposite view, not only on the key issues just cited, but on virtually every other plank in the AFL-CIO legislative program.

Moreover, the Democratic candidates—Lyndon B. Johnson and Hubert H. Humphrey—have proved that they mean what their party platform says. They have proved it by their performance.

There is Lyndon Johnson's magnificent record of accomplishments in the 10 months since that horrible hour when an assassin's bullet thrust upon him the responsibilities of the Presidency. And there is Hubert Humphrey's outstanding 16-year career in the Senate, not only as a brilliant exponent of liberalism, but also as a leader with solid proposals to meet the nation's problems.

On the surface it would appear that the outcome of this election is inevitable.

Yet it would be a grave mistake to rely upon surface indications. Sen. Goldwater has based his campaign on what he believes are underlying

● Our country was founded on the principles of equality and justice; yet it has tolerated massive discrimination and injustice for millions of its citizens. Now, at long last, sensible safeguards for the rights of all have been written into law; but the law has left in its wake uneasiness and fear, as unreasoning as the prejudices which made the law mandatory.

It is to these sources of discontent that Sen. Goldwater has addressed his appeal.

He promises no solution. He offers no program. He says only: I share your fears, your discontent, your unhappiness. Elect me, he says, and all will be well. The problem will vanish overnight and life will be simple and serene.

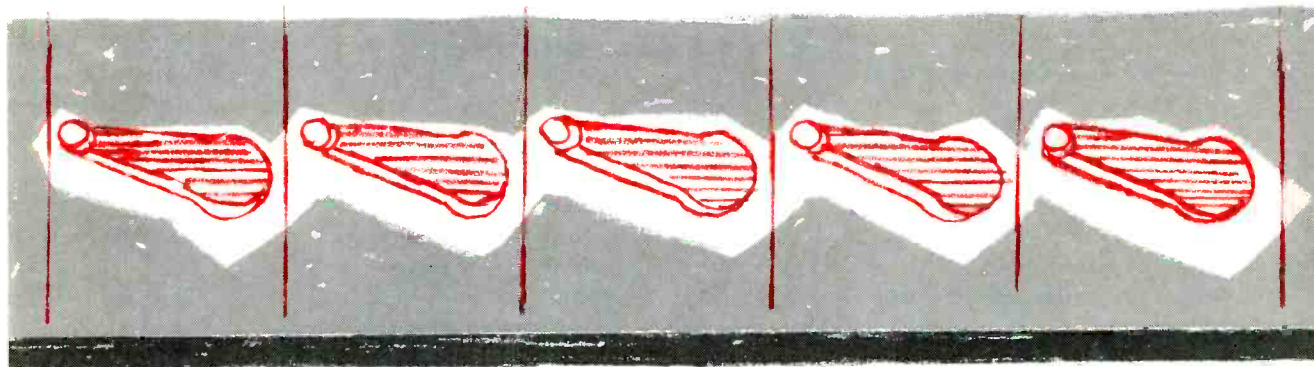
Will this appeal work? Can Sen. Goldwater mobilize an army of discontent large enough to make him President?

I think not, for I have absolute confidence in the common sense of the American people. They know that problems cannot be wished away. They know that problems must be solved. And they also know that the present Administration, and the program of the Johnson-Humphrey ticket, intends to solve them.

Yes, this election does indeed offer a choice, a clear and unmistakable choice.

Americans can choose men who stand for freedom, progress, decency, a continued drive for universal prosperity—men who pledge to the free world a mature leadership, neither fear-ridden nor trigger-happy.

Or they can choose men who preach only fear, who court the support of political extremists, who would return to the law of the jungle and who promise the free world neither help nor leadership.



currents of disquiet among the American people. They might be stated this way:

● The United States is the most powerful military force on earth; yet the cold war continues and American troops are engaged in deadly—and indecisive—combat half-way around the globe.

● America is the most prosperous nation the world has ever known; yet many of its people live in poverty and many more fear a tomorrow in which their skills may be obsolete and their security destroyed.

The men and women of the trade union movement have made their choice—Lyndon B. Johnson and Hubert H. Humphrey.

They stand for freedom and progress. They approach the future determined, unafraid, confident in the true spirit of America.

And America's workers will go to the polls on Nov. 3, in the greatest outpouring of voters in our history, to register their choice for leaders they trust and their disgust for politicians who would make this a fearful nation, unwilling and unable to keep its rendezvous with destiny.

How We Elect A President



THIS much is certain—no matter who wins the Presidential election on November 3, the political cycle of finding the next tenant of the White House will begin almost the morning after.

Party factions will regroup, newly-constituted national committees of the major parties will analyze mistakes and begin to seek funds, “booms” and “boomlets” will be set aloft, and the political drama which will culminate in the national conventions and Presidential election of 1968 will begin to unfold.

This year, an estimated 100 million Americans are eligible to vote, and about 70 million will do so according to Compton's Pictured Encyclopedia. They will be participating in an intricate exercise in government which is neither pure democracy nor pure Constitutional law, but a combination of both.

They were witnesses to party nominating conventions that combined extravaganza, tedium—and, occasionally, true suspense. They will cast votes that will not be “official” until an institution called the Electoral College tallies them a month later.

Barry M. Goldwater and Lyndon B. Johnson are campaigning today for popular votes that must be translated into the minimum of 270 Electoral Votes required for victory.

They—through the voters—will be competing within the framework of an Electoral College devised by the framers of the Constitution to avoid what they feared would be “the tumult and disorder” of a direct election by a population scattered thinly over widely dispersed states and not always able to adequately inform themselves on the qualifications of candidates.

They will be participating in a complex election ritual which some historians believe is outdated and a violation of democratic principles, but which the major parties defend because the present system makes the individual states (and their party machineries) a weightier factor in the election's outcome.

They will become part of the sometimes erratic history of the Electoral College, which has twice resulted

in the candidate with fewer popular votes winning a majority in the Electoral College. In 1876, Rutherford B. Hayes beat Samuel J. Tilden by one electoral vote although trailing him, 4,033,768 to 4,285,992 in the popular vote. Again, in 1888, Benjamin Harrison defeated Grover Cleveland in the electoral college (233 to 168) although Cleveland rolled up more than 100,000 additional popular votes.

Compton's points out that the Electoral College is a group of electors chosen in each state for the sole purpose of electing the President and Vice President. Each party nominates its own slate of presidential electors for each state. These electors are pledged to vote for their party's candidate.

The Presidential electors are within the constitutional rights in voting for whomever they please, but rarely do they break the pledge to party and voters.

The election takes place every four years on the Tuesday following the first Monday in November. While the results are generally known by midnight of Election Day, the technical voting by the Electoral College does not occur until December, when, on a date fixed by federal law, the electors meet in their respective state capitals and formally cast their ballots. The candidates are formally elected when Congress counts the electoral votes from each state.

Individual electors in the Electoral College have not always functioned as the voters intended.

In 1820, an elector voted against James Monroe; in 1956 an Alabama elector voted against Adlai Stevenson; and in 1960 an Oklahoma elector voted for Harry F. Byrd rather than Richard Nixon.

If no Presidential candidate receives a majority of the Electoral College, the 12th Amendment provides that the election shall be decided by Congress. The House of Representatives chooses the President by ballot from the three candidates with the highest electoral college totals. Each state has one vote. A majority of votes is needed to win. The Senate selects the Vice President from the two candidates having the most electoral votes.

Labor Leaders Unanimous For Democratic Ticket

THE AFL-CIO General Board, composed of the presidents of all the Federation's affiliates, has unanimously endorsed the candidacies of Lyndon B. Johnson for President of the United States and Hubert H. Humphrey for Vice President.

This decision was reached after carefully analyzing the platforms in detail, as well as the candidates and their records and views. The action of the board followed the recommendations of the AFL-CIO Executive Council, which said: "It is in the best interest of the 13.5 million members of the AFL-CIO to take a forthright stand in the coming election" and specifically to endorse Johnson and Humphrey.

The General Board stated:

"The choice is obvious, both as to the platform and the candidates.

"Therefore, it is the considered judgment of the General Board of the AFL-CIO that the election of President Lyndon B. Johnson and Hubert H. Humphrey is a matter of the most vital concern to the labor movement, to all the people of the United States, and to the cause of peace and freedom throughout the world.

"We endorse their candidacy.

"We urge every union member to give these candidates their most wholehearted support."

The following are quotes from some of the different international presidents, the first three of whom are registered Republicans.

JAMES SUFFRIDGE, President of the Retail Clerks International Association—

"Although a registered Republican, it is my firm conviction that I must support a Democrat for President this November. I have decided on this course for the following reasons: First, I regard Lyndon B. Johnson as a friend of the American wage earner; second, I have complete faith in his ability, his integrity and his progressive outlook on the need for the elimination of poverty, prejudice and inequality; third, and most important, I believe that the preservation of peace in the world must rest on wisdom, and that the man whose finger can press the button of eternity should be a wise and thoughtful man."

M. A. HUTCHESON, President of the United Brotherhood of Carpenters and Joiners of America—

"In short, Senator Goldwater seems to be against everything that would help the American working men . . . his record shows he is in complete discord with the policies of the Democratic Party, the Republican Party (not to include the radical right segment) and the American labor movement."

LEE W. MINTON, President of the Glass Bottle Blowers Association—

"It should be noted that the Republican Platform pledges constant opposition to any form of unregulated monopoly whether business or labor."

GORDON M. FREEMAN, President of the International Brotherhood of Electrical Workers—

"On the one hand we have Mr. Johnson who is fighting hard to bring about basic programs advocated by the AFL-CIO. We have Mr. Humphrey with a perfect voting record on all issues which the AFL-CIO has considered vital. He voted "right" 60 times out of 60.

"On the other hand there is Senator Goldwater. His record is one as consistent as Mr. Humphrey's except in reverse. In all his years in the Senate, Mr. Goldwater has not had a single "right" vote on the measures with which the AFL-CIO was concerned."

JOSEPH V. MORESCHI, President of the International Hod Carriers', Building and Common Laborers' Union of America—

"We have urged our members to support President Lyndon B. Johnson and his running mate, Senator Hubert H. Humphrey, for election because we believe that the best interests of the country and of labor will be served by their selection to lead the country."

E. L. WHEATLEY, President of the International Brotherhood of Operative Potters—

"By his voting record, the Senator from Arizona has demonstrated conclusively that he is an 'against.' He is not only 'against' what Democrats propose and vote for, he is also 'against' what Republicans propose and vote for."

HAROLD C. CROTTY, President of the Brotherhood of Maintenance of Way Employees—

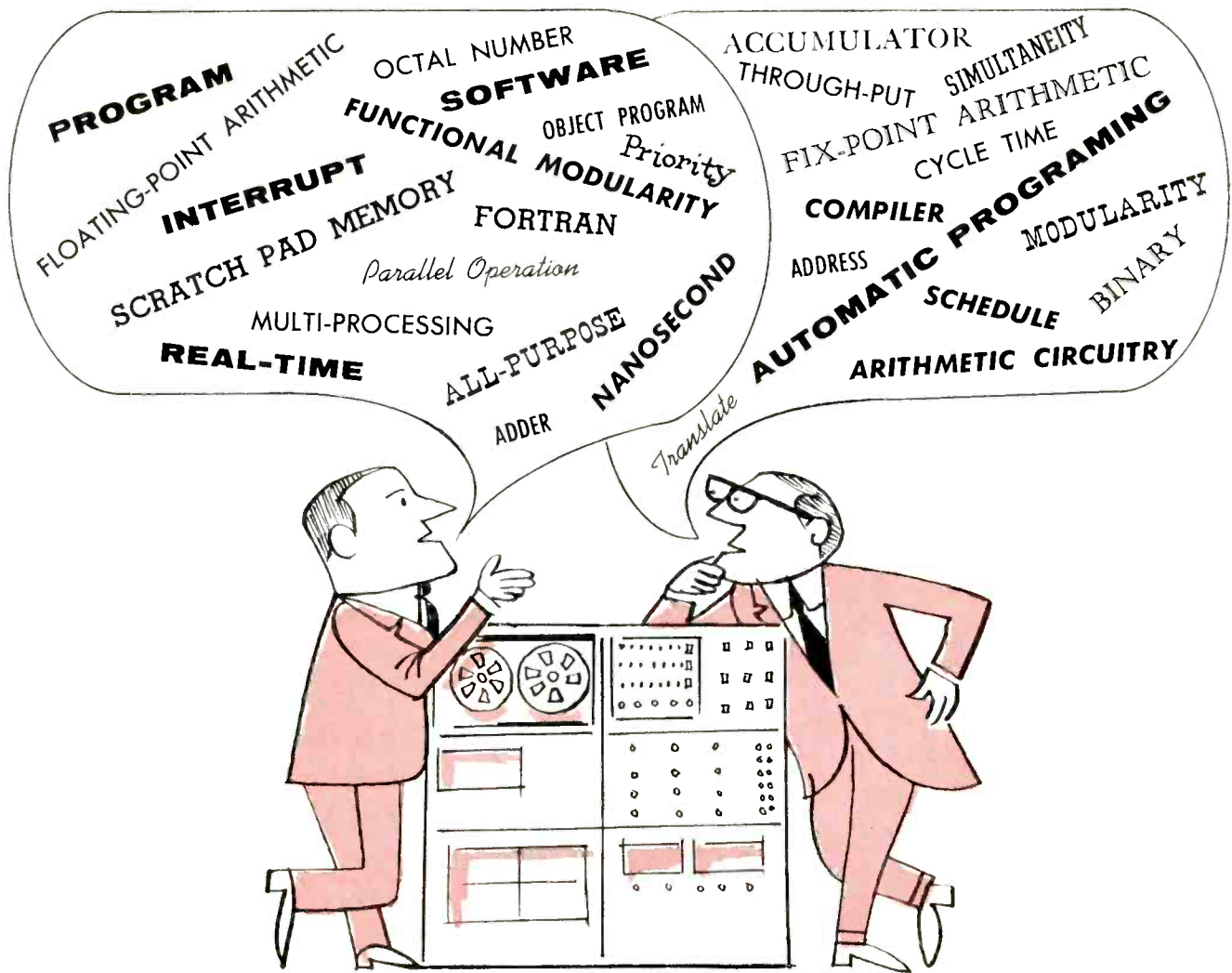
"The type of policies proposed by Senator Goldwater forbids a return to the wages and working conditions that were in effect at the turn of the century. America would go back to the days when employers reigned supreme, firing whomever they pleased and dictating wage levels unchecked by strong trade unions or effective collective bargaining."

EDWARD J. LEONARD, President of the Operative Plasterers' and Cement Masons' International Association—

"Goldwater would change our labor laws so that the worker would lose all he has accomplished in the past one hundred and fifteen years."

Lastly, but most important, it would be wise to keep in mind what **GEORGE MEANY**, President of the AFL-CIO, recently said about the up-coming election—

"Barry Goldwater likes his unions, but he likes them small and he likes them divided and he likes them weak."



Computer Patois

BY KEN KIZER

Reprinted from *Electronic Age*, Autumn 1963

Along with the growth and development of electronic data processing, a new and necessary use of the English language has evolved.

I was FDR who invented the WPA, NRA, and TVA.

WWII didn't help with its LST, SHAPE, BuWeps, and others. Despite campaign promises that Republicans would put an end to the Democrats' alphabet soup, things went from bad to worse with ICBM, ComLogNet, and BMEWS.

English has been described as a tough language to learn. It took the Americans to make English tougher by pluralizing collective singulars (equipments), employing adjectives as verbs (duplexed), and popularizing the acronym for household use (A-OK, TIROS).

The fracture is compounded by segments of business and government having their own gobbledy-gook. In

the electronics industry, for instance, it would put the uninitiated to quite a bit of digging to define "real-time," "through-put," or even a word like "word."

COBOL, for instance, does not mean a boy and girl having a hilarious time but stands for *COM*mon *BUS*iness *OR*iented *L*anguage, a technique pioneered and protected by RCA to aid programmers to express computer problems in the English language.

An instruction in COBOL might read: **RECORD-CHECK.** Read Transaction-File; If Trans-Number is Greater than Master-Number Go to Get-Master; If Equal to Process-Routine Add Trans-Amount to Stock-Amount and Go to Print.

That's English? Perhaps it would help to know that the word "if" is used as a verb.

Grammatical purists would retreat in horror upon learning of the electronic definition of such commonplace words as configuration, address, compiler, mem-

ory, simultaneity, and storage, to list but a few.

A casual visitor to an RCA computer room might wonder upon hearing, "Joe, mount the PLT on the 10 kc station, set P to 2,000 and hit start, please."

He probably would not know that one was telling the other to place the program library tape on the 10,000-character-per-second tape station, set the program register to location 2,000 in the highspeed memory, and depress the start button on the computer.

Below is a definition of an often-used term which, hopefully, will serve to help solve the problem, not become part of it. You'll notice it takes definitions to define definitions:

Access, immediate—pertaining to the ability to obtain data from, or place data in, a *storage* device, or *register*, directly without serial delay due to other units of data, and usually in a relatively short period of time.

(Storage—term preferred to "memory"; pertaining to a device in which data can be stored and from which they can be obtained at a later time. The means of storing data may be chemical, electrical, or mechanical.)

(Register—hardware device used to store a certain number of *bits* or characters. A register is usually constructed of elements such as transistors and usually contains approximately one word of information.)

(Bits—an abbreviation of binary digit, a single character in a binary number or a single pulse in a group of pulses. It is also a unit of information capacity of a storage devices, the capacity in bits of a storage device being the logarithm to the base two of the number of possible states of the device.)

Obviously, space and a layman's knowledge of the subject matter dictate a far simpler glossary than the above. In alphabetical order, here are some terms and, briefly, what they mean:

Accumulator	Device which stores results of an arithmetic operation.
Adder	Device to supply sum of two or more quantities placed into it.
Address	Instruction code used to locate specific data within a storage unit.
All-Purpose	Computer combining the specific talents heretofore assigned solely to a general-purpose or special-purpose computer (scientific or business)—for example, the RCA 3301.
Arithmetic Circuitry	High-speed arithmetic unit which provides fixed and floating-point operations in one computer. (See Fixed point, Floating point.)
Automatic Programming	Technique employing the computer to translate instruction from a form easy for a human being to produce and understand into a form suitable for computer use.
Binary	Number system using only the digits 0 and 1.
Compiler	Translator which reduces a problem-oriented language program into machine language.
Cycle Time	Interval between the call for and delivery of information from storage unit or device.

Fixed-Point Arithmetic

A type of arithmetic in which the operands and results of all arithmetic operations must be properly scaled so as to have a magnitude between certain fixed values.

Floating-Point Arithmetic

A method of calculation that automatically accounts for the location of the radix point. This is usually accomplished by handling the number as a signed mantissa times the radix raised to an integral exponent—e.g., the decimal number + 88.3 might be written as + .883x10²; the binary number -.0011 as -.11x2⁻².

Fortran

Acronym for *FOR*mula *TRAN*slator, a programming system that translates into computer language statements expressed in a format similar to algebraic equations.

Functional Modularity

Addition of modules to a basic data processing system that broadens the scope or concept of the system as well as adding to its capacity.

Interrupt

To disrupt temporarily the normal operation of a routine by a special signal from the computer. Usually the normal operation can be resumed from that point at a later time.

Modularity

Makeup of a system resulting from the assembly of the whole by the addition of sub-units, or modules.

Multi-Processing

Processing several programs concurrently.

Nanosecond

One-billionth of a second.

Object Program

A set of machine-language instructions for the solution of a specific problem.

Octal Number

A number of one or more figures, representing a sum in which the quantity represented by each figure is based on a radix of eight; figures are 0 through 7. (Compare decimal number with a radix of ten—0 through 9.)

Parallel Operation

Flow of data through a single processor using two or more channels simultaneously.

Priority

Value assigned to a program to specify the relative processing sequence.

Program

Series of instructions causing a data processing system to process a specific application.

Real-Time

Processing data with virtually no time lag between the event, computer decision, and response.

Schedule

Time and sequence designation for projected operations.

Scratch Pad Memory

High-speed memory device used to store the location of an interrupted program and to retrieve the latter after the interrupting program has been completed.

Simultaneity

Communication between various units of a system at the same instant.

Software

Programs, routines, procedures, and the like to augment and support a computer system.

Through-Put

Productive work accomplished by the combined efforts of programmers, system operators, and the system itself.

Translate

Producing a statement in one language equivalent to a statement in a different language.

Variable Word Length

Refers to a storage device in which the capacity can accommodate units of data in varying lengths.

Word

Set of characters, occupying one storage location, treated as a unit.

LOCAL UNIONS, TAKE NOTE

The Federal Mediation and Conciliation Service now has a new Form F-7, entitled "Notice to Mediation Agencies." This new form, in good supply since its issuance the middle of this year, should be used to notify the Service, state agencies, etc., rather than the predecessor form in circulation for some previous years.

While the use of Form F-7 is not legally required, it is at least equally convenient as writing a letter and distributing the necessary copies. Some formal notice to the F.M.&C.S. and appropriate state agencies is required, however, by Section 8(d) of the Labor Management Relations Act.

ELECTRONICS COURSE ON TV

A series of programs entitled "Electronics At Work" is being telecast in Pittsburgh, Altoona, Philadelphia, New York and Boston. Made up for presentation in 90 half-hour sessions, it presents material from Electrostatics to TV Communications Systems. The teacher is the well-known John W. Wentworth of RCA, who has written accompanying "Study Guides," in six units of 15 lessons each. Stations carrying the programs will announce the availability of the printed guides, or inquiries may be addressed to: Electronics At Work, Box 66, West Columbia, South Carolina.

WQED, Pittsburgh; WHYY, Philadelphia; WFBG, Altoona and WGBH, Boston are among the stations carrying this program. WNTD, New York advises of its program schedule as Monday, Wednesday and Friday, 12:30 to 1:00 P.M. with the program repeated between 11:10 and 11:40 P.M. on the same days.

NEW WHITE HOUSE FACILITY

The President of the United States now has a readily-available broadcasting facility at the White House which began operation on October nineteenth.

A joint venture of the national networks, it is complete from cameras to video lines and microphones to audio lines. The equipment is warmed up and ready any time any important news breaks from the White House.

SHE BEEFS ABOUT \$15

Not satisfied with a 13-week vacation pay check for \$1700, a woman in Pennsylvania complained to her union about a deduction of \$15 for her dues. Not to be one-upped, headquarters responded courteously—with an offer to swap a \$15 check for the \$1700 model.

ONE YOU CAN DO YOURSELF

Swiss watchmakers, combining their ancient skill with the electronic age, have invented a "reminder clock," *Insider's Newsletter* reports. You record on tape what you plan to do at a future time, set the clock's alarm, and when it rings you hear yourself give yourself instruction.

RADIO STATION'S WATER WINGS



WWDC Radio News Director Bob Robinson (at wheel) and Newsman John Goldsmith take out the station's Amphicar for its trial run on the Potomac River. The vehicle which rides on land and water equally well has recently been added to news facilities of the Washington, D. C., area station and it is the first vehicle of its kind ever registered in the District of Columbia. The amphibicar, nicknamed "Scoop," is used for news, special events and station promotion.

WEEK-TV MOVES TO 25

WEEK-TV went on the air in January of 1953 on channel 43. The station has now obtained FCC approval to move to channel 25. A new transmitter and control equipment has been installed and final testing is in progress. There has been a slight delay in the delivery of the channel 25 antenna but it will probably be delivered and installed prior to the Fall TV season.

The accompanying picture is of Brother Robert Swadener, a WEEK-TV technician and Executive Board member of Local Union No. 1292, at the control console of the present channel 43 transmitter. The new transmitter is in the rear of the photograph. The move to 25 will place WEEK-TV between its two competitors on channel 19 and 31. WEEK-TV also owns and operates WEEQ-TV as a satellite on channel 35 in the Tonica, Illinois area and utilizes an off-the-air pickup. WEEK-TV's move to channel 25 should greatly improve reception in the primary area and likewise improve the signal received by WEEQ-TV for retransmission.

LEST WE FORGET . . .

The world of Calhoun, the world of Taft had its own hard problems and notable challenges. But its problems are not our problems. Their age is not our age. As every past generation has had to disenthral itself from an inheritance of truisms and stereotypes, so in our own time we must move on from the reassuring repetition of stale phrases to a new, difficult, but essential confrontation with reality.

. . . The great enemy of the truth is very often not the lie—deliberate, contrived and dishonest—but the myth—persistent, persuasive and unrealistic.

—The late John Fitzgerald Kennedy,
Yale University, New Haven, Connecticut,
June 11, 1962.

THE LABOR- MANAGEMENT WHIRL

Barry Wants \$1 Billion

• IN WASHINGTON, D. C., union officials found Republican Presidential Candidate Barry Goldwater an increasingly interesting phenomenon. Among other quirks connected with the Arizona Senator is that while he continues to travel around the country demanding less and less Federal spending and less and less governmental activity in the states, in Washington he has been pushing with might and main for a Congressional appropriation of more than \$1 billion to build a series of dams in his own home state.

He has not yet disclosed whether after the dams are built with taxpayers' money he will advocate they be sold or handed over as gifts to private power companies, as he has advocated in the case of TVA. Equally revealing was the publication of a new book, entitled "How to Win an Election," written by one of Goldwater's closest advisers, ghostwriters and brain-trusters, Stephen Shadegg.

Motors Ain't Fair

• IN VENICE, ITALY, a strike by Venice's world-famous gondoliers, coupled with a threat to burn their gondolas, won a quick victory for the city's 400 singing boatmen. For more than a year the gondoliers have protested the city's licensing of motor boats to operate on the world-renowned canals.

According to the gondoliers, the motorized taxis not only left the fragile gondolas awash and dented; the clattering motors and gasoline fumes also took all the romance out of Venice for tourists. The gondoliers had gone on strike before, but although they seemed to win their strikes, somehow the motorboats always came back.

This time the men decided they would couple their strike with more drastic action. Fifty of them stacked up their boats on the main gondola-landing near the famous Doge's Palace and threatened to set fire to them; and after them, they threatend, would come 50 more. Horrified city fathers, visualizing their profitable tourist trade evaporating, quickly surrendered, and ordered the motor taxi licenses rescinded.

Wise Old Owl Comes Through Again

• IN COVENTRY, ENGLAND, a major problem plagued a local factory where American Nike guided missiles for the NATO forces are assembled and painted. The problem was sparrows—and their unguided missiles. Each direct hit meant that the workers had to do a complete repainting job.

Management tried for more than a year to find some method that would drive the birds away and keep them away, but always the little feathered pests returned. Finally the disgusted workers put their minds to finding a solution. They found one, simple and quite inexpensive, compared with the very costly techniques tried by management.

The men merely cut out a bunch of plywood owls, painted them to make them look realistic, and planted the owls in the rafters. The sparrows fled and never came back. "The owls scared hell out of them," said the union chairman.

How to Conduct a Budget Meeting

• IN MOSCOW, RUSSIA, probably the most illuminating revelation on record of how the Stalin dictatorship operated was offered by no less an authority than Stalin's successor in the Kremlin, Nikita Khrushchev. One day Stalin called his cabinet together and after they were all seated, pointed to a tall stack of papers in the middle of the table.

"That," said Stalin, "is the budget for the coming year. Is anyone opposed to it?" Complete silence. "Those in favor of it." All hands were raised. "Good," said Stalin. "It is passed. Now let's go to the movies." Later in the Kremlin theater, Stalin nudged Khrushchev and whispered, "That was no budget. That was just a pile of paper."

U. S. Election Ballot Came From Australia

The estimated 75 million Americans who will vote for President and Vice President and other federal and local offices on November 3 will be using a system developed in Australia.

"Kangaroo voting" was the derisive name first given to the practice of secret voting on officially printed ballots adopted in the United States in 1888. In those days, women didn't vote at all, and it was considered unmanly to do so in private.

Voice voting had been the rule, the National Geographic says. Citizens gathered at the polling places and announced their choices to an election judge—usually the mayor, sheriff, or coroner. As each citizen uttered his choice, partisan crowds responded with catcalls or cheers.

The chaotic situation was eased when secret voting in national elections became federal law in 1875. But the absence of official ballots still left the individual voter somewhat exposed to the public gaze.

Political parties printed ballots for the "convenience" of the voter. They used colored paper, however, and poll watchers could tell at a glance who was voting for whom.

The parties stayed one step ahead, even after a law requiring uniform white ballots was passed. They used paper of different textures so that party observers who handled the ballots at the polls would know which way a person had voted.

In 1858, the system of secret balloting on officially printed forms was adopted in South Australia. The practice spread to the United States and Europe.

Meanwhile, New York State had tried the secret ballot in 1852, but discarded it the following year on the ground that it "insulted the manliness and independence of the laboring man."

New York was to pioneer in the use of voting machines in 1892, however. Though some states contested the legality of machine voting, the courts ruled in favor of the system. By 1960, about 100,000 voting machines were in use.

The machines have become popular not only in national elections but in others as well. In Washington, D. C., the politically knowledgeable members of the National Press Club have been using a machine to cast ballots for club officers since 1962.

The first returns in presidential elections, however, traditionally come from places that have no voting machines. Small New England communities vie with each other every four years to be the first to report.

In 1960, the prize went to the hamlet of Dixville in the White Mountains of New Hampshire. Its nine inhabitants cast their votes in a solid block for the Republican candidate. Afterwards, they sat down in their town hall to have coffee and cake, and wait for the rest of the Nation to catch up.

IBEW Challenges 'Work' Law in Wyoming Court

A challenge to the constitutionality of the Wyoming "Right-to-Work" law, instituted by the International Brotherhood of Electrical Workers, could have an impact on all state open shop measures.

The IBEW filed suit on behalf of its local unions in Cheyenne, Casper and Laramie to restrain Gov. Cliff Hansen, the state Attorney General and the prosecutors in Wyoming's 39 counties from enforcing the "work" law.

Three chapters of the National Electrical Contractors Association joined in the suit.

IBEW President Gordon M. Freeman said that "The IBEW has taken on this legal battle not only in the interest of its own locals but the entire labor movement. The disruptive policy of the State Right-to-Work laws conflicts with the Federal policy in labor relations matters and all constitutional questions arising out of this conflict must be thoroughly explored and clarified by appropriate litigation.

"The action of the Circuit Judge in this case promises a clean-cut test of the issue before the Supreme Court of Wyoming and, perhaps, the Supreme Court of the United States."

The IBEW contended in the lower court that the Wyoming law bars a union from representing employees who have not authorized the union to act as collective bargaining agent and that in doing so the Wyoming law is in direct conflict with the National Labor Relations Act giving exclusive bargaining rights to the majority representative.

The IBEW also said that the prohibition in the Wyoming law of exclusive referral systems is in direct conflict with the provisions of the National Labor Relations Act which have been held to validate exclusive referral systems such as the one used in the electrical and contracting industry for many years.

After a year of litigation in the lower court, during which he denied the Attorney General's motion to dismiss the IBEW suit, the Circuit Judge refused to find the Wyoming statute constitutional and certified particular "important and difficult constitutional questions" to the Supreme Court of Wyoming for decision.

Legal counsel for the plaintiff IBEW are John J. Rooney of Cheyenne, Wyoming, and Louis Sherman and Thomas X. Dunn of Washington, D. C.

Legal counsel for the defendants and intervenor, Associated General Contractors of Wyoming, are John F. Raper, Attorney General of Wyoming, Paul B. Godfrey of Cheyenne, and John L. Kilcullen of Washington, D. C., associated with the National Right-to-Work Committee.

In Memoriam
VICE PRESIDENT FOEHN

International Vice President Charles J. Foehn passed away on October tenth, following a long illness at the University of California Hospital in San Francisco.

Charlie was 60 years of age and had been a member of the Brotherhood for more than 41 years. His many friends and fellow trade unionists will long remember him for his good will and his devotion to duty as a labor leader. He was the Business Manager and Financial Secretary of Local Union 6 from 1938 until 1960 when he became the Vice President in the Ninth District.

He was perhaps best known as an International Executive Council member, from 1942 until 1960, representing the Seventh I.E.C. District with honor and distinction. In the Bay Area, he was also well known as a Commissioner of the San Francisco Board of Education since 1945 and by his period of four years' service on the San Francisco Housing Authority.

He was the personification of integrity, and exponent of responsibility and a kindly and gentle man who will be sorely missed. May he rest in peace.



Charles J. Foehn

DON'T JUDGE A BOOK BY ITS COVER

• IN WASHINGTON, D. C., union leaders enjoyed their biggest chuckle of the summer over the newest pieces of Barry Goldwater propaganda circulating in the Capital. The items are matchbooks, very beautiful, with red and silver covers and with the matches gold-tipped to remind you of Goldwater. But inside is a single line that probably has the 100%-American Goldwater gnashing his teeth. The line discloses that the matchbooks are "Made in Sweden"—an enthusiastically socialist country!

HASTE MAKES WASTE

• IN NEW YORK CITY, a number of newspaper reporters aren't sure they'll ever forgive Senator Kenneth Keating for all the energy he caused them to waste. The newsmen had gathered tensely and expectantly to learn whether the liberal Senator Keating, a strong anti-Goldwater Republican, would run for a second term and battle Attorney General Robert Kennedy for the seat.

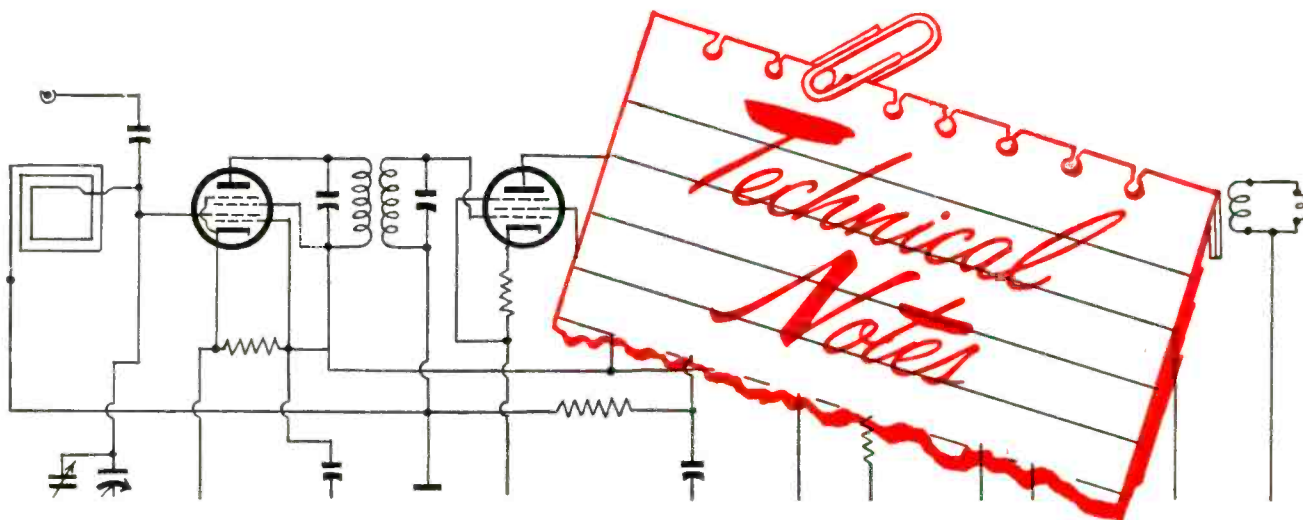
Senator Keating began, "At the outset I would like to announce that I will not be a candidate for the United States Senate." The reporters sprang from their chairs and some of them were half-way through the door when they heard Keating conclude his sentence with a sly dig at Kennedy, "... from Massachusetts."

A NEW LABOR LAW IN ENGLAND

• IN BIRMINGHAM, ENGLAND, a new national labor law that neither labor nor management wanted went into effect recently. The law requires that bosses give workers up to four weeks' notice, with pay, before firing them. Workers on the other hand, must give the boss one week's notice before quitting.

Employers object to the new law on grounds that it will vastly increase record-keeping. Unions are critical because the law contains a "sleeper." If a worker goes out on strike he loses the continuous service necessary to collect the four weeks' firing notice.

THE LABOR- MANAGEMENT WHIRL



SHIRT-POCKET, LONG-RANGE XMTR

A continent-spanning radio transmitter that uses body heat for frequency control stability and can fit in a shirt pocket has been announced by the Radio Corporation of America.

"This is the smallest transmitting device capable of sending signals across North America, and has been designed primarily for emergency use," said James G. Arnold, engineer, who developed the transmitter at the Tucson, Ariz., facility of the RCA Communications Systems Division.

First of its kind, the transmitter weighs only 10 ounces including batteries, and its antenna weighs only an ounce. In contrast, a standard lifeboat transmitter-receiver weighs 58½ pounds.

In operation, the user places a miniature metal container, linked to the transmitter and containing frequency-determining crystal elements, under his upper arm and keeps it there, where a high degree of temperature stability always exists.

Success of the long-range transmission concept, the developer said, is based on using the stable high frequency skywave medium for an extremely narrow bandwidth reception. "The concept is simply derived," said Mr. Arnold. "If the receiver bandwidth is reduced to one-half on a given transmission path, the required transmitter power can be halved and consequently a much smaller transmitter can be used." Beyond emergency uses such as those of downed pilots and shipwreck survivors, the little transmitter is believed to fill communications needs of U.S. Peace Corps members, missionaries, explorers, surveyors and others whose activities require distant and oftentimes solo travel.

Tests have demonstrated the capability of the diminutive, solid-state unit to send specially keyed signals to a receiver site at Tucson from points of varying distances, including those in New York State, Alabama, Maryland, North Carolina and Virginia. Through its unique coding scheme, the transmitter broadcasts three bits of informa-



An RCA model demonstrates the transmitter's range.

tion per minute and this, in terms of the code, could represent far more intelligence than indicated. For instance, groupings of a few signals could, by prearrangement, represent a message of vital concern to the sender and recipient.

Mr. Arnold explains that transmissions require a special receiver such as RCA has developed and built at its Tucson facility. This receiver weighs forty pounds and like the transmitter, can operate on any frequency between two and thirty megacycles.

The transmitter, which measures 2½" x 4" x 1⅛",

is crystal-controlled and operates on a radiated power of the order of 100 milliwatts. The antenna consists of a strand of wire weighing only one ounce. To provide varying distances of coverage during different time periods, the transmitter can be designed to operate on multiple frequencies simultaneously.

PUSH-BUTTON VOTING

A proposal was recently made by Rep. Everett Burkhalter (Dem.-Calif.) that Congress adopt an electronic, push-button system of voting.

"It takes about thirty minutes for the House staff to call the roll," says Burkhalter. "In contrast, electronic voting takes only twenty to thirty seconds. Thirty-one states already have this equipment in one or both of their legislative houses."

Each Congressman would have two buttons on his desk. Upon pressing one button or the other, his vote would be recorded in a half a minute, on a huge board located somewhere on the floor of The House. On this board would be each Congressman's name with a red and a green light beside it. Red would indicate a "no" vote, and a green, a "yes" vote. This vote would also be electronically recorded on paper.

An additional advantage of this system is that it would prevent Congressmen from looking around the room to see how others voted, and then, following the herd instinct by voting the same way.

Several large electronic firms, to include IBM, Remington-Rand, etc., are now looking into the feasibility of this time-saving method of voting for use in the House of Representatives.

25-INCH RECTANGULAR TUBE

Zenith Sales Corporation recently announced its development of a new 25-inch rectangular color tube. Zenith says that its new tube "climaxes several years of intensive research by Rauland Corporation scientists, working in close collaboration with Zenith's color circuit laboratories." The new 90-degree color tube, of the three-gun, shadow mask type, is 4 inches shorter than the conventional 70-degree, 21-inch color picture tube, making possible design of slimmer, more compact cabinetry. Its 300 square inches of rectangular picture area (compared to 265 square inches for the 21-inch tube) provide a larger viewable picture more nearly in proportion with the one transmitted by the station.

A TWO-TUBE COLOR CAMERA

According to an article in a recent issue of *Broadcasting* magazine, the Japanese are developing a two-tube color camera.

They are working hard at perfecting such a camera in time for colorcasting of the Olympic games, which take place in Tokyo in October. The work is being

done by the research division of the Japanese Broadcasting Corp. (NHK).

In the two-tube camera, the incoming light is split into a separate-luminance signal and a color signal image. The separate-luminance signal is black and white; the color tube is also image orthicon. In front of the color tube is a triple primary color filter. As a result the incoming color signal is separated into an optical image consisting of vertical stripes of the three primary colors, which in output becomes a sequential color signal.

The combination of the luminance and color signals into one signal is the equivalent of the color standards used by the United States. This makes them compatible, so that color transmissions can be received on color receivers in black and white.

RCA is reported to be using a fourth, black and white tube in addition to the three color tubes in color cameras at present.

WIDE-RANGE SOLDERING GUN

An "all" soldering gun has been developed by Wen Products of Chicago, which provides heat ranges from 25 watts to 450 watts in one small, lightweight soldering instrument. A ultra-high temperature space-age metal used in the gun produces extremely rapid heating with small current draw, and ATR (Automatic Thermal Regulation). The 450 comes up to heat 36 times faster than comparable 500 watt iron.

Automatic Thermal Regulation (ATR) provides an extremely efficient range of heat power through the use of a new superconducting wire in the tip, developed for the Atlas missile. With ATR, heat power is automatically adjusted to the right level for the job. Each tip provides a range of Heat Power (transferable volume of heat at the tip) as follows:

Fine point tip—25 to 100 watt range (used for printed circuit work, TV and hookup jobs, and stranded wire splicing). Medium duty tip—100 to 200 watt range (used for splicing heavy electrical wires, appliance and toy repair). Heavy duty tip—200 to 450 watt range.



Ultra-high temperature, space-age metal in new gun.



STATION BREAKS

TWO SHOWS SIMULTANEOUSLY

KFMB-TV, San Diego, has come up with a simultaneous double feature that should satisfy the individual who likes to watch two shows on television at the same time.

This idea was put to a test recently by presenting two feature pictures (see photo). The sound-track of one movie was to be carried over KFMB Radio, with the audio of the other on KFMB-TV's regular aural channel.



A view of KFMB-TV's simultaneous double feature.

Here is KFMB's system:

"Video: Film No. 1 is projected onto a rear screen with the image then being picked up by a vidicon camera which frames it in the upper left-hand quadrant and records for first run on video tape. The process is then repeated with film No. 2, except that video placement is in the lower right-hand quadrant. The two resulting blank spaces are utilized to title the picture opposite and to announce its audio source.

"Audio: The major technical problem was solved when it was decided to utilize KFMB-TV's sister station, KFMB, to broadcast the second sound track. To accomplish this, the sound track of film No. 1 is recorded on the primary video tape audio channel and the sound track of Film No. 2 is recorded on the video tape cue track. To obtain broadcast quality, it was necessary to refine the cue track to audio channel standards."

CALIFORNIA CHANGES

Among the many changes in station ownership now going on in the broadcasting industry, two involved stations employing members of Local Union 202 in California.

Station KTVU, Oakland, was acquired by Cox Broadcasting Corporation.

Station KOVR, Stockton-Sacramento, was sold by Metromedia, Inc., to the McClatchy Newspapers for approximately \$8.4 million. Metromedia bought the station four years ago for \$3.5 million.

AN ECHO OF A VOICE

"I strongly favor enactment of state right-to-work laws."

"The government must begin to withdraw from a whole series of programs . . . from social welfare programs, education, public power, agriculture, public housing, urban renewal. . . ."

"Government has a right to claim an equal percentage of each man's wealth, and no more."

—"Conscience of a Conservative," by
SENATOR BARRY GOLDWATER.

LAST LAUGH



OH, HELLO DOLAN, I OFTEN
WONDERED WHAT BECAME OF
YOU AFTER I HAD YOU FIRED."

JACK H MC MILLAN
11573 HAMLIN ST
NO HOLLYWOOD CALIF
91601