



SUPREME

TEST INSTRUMENT BULLETIN



Our 27th Year

Greenwood, Mississippi, U.S.A.

First Quarter 1954

PARTS & PILLS

Public Willing To Pay
For Professional
Service

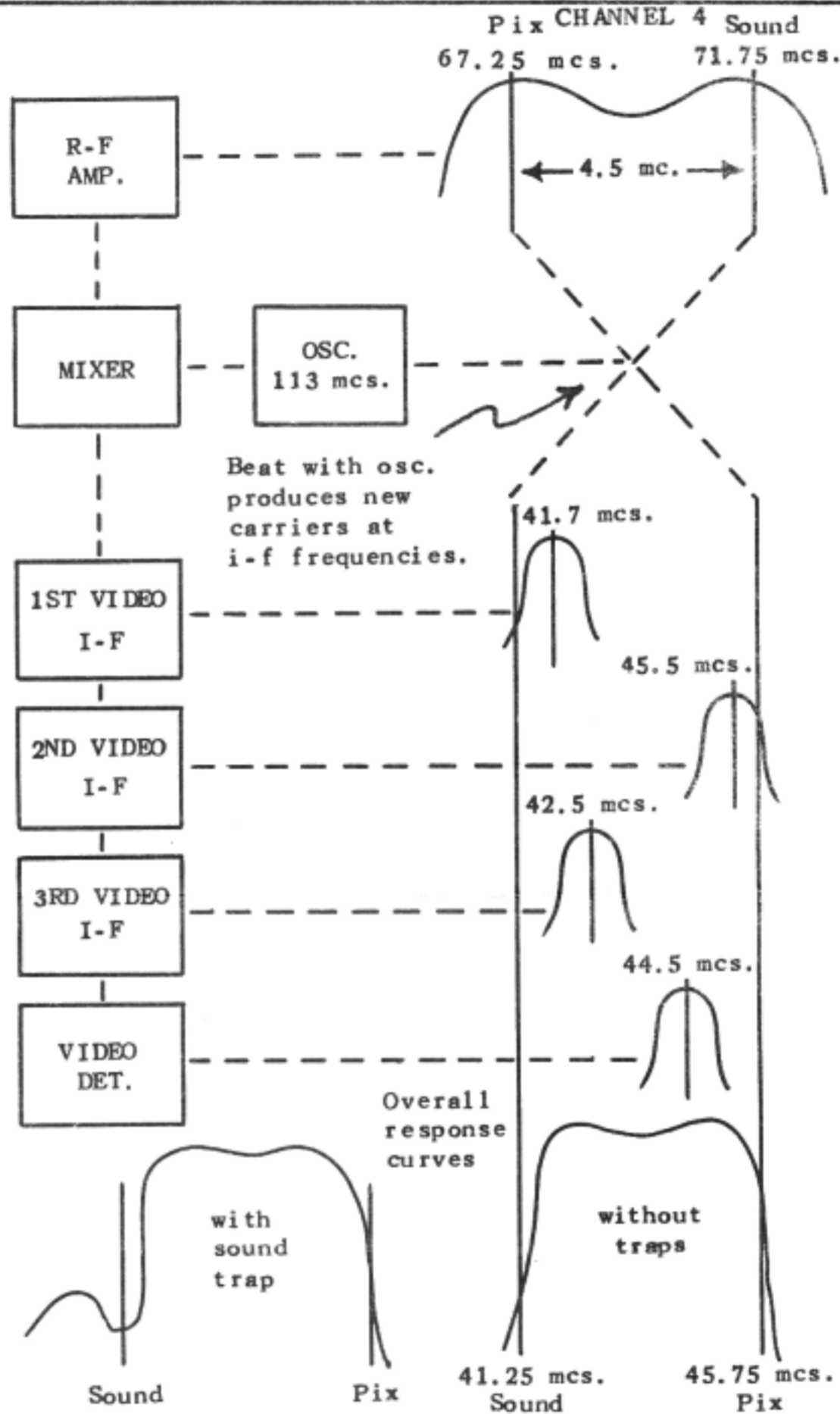
Not too many years ago it was quite commonplace for the small town doctor to have his office over, or in the back of, a drug store. Usually, he owned the store or got a commission on his prescriptions. The patient was sold a few doses of a prescription, the price of which usually amounted to more than the doctor's fee. Doctors were not as good businessmen then as they are today. In fact, you can come out of a doctor's office now and no pills may be on your "menu" at all.

It's Different Now

There is a reason for all this --- the physician of today invests in more test instruments such as the X-ray, cardiograph and fluoroscope. This equipment is a necessary investment to better serve patients. Physicians now charge the patient for using this equipment --- the know-how required to evaluate the results. They have proved that people are more willing to pay for what it takes to locate the real trouble than to try this remedy and that remedy and then still wonder if the trouble is corrected.

You're The "Doc"

The case of the electronic technician is similar. With the aid of modern test instruments, he finds the real trouble. It may require only the application of a soldering iron, or an alignment tool to correct the defect. Know-how and test instruments cost the technician money. In time, public relations programs will educate the public to this fact. It should not be necessary for the technician to camouflage the cost of his technical services by selling a heavy "prescription" of parts.



VIDEO I-F ALIGNMENT

With programs being transmitted in color, alignment of i-f stages in black and white sets is more important than ever. Most late model TV sets are of the intercarrier type. In these sets, the video i-f's pass both the sound and picture signals after they have been converted to i-f frequencies in the mixer. Therefore, these stages must have a 4.5 mc. bandpass. To accomplish this broad bandwidth, the transformers are stagger tuned or overcoupled and usually are shunted with a resistor.

The One Dimension Method

There are two basic methods for video i-f alignment depending on the equipment available. One requires only a signal generator and VTVM. The other requires a sweep generator, marker generator and an oscilloscope. A general procedure using the first method is as follows:

1. Connect a -3 volt bias to the agc line.

(Continued on page 2, column 1)

WHO IS LEGITIMATE?

Unethical Practices
Not Necessarily
Illegal

The thinking comes out in print every now and then that some electronic technicians are 'illegitimate' operators --- particularly those who replace parts which were not defective. This thinking is wrong under present state laws. His actions would be illegitimate only if he billed a customer for services or materials which he did not deliver. This would be considered fraud under the laws of most states.

Is Know-How An Asset?

The replacement of parts not defective runs the bill up, of course, and might be wrong under the code of ethics of a service association. However, if the technician doesn't belong to a recognized group, he can set his own rules. Therefore, one who replaces parts until the trouble is apparently corrected is just as legitimate as the qualified man who uses his training, experience and test instruments to locate the real trouble by rendering a professional service.

Not Ready Yet

From time to time, one reads items for or against placing the technician in a legitimate or illegitimate group by means of licensing. Legislators and businessmen know that such a statute of law pertaining to the qualifications of an individual must be sponsored and administered by a responsible professional group. If trade groups are the sponsor, selfish interests might be involved prompting graft and the statute will serve no useful purpose.

OWNERS SOUGHT

The factory service department would like to locate the owners of two instruments which have been sent to us for repairs. Since shipping the units to us, both owners have moved, leaving no forwarding address. One is a model 542 multimeter mailed from Albany, Ga. The other is a model 599-A tube and set tester mailed from Clarksburg, W. Va.

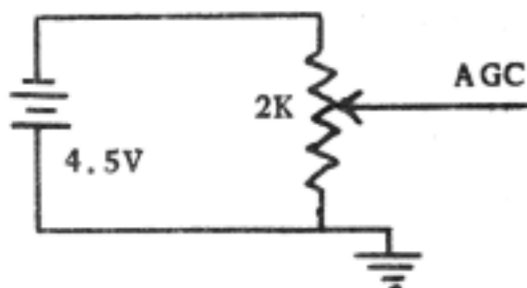
If you are the owner of one of these instruments, please notify the factory service department.

VIDEO I-F ALIGNMENT

(Cont'd from page 1, col. 2)

2. Connect a DC VTVM across the output of the video detector.
3. Lift the shield from the oscillator-mixer tube a sufficient amount to unground it. Connect the unmodulated signal generator to the shield and chassis.
4. Set signal generator to the first video i-f frequency as indicated on the diagram. Adjust the first i-f slug for maximum output on VTVM. (Generator output should be reduced until meter peaks on about 2 volts.)
5. Set generator to frequency of second video i-f and adjust it for maximum output. Follow this procedure on remaining i-f stages.
6. If there is a trap in the video i-f strip, set the generator to the trap frequency and adjust trap for minimum output on VTVM.
7. The overall response curve can be seen by making a graph of the voltage readings taken every half megacycle.

As no two manufacturers have exactly the same design, the special alignment instructions for each set should be carefully followed and the normal response curves noted. Most manufacturers recommend applying a fixed bias of approximately -3 volts on the agc line.



SUPREME TUBE SETTING SERVICE, BOX 3552
GREENWOOD, MISSISSIPPI

Enclosed is \$1.25. Please forward by air mail latest edition of roll chart for my SUPREME Model _____ Tube Tester. The number of my old chart is _____

Name _____ Be sure to give number on old chart!
Address _____ No C.O.D.'s please!
City _____ State _____

NEW SETTINGS FOR SUPREME TUBE TESTERS

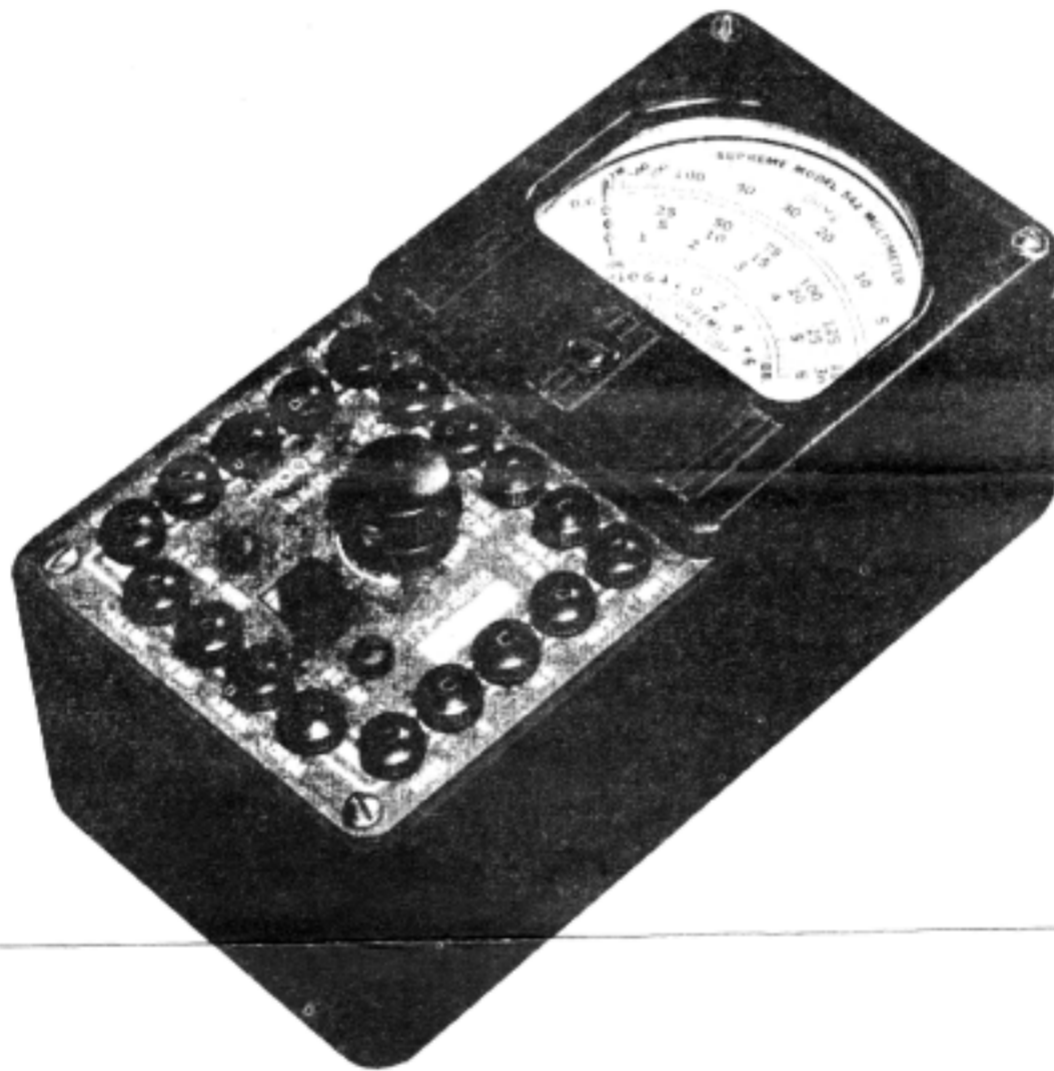
For models 600 and 616.

5AW4	30	C	2	6	48
5AW4	30	C	2	6	68
6BH5 (38)	19	C	4	7	358
6CF6	56	B	3	7	24
9BW6 (12)	25	C	4	7	35
26A6	19	C	3	11	47

For models 589, 599 & 504-A, B.

5AW4	2	5	30	C	48
5AW4	2	5	30	C	68
6BH5 (38)	4	6	19	C	358
6CF6	3	6	56	B	24
9BW6 (12)	4	7	25	C	35
26A6	3	9	19	C	47

A REGULAR LITTLE POCKET LABORATORY



The Supreme Model 542 volt-ohm-milliammeter, illustrated above, has become a real companion to radio and television technicians everywhere. This durable quality instrument is approximately 6 x 3 x 2 inches in size and has 4 ranges each of OHMS, DCV, ACV and MA.

A simple hookup for obtaining any specified bias up to 4.5 volts is shown in Col. 1.

The illustration on page 1 shows the approximate front end alignment curve. It also shows how the overall response curve at the second detector is obtained on a typical stagger tuned i-f strip.

It is available in either the style B case (illustrated) or the metallic type case with leather handle and meter protector shield (Style M).

Model 542 (B) ---\$27.70
Model 542 (M) ---\$32.10
Test Leads ----- \$1.40

From SUPREME, INCORPORATED
GREENWOOD, MISSISSIPPI
REDER DRUG CO
BLUE RAPIDS KAN

PRESS ATTACKS

Only Unethical Receive Publicity

The electronic service profession has been the target of the press many times during the past few years -- particularly since the advent of television. Such an attack hurts the entire industry, especially when it makes independent technicians change their career and go into other fields regarded as "better society" by their friends and associates. Furthermore, it discourages a lot of responsible men from going into business for themselves as no one with any moral standards wants to be classed with what the press says are "crooks", "gyps" etc.

Slanted Views

In practically every attack from the press, the main theme seems to be "installation of parts not needed" or "charging for parts not installed". There have been few, if any, instances where a technician has been criticized for his service fee in locating a faulty part and labor for replacing it. No, we don't think the press will stick their neck out and reproach anyone for asking a reasonable return on his training, experience, know-how and investment in test instruments. All these are so necessary to finding the defective part, whether that part be a 25¢ resistor or a \$55.00 picture tube.

Mr Secretary

According to the poll made by our last Bulletin, there are less than 50 active service organizations, or else, some official correspondents were not "On the Ball". If you did not receive one of our gift pens, write the Service Engineer of Supreme—TODAY!



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