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INTERNATIONAL BROTHERHOOD OF ELECTRICAL WORKERS — AFL-CIO

ADAMSON LAW— 8-HOUR DAY FOR RAILROAD WORKERS

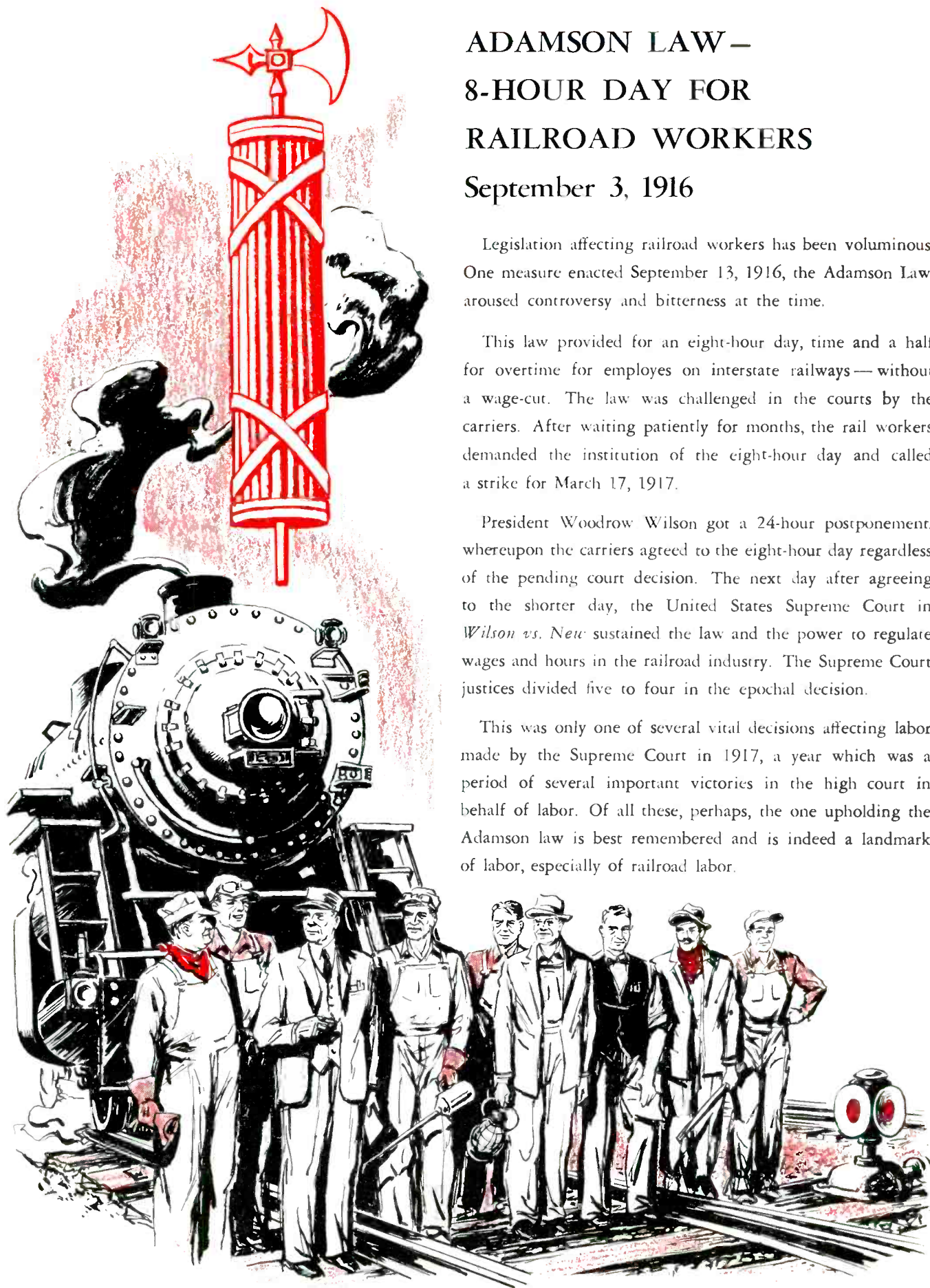
September 3, 1916

Legislation affecting railroad workers has been voluminous. One measure enacted September 13, 1916, the Adamson Law, aroused controversy and bitterness at the time.

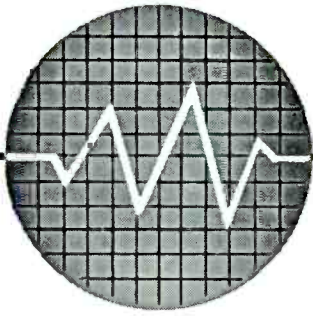
This law provided for an eight-hour day, time and a half for overtime for employes on interstate railways—without a wage-cut. The law was challenged in the courts by the carriers. After waiting patiently for months, the rail workers demanded the institution of the eight-hour day and called a strike for March 17, 1917.

President Woodrow Wilson got a 24-hour postponement, whereupon the carriers agreed to the eight-hour day regardless of the pending court decision. The next day after agreeing to the shorter day, the United States Supreme Court in *Wilson vs. New* sustained the law and the power to regulate wages and hours in the railroad industry. The Supreme Court justices divided five to four in the epochal decision.

This was only one of several vital decisions affecting labor made by the Supreme Court in 1917, a year which was a period of several important victories in the high court in behalf of labor. Of all these, perhaps, the one upholding the Adamson law is best remembered and is indeed a landmark of labor, especially of railroad labor.



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TECHNICIAN ENGINEER



VOL. 12, NO. 1

ALBERT O. HARDY, Editor

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the cover The world's tallest candelabra antenna system stands 1500 feet above the ground near Stockton and Sacramento, Calif. It sends out signals for three California stations—KCRA, KQVR and KXTV—and serves 30 surrounding counties. As one cover picture shows, the big guyed tower sometimes sticks its three antennae above the clouds—whenever the weather closes in on that traditional California sunshine. For more on the big candelabra, see the article beginning on page 7.

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 1961 figures: November, 1962—106.0 (130.1 on old base); November, 1961—128.9. (Please note: With the January, 1962, index, the reference base was changed to 1957-59—100, from a previous base of 1947-49.)

COMMENTARY

Recently Senator Barry Goldwater of Arizona revealed what he had in mind when he stated that he intended to introduce labor legislation in the next Congress.

His proposals included the following—

- Taxation on unions;
- Place unions under antitrust laws;
- Strengthen injunction powers against unions;
- Enact a national open shop law;
- Curb the right to strike; and,
- Eliminate the requirement that management must bargain with a union which represents a majority of its employees.

It would seem that Senator Barry Goldwater would turn the clock back 50 years, eliminate trade unionism,

and place all workers under a management and government dictatorship.—*The White Collar Worker*.

“Yes, it *would* weaken unions at the collective bargaining table. That is one of the purposes of the right-to-work proposal.”—Statement by Prof. Russell Decker, Bowling Green (Ohio) State U., during debate held in Findlay, Ohio, July 17, 1958. Prof. Decker appeared as a spokesman FOR the open shop law.

When Khrushchev met recently with Red puppets, Gomulka and Ulbricht, the *Miami Herald* headlined the story: ‘Nik Meets With Two Bloc Heads.’

1948-1962 Commerce Department analysis
shows falsity of management claim



Labor Costs Are **NOT** Responsible For 'Profit Squeeze' on Business

BUSINESS spokesmen frequently blame their deteriorating profits on rising labor costs. The unions, they say, are running their companies into bankruptcy.

A report recently issued by the Office of Business Economics of the U. S. Department of Commerce exposes the lie in such generalizations. A 1948-1962 analysis published in the November issue of the Commerce Department's *Survey of Current Business* shows that during the past 14 years, since the peak of the post World-War-II boom, the increase in compensation to employees has just about matched the rise in the "corporate gross product." Other factors, meanwhile, are the real culprits which have brought a decline in profits . . . and the so-called "squeeze."

The study shows that corporate profits after taxes rose only 26 per cent between 1948 and 1962, while gross corporate product—the total value of all goods and services furnished by American companies—jumped a thumping 113 per cent.

Wages, salaries, and fringe benefits rose all right—but exactly by the same 113 per cent as did total corporate output. In other words, employees received the same 64 per cent share of gross corporate product in 1962 that they did in 1948. Thanks to "labor bosses," unions, and much hard work by the rank and file, workers managed to hold their own . . . but that's all.

The government report states: "Wages and salaries plus supplementary labor income ('fringe benefits') account for just under two-thirds of the total cost of the national output—a fraction that has remained quite constant."

The study was divided into three time periods (as

the accompanying charts show)—1948-51, 1951-57, and 1957-62. In the first and last of the three periods, the payroll component lagged slightly behind other costs. From 1951 to 1957, when the profits "squeeze" developed, the corporate wage bill expanded a little more than did total output. Over the entire period, gain and losses to labor were offset, however, leaving the share of employee compensation in 1962 the same as in 1948.

With these facts at hand, Commerce economists and statisticians began to search for causes of the "profits squeeze." This is what they found:

Depreciation and taxes, both direct and indirect, are largely responsible. While pre-tax profits fell from 21.3 per cent to 15.7 per cent of gross corporate product during the 14-year period, indirect government levies such as sales and business property taxes increased from 8.9 to 10.5 per cent of GCP. And depreciation plus other capital consumption allowances went up from 5.5 to 9.5 per cent.

Direct levies, such as the corporate income tax, took an even greater bite. While pre-tax profits rose only 53 per cent over the period, tax liabilities increased 98 per cent, thereby reducing the 14-year gain in net profits to 26 per cent.

The latter may serve to bolster President Kennedy's request to Congress for across-the-board income tax cuts. Government fiscal experts, notably Treasury Secretary C. Douglas Dillon and Economic Advisor Walter Heller, contend that, as the economy expands, Uncle Sam takes a larger and larger share of the national income. This, in turn, holds down purchasing power, profits, and the business incentive to invest.

Two other factors contribute to the profits squeeze, say the Commerce Department economists—excess plant capacity and intensified competition. The latter brought back the buyer's market and brought down prices in 1957. It was in that year that the nation's economy finally caught up with the abnormal buyer demands after World War II.

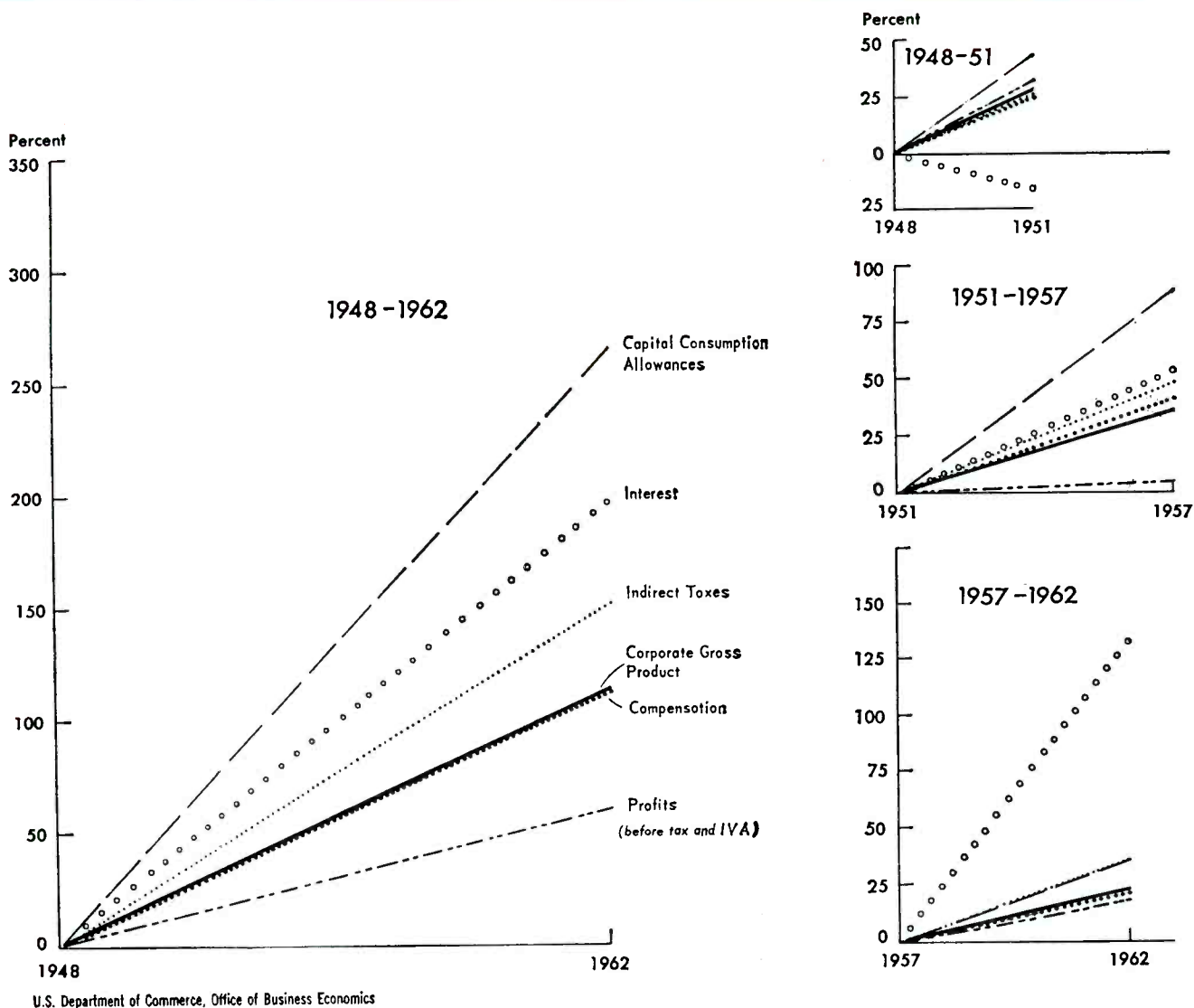
With regard to the factor of depreciation, it's hard to tell just how much depreciation some companies suffer and how much they spend to bring plants and equipment up to par. As a cost of doing business, money set aside for the eventual replacement of obsolete plants and equipment is tax exempt, and, consequently, separated from profits on a company's books.

But the company still has the money to use as it

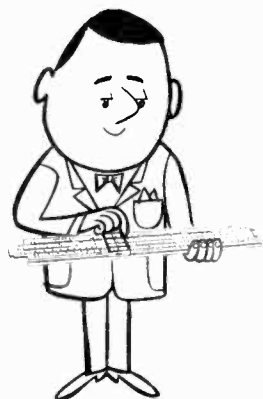
sees fit. Because of this, many business analysts now consider cash flow—which is the combined total of depreciation and after-tax profits—a better measure of a company's performance than profits alone.

All in all, the Commerce Department's study clearly confirms the correctness of organized labor's long stand on several economic issues:

- Labor is just managing to hold its own in the present period of high-priced prosperity.
- Wages *must* keep pace with productivity.
- Purchasing power must be maintained at a level sufficient to offset recessions.
- Income taxes for consumers must be trimmed soon.



Over the postwar period, compensation of employees has kept pace with the rise in production. Profits have lagged. Depreciation and indirect taxes have risen faster than corporate output. The chart at left above shows the overall 14-year picture, while the smaller charts show breakdowns for three segments of the same period.



Some Notable Statistics of 1962

● **Doctors Top Income Parade: Dentists, Lawyers Come Next**

When America's oldsters battle the American Medical Association on medical care for the aged, they are battling the best-paid segment of American life—doctors.

Latest statistics from the Bureau of the Census show that male doctors, dentists and lawyers ranked in that order as "the top earners in the United States during 1959."

The report shows that 135,000 of the 211,000 male doctors in the country—or 64 per cent—earned \$10,000-and-over during 1959, indicating that the median income of men in the profession was considerably above the \$10,000 mark. Median represents the amount that 50 per cent of the group earns.

Dentists were second with 60 per cent of the 80,000 dentists in the \$10,000-and-over bracket, and lawyers were third with 53 per cent of the country's 203,000 lawyers in that bracket.

In contrast, median income for all 44,000,000 men in the "Experienced Civilian" labor force was less than half that of doctors and dentists, at \$4,621.

Median earnings of salaried managers in manufacturing plants were \$9,156 and aeronautical engineers were \$9,059.

Earnings of women in most categories trailed those of men. Women doctors, for example, showed median earnings of \$5,517 and women lawyers \$5,199. Median income for 20,000,000 women in the work force were \$2,257. These figures were roughly about half of what men in the same groups earned.

The report shows also that the number of "Professional, Technical and Kindred Workers" increased 47 per cent between 1950 and 1960. This contrasts with an overall gain of only 15 per cent for the total experienced labor force. Occupations in the professional group with highest relative increases were designers, 132 per cent; aeronautical engineers, 194 per cent; industrial engineers, 140 per cent; mathematicians, 348 per cent; and psychologists, 147 per cent.

Also, a major change took place during the 10-year span in the managerial field. The number of managers, officials, and proprietors (not elsewhere classified in the report), who were salaried, increased 43 per cent, moving them ahead, numerically, of the self-employed class, which decreased by 22 per cent.

● **Number of Strikers in 1962 Dropped to Post-War Low**

The number of workers involved in strikes during 1962 dropped to the lowest level since the end of World War II.

The number of strikes and of man-day idleness were higher than in 1961, but were also below the levels of most postwar years, according to the Department of Labor.

Approximately 3,550 stoppages, involving about 1,250,000 workers, began in 1962. Despite a decline in the number of workers idle, strike idleness in 1962 amounted to 19.0 million man-days, compared with 16.3 million in 1961, and 19.1 million in 1960.

Nevertheless, total strike idleness in 1962 amounted to only 0.16 per cent of estimated working time in nonfarm establishments (excluding government), the third lowest annual level since 1944.

Sixteen major strikes, each involving 10,000 workers or more, occurred during 1962. These major strikes accounted for about a fourth of the workers involved and of total strike idleness.

● **Record Number of Job Placement Is Reported**

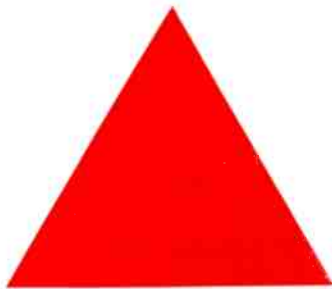
Federal-State employment offices report that they made a record-making total of job placements—6,800,000—during 1962. This was 15 per cent higher than in 1961, with the largest increases being in semiskilled, professional and management classifications.

● **Executives Are Getting A Taste of Unemployment**

In Chicago, more and more employers are now getting a taste of what mass unemployment means to union workers—the end of unemployment they were indifferent to when they were in the saddle. Jobless executives have increased 12 per cent. The average monthly unemployment rate of "managers, officials and proprietors" was 134,000, and it's probably become worse, according to the executive hiring firm of Heidrick & Struggles. There's little doubt that the executives tossed out on the streets for the first time will support increased unemployment compensation legislation—the same legislation they fought all the years they were on the corporate payrolls.

● **The Nation's Hams Buy A Lot of Equipment**

According to *Electronics* magazine, the approximately 240,000 hams in the United States spent an average of about \$155 each last year for equipment and components. This is a total of slightly over \$38,000,000—not including CB equipment.



TALLEST CANDELABRA ANTENNA SYSTEM

THREE television stations in the Central Valley of California have just completed their first year of mutual "pole sitting" . . . sharing an antenna platform atop the world's tallest candelabra antenna system.

Stations and public report excellent results. The installation has increased each station's coverage an estimated 50 per cent. Television viewers in 30 counties of the booming West Coast state can now pick up the three signals. Before the tower was completed, the stations—KCRA, KOVR, and KXTV—were 20 to 30 miles apart, and signals arrived at home-receiver antennae from three different directions.

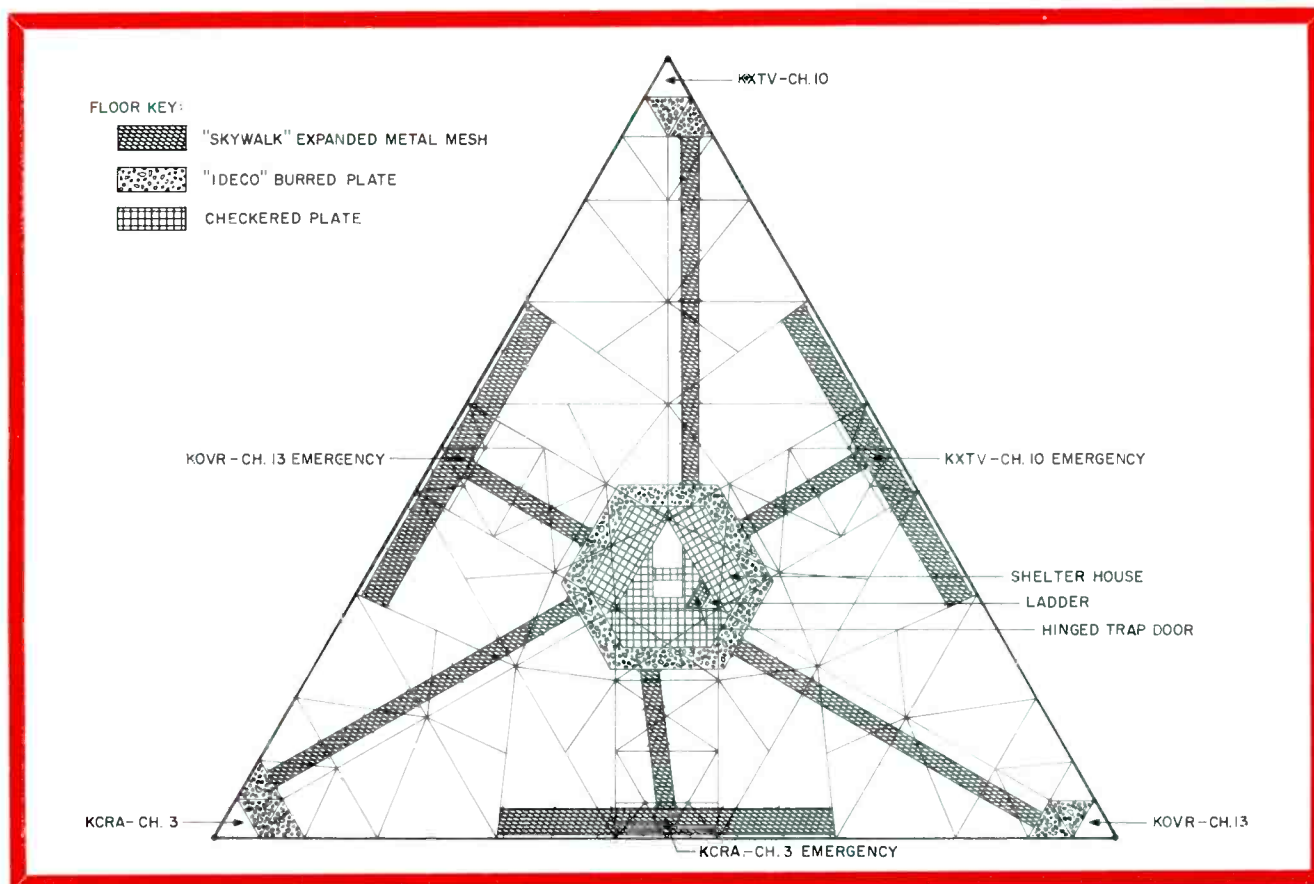
This resulted in many reception problems in relative signal strength, antenna orientation, and so on. There

were submarginal signals in the valley, too, and it was the practice of TV-service organizations to promote the installation of lucrative receiving-antenna arrays oriented to these submarginal transmissions.

The two high-band stations in the area KXTV and KOVR—reoriented thousands of receiving arrays—at no cost to the home owner—to effect the best compromise in antenna response to the Stockton-Sacramento stations.

These problems are now in the past, however, and citizens of the Central Valley now receive all three signals loud and clear.

Before the candelabra agreement, KCRA personnel had spent years in continuous attempts to find an antenna site which would satisfy air-traffic requirements.



The candelabra platform, shown in a simplified drawing above, is an equilateral triangle with each side 105 feet three inches long. Center-to-center antenna spacing is 100 feet. The Channel 3 array is a super-turnstile. Channels 10 and 13 have traveling-wave antennae. Expanded-metal "skywalks" provide easy access to the shelter house and emergency equipment.

Sacramento-to-Stockton straddles a portion of one of the nation's most densely-used air spaces. The Regional Airspace Panel indicated that it would look favorably upon a common site for all stations, a parcel of land suitable for an antenna farm, before granting airspace for any one station.

The three stations eventually reached agreement on such a site, near the Sacramento River, and airspace approval was given in July, 1959. Then began the slow process of working out the engineering details with manufacturers and the legal aspects in Washington. Geologic information on the site was obtained from oil companies which had drilled in the area. Soil samples were taken. First drafts of tower design were begun.

Work on the foundation began in November 1960, after the FCC had okayed the plans.

A great deal of painstaking work was avoided by the three stations by studying the experience of three Baltimore, Md., stations which had pioneered the candelabra system of TV broadcasting. Three stations in Baltimore staffed by IBEW members—WBAL, WJZ, and WMAR—erected the world's first three-antenna candelabra in 1959.

The Baltimore system is almost identical to the California installation as to channel spectrum spacing, antenna types employed, platform layout, emergency-antenna provisions, microwave equipment space, and shelter design.

The only important difference between the two is structure height (the Baltimore tower stands 729 feet; the California tower, 1548 feet). There is no doubt that, due to the excellent cooperation of the Baltimore stations, the California project was spared a great deal of effort. The California people were afforded the opportunity of visiting and examining the Baltimore structure firsthand on many occasions.

PERHAPS the most unique difference between the Walnut Grove and other antenna installations is the final set of system specifications agreed upon by the stations and RCA, the designers. The principal feature was the new method of r-f pulse measurement technique for determination of system compliance. Standards were proposed and agreed upon which used this technique as the sole specification for entire system performance. The component parts of the system, in addition, were to meet conventional VSWR requirements.

Although it was agreed that a proposal to substitute pulse techniques for the more conventional VSWR methods was desirable, no one had, at the time, proposed a system to attach numerical values to the results sought. There is no simple way to correlate the reflected pulses (seen on the CRO face) with the numerical significance of the VSWR measurement.

In an effort to relate the pulse measurements to numerical values, various inquiries were made. These

inquiries generally revealed that it was desirable to keep reflected signals to a level at least 26db below the driving signal. Reflected signals above this value become objectionable in the reproduced picture.

Since antenna reflections on a long-line system resulted in correlated echoes of the primary image, it was agreed to use a "yardstick" of—26 db as the minimum acceptable figure of reflected pulse voltage for the super-turnstile (Channel 3) antenna. This is equivalent to a 5 per cent reflection from a finite discontinuity.

It was also felt that a 0.25 microsecond sine-squared shaped pulse would also approximate the energy content of a typical TV picture transmission. This pulse would provide the desired frequency weighting curve which most nearly represents the effect on actual picture transmission. The measured values were—38 db and—35 db for the two lines terminated in the antenna . . . well below the barely objectionable value of—26 db.

FOR the two traveling-wave antennas, the known capabilities of these newer and simpler antennas led to acceptance of the even lower reflection figure of 3 per cent or, 30.5 db below the peak level of the launched reference pulse. In the Channel 10 system, the figure achieved was 0.7 per cent or—43 db; the Channel 13 system measured 0.6 per cent or—44.4 db.

In addition to the individual-system measurements, cross-coupling measurements were required to prevent, as much as possible, problems with cross modulation and reradiation of signals from one antenna system to the other. The specification here placed heavy reliance on the Baltimore performance record. It was agreed that the spec should be at least 35 db "separation" between any two antennas. The measured values greatly exceeded this specification in that the usual value obtained was in the order of 50 db and, even the most unfavorable combination exhibited a 12.9 db margin above the 35 db requirement ($35 + 12.9 = 47.9$ db).

Owing to the length of the transmission lines up the tower, there were quality-control checks at frequent intervals during erection. This proved the quality of the line as it went up, rather than risking the delay and extra expense of replacing damaged sections after the installation was complete.

Each of the three stations have installed their own STL microwave equipment. KCRA uses both 2 and 7 Kmc bands plus a 970 mc aural link and KXTV uses two 2-Kmc links with an aural link operating on 950 mc.

KCRA uses two dishes mounted on the platform face: a 10-foot one for the 2-Kmc link and a 6-foot for 7 Kmc. The microwave receivers are rack mounted in the 1400-foot shelter and the video travels via two 1 $\frac{7}{8}$ -inch rigid co-ax lines to the building below. These

lines are sending end terminated in addition to matched loading at the lower end.

For 7 Kmc back-up, a 4-foot dish and receiver is located at the 225-foot level. Another 61-foot paraflected receiving dish at the 1400-foot level is used for the 927 mc aural link. Twenty-six megacycle voice-communications gear is used between studio and transmitter sites.

The KOVR installation places the receiving "dishes" on the platform with passive reflectors located at the 225-foot and 460-foot levels.

Pictures of the candelabra are on our front cover.



The three stations occupy essentially identical sections of the three-section transmitter building at the base of the tower.

NEW OWNER OF WINS RENEWS AGREEMENT

The Westinghouse Broadcasting Company purchase of WINS, New York, was followed quickly by the renegotiation of Local Union No. 1212's agreement with the station, by the turn of chronology and the long suspension of re-negotiation while the FCC processes ground slowly.

For the first time in long history, the WINS engineers are thus participants in a pension plan. Thanksgiving and Christmas Days are recognized as special holidays, in addition to the five holidays formerly observed, jury duty is especially provided for, an hour meal period is included within an 8-hour work day and 5-hour minimum credit for callbacks is also continued.

The wage scales at this outstanding New York City independent station are based upon a 2-step escalator, currently having a top of \$192.50, with a \$2.50 increase provided for in October, 1964, and another \$5.00 to be added in 1965; Supervisors' rates are \$20.00 higher.

WNEW STRIKE ERUPTS AND IS SETTLED

Following months of negotiations, Local Union 1212 struck Metromedia's New York radio station at 6:30 P.M. on December 29, 1962. Interim agreement—pending the settlement of remaining issues—returned the station to normal operation by its Technicians at midnight on January 8.

Generally stated, the broad issues were the automation of the transmitter and resultant layoff of six Technicians during the negotiations, job security for the remaining staff, wages, vacation allowances and the interrelationships of a pension plan, etc. Metromedia terminated the previous agreement on its anniversary date of September 30th and the ensuing negotiations were thus prime efforts to solve the problem of a wholly-new agreement.

Negotiations preliminary to the return of its Technicians to their jobs were productive of long-term em-

ployment guarantees and a milestone in vacation allowance provisions. The company offered 5 weeks plus 2 days vacation in addition to the regular vacation allowance during the twenty-first year of employment—and during every fifth year thereafter. A pension plan of very considerable consequence is also part of the new proposed agreement.

WMCA PACT IS A PACE-SETTER

A recent renewal agreement with Local Union No. 1212 at WMCA, New York provides for severance pay at the rate of one week's salary for each six months' service or major fraction thereof, in the event of layoff or retirement. Transmitter engineers enjoy three consecutive days off, and studio engineers two consecutive days off, out of every seven days. Eight consecutive hours constitute a regular day at the transmitter and six and one-half hours a regular studio work day, including meal periods.

Extensive language provides for relief periods during studio "board assignments," with a meal period being specified as one of the necessary relief periods. Other provisions of the agreement worthy of note include employer-paid Blue Cross-Group Health and major medical insurance, a 10 per cent night differential, four weeks' vacation after five years of service, company-assignment accident insurance, and automatic adjustment of the wage scales if the Consumer Price Index subsequently rises 5 per cent or more.

WANT IN ON THE GROUND FLOOR? Third Institute for Instructor Qualification MARCH 18 - MARCH 29, 1963

IBEW members are needed as instructors for the Brotherhood course "Industrial Atomic Energy Uses, Hazards and Controls". Your local union, one nearby, or a combination of those in your city may well need this course — and may need YOU as an instructor. See The Electrical Workers Journal for December, 1962, and the next issue of the Local Union Newsletter for more details. Time is fleeting — act soon!



WILLIAM E. SIMKIN

THE THIRD MAN

Chief U.S. Mediator Warns Against Excessive Bargaining Intervention

By **HARRY CONN**
Press Associates, Inc.

THE one man in the United States who wants to be technologically displaced is William E. Simkin, director of the Federal Mediation and Conciliation Service.

"It would mean that relationships between labor and management had reached a point where they could bargain collectively and resolve their differences without a third man at the bargaining table," he told Press Associates.

Simkin was quick to point out that he doesn't see any technological threats to his job—today, tomorrow or even in the indefinite future. On the contrary, all indications are that he's going to have a bigger job.

"In recent years," he said, "a larger and larger percentage of labor-management disputes are requiring the help of the Federal Mediation and Conciliation Service. This is the trend. The biggest increase came in the fiscal year which ended last July, showing a jump of 12 per cent more cases over the previous year involving Federal mediators."

The mediation chief doesn't believe this is the result of a recalcitrant attitude on the part of either labor or management. In fact, he feels that both are showing an increasing degree of maturity.

"The basic explanation for this development," he said, "is that collective bargaining is getting tougher. The problems are more complex. Technological changes in the work force are bringing about developments of great magnitude and settling all of these problems in a contract is not easy."

As the third man at the bargaining table, a mediator must consider the problems of the two contending parties. For years, Simkin says, unions have fought for improvements and impressive gains. No union representatives can easily agree to "retrogression" and go

back to the membership and ask them to accept it. Union representatives, he says, are political beings who owe their office to the members who vote them in or out.

Yet, he believes changes are inevitable for the worker as well as the employer.

Simkin would go slow in invoking the Taft-Hartley injunction, saying that it is not "the only legal or proper procedure that is available in a dispute where the public interest transcends private interests." He would like to see still more alternative methods, as recommended by the President's Advisory Committee on Labor-Management Relations, to strengthen the executive branch of government.

He had this warning:

"The right of government to use alternative procedures in critical disputes, including careful experimentation, is not a license for widespread intervention at the bargaining table beyond normal mediation and conciliation efforts.

"All of us who believe firmly in the institution of collective bargaining know that it can be weakened and even destroyed by excessive third party intervention of any sort."

AT the same time he feels, paradoxically, that "in the absence of any governmental intervention, the minority failures of collective bargaining would lead to new restrictive legislation that could nullify many of its past and present achievements."

For Simkin, a quiet-spoken, knowledgeable man in the labor relations field since 1939, new problems mean new challenges.

He says his Federal Mediation and Conciliation Service will rely on "tested and effective techniques of

mediation that we have developed over the years."

He also sees the "need for more inventive and aggressive mediation when it becomes apparent that these simpler functions will not suffice." He notes that two or three-man panels are being used more frequently in difficult cases.

Simkin would prefer that the Government agencies not be called into labor-management disputes, but considers it a fact of life today.

"As Government representatives," he says, "we cannot escape our responsibilities to the public interest. The more important question is: How, when and by what means can we be expected to exercise these responsibilities?"

Despite his long experience as an arbitrator, he does not "support any possible idea that the mediation role should be converted to an arbitration role. We have no 'decision making' powers in the sense that we can impose answers by governmental authority. Nor do we seek any such authority."

A mediator, he adds, is not in a position to prevent a specific settlement even if he should believe that it is contrary to the public interest.

IN major disputes, Simkin and his mediators do receive a minimum of publicity but contrary to some of his predecessors, the present head of the FMCS shuns news of his activities.

Few people really know much about FMCS. It was established by the Taft-Hartley Act in 1947 to separate the government's role in labor disputes from the Department of Labor. But, as Simkin is the first to admit, a Secretary of Labor must move into major labor situations whether there is a legal basis for his actions or not.

Currently there are about 212 field mediators assisted by a small supervisory staff at the national office, housed in the Department of Labor, and at seven regional offices.

In a typical year, the FMCS receives about 100,000 30-day notices, that many known contracts are negotiated each year outside the transportation industries which are covered by separate legislation.

Of the 100,000 cases, only about 20,000 are assigned to FMCS mediators and in only about 7,000 cases per year are mediators actively "sitting in" at one or more joint conferences. Even these cases vary, but the average active case requires mediator participation at between three and four days of joint conferences.

Simkin would not offer any "rule of thumb" which a mediator uses in standard situations.

"Every case is different," he said, "the relationships between the parties and with the mediator are different, the problems are different and the public interest is different, and the mediator has to weigh all of these factors."

AFL-CIO CONGRESSIONAL AIM OUTLINED

AFL-CIO President George Meany said, in the course of his New Year Message: "For the first time in several years we will press [in the new Congress] for repeal of Section 14b of the Labor-Management Relations Act, which permits the states to impose greater restrictions on union security provisions than are contained in the Federal law. The endless proliferation of struggles over so-called 'right-to-work' laws wastes money and manpower that could be put to better use; injects unnecessary bitterness into labor-management relations; blackens the reputations of both labor and management through the public interchange of charges and countercharges and in general contradicts the established policy of the United States that the encouragement of collective bargaining is in the national interest."

It is interesting that almost concurrent with this statement the findings of a recent study were released by an independent citizens' committee which opposes "right-to-work" laws in the public interest. Its survey states that as of 1961, 19 states had such laws in effect and 12 of the 19 had retained the laws since 1950. In 1950, the hourly wage rates paid in the 12 states was 25¢ below the United States average. By 1961, the average wage had retrogressed to 31¢ below the national average. For all 19 states the same comparison shows the average hourly rate 21¢ below the U.S. level in 1950—and 23¢ lower in 1961.

Thus, the study is conclusive proof that not only have these states not been keeping pace in wages and income with states permitting free collective bargaining but to the contrary they have been falling further and further behind the national pace.

Even more recently, the *Hutchinson News* published an editorial saying that a great mistake was made when the state "r-t-w" law was passed in Kansas in 1958.

"One of the promises of those who promoted the right to work law in Kansas was that it would lure new industries to the state," the editorial recalls. "Manufacturers, it was argued, would seek a new location where the union shop was outlawed, unions were weaker, wages lower and labor troubles less. It hasn't worked out this way. From the Chambers of Commerce to the unions themselves, everyone is crying that Kansas is missing the boat, so far as the nation's industrial expansion is concerned."

"The right to work law may play its part in a further bypassing of Kansas. . . ."



Ed Towns sprays lacing on beam at 350-foot level. To prevent cars below from being spotted, a safety spray paint is used; it dries rapidly, falls as dust. Before men go up on job, they cover faces with grease or vaseline so paint may be wiped off easily at day's end.

COOL HEADS AND BRIGHT COLORS ON A TV TOWER

By **CHARLES SHERMAN**

St. Louis Post Dispatch

PAINTING a radio or television transmitter tower is a job that requires an abundance of courage and insurance, a minimum of acrophobia and, above all, restraint in stepping back to admire one's work. Members of the Towns family of St. Louis have been meeting these requirements, without serious incident, for up to 25 years.

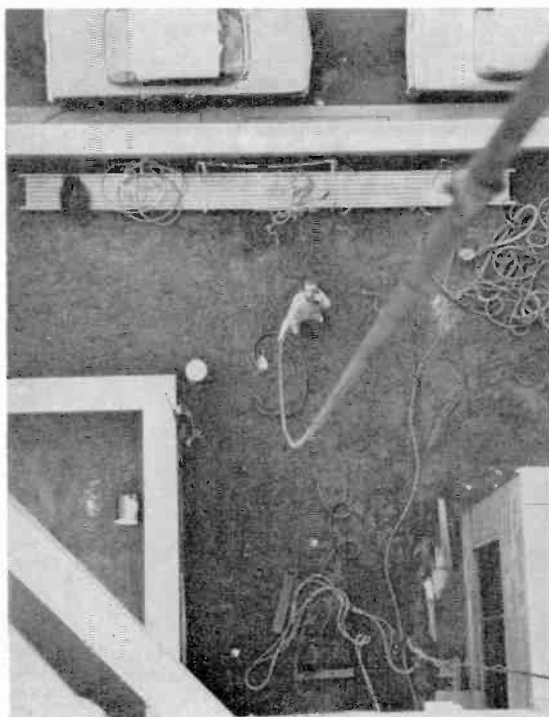
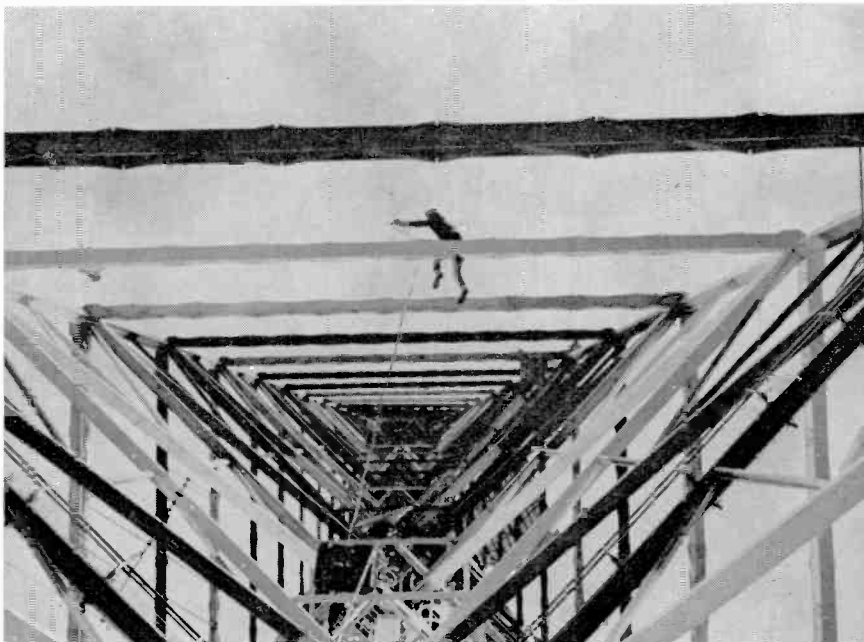
Three of four painting brothers and one nephew have just finished the job of refurbishing the KMOX-TV tower at Twelfth and Cole streets. They needed five weeks and about 500 gallons of paint to freshen up the 520-foot tower. The men rode up on a device called a spider, a small platform raised by cable. The paint,

an exterior enamel, will last about eight years.

Most feared hazard on the job is a sudden gust of wind strong enough to knock a man off balance. This peril exists even when there is no wind apparent at street level. On the KMOX-TV job, there were several days of work lost because of wind. However, the only accident occurred when a paint hose broke under pressure. Mike, the nephew, held the spewing end against himself to prevent automobiles below from being splattered.

The high work has its compensations. There is premium pay of 25 cents an hour above scale. In the end, pay for a "high man" amounts to \$5.01 an hour.

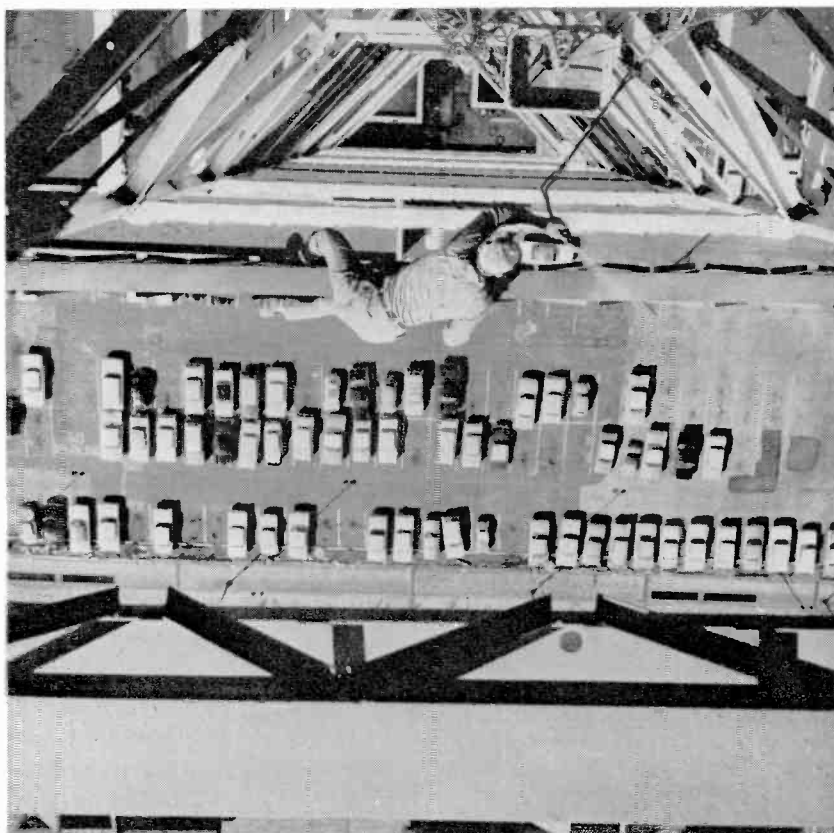
Viewed from base of tower, Mike Towns appears to be falling; actually the 19-year-old junior member of the painting family has twisted around to spray the underside of a beam at the 160-foot level.

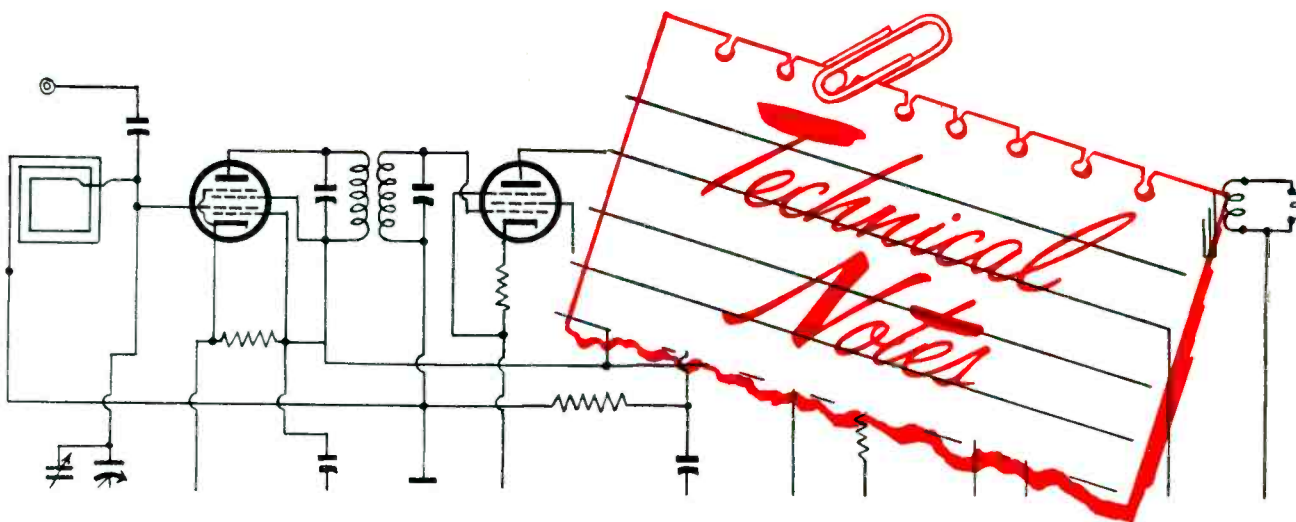


In view at left, Roy Towns job foreman and uncle of Mike, handles hose that supplies compressed air for sprayers. He issues instructions to men above him through the telephone that he is holding.

Photos from Black Star

As unconcerned as a homeowner on a stepladder, Ed Towns sprays crosspiece of KMOX-TV tower at 350-foot level. Far below is Twelfth street, which curves into Thirteenth, then Mullanphy. View is to the north. Towns is a 20-year veteran in high work. Tower is painted international orange and white, alternated at specified distances in conformance with CAA regulations.





DEFINITIONS SUGGESTED

So that electronics engineers can agree on terminology in microsystem electronics, the Electronic Industries Assn. has compiled a list of 23 terms frequently used . . . but often misused. In a bulletin recently issued, EIA presents its recommended definitions for these 23 terms and asks for comment from its members and the general public.

As Virgil Graham, associate director of EIA's engineering department, points out, "Standards development or other engineering activity cannot be undertaken in any new technology until engineers can agree on the meaning of terms they use."

The bulletin defines microsystems electronics as "that entire body of electronic art which is connected with or applied to the realization of electronic systems from extremely small electronic parts." Other definitions include:

Electrical Element: The concept in uncombined form of any of the individual building blocks from which electronic circuits are synthesized. Examples of basic electrical elements are insulation, conductance, resistance, capacitance, inductance, and transistance.

Transistance: The electrical element which controls voltages or currents so as to accomplish gain or switching action in a circuit. Examples of the physical realization of transistance occur in transistors, diodes, saturable reactor, lumistors, and relays.

Component: A packaged functional unit consisting of one or more circuits made up of devices, which may be part of (in turn) an operating system or sub-system. A part of, or division of, the whole assembly or equipment. Examples of components are I.F. amplifiers, counters and power supplies.

Integrated Circuit: The physical realization of a number of circuit elements inseparably associated on or within a continuous body to perform the function of a circuit.

Hybrid Integrated Circuit: An arrangement consisting of one, or more, integrated circuits in combination with one, or more, discrete devices. Alternatively, the combination of more than one type of integrated circuit into a single integrated component.

Packaging Density: The number of devices or equivalent devices per unit volume in a working system or subsystem.

Module: A unit is a packaging scheme displaying regularity and separable repetition. It may or may not be separable from other modules after initial assembly. Usually all major dimensions are in accordance with a prescribed series of dimensions.

Morphology, Integrated: The structural characterization of an electronic component in which the identity of the current or signal modifying areas, patterns, or volumes has become lost in the integration of electronic materials in contrast to an assembly of devices performing the same function.

Morphology, Translational: The structural characterization of an electronic component in which the areas or patterns of resistive, conductive, dielectric and active materials in or on the surface of the structure can be identified in a one-to-one correspondence with devices assembled to perform an equivalent function.

Substrate: The physical material upon which a circuit is fabricated. Used primarily for mechanical support, but may serve a useful thermal or electrical function.

If you care to comment on these definitions, send such comments to MCA Definitions, Electronic Industries Assn., 11 West 42nd Street, New York 36, N. Y.

U.S. STANDARDS WORLDWIDE?

Universal adoption of U.S. TV technical standards for visual part of transmission has been proposed in Chicago before the Society of Motion Picture and Television Engineers by M. W. S. Barlow, CFCF-TV Montreal, Que. Other TV standards such as audio, channel spacing, allocations, etc., would remain the same in each country, he said, and virtually no adjustment would be needed in home TV receivers or transmitters.

Four versions of 625 lines-50 fields now used abroad will convert to U.S. 525-line system more satisfactorily than vice versa, he said. A switch to 525 lines would greatly aid international program exchange. Foreign sets convert to program 525 lines, 60 cycles by simple adjustment of vertical hold, he explained.

'SUNFLOWER' PROJECTION

A color TV set, using the "Sunflower projection system," has been developed by J. H. Owen Harries of Harries Electronics, Hamilton, Bermuda. The principal addition to the Harries set is a "Sunflower" corrector, which is said to overcome registration distortions inherent in color projection systems. The inventor claims that color receivers made with his system should be able

to sell for about \$31 more than comparable black-and-white receivers, if produced on a mass basis.

The Harries receiver uses the compatible National Television Systems Committee standards.

RCA engineers who have studied technical data on the competing receiver believe that the "Sunflower" development "does not appear to offer any substantial advantages" in overcoming what they call the principal limitations of projection TV. These they named as light use, contrast resolution, and high cost.

WHO'S ON FIRST BASE?

We've no desire to become involved in an altercation with the National Society of Professional Engineers, but that old issue of "engineers" vs. "technicians" has been raised again.

The Chief Engineer of the FCC, E. W. Allen, recently informed the Society that the field staff of the Commission will be instructed to avoid the term "engineer" when addressing those not known to be registered engineers. Mr. Allen told the Society that an FCC operator's license does not automatically give the holder the right to use the term "chief engineer." He made reply to the Society's complaint that some holders of first class phone licenses in South Carolina were calling themselves "chief engineers" and that the state requires compliance with its registration law for professional engineers.

Mr. Allen pointed out that inquiries by Commission personnel for the "chief engineer" were only following custom and that such references did not imply Commission recognition of professional status.

Here's real tempest in a teapot or is it a transient in a transistor?

TV STATION STAFFS GROW

Television station staffs are growing while those of radio stations are getting smaller.

The new *Broadcasting Yearbook* shows that 49.4 per cent of all TV stations employ 51 or more persons, compared to 45 per cent with similar size staffs last year. At the lower end of the scale, TV stations with 1-15 employees have decreased from 13.8 per cent last year to 12.2 per cent in 1962.

Radio stations with 1-15 employees have increased from 79.6 per cent last year to 81.2 per cent. Stations with 16 or more employees are down 1.6 per cent.

SECRETARY HAS A POINT

U. S. Dept. of Labor Secretary Wirtz recently said: "A strike is a front-page headline; a peaceful settlement hardly makes the papers at all. The public image of collective bargaining is almost entirely in terms of its discord rather than its concord. This is an area in which, reversing the older truism, good news is no news at all."

E.T.V. FUNDS STILL NEEDED

Funds authorized by Congress last spring to put more educational stations on the air will not be available until later this year.

An omnibus appropriation bill, containing an allocation of between two and three million dollars for the operation of the ETV program's first year, was abandoned in the last hours of the 87th Congress.

A new Congress convened January 9. A bill is expected to be introduced which would appropriate funds to staff the organization operating in the Department of Health, Education and Welfare, and to grant Federal funds to match state and local funds for ETV projects. In hearings before the House and Senate committees studying the allocation bill, H. E. W. asked for \$4,989,000. The House cut this figure to \$2 million and the Senate to \$3 million in their respective versions of the bill. Congress adjourned before a reconciliation, contained in the omnibus appropriation bill, could receive the approval of a joint committee, and passage by both houses.

PEACE CORPS PRAISE

Union members have made "substantial and rewarding contribution" in the Peace Corps, according to R. Sargent Shriver, director of the Corps. Shriver, in a recent statement, said he was "impressed with the great versatility" shown by trade unionists "who volunteered their skills and technical competence to the Peace Corps."

Scores of members from craft, industrial and white collar unions are serving with the Peace Corps. Shriver said they are "investing two years of their lives to help people of other countries take the first step toward a better future." "Union workers understand what it means to improve standards of living," Shriver said. "Their experiences with the realities of life are important to a developing nation's needs. No other segment of American society has this unique, specialized knowledge to offer."

Shriver said the Peace Corps was asking Labor "to continue to give us skilled, imaginative and committed unionists who understand the value of sharing their knowledge." "Give us men and women with a deep appreciation for hard work and high achievement, and we will give them back to you, after their service in the Peace Corps, with an increased knowledge of their skill and of the world," he added.

At the beginning of the organization of the Peace Corps, some people said that it could turn out to be a flop or a brilliant and successful stroke in the area of foreign relations. From all reports to date, the Peace Corps has been a tremendous success. And it is especially pleasing to note that trade union members have contributed to that success.



STATION BREAKS

ELECTIONS, BARGAINING

Local Union No. 1223, Portland, Maine, reports a successful NLRB election among the production, program, announcers, photographers and film room personnel at WGAN-TV. The local union has long represented the engineers at this Channel 13 station.

Local Union No. 995, Baton Rouge, Louisiana, has had a representation proceeding in process at WBRZ, the ABC-TV affiliate, since June, 1962, a matter still awaiting the decision of the National Labor Relations Board.

However, on December 28th, the Board released the text of the intermediate report of its trial examiner, Harry S. Sahm, in a parallel Board proceeding. The local union had filed charges of unfair labor practices on March 29 and May 23, alleging coercive tactics on the part of the employer in the termination of two of its employees.

The trial examiner concludes that the employer interfered with, restrained and coerced its employees in the exercise of their rights, and discriminated with regard to hiring and tenure of two of its employees. He therefore also concludes that the discharged employees should be reinstated to their former employment and that they should be "made whole" for any loss of pay incurred in the interim period.

LOCAL 1200 AGREEMENT

Local Union No. 1200 has just concluded a new agreement with WTOP-AM-FM-TV. Business Manager Frank Green summarizes the changes as follows:

"After a prolonged and strenuous war of nerves, we settled for a three year agreement which included a wage scale of \$120 to \$202 for the first year, \$125 to \$205 for the second and \$130 to \$210 for the third. We increased the spread for supervisors to \$25. We reduced the years of service for five weeks of vacation from 20 to 18 years and increased the number of summer vacation relief technicians from three to six. The night differential was changed so that technicians will now receive 15 per cent for all hours worked between midnight and 8 a. m. The geographical jurisdiction for television was extended approximately another 100

miles. Severance pay was increased from 12 to 15 weeks. However, we did have to conditionally waive exclusive jurisdiction over the filming of silent motion pictures. The condition being that the waiver will be in effect only as long as the company employs three technicians as motion picture photographers and one additional technician to operate sound and lighting equipment for sound-on-film photography. This is guaranteed employment for at least four technicians in that one group or unit. If the company reduces that number, the waiver is cancelled. (I do not believe that this waiver will have any practical effect on the amount of silent motion picture work we will do.)"

SOCIAL SECURITY UP

As of January 1, your Social Security contribution increased to 3 $\frac{5}{8}$ per cent. The base, \$4,800 per year, remains the same.

LAST LAUGH



CARL STAMWITZ

"Sometimes even I get fed up with these tattlers who run to the boss with everything!"

ALEXANDER BROWDY
1962 S STEARNS DR
LOS ANGELES 34 CALIF
45 BN