



the PHILCO SERVICEMAN

VOL. 26 NO. 6

JUNE, 1956

SEE . . .

PROFESSOR M. T. HEAD

PAGE 8

COMING ATTRACTION!

**THE ALL-NEW
PHILCO ELECTRONIC
VISUAL TRAINING SERIES
IN FULL COLOR AND SOUND**

These pictures are from the first meeting package in this new training series. The film is titled "The 7E10 Service Story" and covers the Philco 14" Portable TV Chassis.

A 12-page "carry-home" booklet containing all the information discussed in the film will be distributed to all PFSS members attending this meeting.

Check with your Philco Distributor Service Manager for the time and date of this presentation in your area.



'SELL YOUR SERVICE'

THE THIRD IN A SERIES OF "BUSINESS BUILDING" ARTICLES MAGAZINE AND TELEPHONE DIRECTORY ADVERTISING

WHENEVER the term "magazine" is used, we are not referring to a nationally distributed publication. We are referring to a periodical or directory published by an organization within your immediate neighborhood. This magazine might be published by any religious, business, civic, or social group for local distribution.

These magazines may sell space by the line, but most offer full or fractional page rates.

The most important thing to remember about magazine advertising, or any other advertising for that matter, is that the medium you select must be able to accomplish the job you intend it to do, and in the most economical and efficient manner. Never hesitate to divert advertising funds from one medium to another if its "pulling" power warrants the switch.

Your magazine advertising must produce a business-building return

commensurate with the amount of money you intend to invest in it.

You should always be sure to limit your advertising to cover the exact area you are interested in servicing. Check the magazine's readership and circulation to make sure that you are going to reach the most promising and the greatest number of potential customers. Remember, as your service area increases, so must your service costs to cover the additional time and travel expense involved.

The same basic ingredients outlined in previous articles will also apply here. In fact, ads which were prepared for other media such as newspapers, direct mail, etc., might be successfully reused if they brought encouraging results when originally employed, but consult the magazine before attempting to do so because the mechanical reproduction requirements might be different.

Your ads should assume an air of individuality and professionalism. The copy should be clever, convincing and truthful. Whenever you can, include artwork for additional "attention value."

The publication you intend using might offer professional assistance, at little or no cost, to help you prepare your advertisement. If this service is available . . . use it! You'll have the advantage of receiving additional professional advice and suggestions.

Once again, you can also consult your distributors to ascertain whether or not manufacturer-prepared advertising will fit your need.

Telephone Directory Advertising

Advertising in the "Yellow Pages" of the classified directory generally "pays off." It is especially effective when the ad has been properly prepared and the advertiser is located within the immediate boundaries of the directory distribution.

Two types of directory advertising are available, display and classified. The costs vary according to page area, the same as in newspaper advertising. Display is most expensive, but more "eye catching." It permits the use of different type styles to enhance its attention value.

Only you can decide which is more practical to accomplish your objective. First, check your promotion budget to determine the amount of money you can afford to spend.

Before employing either of the two

We are Specialists in



TELEVISION SERVICE



Our Philco Factory-Supervised Servicemen repair any model, any make, and do the right job at the right price

GUARANTEED REPAIRS

TELEVISION OR RADIO
TUNE-UP
SPECIAL
LIMITED OFFER!

Estimate given on other repair work or replacements found necessary.



AUTHORIZED
MEMBER

MEMBER'S NAME
AND ADDRESS HERE

TELEPHONE NO.

STORE HOURS

PLAY IT SAFE . . .

1. We test the tubes.
2. We re-align all tuned circuits.
3. We check the performance of all components.
4. We clean and dust the chassis.
5. We polish the cabinet.

ONLY \$1.50

types offered, keep in mind that when a person refers to a phone book if in need of service, he will invariably try to locate the nearest technician. If this is true, and in the majority of cases it is, the potential benefits derived from either type of advertising might be the same and a small simple classified listing would suffice. You might employ display or a bold-face listing in this case to attract the reader to your ad in preference to other advertisers on the same page.

You should, whenever the opportunity presents itself, "cash in" on the great, nationally advertised Philco name. Philco Distributors generally provide for PFSS headings in the "Yellow Page" section of directories distributed in many communities. The *Factory-Supervised* emblem is familiar to many consumers... especially Philco product owners, and you can "tie in" by placing your listing under the "PFSS Diamond."

Whatever you do... avoid price advertising. In fact, in most localities price advertising is prohibited by the phone companies. The only reason you could possibly have for this method of advertising is to undercut competition. Price cutting is a "one-way street" which continually carries the advertiser downward, and in the long run it does more harm than good.

Before advertising, consult your phone company to see whether or not they furnish free art or copy services. You should also inquire into the possibility of recruiting help from the various distributors with whom you deal.

Go to it... see you next month when we discuss Display Advertising.

T248 Television

Television Servicing (Cont'd)

PHILCO FACTORY-SUPERVISED SERVICE

Approved installation and repair service on television receivers by reliable factory-trained experts. Genuine parts. Standard prices.



PHILCO
Factory-Supervised
Service

"WHERE TO GET SERVICE"

Able Appliance Co
Home & Shop Repairs
Day & Night Service
AAA Appliance Inc
Chelton & Chew Avs. - TEne 9-9200

AAA Regent Radio & Television Co
Genuine Parts - Service Day And
Night All Parts Of City - Reasonable Rates
920 W Erie Av. - BA/dwn 9-4541

5902 Greene - BA/dwn 9-4541
1311 E Erie Av. - TEne 9-6300
18 & Stenton Av. - CUmbri 9-0444
256 W Erie Av. - Livn 8-0628
Acme Radio & Electric Service
2952 Kensington Av. - NEbrsk 4-3195

ALLAN RADIO CO
8506 Germtn Av. - CHestHl 7-9700

ASTRAL ELECTRONICS
Auto & Home Radio Service
1642 S 9 Hdwrd 7-4614

Basile Television Serv 1339 Oregon Av. - DEW 4-8016
If no answer call 748 S 9 - WAInt 2-0374

BRENNER SAMUEL M
4940 N Broad Michn 4-2946

CENTRAL CITY RADIO & TELEVISION SERVICE
2004 Ranstead - LOest 7-3278

CERRILL* RADIO & TELEVISION SERVICE CO
6321 Fkd Av DEvnsr 3-0300

E & S TELEVISION & ELECTRONICS
4940 N Broad Michgn 4-2946

EASTERN TELEVISION SERVICE
1509 S Broad DEWey 4-5881

FAIRHILL TV SERV CO
357 E Eleanor. Michgn 4-5845

Ferrara's Television
895 N 66 St. - TRnity 7-7000

FIDELITY TELEVISION SERVICE
6017 Ogontz Av HANcok 4-6092

G&M Electronic's Service
216 Snyder Av. - Hdwrd 2-7089

GILBERT TV SERVICE CO
Germantown And Vicinity 24 Hours
17 E Haines - TEne 9-4322

Granite TV 6225 Market - GRnit 2-4500

GUS'S TELEVISION SALES & SERV
6505 Lansdowne Av. GRnwd 7-0414
Haar Albert M 123 S 46 - EVgrn 2-3810



SHOW YOUR COLORS



The PFSS Color Television School Diploma and Certification Card are two items you'll be proud to show your customers.

The Graduation Certificate is

awarded only to PFSS members who successfully complete the "Philco Color Television School for Service Technicians," in recognition of their knowledge and proficiency in color

television service. It is signed by both the instructor and the Philco Distributor Service Manager. The Diploma is printed in color and suitable for framing and display.

The accompanying ID Card is to be carried by the technician to certify that he has completed this course and is an accredited color television technician. It is signed by both the Distributor Service Manager and the Philco Electronic Service District Representative. This card is also attractively printed in color.

When your Philco Distributor notifies you that his classes are forming... sign up... the one who will profit the most is YOU.

SHOP TALK CORNER

NEWS-VIEWS-COMMENTS FROM PFSS MEMBERS IN THE FIELD

"I am looking for floor plan layouts of small, medium and large service shops. In particular, shops doing radio and television service work only.

"Any help you might give me in obtaining the above mentioned material would be greatly appreciated."

H. W. GOLLINGER
Tacoma, Washington

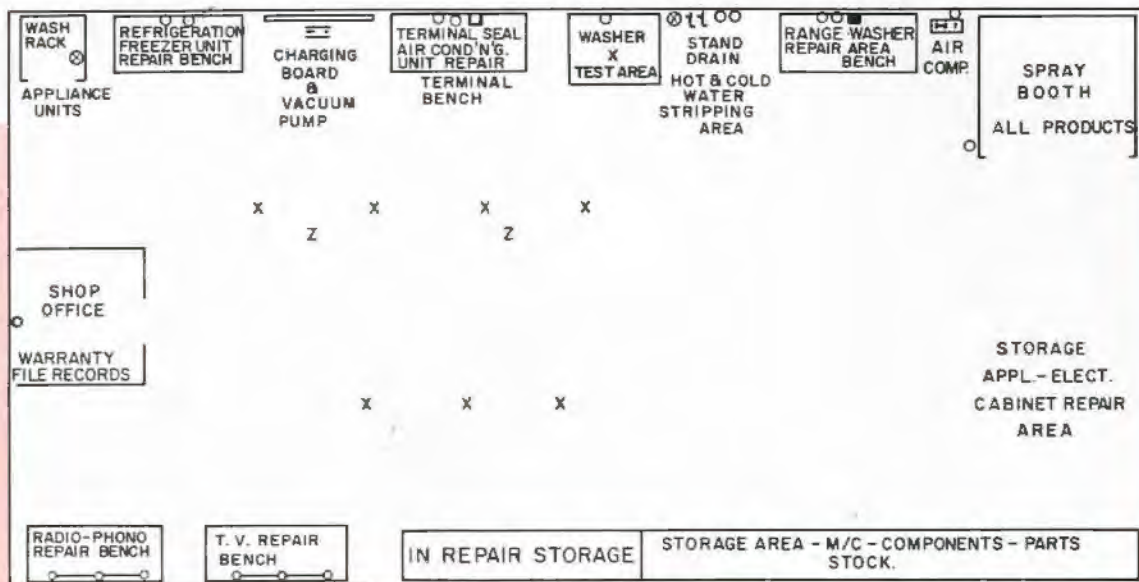
We have received many requests for this type of material and hope the following information will prove of some value to those contemplating setting up new service shops.

The size of the service shop required, along with the equipment and facilities necessary for an efficient service operation will depend upon . . . the type of

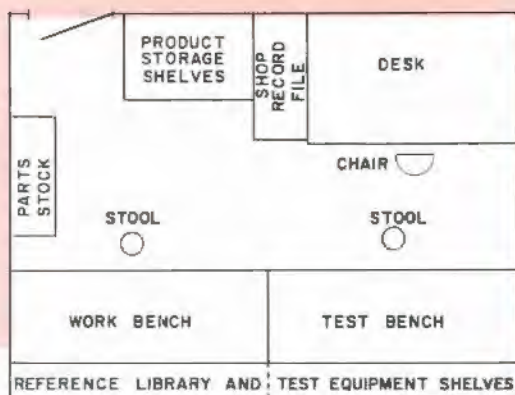
products serviced, the operator's net income and scope of service activities. A technician working for himself and serving a small rural community might find a service area of 8' x 12' adequate. On the other hand, the larger service operator employing several service technicians might require an area as large as 25' x 50' or larger.

It's almost impossible to present service shop layouts which would be considered ideal under all conditions, so we are going to illustrate various layouts and hope you might be able to adapt some of the ideas and features to fit your own requirements.

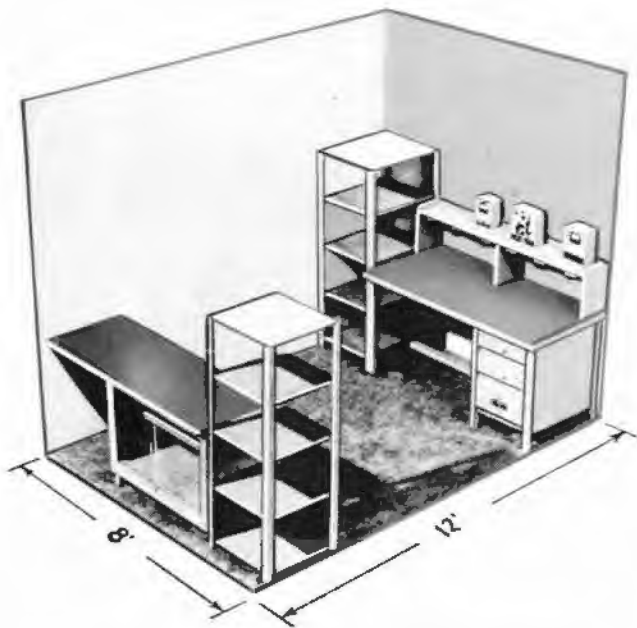
Ed.



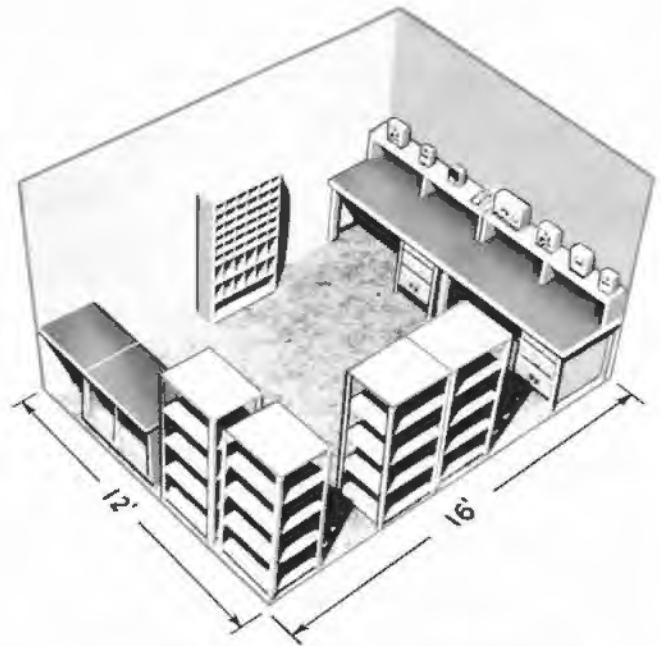
- CONTINUOUS 115V. PLUG-IN STRIP
 - DUPLEX 115V. RECEPTACLE
 - DUPLEX 230V. TWO PRONG-PIN GROUND RECEPTACLE
 - DUPLEX 230V. STANDARD RANGE RECEPTACLE
 - X DROP TEST CORD 115 V.
 - Z DROP TEST CORD 230V.
 - ↗ HOT WATER
 - ↖ COLD WATER
 - ⊙ DRAIN
- SUGGESTED AREA-25' X 50' (1250 SQ.FT.)



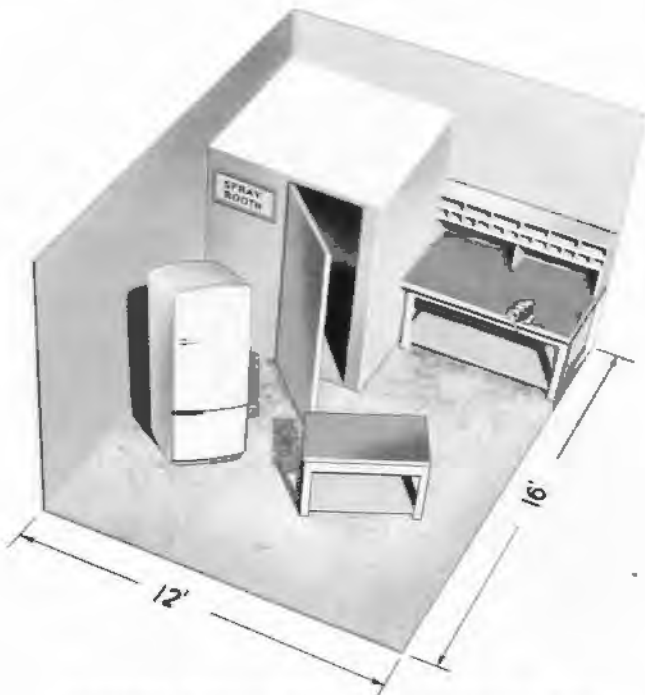
9'X12' SERVICE AREA



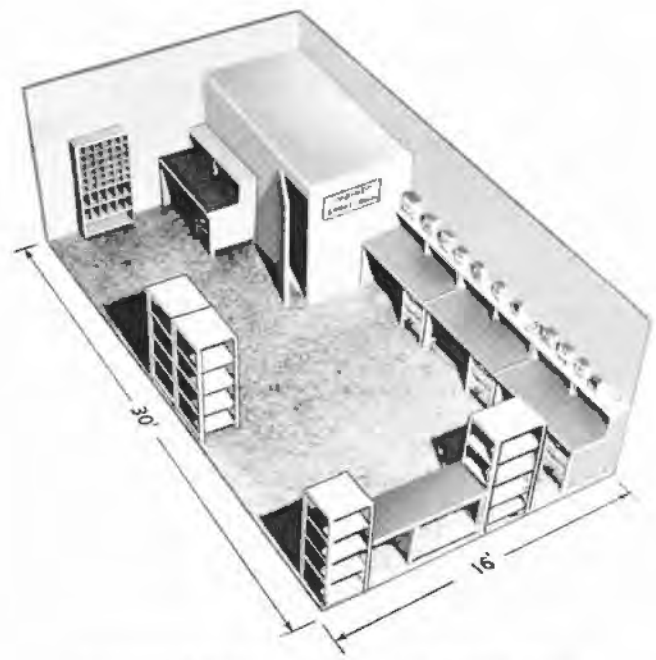
Suggested Radio and Television Service Area
8' x 12'



Suggested Radio and Television Service Area
12' x 16'



Suggested Refrigerator and Air-Conditioner Area
12' x 16'



Suggested Radio and Television Service Area
16' x 30'

"I have been in the service business for over 25 years and have been a PFSS member for quite some time now and would like to say that Philco is, without a doubt, the best company I have ever had any dealings with, especially in regard to the service of their merchandise.

"If possible, I would like to put in a "plug" for the West Texas Appli-

ance Company of Fort Worth, Texas, Philco Distributor in this area. It's a top concern and they certainly go out of their way to assist their customers.

"Please consider presenting more business-management information in the *Philco Serviceman*, because it seems that even the best of service technicians at times are very poor

business managers."

H. RAY BOYER
Eldorado, Texas

We certainly agree that the service technician should have as much information as possible available in regard to business management, and we intend to publish a complete article pertaining to this subject in the next issue.

Ed.

THE OL' OUACHITA SERVICE PHILOSOPHER By JACK DARR



TALKS ABOUT AUTOMOBILE
RADIOS AND STUFF

WELL, sir, Y'know, people can git into some of th' danged-fooledest arguments there ever was, now and then, without no trouble at all, and radiomen certainly ain't immune to this disease. Always arguin' amongst themselves as to how they can git more money fer their work, and about half of 'em are settin' on their stools lettin' a lot of perfectly good business slide right past their doors! That's the dad-burnedest thing I ever heard of. I even read a piece in a magazine t'other day, allowin' as how we ought to give more thought to takin' in *radio* repair work, in order to increase our income!

You know, that's just a right good idea! Wonder why somebody didn't think of that one some several years ago? (Jist between you and me, I wonder what in Tunket this guy thinks we *been* fixin', all along?) Nope, whilst some fellers might of been concentratin' their efforts on TV repairs, what you might say exclusive, me an' a lot of the rest of the fellers have been goin' right along fixin' anything that the neighbors bring in, as long as it's got tubes in it! Some of th' fellers around here, with two or three men, they fix electric irons and stuff like that, but me, I'm strictly an electronics man: if it ain't got tubes in it, I don't waut it! You'd be surprised how many dang things there is now *with* tubes in 'em, too: everything from Geiger counters to gas boilers!

One thing, though, that a lot of fellers don't get their fair share of, that they ought to, and they could, if they'd just go after it, is the highly profitable auto-radio business! (Y'know, even I got a mite mixed up in that last sentence! What I meant to say was that you can make money fixin' car-radios. Did I?)

Anyway, there seems to be a lot of you galoots that got the idea that car-radio work is awful hard, dirty, greasy work, and you don't particular care whether you soil your lily-whites on it or not. Well, sir, that ain't so. You might jist accidentally git a

smudge of grease on you now and then, if you happen to be one of the guys like me, who can't jist work on a job, but have to waller in it, but on the whole, the way they're makin' the sets now, you can fix a heck of a lot of 'em without much more trouble than you would run into on the average house radio, let alone some of these danged TV sets!

If you're the kind of guy who likes to git his teeth into all the new circuits and stuff, just to see what makes 'em tick, and how they work, you oughta be right at home in some of these new sets. Yep, they're comin' out with transistor auto-radios, now. We'll have a new transistor set on the market by the time you read this, in several of the new cars. This will be in addition to the sets that Philco's already buildin', for a heck of a lot of cars: Plymouth, Imperial, Mercury and Chrysler, and so forth. These new jobs will be in some of the new cars by the time you git around to readin' this, if the editor don't read it first, and throw it out.

My personal belief is that the average radioman or even some of you who have actually never worked on many radios, havin' started in on TV sets, can git a lot of fun and some good money out of workin' on car-radios. You can always charge a little more for a service job on one of them, because of the extra time involved in takin' the set out and puttin' it back in, and it ain't too hard to do, once you git onto it. Course, some of the new cars ain't makin' it too easy for us, by hidin' the radio up behind the glove pocket, but most of the others are doin' the best they can by us. Lots of 'em usin' the 'exposed power supply' kind of construction now, thank goodness, where the power tube, rectifier, vibrator and speaker are all kinda out in th' open, and you can git to 'em without surgery. Them parts accounts for most of the troubles anyway, so that's a big help.

Y'know, right there's a thing that's always puzzled me, in the design of

automobiles, and I'd like to git in a little fussin' about it, here and now. Why in thearnation heck don't they figger out some way to install the radio in a car where it'll be easy to git at? They put a lot of other stuff right out in plain sight! (Trouble is, th' stuff that's out in plain sight is the stuff you don't have trouble with only once in a coon's age!) Jist stop an' think of it: of all the stuff that they got jammed up under the dashboard of a car, what gits worked on more often than the radio? Ain't that right? You'll service that radio four or five times to once for any of the other stuff that's hid away under there! Of course, I know that they must have a logical reason for buildin' 'em that way, but jist between you an' me, sometimes it's pretty hard to see it! Especially when you're standin' on your head, tryin' to rassle a long heavy chassis, with several protrudin' knobs on it, out past a snarl of wires, cables, heaters, and so forth! Anyhow, like I said, there's a lot more easy ones than there is hard ones, thank goodness. We only remember the hard ones, which is a human characteristic, I reckon. The easy jobs, we fergit right away, while the difficult ones stick in our craw for a long time.

'Bout th' worst trouble you'll run into in th' car-radio business is th' character who comes shuillin' in with a 1936 Chrysler radio (made by Philco, too, Advt!) an' says, "How long will it take you to put this in my car?" Not, "Can you find any place in my car that'll fit this radio, so that it'll look halfway decent," but "How long will it take you to put it in my car?" You know, it's jist a dang shame that the rules of business etiquette keeps us from tellin' some of our customers th' actual truth, sometimes! Wouldn't it be fun to give a character like that a real truthful answer, jist once! Wow! You'd lose the customer, but it might be worth it, jist to git the enjoyment of blowin' off steam!

Y'know, they used to say that there was only one class of people who had to stand on their heads to make a livin', and that was acrobats. Well, they can add another category to that, now: auto-radio men! Oh, well, maybe they'll take to mountin' 'em in the trunk, someday, an' all we'll have to do is lift the lid, and there they'll be, all ready to work on. (Wake up, ol' boy, you're pipe dreamin' ag'in!) Well, I gotta git back to work. Feller wants me to install a 1935 Ford radio in a New Jeep Station-Wagon! Y'all come.

\$10.00

PROMOTIONS

Never thought it would be this hard to give money away, but—once again—not a single member came up with a promotion or advertising piece, or even a service suggestion, worthy of the top award again this month.

I guess we'll just have to keep this check with a blank space where the name goes 'til next month. How about giving me the opportunity of sending it to you? Mail in that suggestion you've always intended to send—today!

Ed.

\$5.00

TRADE TRICKS

Our \$5.00 award this month goes to William L. Fields of Hampton, Va., for his helpful troubleshooting suggestion.

"A Yoke Checker should be used to measure inductance of linearity and width coils. At times, the D.C. resistance will be correct for these coils,

but the inductance will be incorrect causing a reduction of width on many sets.

"Standardize your meter with coils of known inductance. Note the position of the slug before calibration and adjust for maximum or minimum inductance."

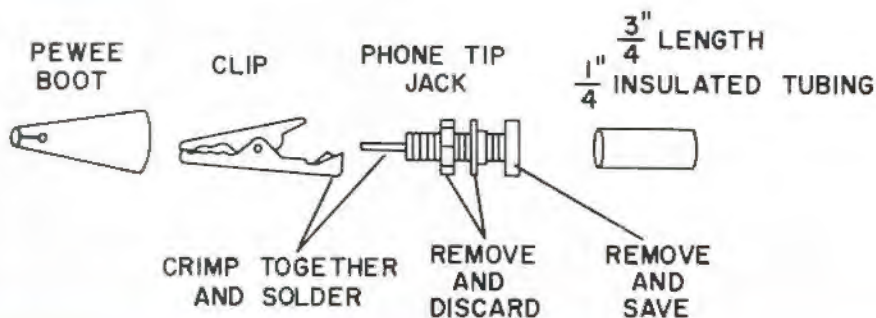
\$2.50

TIME SAVERS

Our \$2.50 award this month goes to Vern Maxwell of Cantrall, Ill., for his little "gimmick" to help speed-up service.

"Here's a simple method of constructing a handy insulated clip which will fit any standard test lead.

"Remove Nut, Insulating Ring and End Cap from Phone Tip Jack. Discard Nut and Insulating Ring. Solder Clip and Jack together—slide Insulated Tubing over Jack Barrel—screw End Cap back on and slide Boot on Clip."



PFSS BINDERS Will Increase Your Service Efficiency!

These sturdy binders are easy to use and operate. They'll enable you to file, protect and store properly all your vital service data in one place, within easy reach for fast reference.

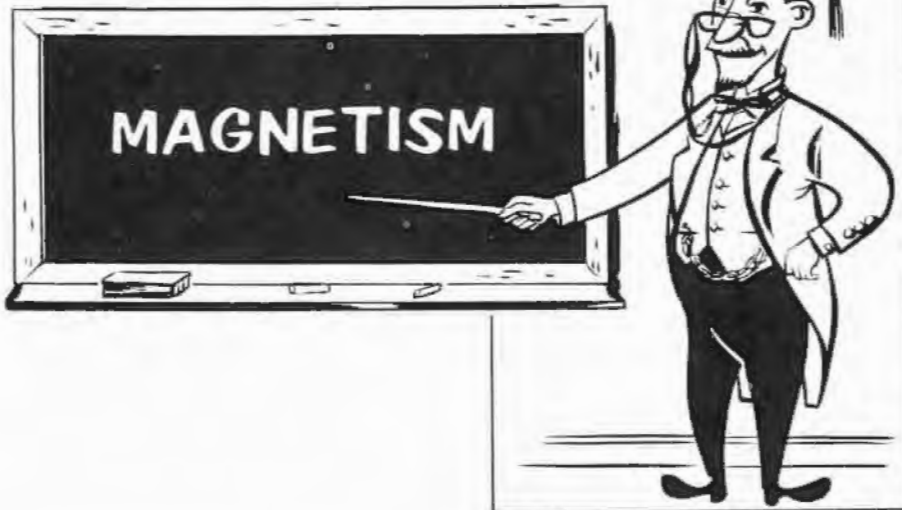
They're constructed to remain flat when opened for maximum visibility, are water repellent and are, without exception, the most practical binder available in the industry.

The durable, hard-back covers are attractively designed in blue and yellow. It's almost impossible to scratch or mar furniture, because there are no exposed rivets.

Protect your valuable service information in these Philco Factory-Supervised Service Binders

Ask your Philco Distributor for this binder . . . NOW!
REMEMBER THE NUMBER . . . PR-2157

PROFESSOR M. T. HEAD EXPLAINS . . .



MAGNETISM is stuff that is found in a magnet. I don't mean it is actually found, because you can't see magnetism. Anyway, a magnet is a piece of iron shaped like a horseshoe but is no good for a horseshoe because it has no nail holes in it. However, when you hold this magnet over a tack that is not fastened down, it will make the tack jump up and hang onto it. This proves that a magnet is a very handy thing, because you can use it to pick up nails, tacks, bolts, and other things. The uses of a magnet are limited, because it will only pick up things made of steel, iron, and the like. However, if you want to pick up things made of glass, copper, lead, brass, aluminum, and so forth, you can make a dandy little instrument by placing a small cud of chewing gum on the end of a stick. Of course, if you want to pick up radio signals, the best thing to use is a radio receiver of some kind. On the other hand, if you want to pick up a girl—but we are getting away from magnetism, aren't we?

Now it so happens that a magnet is called a magnet because it is said to be magnetized, and for this the molecules are at fault. It seems that things that can be magnetized are full of molecules, and each magnet is a tiny molecule—I mean each molecule is

a tiny magnet. Up to the time when the iron is magnetized, the molecules just lay around doing nothing. But after you magnetize the iron, two poles appear on each molecule. That is, the poles don't actually appear, because you can't see a pole—not this kind, anyway. For that matter, you can't see a molecule, either. A pole is something that—well, it really isn't something—in fact, it is nothing—in other words, you know that the earth has two poles, because Peary went to one and Admiral Byrd went to the other. Well sir, it's the same way with the moles of a molecule—I mean the poles of a molecule. When you place a magnet under a piece of paper and sprinkle iron filings on the paper, be careful not to get any of these filings into your eyes. Your eyes are your most priceless possession. Now if you tap the paper, the iron filings will become arranged in a most interesting pattern. This makes a very engaging parlor trick that can be used at parties to mystify people who are not familiar with magnetism—not having had the benefit of these theoretical discussions. With this little trick, you will be the life of the party. It is better than putting a lamp shade on your head or trying to imitate Jimmy Durante—which is bad for your throat.

But getting back to magnetism—there are also atoms to be considered, just the same as in electricity. I don't mean they are the same atoms—they are different ones, but they look just like the same ones. I don't mean they look just the same either, because you can't see them. However, if you could see them, they would look just the same. Now this experiment we just performed proves that if you hold a magnet under a piece of paper, and sprinkle iron filings on the paper, the iron filings will become arranged into a most interesting pattern.

Another good thing about magnetism is that it doesn't have any phase shift. This relieves the student of a great deal of responsibility.

Magnetism is broken down into a lot of charming terms for the technically minded student. There are magnetic lines of force, magnetomotive force, oersteds, eddy currents, flux density, hysteresis, and saturation, to say nothing of permeability. Every real student of electronics should learn to pronounce these words correctly, because they are so useful. For example, just suppose that you are engaged in a technical discussion with someone, and are gradually getting the worst of it. The important thing here is to save face. Suppose that your opponent has just cut loose with a barrage of technical terms, topped off by a reference to something being "inversely proportional to the transit time." You can then quickly retaliate with a few choice expressions climaxed by "magnetomotive hysteresis in oersteds per square centimeter," and you will immediately have the upper hand. You can then walk away in full possession of your dignity.

I hate to leave this matter just when it is getting so interesting, but I will be back again with more theory on magnetism and other things connected with electronics, and these too will be clearly explained so that anyone without previous experience can understand them.