THE BROADCAST ENGINEERS' JOURNAL Ed. Stolzenberger, Editor

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NABET.

Meets in CHICAGO:

Executive Board October 8, 9, 10

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New Executive Board October 14

The Broadca Engineers' Journ

-Dedicated to the welfare of the Radio-TV

OCTOBER.

No. 10



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A Message to the Members of NABET

from

JOHN R. McDONNELL President, NABET

Coincident with the publication of this issue of the Journal, the NABET National Council will be convening in Chicago, in its Annual Meeting, at which time the elected representatives of NABET Chapters will determine, to a large extent, NABET's policy for the ensuing year in the light of changed conditions and the wisdom gained through experience since our 1949 Meeting.

In general, our successes have considerably outweighed our failures: we have weathered a shake-up in the staff of full-time officers which required the appointment of a new Executive Secretary and the moving of that office from New York to Chicago; we have conducted a membership referendum on the question of Affiliation, with its attendant confusion and disruption; and, have found ourselves with sufficient stamina not only to continue as a Union, but, presently functioning with an even higher degree of efficiency than a year ago. The stature of NABET has increased, both in the networks and the independent stations; with Management, and with other Unions. As a result of some of our more militant actions we are approached with a good deal more respect from the other side of the bargaining table, and our successes have inspired an ever increasing number of inquiries from interested radio and TV men who would like to join our ranks.

As President of NABET it would seem to me that the principal objective of the National Council, in its 1950 Meeting, would be an evaluation of NABET as it stands today. Let us probe our Union frankly and constructively to determine our strong points and our shortcomings. We should set up a campaign and policy which will make the most of our strength and minimize our weaknesses. It is important that the National Councilmen acquire an understanding and appreciation of NABET which they can take back and pass on to their respective memberships. It is also important that we learn to know each other's problems, learn to work together more closely, and evolve a means of inspiring a greater interest and participation in Union affairs on the part of the individual members. Membership lack of interest is a problem which faces all Unions, but, it is particularly important for a Union of the size and scope of NABET to find ways and means to activate the individual members, who ultimately determine whether NABET shall be effective or important, aggressive or complacent, a Union or a social club. NABET membership by their conduct on and off the job and in their contacts with Management, with other Unions and with the unorganized radio and television men they meet, to a large extent determine how effective NABET can be. Therefore, it becomes the job of the elected leaders of this organization to find means to inspire strong membership interest to an even greater extent than we now enjoy.

JOHN R. McDONNELL, President, NABET.



George Maher

NABET

Executive

Secretary

As this is being written, NABET is busily engaged in various NLRB activities, the outcome of which will serve to increase the membership of NABET on the one hand, and will serve to protect the NABET jurisdiction in TV on the other hand.

Specifically, there are four stations in Buffalo, N. Y., which have disaffiliated with the ACA and have indicated a desire to affiliate with NABET. Erie, Pennsylvania, also is moving toward NABET and three of the four stations there are affiliating with NABET.

Insofar as the basic jurisdiction in TV is concerned, we are resisting an effort by the IATSE to carve out, as a craft unit, the TV film projectionists employed by ABC in the city of New York. Additionally, we are fighting to sustain the basic overall unit at WFMY-TV in Greensboro, N. C. Here, the management is trying to remove cameramen from the unit.

These and other various maneuvers will continue to plague us for years to come. However, we feel that NABET is able now to combat any encroachments which may be directed against us.

A full and complete report of NABET's accomplishments during the year will be made to the National Council during its meeting in Chicago and, at that time, it is to be hoped that an even more effective program of aims and policies will be adopted which will make it possible for NABET to do an imminently more satisfactory job of representing Radio and Television Workers.

GEORGE MAHER, Executive Secretary.

DEADLINE is 2nd of EVERY MONTH. EXAMPLE: COPY RECEIVED MARCH 2nd APPEARS IN THE APRIL ISSUE, IN THE MAIL APRIL 1st.

Heading Cuts for Chapter news columns. Chapters without regular heading cuts and desiring same, should send in photo, cartoon, or drawing of subject matter that they wish used to identify and distinguish their column.

New York NABET Office

has moved to:

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The NABET Chapter Journal Column

By ED STOLZENBERGER, Editor

What is the ideal or most suitable subject matter for a Chapter Journal column?

It is not surprising that that very question was posed in the very first issue of our Journal, back in January 1934! The question has since been put frequently-in the Journal, at National Council meetings, and at meetings of the Board of Trustees of the Journal.

The Trustees, at their August 15th meeting, decided to be specific about it, and rather than attempt an instruction sheet or guide to all Chairmen and Chapter Editors, the Trustees have commandeered this Metro-New York column. This space is to be used to demonstrate the nature of the subject matter and treatment that would not only enhance the Journal, but importantly convey to the other Chapter memberships some of the NABET thinking and "what's going on" in this NABET jurisdiction.

In the same way that the NABET President directs the overall membership' attention to some pertinent subject in his monthly Journal column, it is conceivable that the local Chairman may have some message to direct to his Chapter membership; further, we know from daily experience, that to mimeo and bulk distribute union information doesn't assure that each member really has had a chance to read the numerous mimeo releases, local and national.

However, each NABET member does get the NABET Journal-so, ergo!-the capsule version of this mimeo title, number, and date for reference and complete details. The Chapter's journal column space would thus become a Local Union Paper for each of the NABET Chapters-and each would be better informed about each other, and each individual member of each chapter will have been provided with a Reader's Digest version of his local and national NABET affairs—and this local paper service between one set of Journal covers can be accomplished without any single Chapter having to do any of the mechanical work, or be concerned at all about printing bills, the mailing and postage bill, or trying to maintain the mailing list!

The general topic headings might be covered by each Chapter Associate Editor in this sequence:

- 1. Economic trends; general and industry.
- 2. Industry employers; good and bad practices, policies on sick leave, hiring, lay-offs, severance, leaves of absence, accident and safety prevention campaigns, proper lighting, ventilation, and drinking water, etc., etc.
- 3. Other unions—relations with, degree of cooperation off the iob and on the job, NABUG activities, present and potential jurisdictional conflicts, social and business activities propelling all radio-television technicians toward One Union, etc., etc.

4. NABET

- (a) National—capsule comments and constructive criticism relative to the President's Message, National Office mimeos and releases, etc.
- (b) Local—Chairman's Statement, capsule of Chapter Meeting minutes and mimeos including financial state-

ments, report of local NLRB cases, statement of Chapter membership, constructive comments on methods of simplifying dues collection and transmittal from member to local to national treasury, printing of local bylaws, proposed Constitutional Amendments and comments on same, etc., etc., and a chapter "progress report," local election results and tallies, etc.

It is important that the Chapter Chairman continue to read and initial Chapter columns before they are submitted for publication.

Chairmen and Associate Editors, present and potential, should remove this page and file it for future reference, should that quaint phrase, "I don't know what to write about" ever be strained again!

With these boundary conditions set, we'll proceed with the Metropolitan New York Chapter news.

1. Economic trends, general and industry.

It was refreshing to note the action of the enlightened Chrysler Corporation in voluntarily raising the pay of its union (and non-union) employees. The broadcast industry is overdue for that type of morale booster!

Here in New York, ABC-TV is about to expand its present 5-day-a-week TV programming to a full 7-day schedule. That means a further increase in employment opportunities, and additional promotions for present members of the staff; that's

NBC has decommissioned its Radio City studios 8H, 3A, and 3B. They are about to become the latest in TV studios and facilities. In addition, NBC has leased the Radio City Center Theatre and the Hudson Theatre, both for conversion to TV studios.

2. Industry employers and practices.

In the future, we'll cover the various employers' contract terms relating to sick leave, etc. At the moment, the lighting conditions and eye-strain under which radio-TV technicians work, will be given a good looking-at. Glaring tally lights, low ceilings and glare from near eye-level ceiling lights, gloss paint, black paint with aluminum trim, reading from pencilled or mimeod operating sheets and scripts all day-all week—the year long, plus eye fatigue in continued observance of TV picture monitors, will hardly lead toward continued employment through age 65—when you will be ready for the green pastures of Social Security!

The hearing on the IATSE claim of ABC-TV projectionists in New York has been postponed from August to September, and will be reported further.

We'd like to see NABUG take on the monumental task of committing all its members to seek simultaneous expiration of the various industry contracts, leading toward industry-wide negotiations.

NABET—National.

The National Council has almost unanimously approved the

To Page 4

Radio and Television Directors Guild

The National Board of the Radio and Television Directors Guild, an International of the American Federation of Labor, held its annual meeting in New York City August 26-27-28, 1950.

The meeting took place in the International offices, Hotel Gladstone, New York City.

The board elected new officers to serve for two years. These new offices are:

International President	Dick Mack, Hollywood
1st Vice-President	Oliver W. Nicoll, New York
2nd Vice-President	Arthur Hanna, New York
3rd Vice-President	Hal Miller, Chicago
Secretary	Charles Powers, New York
Treasurer	Lester O'Keefe, New York
Secretary	Charles Powers, New York

Former officers were:

International President	Lester O'Keefe, New York
1st Vice-President	Mel Williamson, Hollywood
2nd Vice-President	Ben Park, Chicago
3rd Vice-President	Ernest D. Ricca, New York
Secretary	Oliver W. Nicoll, New York
Treasurer Earle Lewis M	AcGill, New York (deceased)

The slate of new officers represents a break with past National Board tradition. Formerly, the International President was always, by agreement of all locals, a New York member; and local presidents of Hollywood, Chicago and New York were traditionally elected 1st, 2nd and 3rd Vice Presidents in that order.

In this administration, the new International President, for the first time in Guild history, is a Hollywood member. None of the Vice Presidents are local Presidents.

This re-alignment of officers is designed to:

- Spotlight the RTDG's counter-attack to Screen Directors' Guild of Hollywood raids on RTDG members in TV;
- 2) Provide for support of the new International President in this campaign, by Vice Presidents who are not weighed down by heavy responsibilities of local presidencies.

In line with its policy of maximum muscle for its fight against the SDG of Hollywood, the Board eliminated the office of National Attorney, this move designed to concentrate legal firing-power in local situations.

Also in line with same objectives, new duties and larger responsibilities were vested in Newman H. Burnett, formerly National Executive Secretary, now appointed to the newly created position of National Executive Director.

The National Board believes that it can beat the SDG of Hollywood threat on the basis of the RTDG's record of real service to AM and TV directors, associates, and floor managers in the industry, as against the glamorous promise of the SDG. The RTDG is convinced TV men will choose a truly democratic union in which they can have a share in their destiny rather than second-class citizenship in a screen union dominated by big-time Hollywood directors, who, in many cases, are themselves management-partners, stockholders in film companies, and subject to, at the very least, divided loyalties.

The RTDG is set to go all-out in its national war with SDG of Hollywood.

Among the many other important resolutions passed in the three days sessions, the board unanimously passed the following resolution:

"The RTDG is an important force in our nation's pattern of communication. It has a long and active record of support of our government and its responsible agencies in times of national emergency. It is unalterably opposed to communism and any other form of totalitarianism. Accordingly, in the present national crisis, it is resolved that we offer the services of the RTDG to The National Security Resources Board, Department of Defense, The President's Committee on Religion and Welfare in the Armed Forces, the National Psychological Strategy Board, and to the recently organized all-inclusive broadcasting industry defense council.

NABET CHAPTER JOURNAL COLUMN— From Page 3

three constitutional amendments about to be voted upon by the membership—which implies an overwhelming recommendation to the membership to vote "yes"; these amendments will clarify the provision for multiple National Councilmen from any given Chapter.

The economy note in calling a short meeting of the National Council is good news. An equally important economy measure presently in force is the doubling-up of the Executive Secretary and the Secretary-Treasurer's functions. With the installation of the bookkeeping machine and a full time bookkeeper, the Treasurership becomes what it always should have been in our opinion—a subsidiary function of the union's chief full-time officer.

NABET-Local.

The second most important thing NABET-wise in this area (the first was the issuance of the Metro-New York Chapter, Dec. 27, 1949) was the relocation of the NABET Office to Room 407, 48 West 48th St., New York 19, N. Y. The phones are PLaza 7-3065 and 3066. Ours is NABET's largest Chapter, with 770 members. That's fantastic when considered in the light of the union's inception in 1934—when we boasted 292 members from coast to coast!

Future columns will go into detail on the local level picture, the problems and what we are doing to give the members the very best in service, quick and efficient distribution of union bulletins, development of more prompt handling of grievances, etc. Since our Charter was issued at the beginning of the year, we have been kept hopping with the affiliation question—meetings and eventual balloting, which ran right into network negotiations for two months, which ran into a two-month siege attempting to draft working rules under 8-c of the network contract, and which we have just finished balloting on! It has been suggested that on Dec. 27th, 1950, we have a party celebrating our first birthday, and it will certainly be justified!

Support NABET'S YEARBOOK

Television camera with the eyes of a cat!

Why an image orthicon camera can see with only the light of a match

No. 9 in a series outlining high points in television history

Photos from the historical collection of RCA

• Show any camera fan the things a television camera is asked to do, and you'll leave him gasping!

Accustomed to using flash bulbs and floodlights—or taking time exposures in dim light—the still photographer is tied to the limitations of lens ratings and film speed. But a television cameraman operating the RCA image orthicon camera gets sharp, clear pictures—in motion—in places where lack of light would paralyze the most costly "still" camera.

The secret, of course, is that the picture signals created within the RCA image orthicon camera can be intensified millions of times for transmission.

Youthful ancestor of this supersensitive instrument is the *iconoscope tube* invented by Dr. V. K. Zworykin, of



Here, in a testing battery at RCA Tube Plant in Lancaster, Pa., RCA image orthicon pick-up tubes get the final seal of approval from an engineer.



Although dramatic action, in television plays, is often presented in the dimmest light — no detail is missed by the RCA image orthicon camera.

RCA Laboratories. It was television's first all-electronic "eye"—without any moving parts, presenting no mechanical problems.

Basing their research on principles uncovered by Dr. Zworykin's iconoscope, RCA scientists were then able to develop the image orthicon pick-up tube. Although simple to operate, and virtually fool-proof, it is actually one of the most complex and compact electronic devices ever developed.

Within its slim length—not much bigger than a flash-light—are the essentials of three tubes, a phototube, a cathode ray tube, an electron multiplier. The phototube converts a light image into an electron image, which is electrically transferred to a target and scanned by an electron beam to create a radio signal. The electron multiplier then takes the signal and greatly amplifies its strength so that it may travel over circuits leading to the broadcast transmitter.

Inside the image orthicon tube, more than 200 parts are meticulously assembled. There's a glass plate thinner than a soap bubble...a copper mesh pierced with 250,000 tiny holes to the square inch. A piece of polished nickel pierced with a hole so small you couldn't thread it with a human hair!

The image orthicon television camera, as it has been developed by scientists at RCA Laboratories, is now 100 to 1000 times as sensitive as its parent—the iconoscope ... and in the dark, sees almost as clearly as the keenest eved cat!



Radio Corporation of America
WORLD LEADER IN RADIO—FIRST IN TELEVISION

RETIREMENT--PENSION PLANS--PART III

The Significance of the Compound Interest Rate

By ED STOLZENBERGER

Labor unions, employers, and the government itself have been talking pensions and retirement for a long time. Because of the complexity of the subject, most employees covered by an employer's pension retirement plan have accepted their plan in good faith even though they very probably have not read it, and "hope" that should they live long enough to be retired, that they will not be too hungry.

From the employee's point of view, the typical questions are:

I. How much will I get?2. How long will I get it?

3. Will payments be made to my beneficiary if I die the day after being retired?

4. Is my Group Term life insurance continued during my retirement?

5. What do I get, if, on the eve of my retirement, the employer's medical department tells me I am no longer healthy enough to work, or for any other reason employment is terminated short of reaching the retirement age?

From the employer's point of view, some of his questions include:

- I. Will the plan affect salary costs through rulings and interpretations of the Wages and Hours law?
- 2. Is the plan in accordance with provisions of the Internal Revenue Act so that the cost may be charged as a current operating expense?
- 3. Do I want to encourage employee loyalty and long-term employment?
- 4. Would the Insurance carrier attemp to discourage employment of new employees over 40 years of age?

It is the purpose of these several articles to provide some background to a very entangled subject. In Part I, we discussed the automatic mechanics of the money operation called "dollar averaging". By citing examples, this well-known concept was proven: that if you invest equal amounts of money at regular intervals, that regardless of the price fluctuations, your long-term average cost of whatever you are buying will be lower than the average price during the buying period. This is so because of your equal dollar purchases. When the price is high, with equal dollar investment you buy fewer units at the high price.

Conversely, with the same number of dollars when the price is low, you purchase many more units. When you average out your unit cost, it is lower than the average price during the period. The application of this principle supplies the automatic answer to the important question: When should I buy? — You should try to make routine purchases or investment at regular intervals, such as monthly, quarterly or semi-annually.

The important point of Part II was a discussion of the evolution of investment cooperatives, which was climaxed in the Investment Trust Act of 1940. All complying investment cooperatives (called investment trusts or mutual funds) are referred to as "regulated investment trusts." By qualifying under the Act, regulated investment trusts earn special treatment under the Internal Revenue Code — to the further advantage of the investment trust share holder. Investment in shares of a regulated investment trust automatically provides the answer to "What to buy?" - Should I put all my eggs in one basket? How can I diversify adequately to protect against the obsolescence or competitive failure of my investments? The regulated investment trust shares give you the easy and safest answer to this group of questions. It is important to note that these shares have the status of demand deposits; the leading daily newspapers throughout the nation list the daily purchase and redemption prices of many dozen of investment trusts. All of these funds are not identical either in stated aims or purposes, or in results achieved. The internal mechanics of operation and the interpretation of comparative results may be the subject of another of these articles dealing with the many facets relating to Pensions and Retirement.

So much for a general recap of Part 1 and Part 2. The subject matter of this Part III is compound interest—and its most important bearing on pensions and retirement income.

How does dollar averaging, regulated investment trusts, and compound interest bear on retirement-pension plans? Coupled with actuarial data, this subject matter encompasses the whole problem of pension-retirement funds and plans. These are the roots and the key to the answers. Spreading of investment risk, making opportune purchases to keep average buying

price down, reasonable security of principal, and at the same time secure the highest possible earning rate (interest and dividends) on the investment, are the monumental problems that insurance companies, pension trust funds, profit sharing funds, etc., have to cope with. And these considerations apply equally whether you are insuring against fire, theft, casualty, accident, life, or pension-retirement.

However, it is necessary to state that insurance company plans are based upon 2% earning rate applied to the principal investment, and this low rate is grossly inadequate—especially in the face of 2.9% series E U. S. Savings Bonds, and U. S. federally insured Savings & Loan Association shares earning from $2\frac{1}{2}\%$ to 4%.

It is necessary to re-state and emphasize that the typical insurance company retirement-pension policy issued today is based upon a 2% earning rate. The strange element is that not too many pension-hopefuls are aware of this factor, and its futility. Yet, few of us would expect to be able to retire on the 2% interest from our savings bank account, and 2% from any other source is equally meagre. A 2% income, whether from an insurance policy or a savings account, will not do very much in the way of keeping the wolf away from the door! Our premise is that regardless of where your principal is invested, it positively must earn for you much more than 2%. Whether your money is in a savings account or in an insurance plan, if the earning rate is 2%, you have little more than safe keeping for your money.

We refer you to the long list of regulated investment trusts. Earnings in the neighborhood of 4% and upwards are not uncommon; the prudent individual might well plan to include these investment trust shares in his overall retirement plans.

The utilization of Investment Trust shares for retirement purposes is completely flexible. They may be purchased by an individual, by groups of employees or members of a union, either in the names of individuals or the group name, or they may be purchased jointly by employer-employee in the name of the employee, in any amount negotiated and agreed between employees and employer, and between union and employer.

The national investment in regulated investment trust shares is well in excess of 2 billion dollars. These investment trusts have been ruled as legal investments under the Massachusettes Prudent Man rule, many unions have large holdings, and they are becoming a vehicle of investment for savings banks and insurance companies. New York State's laws permit up to 35% of the assets of trust funds to be invested in common

stocks. More and more pension funds are placing 30% or more of their funds into common stock. There is a wider acceptance of common stocks and investment trust shares by fiduciaries, with the trend toward more favorable legislation and judicial attitudes regarding their use.

The use of mutual investment fund shares for funding pension plans was outlined in the February, 1950 issue of "Commerce," Chicago Association of Commerce & Industry publication. "The mutual fund has two qualities that commend it to the attention of managements studying the investment clauses in any established or proposed pension trust agreement," Henry J. Simonson, Jr., president National Securities & Research Corp., pointed out.

"First, these shares represent ownership in a diversified list of securities, which means that the risk is spread over some of the leading corporate properties of the country so that the danger of serious capital impairment is minimized.

"Second, these funds are supervised by experienced investment management which is in a position to make adjustments in the portfolio so as to keep income at a satisfactory level, while at the same time safe-guarding against changing conditions that might affect the value of any individual holding in the trust," Mr. Simonson said.

We stress here and urge your critical inspection of the regulated investment trusts and mutual funds for these important reasons, none of which should be overlooked or minimized:

- 1. even under blindfold conditions, you will have no trouble finding a mutual fund with a long record of regular earning rate importantly in excess of the current insurance-pension rate of 2% (you will note a later reference to the fact that a 1% increase in earning rate can either reduce pension costs by 30% or increase the pension payments by 30%!)
- these mutual funds are demand deposits, readily convertible to cash at the then current value of the individual securities and quoted daily in the leading newspapers;
- 3. the continuous professional management of these mutual funds provides continuous offensive and defensive protection of principal against deflationary and inflationary economic tendencies; this is accomplished in most mutual funds by switching and transferring investments in anticipation of changing conditions; the published records of many mutual funds bear out

the superior performance of well managed mutual funds in comparison with generally re-

garded "blue-chip" issues.

Once upon a time, the prudent solution for providing financial security was the purchase of high grade bonds; the bonds were mortgages on business, and they yielded upwards of 6% interest. The Commercial and Financial Chronicle of March 30, 1950, tells the story very vividly:

High Cost of Living and Lower Bond Yields

Two fiscal developments have combined to make common stocks more attractive. They are the high cost of living and the low yields on high grade bonds.

The purchasing power of the dollar today is 40% lower than it was eleven years ago; high-grade bonds yield 20% less than 11 years ago. But

common stocks yield 50% more.

These contrasting trends highlight the story told by the accompanying table (Exhibit I) of monthly average yields on Moody's Aaa bonds and Moody's 200 common stocks for the 30 years, 1920 to 1949.

In 1920, the yield on Moody's Aaa bonds was 6.12%. The yield on Moody's 200 common stocks was 5.5%. Bond yields for that year were 111%

of common stock yields.

While the yields on Aaa bonds were in a downward trend for the next 10 years and the yields on common stocks fluctuated widely for the period ending with 1930, it was possible for the investor to get a 7% higher return on average by investing in Aaa bonds than he would have gotten by investing the same amount of money in common stocks.

During the 1920's, the purchasing power of the consumer's dollar was also improving. Based on the period 1935-39=100, the purchasing power of the dollar increased from approximately 70 in

1920 to 83 in 1930.

Under such conditions, there was no pressure on the investor to seek a higher yield or to protect the purchasing power of his dollar through equity investment. Starting with 1931, the income advantages of Aaa bonds began to disappear, partly owing to the change in long-term money rates and partly owing to declines in the stock market. The yield on Moody's Aaa bonds in 1930 was 4.55%. Since then, this yield has declined persistently until it averaged but 2.66% for the calendar year 1949.

Long-Term Rise in Stock Yields

The yield on Moody's 200 common stocks was

4.54% in 1930. It was 6.63% for 1949. The ratio of bond yields to common stock yields, which was 107.8% for the 11-year period from 1920 to 1930, was only 66% for the 19 years from 1930 to 1949.

The year 1949 represents a low point in the ratio of bond yields to common stock yields. For that year, it was only 40.1% of the yields available on common stocks.

These figures bring forcibly to mind the fact that the bondholder has been hit three ways: First, by declining money rates; second, by declining purchasing power of the dollar and third, by increasingly heavy taxation.

EXHIBIT I

MONTHLY AVERAGE YIELDS ON MOODY'S AAA BONDS AND MOODY'S 200 COMMON STOCKS FOR THE 30-YEAR PERIOD FROM 1920-1949

	Moody's AAA	Moody's 200	Ratio of	Purch. Power
	Bond	Common Stocks	Bond Yields	of Consumer's
	Yields	Yields	to Common	Dollar
	Monthly Avge.	Monthly Avge.	Stock Yields	1935-39=100
1920	6.12%	5.5%	1.113	69.8
1921	5.97	6.1	.979	78.3
1922	5.10	4.6	1.109	83.5
1923	5.12	5.3	.966	82.0
1924		5.2	.962	81.8
1925	4.88	4.3	1.135	79.7
1926	4.73	4.5	1.051	79.1
1927	4.57	4.6	.993	80.6
1928	4.55	3.9	1.167	81.6
1929	4.73	3.41	1.387	81.6
1930		4.54	1.002	83.8
1931	4.58	6.17	.742	92.0
1932	5.01	7.36	.681	102.5
1933	4.49	4.42	1.016	108.2
1934	4.00	4.11	.973	104.5
1935	3.60	4.06	.887	101.9
1936		3.50	.926	100.9
1937		4.77	.683	97.4
1938	3.19	4.38	.728	99.2
1939		4.15	.725	100.6
1940	2.84	5.31	·535	99.8
1941		6.25	.443	95.1
1942		6.60	.429	85.8
1943	2.73	4.89	.558	80.9
1944		4.81	.565	79-7
1945	2.62	4.19	.625	77.9
1946		3.97	.637	71.8
1947		5.13	.509	62.8
1948		5.78	.488	58.4
1949	2.66	6.63	.401	59.1

Exhibit I clearly shows what's happened to the earning rate of bonds. The rest of the story is equally sad. Here's what happened to the cost of living:

1935	.,	98.1
1940		100.2
1950	June	170.2

This data is from the Bureau of Labor Statistics, Cost of Living Index 1935-1939 = 100.

Exhibit II is a simple tabulation in increments of \$10 per week, and the monthly and annual equivalents. This data is presented to indicate at a glance the size of the fund that must be accumulated in order to pay a reasonable annual retirement.

EXHIBIT II

Weekly	Monthly	Annual	Equivalents
\$10	\$43.33	\$520	
\$20	\$86.67	\$1040	
\$30	\$130.00	\$1560	
\$40	\$17 3.33	\$2080	
\$50	\$216.67	\$2600	
\$60	\$260.00	\$3120	
\$70	\$303.33	\$3640	
\$ 80	\$346.67	\$4160	

Example: If you want an annual retirement payment of \$2080, and the experience tables indicate you will live for 10 years, your accumulations must total 10 times \$2080, or \$20,800, less of course, the interest that would be earned on the diminishing balance of the fund as the fund was being paid to you in the form of retirement payments.

Another easy guide, is that \$1,000 at 5.2%, produces an income of \$52 per year, or \$1 per week.

EXHIBIT III

.07	^	1 1
5 70	Compoun	aea.

Number	570	ompounded	
of Years	Quarterly	Semi-Annually	Annually
5	1.2820	1.2801	1.2763
IO	1.6436	1.6386	1.6289
15	2.1072	2.0976	2.0789
20	2.7015	2.6851	2.6533
25	3.4634	3.4371	3.3864
30	4.4402	4.3998	4.3219

Exhibit III presents in tabular form that natural limit of practical gain as the frequency of compound-

ing is increased. The "n" case would be instantaneous compounding continued to infinity. These articles deal with the practical results to be achieved. The tabular data in Exhibit III demonstrates that there is little practical gain in compounding more frequently than semi-annually.

Interpretation of Exhibit III: \$1,000 at 5% interest for 30 years

when compounded annually would become \$4,321.90 when compounded semi-annually becomes \$4,399.80 when compounded quarterly becomes \$4,440.20

At the end of the 30 year period, the gain of semiannually over annual compounding is \$78, and the further gain of quarterly over semi-annual compounding is only \$40. For this practical reason, we have chosen semi-annual compounding for the curves of Figures 1 and 2, and for the tabular data presented in Exhibit IV and Figure 3.

EXHIBIT IV

Semi-Annual Compounding at the Various Rates and for the Periods Tabulated

Period						
of	~	~	~	01	- 01	~
Years	2%	3%	$_4\%$	5%	6%	7%
5	1.104	1.161	1.219	1.280	1.344	1.411
$7\frac{1}{2}$	1.161	1.250	1.346	1.448	1.558	1.675
10	1.220	1.347	1.486	1.639	1.806	1.990
$12\frac{1}{2}$	1.282	1.451	1.641	1.854	2.094	2.363
15	1.348	1.563	1.811	2.098	2.427	2.807
$17^{1/2}$	1.417	1.684	2.000	2.373	2.814	3.334
20	1.489	1.814	2.208	2.685	3.262	3.960
$22\frac{1}{2}$	1.565	1.954	2.438	3.038	3.782	4.702
25	1.645	2.105	2.692	3.437	4.384	5.585
$27^{1/2}$	1.729	2.268	2.972	3.889	5.082	6.633
30	1.817	2.443	3.281	4.400	5.892	7.878
$32\frac{1}{2}$	1.909	2.632	3.623	4.978	6.830	9.357
35	2.007	2.835	4.000	5.632	7.918	11.113
$37^{1/2}$	2.109	3.055	4.416	6.372	9.179	13.199
40	2.217	3.291	4.875	7.210	10.641	15.676

Figure 3. This tabular data has been read off the curves of Figure 1 and shows the number of years required to Double, Triple, and Quadruple an Initial Investment at semi-annual Compound Interest at the Several Rates Shown:

Initial Investment At	2 %	3 %	4%	5%	6%	7%
	yrs.	yrs.	yrs.	yrs.	yrs.	yrs.
Doubles in:					113/4	
Triples in:					183/4	-
Quadruples in:	69¾	$46\frac{3}{4}$	35	$28\frac{1}{4}$	$23\frac{1}{4}$	201/4

If you are concerned about guaranteed (rigid, non-flexible) principal, it is ready-made and waiting for you in the form of savings bank deposits (1½% to 2%), Series E U. S. Savings Bonds (average 2.9% if held to maturity), and Federal Savings & Loan Association deposits or shares (2½% to 4%), all of which are equally insured by our Federal Government.

To some, this insured-principal feature is of paramount importance. A good look at financial and political history at once makes it evident that where a huge public debt becomes a matter of policy, there have been but two eventual treatments:

- voiding or cancellation of all extant money and debts; or
- 2. the more sportsman-like "give them a run for their money" version of the same thing, usually called inflation.

Right or wrong, justifiable or not, it can hardly be denied that in the lifetime of the present pension-hopefuls, their hard earned and more toughly saved dollars of a few years ago positively do not buy their equivalent today. If your observations coincide with the writer's, then the thing you don't want is guaranteed, rigid, non-flexible principal; you do want and need elastic principal. Ownership in a multitude of diverse industries provides that elasticity—the element that tends to keep the purchasing power of your principal constant. Regulated Investment Trust shares and mutual funds are ready-made to provide the diversification of investment by industry, and by company within an industry-that is essential to protect you against adversity and obsolescence in any particular industry or any particular company.

In Exhibit I, the tabular data indicates the steadily declining earning rate of the highest grade bonds, to the present average of 2.5%. The following example shows how a balanced portfolio invested in government and high grade corporate bonds for safety, and in preferred and common stocks for more income can increase the yield to 3.76%, or by one-half. This difference in yield over a long-term period could be used to offset possible price declines in the stock portion of the portfolio, if necessary.

Investment	% of Total	Average Yield
Government Bonds Corporate Bonds Preferred Stocks Common Stocks	37.5% 12.5% 20.0% 30.0%	2.30% 2.70% 3.80% 6.00%*
Common Stocks	100. %	3.76%

(*approximate current average)

Lest the cautious reader recoil and raise an eyebrow at the thought of common stocks, the endowment funds of 12 eastern colleges totalling over \$600 millions have an average of 13% in preferred stocks, 42% in common stocks, and the balance in bonds. Last year, U. S. life insurance companies increased their purchases of common stocks over 1948, from \$49 million to \$69 million, and sharply curtailed their purchases of bonds according to the Institute of Life Insurance. Twenty-four States and the District of Columbia have already granted life insurance companies the right to invest a limited amount in common stocks.

At this point, you should be more than curious about the long build-up and pitch leading up to what appears to be undue stress on a mere 1.6%, or 2%, or maybe a bit more. After all, what's two per cent! Let's see.

Here are several graphs designated Figure 1, and Figure 2, and some interesting highlights from these graphs presented in tabular form as Figure 3.

In Figure 1, the vertical axis represents the value of any unit investment, over the period of years plotted, as a function of various semi-annual compound interest rates as shown in the family of curves. The validity of the data may be verified with such texts as "Compound Interest and Annuity Tables" by Kent (Mc-Graw-Hill), etc. As an example, to facilitate reading and interpreting the graphs, let us pose this question: If I invest \$1,000 and the interest thereon is compounded semi-annually, how long would the investment have to remain until the initial investment and the compound interest thereon doubled to become \$2,000? Along the vertical axis, the number one is the starting point or the initial investment; reading up, the number two is the point at which the initial investment plus the compound interest thereon, exactly doubles; reading further up, the number three is the point where the initial investment triples; four is the quadruple point, etc. As a check example, note that \$1,000 invested at 7% compounded semi-annually for 35 years, has a value of \$11,000. The enormously exaggerated results from the higher earning rates are shown to whet your appetite and to encourage further pursuit of this interesting subject. So much for how to read the information plotted.

In Figure 2, we have taken the portion of Figure 1 below the 3½-times point on the vertical axis and expanded it for easier reading. Read Figure 2 along the 2-times (investment doubles) line, and note that \$1,000 would have to be invested for 35 years at 2% before it became worth \$2,000. Now read back along the 2-times line and note that the same investment at 3% only requires 23¼ years to double itself, and that

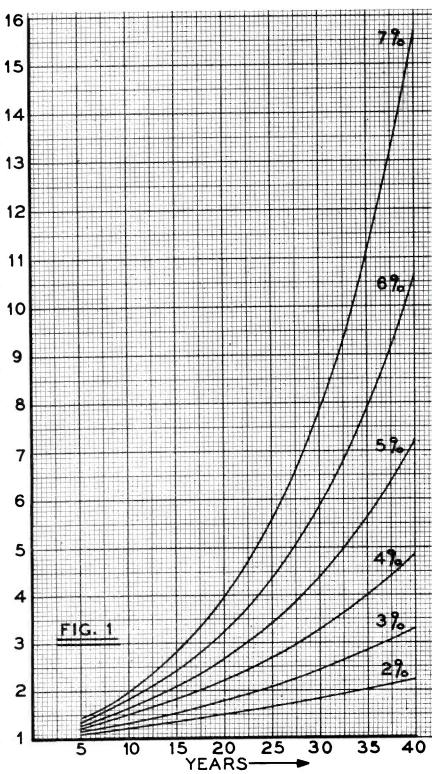
money at 4% doubles itself in 17¾ years, at 5% it 16 doubles in 14¼ years, at 6% in 11¾ years, and at 7%, it doubles in 10¼ years.

Let us have another look at the 2% and 4% curves of Figure 1. For a typical working span of 35 years, an investment of \$1,000 at 2% has earned \$1,000 in 14 interest at the end of the period. Had the investment been made at 4%, the interest would have been \$3,-000. Stated another way, to build a \$2,000 fund under 13 a 2% plan, you have to contribute 50%, or \$1,000, where to build a \$2,000 fund under a 4% plan you would only have to contribute 25%, or \$500. Or, had 12 you contributed the same \$1,000 into the 4% plan, your retirement payments would be double what they would be under a 2% plan. Another way of realizing the full significance: the \$1,000 invested at 4% compounded semi-annually becomes \$4,000; \$3,000 of that amount is earned interest—which is 3-times the 10 amount earned for you at 2%.

Pension payments consist of two contributory items. Part of the payment is a return of your own money, and the remainder is the interest that your money has earned. Obviously, the higher the interest rate, the larger the earning, and the smaller your contribution—or, with the same contribution, the larger the pension payment to you. We cannot stress too strongly the importance of earning every last additional ½% possible! Nor can we stress too strongly the utter futility of any 2% system or plan.

Too many employer-sponsored pension plans deprive the employee of vested rights in thre employer's contribution toward the individual employee's portion of the pension fund. It goes something like this: Let's let the employer and the employee play bank; the employee puts in cash—but the employer puts in tokens; these tokens will be redeemable for cash only under certain specified conditions; under all other circumstances, the employee is allowed to leave with his own money at 2% interest. That's not a pension plan, that's a joke. But a very vicious joke, and not realized until the individual is too far along in years to attempt to rectify it—by refusing to participate.

The employee positively must have vested rights to the employer's portion of the fund. Anything short of full vesting is an open invitation to the employer to coerce, fire, claim incompetence, etc., after long years of service. The era of pension-planning progress is too new for anyone, particularly an employer, to offer in defense, the employer's history in that regard, by citing the employer's record of never having engaged in such a practice. Let us be quick to remember that the average age in this radio and television industry today is about 40, with some of the grey-



beards about age 55. Ten years hence, with the average age about 50, let's hope that the industry policy hasn't changed. Obviously, it would be more than foolish to sit by and wait out the ten years. We have got to get across the moral issue which is the basis of the employee's claim and right to pension vesting.

The New York State Industrial Bulletin says this about vesting:

Vested Rights or Vesting—Any rights in the pension plan which the employee does not lose if he leaves the company's employment before retirement age. Vesting is the process of giving an employee a permanent right or interest in the contributions the employer has made in his behalf. Vested rights are also defined as "The permanent interest or equity an employee gets in the employer's pension contribution after he has fulfilled certain conditions." Thus, if he acquires "vested rights" after 10 years' service as a pension participant, and then leaves the company, he can take with him the money the company has contributed toward payment of his pension during those ten years. Frequently vested rights may not be taken in the form of cash, the vested employee receiving instead, starting at the normal retirement age, whatever pension he has earned up to the time he leaves the company.

In contributory plans the employee who leaves his job before retirement age is returned his own contributions in all cases plus part or all of the interest earned on his money.

Employer pension plans are nothing but forced savings plans, unless the employee acquires a vested interest in the employer's contribution to the individual's retirement fund. Similarly, several unions have inaugurated their own pension plans, based upon continuous "good standing" of the member in the union, for some period of years and minimum age attainment, at which time, according to the union's constitution or subsidiary pension-insurance organization, some arbitrary, non-actuarial amount of money is paid to the union member as a pension. Such a union-sponsored plan obviously provides the union with a whip that discourages criticism of the union, and keeps a lot of its members tied down—because in the typical unionsponsored pension-insurance plans, the employee (union member) not only doesn't get the union's contribution, but he doesn't get his own money back! Some of the worst forms of this union practice make their per capita tax such as to include pension and insurance payments, so the member has no option at all; if he wants to be a member he has to pay the uniform dues —which just happens to include payments into an insurance and pension fund—in which he will have even less equity than in the typical employer-type pension plan. Salesmanship always enters so that the individual is maneuvered into believeing that he really wants and will benefit from participation in the plan; in the case of at least one numerically-large union,

each insurance-pension type member is represented by one vote in convention, whereas the non-insurance-pension type member is represented at the same convention by 1/10,000th of one vote! We are not here picking on, or heckling some other union. Admittedly, their bold efforts many years ago in the little-understood field of pensions represented true pioneering, and served as a wedge to extract from employers similar pension and insurance plans. However,we cannot continue to live in the past; these plans were outstanding when inaugurated some 50 years ago. But the requirements based upon actuarial data, experience tables, and the extremely unrealistic vision of a single employee being welded to a single employer for his full working life—do not satisfy the conditions of today.

Good intentions will certainly not pay your bills—or your pension retirement. A very sad portion of New England history is recounted in the *Cyclopedia of Fraternities* (Albert C. Stevens, publ. 1907 by E. B. Treat & Co., N. Y.). Dozens of insurance-fraternities sprung up over night—each offering to pay larger benefits at lower dues (premiums) than the competition. While their intentions were good, they all failed financially because a lot of people then, like now, haven't learned the kindgarten lesson: you only get what you pay for.

We have herein presented to you the story, adequately embellished with graphs and tabular data and examples to show beyond doubt why you need "that extra 2%". We showed that over a 35 year period, a \$1,000. investment at 2% only earned \$1,000. for you, but that at 4%, the earning would have been \$3,000. That this advantage can serve you in either of two ways:

- 1. Your cost for a given retirement payment can be reduced by about 30%; or
- 2. Your payments can be greatly increased, without increase in cost to you.

We next introduce the rather obvious fact that insurance companies, banks, trusts, etc., when they guarantee to you 2% on your money, must of necessity actually invest your money at rates much higher than 2%. We should be concerned enough with our own welfare to be willing to look into the subject; this article has attempted to make that chore a bit easier for you by introducing you to the Regulated Investment Trusts (generally referred to as investment cooperatives or mutual funds), and along with other tabular data, to show how, strictly on your own, you could diversify your investments between government and other high grade bonds, together with preferred and

common stocks to easily average a return of 3.76% on your investment. The mutual funds do all of this diversification for you, and they have the technical skill and constant supervision to assure you maximum protection of principal.

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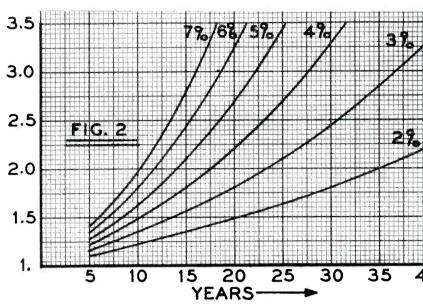
The other related item, which we nailed down early, was the statistical answer to the question of how frequently must money be invested and compounded to provide real advantage to the investor. Semi-annual investing and semi-annual compounding will, in general, provide you with adequate "price averaging" advantage and also optimum gain from the reinvestment of the earnings on your investment.

Most union-sponsored and employer-sponsored pension-retirement plans do not provide for vesting, and therefore the protection afforded to the individual is at least dubious. And it would be worse by far, if you found you were "replacable" on the eve of your retirement.

It appears as though it will take another generation or two to get the employer-type retirement plans oriented for the protection of the employee, so that he at least acquires vesting rights in the employer's portion of the fund.

In the meantime, the current crop of employees must be realistic enough to recognize that it would be foolhardy to really depend upon an employer-type pension plan without vesting, and that they ought to take steps to protect themselves.

One of the simplest means of handling the entire operation would be through a payroll deduction plan, wherein the group enterprise would function as a unit in making purchases and thus effect a great reduction in the buying commissions, and setup the bookkeep-



ing system to credit the individual with his equitable share of the total fund. The by-laws of the fund or trust could easily provide for the withdrawal by an individual of his full share of the fund, etc.

Let us recognize that people are human, and that the degree of education and experience in matters financial varies considerably; that there must be expected individual suspicions, superstitions, and misinformation about the whole money subject. And that in addition, such a movement would suffer the mass inertia to get the group to agree that they want an investment trust plan, and then further to decide on "which one", and then to attempt to get agreement on how much per month or quarter each individual shall contribute to the fund.

To the alert individual, the solution is to "get going" on an individual basis — and as quickly as possible.

ABC Income

ABC last week reported net income after federal income taxes of \$180,000 in the first half of 1950. The network suffered a net loss of \$46,141 in same half last year.

The net for the January-June period of 1950 was equal to 11c a share on the 1,689,017 shares of common stock outstanding.

New York State Labor Law Interpretations

Question—May the Department of Labor accept an assignment from a person of commissions earned in the sale of radios?

Answer—The Labor Law of the State of New York, from which the Industrial Commissioner draws his jurisdiction to act on labor matters, limits him to the collection of agreed

wages earned by such employees as are working men, laborers, or mechanics. A claim for commissions earned for the sale of radios does not fall within that category. The Department is, therefore, unable to accept such an assignment.

Question—Is it possible for a man to collect unpaid commissions after he leaves a company's employ?

Answer—A salesman who has earned commissions and to whom commissions are due and payable by virture of agreement between employer and such salesman, may collect such commissions even though he has left the employ of the establishment.

Question—Must an employer pay an agreed salary when a salesman makes no sales during the week?

Answer—Where the agreement between the employer and salesman is that the employer shall pay the salesman a definite salary for a fixel period, payment of which is not made dependent upon any sales by employees during such period, the employer is under duty to pay the same.

The I.R.E. West Coast Convention

The 6th annual Pacific Electronic Exhibit took place in the municipal auditorium at Long Beach, Calif., Sept. 13 for a three-day run, and something new has been added, according to Heckert Parker, general exhibit manager.

The experience of five previous shows has been responsible for the addition of a tag line: "Business and engineering conference.'

Thus, in addition to the various and sundry display booths housing standard electronic items as well as novel applications, there was ample provision for conferences of business leaders and electronic engineers.

The jobber angle was stressed with provision for special meeting place for jobbers, with trips to nearby electronic plants and distributors' facilities.

The Los Angeles chapter of the Reps of Radio Parts Manufacturers, Inc., will operate the information and message center

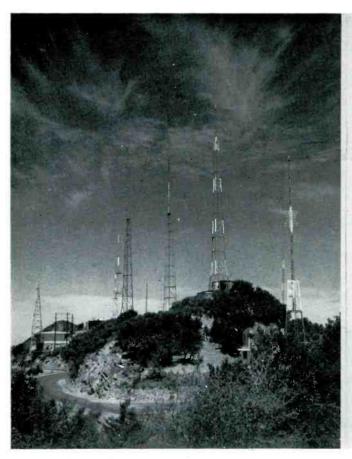
The general public was not admitted to the exhibit. At the same time and place, the annual west coast convention of the Institute of Radio Engineers was held, and included many educational exhibits.

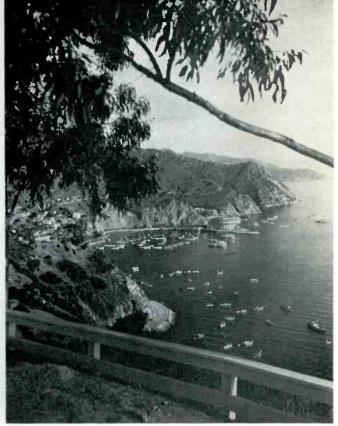
The exhibit alternates annually between northern and southern California under auspices of the West Coast Electronic Manufacturers Assn. And this year, besides the regular features, business talks by national authorities and panel discussions by electronic engineers were headlined during the 3-day exhibit and conference.

The following report on Industry Standardization was presented to the convention by Virgil M. Graham, Associate Director of the Engineering Dept. of the Radio-Television Manufacturers Associa-

Thirty Seven Years Progress in Industry Standardization Is Cited As Foundation for Rapid Progress In Television, Radio and Electronics

A report on engineering standardization in the radio industry which began in 1913 and is today the basis of outstanding advances in the electronic art, including television, radar, radio, electronic computing and other complex electronic devices was presented to the West Coast Convention of the Institute of Radio Engineers here by Virgil M. Graham, director of technical relations for Sylvania Electric Products, Inc. and associate direc-





vision and Micro-wave antenna arrays atop Mt. Wilson, Calif. lina Island, as seen by the IRE Conventioners.

The IRE-WCEMA Conventioners saw this array of Tele- Work to Live! Here's the restful view at Avalon Bay, Cata-

tor of the Engineering Department of the Radio-Television Manufacturers Association.

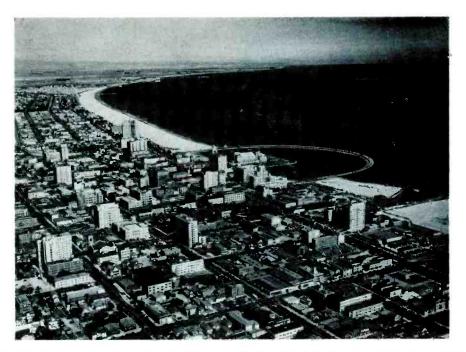
"Early radio standardization," Graham said, "stemmed from the first preliminary report of the committee on standardization of the Institute of Radio Engineers dated September 10, 1913. This report contained definitions of terms, tests and symbols which are of interest to the radio industry and the Institute today.

"The first effort to establish the manufacturing type of standards began about 1923 by the Associated Manufacturers of Electrical Supplies then concerned particularly with appliance type of electrical equipment. Activity of AMES committees continued until mid-1926 when their organization combined with the Electric Power Club, concerned with heavy power equipment to form the National Electrical Manufacturers Association. Radio standardization was continued by NEMA's radio division which published handbooks on standardization during 1927 and 1928.

"In 1929 the rapidly growing Radio Manufacturers Association, which had been established in 1923, set up the first RMA engineering committee with a standards section. At this time RMA standardization procedure followed closely that established by NEMA. Material was proposed by RMA engineering subcommittees, reviewed by the general standards committee and approved proposals were then submitted to RMA membership for letter ballot providing one vote for each member company. If the ballot was not returned within a stated time it was counted as affirmative. A majority of 75% affirmative votes was required for adoption.

"Occasions when 75% of the ballots were not returned were not unusual. The weakness of the procedure soon became apparent. In 1934 a survey of other manufacturing standardization systems indicated that procedure used by the Society of Automotive Engineers was more desirable. Therefore, a modified SAE procedure was adopted by RMA. Proposals are circulated for comments which a General Standards Committee judges for the industry. This procedure permits consideration of valid objections and provides a very democratic standardization system.

"During the early 1930's RMA engineering was concerned principally with component standardization. Therefore, subcommittees were formed out of the components committee to specialize in standards for resistors, capacitors and other components. Mr. L. C. F. Horle, a consulting engineer in New York, or-



Aerial view showing Long Beach Harbor with Municipal Auditorium inside horseshoe

—Pacific Air Industries Photo.

ganized these component standardization committees and also established the RMA Data Bureau. In 1938 the Bureau assumed the handling of tube type designation assignments which had previously been a function of the RCA License Laboratory.

"The RMA Data Bureau became the focal point of the engineering department's operations as activity increased. In the late 1930's collection and tabulation of data on broadcast receiver characteristics were an important phase of the Bureau's activity. Information on sensi-

tivity, selectivity and other characteristics could be made available to the Federal Communications Commission and other groups requiring it. This activity was interrupted by World War II but was resumed in 1947."

In closing Graham reported the retirement of Mr. Horle as manager of the Data Bureau and chief engineer of the Radio and Television Manufacturers Association. He reported the appointment of Ralph Batcher who has long been associated with the radio industry to succeed Mr. Horle.

Dealers Got 2.6 Million TV Sets In Six Months, RTMA Estimates

Television dealers throughout the country were shipped an estimated 2,612,000 TV receivers in the field six months of this year according to an industry estimate released by the Radio-Television Manufacturers Association. The RTMA estimate includes shipments to dealers by counties of both members and non-members of the Association,

The estimate of television receiver shipments covered 38 states and the District of Columbia. RTMA TV production estimates showed a total of 3,114,000 sets manufactured during the same six-months period. The difference of 503,000 sets represents manufacturers' and distdibutors' inventories and sets in transit.

Shipments in the month of June totalled 289,000, a decrease from the 369,-000 TV sets shipped to dealers in the preceding month.

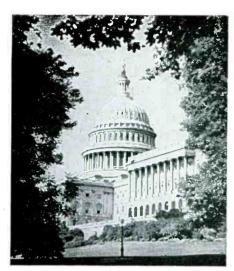
NABET—SINCE 1934

Dedicated to the

WELFARE - SECURITY- PRESTIGE

of the

RADIO - TELEVISION WORKER



WASHINGTON

By A. T. POWLEY

As promised in last month's column, we have more news on the proposed new studios for WMAL-TV. If present plans materialize, the station will have one of the best equipped studios and most upto-date facilities on the east coast, outside of New York City. The Evening Star Broadcasting Company has taken a long term lease on the Shevy Chase Ice Palace, which is located in the 4500 block of Connecticut Ave. N. W. When construction is completed space will be provided for AM, FM and TV, There will also be adequate office space, prop storage, dressing rooms, etc. It is planned to start construction on the TV studios immediately, and build the AM and FM studios at a later date. Studio facilities consist of two large studios; one seventy by thirty feet, and the other forty-eight by twenty-nine feet. There is also an auditorium studio with a stage and control rooms seating five hundred persons for audience participation shows.

Current news from the Trans-Lux studios has Bill Chew just returned from a vacation in Florida, and Frank Fugazzi is trying desperately, and unsuccessfully to resign from the Naval Reserve.

The local channel 9 outlet has changed call letters from WOIC to WTOP-TV. It is now operating with FCC approval under its new ownership. There have been no changes in the personnel in the Engineering Department to this date. I understand that there is some consideration of acquiring new studios. It is also planned to originate more network shows this fall.

In closing, we note that Garoway is back on channel 4 again, together with "Schnepper and Snooper," boy wonder,

Paul R. Quay

Paul R. Quay, transmission supervisor for Radio Station WDOK, was accidently electrocuted on April 6, 1950. A momentary loss of balance while measuring floor space behind the WDOK transmitter threw him into contact with an 8000 volt cable. The engineeering staff was



preparing for opening of the station, which was tentatively scheduled for later that month.

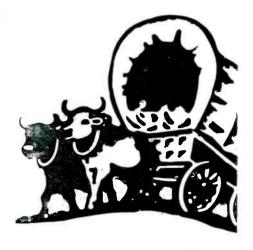
A native Clevelander, Paul, 37, joined the WDOK staff in February 1950, after having been employed as an engineer at Radio Station WHK since November, 1941. He served in the Pacific area in the U. S. Marine Corps during World War II.

Paul was interested in everything, enthusiastic, cheerful, and very dependable. At WHK he covered many of the larger Mutual network pickups from the Cleveland area. At various intervals he worked master control, studio control, remotes, short wave, and maintenance shifts. Playing on the baseball team was one of his many activities at WHK. He will be sorely missed by his fellow workers as he was one of the best liked and will known engineers in Cleveland.

He is survived by his wife Lillian, two fine sons, Gary 7, and Paul 3, his mother, two sisters, and a brother Ralph, an angineer at Radio Station WGAR.

Paul was a good radioman, NABET member, and a real friend.

who learned all about television in two easy lessons. Best 75's—A. T. P.



OMAHA NEWS

By RALPH O. LATTA, Jr.

KMA NEWS

Don Burrichter is looking forward to leaving on the Alaskan tour, which KMA is sponsoring. He expects to leave around September 6 and will be gone for three weeks, making tapes and taking a few pictures.

Lloyd Latta returned after a trip to the Ozarks and a 15 day tour of active duty with United States Air Force.

Rogers Peters WØWHZ, is going all out with a 32 element antenna array for two meters.

Norm Kling $W \varnothing JGN$ has been spending considerable time trying to get the modulator ready for his new 10 meter rig.

It is so cool here lately that some of the fellows have begun to wonder fi anti-freeze is in order, especially when it hit an all time low for this time of year of 38°.

Everyone seems to have gotten over the station's 25th Anniversary celebration, which had enough special events to keep everyone happy for a long time. State Fair time is now in full swing, but another three weeks should put every one back on regular shift and things back to normal again.

WOW Transmitter News

Not much news. Roy Glanton and family are presently on vacation to points north and east. Bob Rudd has Roy's shirt and George Jelinek is staying at the transmitter at night.

Several members of the transmitter staff attended the party given Bill Ko-To Page 20



ABC CHICAGO -By DICK DAVIS

About five minutes ago I was serenely watching the ball game and enjoying my vacation when my wife reminded me that I have a column to write for this magazine. So here goes.

The big excitement around here right now is the annual ABC outing scheduled for next Thursday. Everyone's looking forward to a big day of golf, swimming, tennis, lots of beer and chow. I wonder if Dan Chaneske will make any money off the slot machines this year.

Speaking of parties, the engineers have quite a deal up in Studio A every Thursday afternoon. What with the Beulah Karney cooking show there's always plenty of food after program. Certain people who never show their faces on other occasions make it a point to be there once a week. Of course the meal wouldn't be complete without dessert so the Highlander Ice Cream show takes care of that. Some of the guys have had to go on a diet.

The fellows in Vitapix are breathing more comfortably these days. A brand new air conditioning system has just been installed. However it wasn't put in with their comfort in mind, the real reason being to prevent arcing of high voltage equipment in the film cameras. Even with the air conditioning which we have down in the Civic Studio we had to haul three 2000 watt Kleig lights up into the control room one day last month to dry out the equipment before we could use it. As the saying goes, "It's not the heat, it's the humidity."

George Smith, our Chapter Chairman, recently successfully negotiated a contract for the engineers at WAIT here in Chicago. Highlight was an average raise of \$12.50 to \$15 a week.

Owen Rogers returned from his honeymoon a couple of weeks ago. His bride almost became a widow on her wedding day though. Seems as if Rog got into an argument with three big bruisers and was all set to take on the three of them with his camera tripod.

The new car department finds Walt Kramer, John Nitchals, and Elmer Kubitz with new Chevrolets this month. Elmer mangled his wife's hand in the door the first day he had his. One way of getting even I suppose. Newt Robinson has a Chevy, too. Vintage of 1934. He's offered as high as fifty bucks to anyone who will take it off his hands.

We had some more elephants on Super Circus recently. These were just a wee bit mean. We couldn't dolly cameras or hardly breathe without getting them mad. I was on the No. I camera down in the pit and there was one particular pachyderm called Empress which didn't like my looks. I worked with a loose panhandle all during that act.

Amendments to the NABET NATIONAL BY-LAWS Adopted October, 1949

(Detach, and scotch-tape to gold-covered NABET Constitution dated Jan. 10, 1949)

Art. 2, Sec. I (a) amended to read:

If within six months following his initiation and payment of said fee, a member of the Association, because of a change in his employment status which no longer requires that he manitain an active membership, his initiation fee shall, upon application by such member, be refunded to him on a 12 months pro-rata basis. That portion of the initiation fee which is retained by the Association shall be credited to the account of such member to be applied against a future application for active membership. Such refund having been applied for and accepted will bar such members from applying for inactive membership as outlined in Section 3 hereunder.

Art. 2, Sec. I (b) amended by deleting.

Art. 2, Sec. 2. Payment of National dues shall be as follows: For those members who, by reason of their employment are required to maintain active membership: On a \$3,000 or over base salary per year, ten cents per month per \$100 base salary; on less than \$3,000 base salary per year, \$1 per month per \$1,000 base salary. All dues will be computed on salaries as of Jan. 1st of each year, (employment date for partial year in case of new employees) and payable to the National Office quarterly in advance of Jan. 1st, April 1st, July 1st, and Oct. 1st.

For those members who desire to maintain active membership although not required by reason of employment to do so, annual dues shall be \$50 per year payable as outlined above.

Dues shall be in addition to any dues levied and assessed by local Chapters of the Association. All dues to be collected in advance of the due date by the local Chapter Treasurer and in turn forwarded to the National Secretary-Treasurer on the above mentioned dates.

(a) In the event a member of the Association is released from employment or resigns his employ(OVER)

The field crew had an unusual pickup at the Tam O'Shanter World Championship of Golf. I guess you would call it a remote-remote. Two cameras were setup on the 18th green in the conventional manner. A third was set up on the 15th green and the signal was microwaved to the field truck. From there, of course, the signal was microwaved to the transmitter.

Just in case anyone is wondering how the blood got all over the wall of the Civic control room ask Bob Christensen. He was leaning back in one of the chairs up there and the thing went out from under him. He says he doesn't even remember it happening. In fact he wondered what he was doing in the doctor's office.

NABET NAT'L BY-LAWS—(Continued)

ment, there shall be no refund of dues paid by such member.

Art. 2, Sec. 3. A member no longer required to maintain active membership in the Association, may, within 30 days from the date active membership is no longer a requirement, make application to the Chapter Council for an Inactive Membership. Upon approval by the Council and payment by the applicant of \$10 per calendar year pro-rated quarterly, an inactive membership card shall be issued to the applicant. An inactive member shall be entitled to all benefits of the Association except that he shall not be entitled to vote on either local or National matters, nor shall he be eligible to hold office in a local Chapter. This by-law to become effective Jan. 1, 1950.

Sections 4 and 5 remain as originally printed.

Art. V, Sec. I (a) be amended by changing the third sentence to read, "The Board of Trustees shall consist of five members who shall be appointed by the Executive Board."

Art. VI, Sec. 2, the word \$8,000 be changed to read \$9,000, and the word \$7,200 shall be changed to read \$7,600.

Art. VI, Sec. 3, the word \$7,000 be changed to read \$7,500.

Add: Art. VII, Sec. 12: It shall be the duty of any representative of this Union who shall meet with any employer for the purpose of negotiating a contract or a modification of a contract to advise the Chairman of any Chapter of this Association affected by the negotiation-by most expeditious means available—a summary of each day's activities so that the membership may be at all times fully advised of his activities. Such report to reach the Chapter Chairman at the start of the next business day and to include at least the names of the negotiators on each side; a summary of the areas of agreement and/or disagreement; and such other information as he may feel desirable for a full understanding of the day's activities. The Chapter Chairman shall be responsible for the security of such information.

CHICAGO—Continued from Page 17

Quite a few people here are anxiously awaiting the Zenith demonstration. I might add, with tongue in cheek!

Bill Sprague, formerly of the Civic crew, is now a member of the production staff and doing a fine job as stage manager. His dad was in town visiting him last Sunday so Bill decided to take him on a cook's tour. It ended abruptly when he smashed up his car on the Outer Drive.

It seems as if the engineers here just can't get enough of cameras during a regular eight hour day. Right now an ABC Camera Club is in the infant stage. The problem of suitable dark room space has not been settled as yet though.

However, it looks as if it will be in the Daily News Building. Will get more details on this as the thing develops.

The maintenance department has its hands full these days with the new studio. Upon its completion WENR-TV will begin programming from 4 o'clock in the afternoon continuous through midnight. This excludes the regular two hour Bob and Kay show in the morning.

Ed Jamison finally got his projectionist's license. He no longer has to sweep the floor and make coffee for George Hillas. Those duties now fall to Noble Moore who just got his apprentice license.

I was playing golf with Grant Miller the other day when he got his first birdie. You would have thought he found gold in the cup. It was too much for him though. He immediately went to pieces and took a nine on the next hole.

This is about the seventh month that I've been writing this column. I never so much as heard a peep out of anyone until last month when I missed getting an article in. Then all h-broke loose. About thirty engineers were ready to sue me because they didn't see their name in print. I didn't dare to let even my vacation interfere this time. Hope you liked it!

The Secretary of Labor Says:

Labor Day, 1950, has a special significance. It comes at a time when the United States has accepted the challenge of totalitarianism by going to the defense of the people of South Korea and any other peoples who may be menaced by Communist aggression. Organized labor has thrown itself into this struggle with all its soul and might.

Labor is free and can be free only in a democracy. American labor realizes that there can be no freedom for workers in Communist-dominated countries. Free workers understand that they owe it to themselves and their handcuffed brothers under totalitarian rule to join unreservedly in the fight to set workers free in every part of the world.

Labor is rising to the height of this great argument in the centennial year of the birth of Samuel Gompers, who dedicated his life to championing the rights of workers here and abroad. Labor leaders of today are moved by the same vision. The trade-union movement which has known so much injustice and misery is vigilant not only in its own behalf but for the protection of others who face the brutal arrogance of communism in this unhappy world.

That is why we have gone to the rescue of the South Koreans. That is what President Truman meant when he took a positive stand against the Communist invaders of South Korea.

Labor marches with all other lovers of freedom and right to halt Communist aggression, wherever and whenever it raises its hideous head.

Conservation of Purchasing Power By CHESTER M. WRIGHT

Let's talk about hoarding. Many others are talking about it. There ought to be a definition of what constitutes hoarding. Just now nobody knows precisely where prudence stops and hoarding begins.

Mrs. Joe Smith watches the papers, reads the grocery ads and sees prices going up.

Maybe she sees (I know I did) a brand of canned milk marked three for 33 cents. A couple of days before it had been three for a quarter.

Maybe she sees a brand of canned chicken marked twenty cents higher than it was a couple of days before.

Maybe she says to herself, "I better get me a couple of cans of that stuff before they smack it up another twenty cents."

Maybe that's what she does. Does that make her a hoarder? Maybe the little Goody Goody Company wants to put up a small factory, after having built a business that warrants it.

Maybe Bill Gottem, head of the outfit, says to himself, "Looks like steel and cement will get pretty scarce and maybe a lot higher in price; I better go nail down the stuff I want and get it delivered on the lot right away," which he does next day.

Bill knows that if he doesn't get it right quick, he will not have any luck at all. The other thing Bill knows is that if he doesn't get the stuff, someone else, possibly a competitor, will get it.

Now, does this bit of energetic action make Bill a hoarder? Maybe Bill even buys some cement and steel that he thinks he *may* need for an enlargement six months hence. Does THAT constitute hoarding?

I think a lot of people would like to have some clear definitions of hoarding, and as matters stand, we do not have any.

I know perfectly well that if a company or a person buys and stores enough of any commodity to either affect the market or endanger the welfare of other persons, that *is* hoarding.

I suspect that if some family were to buy and store away a hundred cases of canned corn, or peas, or any other one item, that might be called hoarding.

Would it be hoarding if that person bought only five cases, or one case?

And is there a difference between buying to beat coming price increases and buying to insure a continuing supply?

It is my hunch that a great many persons would welcome an authoritative statement that might serve as a guide to conduct.

Not many persons want to take food away from their neighbors, but neither do they like to see prices going up day by day, cutting down by that much their own buying power.

It isn't too long since we went through a war, with shortages and rationing.

There were too many who cheated and who cut corners and who got all they wanted of everything they wanted, including roast beef and gasoline.

The President has talked a lot of serious talk about this whole question. There is the threat of rationing, which in itself has been driving people to lay in supplies.

It seems to me we need some clear statements by government. A great and honorable national magazine advises laying in supplies to beat rising prices.

What is RIGHT to do? What is ethical to do? Or, what is wise to do?

Perhaps this is all too much to expect. Perhaps there is some reason why we cannot expect candor from our government.

But, without candor a lot of peple are going to do what *they* think is the thing to do for self protection.

And it is quite likely that everyone in Washington knows that to be true.—CMW.

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RTMA Opposes TV Tax Proposal, Asks Senate Committee Hearing

Contending that the proposal of the Treasury to extend the 10 per cent radio excise tax to television is "contrary to the public interest," the Radio-Television Manufacturers Association wrote the Senate Finance Committee requesting an opportunity for industry representatives to appear in opposition to the proposal.

The RTMA position was made known in a letter to Chairman Walter F. George (D., Ga.), Chairman of the Senate Finance Committee, from the RTMA Excise Tax Committee under Chairman Allen B. DuMont and Vice Chairman A. M. Freeman.

Emphasizing television's important place as a communications service in the national defense program, RTMA urged mature consideration of the effects of the proposed new tax. RTMA told the Senate Committee that new considerations underline Secretary Snyder's present proposal which were not relevant at the time of the House hearings when industry representatives were heard.

"Secretary Snyder gave only one reason in support of this tax 'the extension of existing excises . . . in the interest of competitive equality,' and stated that television is a competitor of other forms of entertainment which are subject to excise taxes, such as movies and 'professional sporting events'," RTMA pointed out.

The RTMA letter explained further: "Television is not merely a form of entertainment. It is not to be compared with such activities as 'professional sporting events' but with others means of communication which have traditionally been fostered by Congress. It is the most effective means of mass communication that has yet been devised. Anyone who had the opportunity to witness, by television, the recent report by the President to the people of the United States will appreciate the impact of the personal appearance he made in each home. At the historic meeting of the United Nations on August 1, the United States had but eighteen spectator seats, but through television, hundreds of thousands of American citizens were in attendance and participated.

"In time of war, television will be the primary method of civilian training and instruction. Visual training, which in the past has required group gatherings, can be done in the home. Great numbers of people can be trained simultaneously. Each person can be trained for emergencies. Each person can be made a part of a unified defense.

"During the last war, weekly telecasts were used in the New York area for training air raid wardens. Television facilities currently available will place such training on a national scale. Moreover, other civilian training will now be possible, as for example, aircraft spotting and first aid. Effective instruction can be given for identification of radio active materials, evacuation of cities, mobilization of home guard units and other protective measures. In order fully to realize the greatest potential means for preparedness and defense, its widest distribution should be fostered."

RTMA President Robert C. Sprague, who is in Washington today, commented that "the greatest need for television receivers exists in areas which are most vulnerable to attack and where fortunately television stations are available for transmission of government information on civilian defense."

RTMA pointed out that the television industry is already under competitive handicaps and that these should not be enlarged by taxation. "The television industry is a little more than three years of age," RTMA said. Imposition of a tax at this point in the growth of television, "is not only a burden on the industry, but is discrimination against the people in those areas of the country who have been unable to obtain television service."

OMAHA NEWS From Page 16

tera, Chief Enginee, the occasion of his 25th anniversary with the station. The party was well attended, the steaks were good and the wine flowed freely. was quite a surprise for Bill who came down to Marchios expecting to meet a couple of fellows from Kansas City.

Ralph Mlaska, Mark McGowan and George Jelinek are currently taking the TV training program and all find it very interesting.

WOW Studio and TV News

SE Roy Ekberg, and TVE's Larry Sibilia, and Bill Dunbar recently made a trip into Chicago to observe TV operations at ABC and NBC, and wish to express their gratitude to the fellows who so graciously gave of their time, to give them the wealth of information that they brought back with them. It is hoped that the trips can be made a regular feature in order that the network operation and

WOW TV's operation can be compared to better keep pace with this rapidly changing business.

TVE "Mrph" Murray has been transferred to Film as a NABET film technician. Mrph's past associations with film work prepared him splendidly for the job, and we're happy to see a NABET'er doing the work.

SE Orton Wagner has transferred to TV following his participation in WOW's TV training program being offered to AMer's. The training program as set up by G. Flynn, WOW Inc. Operations Supervisor, puts TV Training on a voluntary basis for all those who wish to participate; men are assigned on a training schedule to Camera, Video, Telecine, or Transmitter, and are given credit for the number of hours spent in training on each phase. The company will give credit of this training in letters of recommendation when requested by the employee, in the event that they desire to move into TV elsewhere.

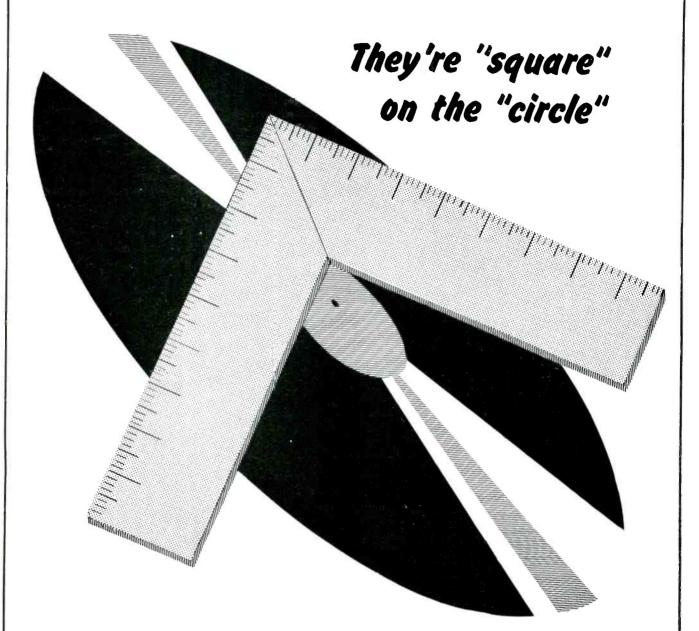
Much work and many plans are the word of the day around WOW TV as preparations for starting with network operation September 30th rolls around. Most of the work centers around setting up a complete Master Control, to handle all switching, monitoring and controlling. An Announce booth off of Master Control is being built, with Master Control engineer having a view of announcer and Telecine operator from the operating desk. Vacations are being doubled up to get them out of the way by the time this operation will be in use.

Sept. 30th also brings along our first football game from the University of Nebraska, at Lincoln.

This entails the setting up and operation of the WOW TV owned and operated Microwave link using two RCA 6000 meg and one Raytheon 2000 meg link to bridge the 52 mile gap; we did well last year with very little time lost due to failure of the link, this year we hope it's even better.

That's all for now gang, what's going to happen when we're at the end of the network, and the A. T. and T. boys can't call it west of Denver?

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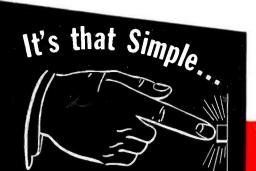
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This is accomplished by the use of a series of 8 fixed band rejection filters covering the range 50 cycles to 15 K.c., followed by a stable, high quality, wide range (50 cycles to 45 K.c.), high gain amplifier. There are no tube circuits or other sources of inherent distortions, making it possible to measure low levels of distortion accurately over a wide level range.

-SPECIFICATIONS

RESIDUAL DISTORTION: No tube circuits or non-linear devices between input of set and filter input.

DISTORTION MEASUREMENTS: Filters provided for 50, 100, 400, 1000 cycles, 5 Kc, 7.5 Kc, 10 Kc, and 15 Kc with cut off of -70 db. Distortion measurements to 0.1% full scale meter deflection with zero level input.

NOISE MEASUREMENTS: With zero db input, limit is -80 db. At +40 input, limit is -115 db below input.

AMPLIFIER FREQUENCY RANGE: 50 cycles to 45 Kc.

ACCURACY: Filters are down 70 db at fundamental frequencies, and within ± 0.5 db of flat response at the second harmonic. Absolute accuracy of measurement can be depended upon to be within $\pm 5\%$.

RESIDUAL NOISE LEVEL: Below -80 db at gain control full on. Multiple gain control employed so that residual noise drops to -90 db. when gain control is set at -30, -100 db when gain control is set at -20, etc.

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