



RADIO AND TELEVISION

Service News

A PUBLICATION OF THE RCA ELECTRON TUBE DIVISION



Big two...

Most dynamic picture-tube marketing news in years is RCA's recent decision to merchandise two distinct lines of picture tubes for replacement use in black-and-white television sets. See page 2 for details on the all-new premium RCA "Silverama" line and the economy-priced, factory-rebuilt RCA "Monogram" line. Both brands carry a one-year warranty. Packaged in attractive new cartons (as shown at left), they are now available to dealers and service technicians from local RCA distributors.



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A powerful sales promotion program has been prepared by RCA and is currently being offered by RCA distributors to help service-dealers move the "Big 2" in picture tubes. Among the outstanding merchandising aids that highlight this campaign is the Window Display Kit (Form 6F906), consisting of a litho display and two streamers.

Dynamic Ads and Promotions Alert Consumers To RCA's 'Big 2' Lines of TV Picture Tubes

RCA is now marketing two distinct lines of television picture tubes for black-and-white sets: an all-new premium "Silverama" line and an economy-priced, factory-rebuilt "Monogram" line.

Strongly supported by a dramatic consumer-directed RCA advertising and sales promotion campaign, both "Silverama" and "Monogram" tubes are now available to you from your local RCA distributor—who can also provide you with two distinct lines of RCA picture tubes for color TV receivers. RCA's all-new premium color types are keyed as "Colorama" tubes, while the factory-rebuilt RCA color types are also identified by the "Monogram" label.

The all-new "Silverama" and "Colorama" tubes and the factory-rebuilt "Monogram" tubes are clearly labeled as either new or rebuilt. Each is priced accordingly. And each carries a one-year warranty.

For the record, RCA is the first major electronics manufacturer to merchandise a dual line of all-new and rebuilt picture tubes on a national-brand basis.

As spokesman for RCA's industry-awakening announcement of its two black-and-white TV picture tube lines, D. Y. Smith, Vice President and General Manager of the RCA Electron Tube Division, said, "RCA's top quality 'Silverama' picture tubes will be constructed entirely from all new materials. Each tube will use all-new glass, all-new screen, and all-new components.

"Previously, 'Silverama' was used to identify RCA TV picture tubes which were aluminized by a special process which produces finest picture contrast

and clarity. We will now employ the same trade name to identify those tubes which are constructed 100 per cent from new materials. Each 'Silverama' tube is new in every respect, incorporating all of the latest engineering and manufacturing improvements which are utilized in the picture tubes going into the newest RCA Victor television receivers.

"The RCA factory-rebuilt series will be marketed under the 'Monogram' trade name.

"The RCA 'Monogram' tubes (for black-and-white sets) will have optional retail list prices approximately 25-30

per cent below RCA's optional list prices for 'Silverama' tubes.

"A supply of tubes for the rebuilding process will be obtained through RCA distributors who will send 'worn-out' tubes which have been replaced in TV sets to the company's plant in Marion, Ind. There, inoperable salvaged picture tubes will be disassembled. Using a new electron gun and any other required new parts, the tubes will be rebuilt under the most modern tube-factory conditions. When completed, tubes bearing the 'Monogram' trade name will be tested to assure the finest rebuilt-picture tube quality."

How can you be sure you're getting a brand new picture tube?

Do you know that many TV picture tubes are made with reconditioned materials? Can you tell the difference between a new and a rebuilt picture tube? How can you be sure you are getting what you ask and pay for?

The answer is simple! RCA now manufactures two lines of picture tubes—all-new Silverama and factory-rebuilt Monogram. Each is clearly labelled as

either new or rebuilt. Each is warranted for one full year. Each is priced accordingly. And both fit virtually every make and model TV set.

All guess work is eliminated. You're sure you're getting an all-new factory-fresh TV picture tube when you ask for RCA Silverama—or the finest rebuilt picture tube made when you ask for RCA Monogram.

All-New, Premium RCA Silverama®

Finest picture tube made!

Completely new, glass and all parts. **\$49.00***
For the brightest, sharpest, clearest picture your TV set can deliver!



Factory-Rebuilt RCA Monogram

Finest rebuilt picture tube made!

A picture tube for the budget-minded. Reprocessed and tested in the same **\$36.00*** factory as RCA's premium picture tubes.



RADIO CORPORATION OF AMERICA Electron Tube Division, Harrison, N.J.

*Optional list prices for a popular 21" tube. Monogram prices slightly higher for West.

RADIO AND TELEVISION

RCA

Service News

A PUBLICATION OF THE RCA ELECTRON TUBE DIVISION

RCA RADIO & TELEVISION SERVICE NEWS is published in the interest of dealers and service technicians. It is written to assist them in providing better service, and to foster the growth of their business by supplying them with information on the latest trouble-shooting and sales promotion techniques, sales and service aids, together with invaluable data on RCA tubes, transistors, batteries, parts, and test equipment.

MARCH 1959

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Harvey Slovik
Editor

Vol. 24, No. 2

Here is the RCA picture tube ad which appeared in the March 14th issue of TV GUIDE.

When your TV picture tube needs replacing, remember this...

NOW...AN RCA PICTURE TUBE TO FIT EVERY BUDGET!



What is a picture tube?
The picture tube—in simple terms—is actually a glass or metal bulb containing a gun which emits a stream of electrons. These electrons strike a layer of phosphor on the inside surface of the glass face—causing the phosphor to glow—thus painting a TV picture on the face of the tube.

Two kinds of tubes
There are two kinds of picture tubes—new tubes constructed of all new materials and parts, and also picture tubes known as "rebuilt." A rebuilt picture tube is a picture tube that has been repaired by replacing the gun and possibly the phosphor and then reprocessed. Actually there's nothing wrong

with "rebuilt." Retired tires and many other reconditioned devices can give you satisfactory performance. But the quality of most rebuilt products is limited by the rebuilder's skill and know-how. With a rebuilt picture tube the big question—do all—provide you with the bright, sharp picture you want for greater TV enjoyment. Now you can be sure. There is no finer rebuilt picture tube made than the RCA Monogram.

So now you have a choice in RCA picture tubes.
• RCA Silverama—A premium picture tube—made of all new glass and all new parts.
• RCA Monogram—No finer factory rebuilt picture tube made.

Not just one RCA television picture tube...but a choice of two!
When the picture on your TV fades, dulls or blacks out—when your TV technician tells you the picture tube should be replaced, remember you now have a choice of two kinds of RCA picture tubes:
• RCA SILVERAMA—A premium picture tube—constructed of all new glass and parts. Made for the TV viewer who wants the finest picture his set can deliver.
• RCA MONOGRAM—A rebuilt picture tube of dependable quality for budget-minded TV owners. Reprocessed and tested in the same factory as RCA's premium picture tubes.
Both RCA SILVERAMA and RCA MONOGRAM are warranted for one full year...and there's a size to fit virtually every make and model TV set. Your local TV service technician can give you complete information and prices. Remember: for the best in television be sure to say...RCA.

All-New Premium
RCA Silverama
Finest Picture Tube Made Today \$49.95*



Factory-Rebuilt
RCA Monogram
Finest Rebuilt Picture Tube Made \$36.00*



RADIO CORPORATION OF AMERICA * Electron Tube Division, Harrison, N. J.
*Optional 10% sales tax in Southern States. Minimum prices slightly higher for West.

Look for this RCA picture tube ad in the March 21st issue of THE SATURDAY EVENING POST.

Mr. Smith pointed out that the RCA "Monogram" and "Silverama" lines will include picture-tube types for virtually every replacement need. Both lines will contain aluminized and non-aluminized versions.

"A one-year warranty will be provided for both RCA 'Silverama' and RCA 'Monogram' tubes. The warranty card, accompanying each tube, will furnish clear brand identification to those consumers wishing to purchase either an RCA all-new or an RCA factory-rebuilt picture tube."

Commenting on RCA's decision to launch a rebuilt line, Mr. Smith said:

"We believe that the public will appreciate RCA's introduction of two picture-tube lines. For the first time on a national basis, new and rebuilt tubes will be clearly defined and segregated in the renewal market.

"All-new premium tubes, made entirely from new parts, will be labeled, priced, and sold as new products. A national brand rebuilt picture tube will be identified, merchandised, priced, and sold as a rebuilt product for the first time."

James M. Toney, Vice President and General Manager, RCA Victor Television Division, said:

"All models of RCA Victor black-and-white television receivers will continue to be manufactured with all-new RCA 'Silverama' picture tubes."

'Big 2' Campaign

The most extensive advertising and sales promotion campaign ever conducted for RCA television picture tubes has been launched on behalf of the "Silverama" and "Monogram" lines.

You most probably have seen the advertisements about RCA's two lines of TV picture tubes in the February issues of leading trade publications.

Besides these trade ads, consumer-directed advertisements were published last month in major newspapers

across the nation and in magazines including TV GUIDE and LIFE. There are more such RCA ads to come. THE SATURDAY EVENING POST, for example, will feature an RCA "Big 2" ad this month.

In addition to RCA's regularly sponsored radio and television programs on the NBC network, a special series of commercials are scheduled for the "Steve Allen Show," the "Jack Paar Show," and the "Today Show" starring Dave Garroway. Local spot commercials will also be used.

The RCA Electron Tube Division also has prepared a hard-hitting "Big 2" promotion program. It will help service-dealers like yourself to announce and sell the two RCA black-and-white picture tube lines—whose quality standards insure customer satisfaction.

See your local RCA distributor without delay on the following "Big 2" dealer merchandising aids:

- Window Display Kit (Form 6F-906). It includes a dynamic litho display and two streamers that are ideally suited for increasing your sales by calling immediate attention to you as the TV service-dealer with the RCA "Big 2" in picture tubes. Be sure to place the new display and streamers in and on your store window, respectively, to tie-in with RCA's national advertising and sales promotion.

- Dealer Decal (Form 6F909). Placed on your shop door, window, and service truck, it promotes new business by stressing that you offer the best in TV service along with a choice of RCA "Silverama" all-new premium or RCA "Monogram" factory-rebuilt picture tubes.

- Two Jumbo Postcards (Forms 6F910A-B). Here are direct-mail "salesmen" you should send to every TV-set owner on your mailing list. One card tells the quality story of RCA "Silverama"; the other introduces the RCA "Monogram."

- Dealer Ad Mats (Forms 6F912A-E). Just what you need to sell your services and promote your sales of RCA "Silverama" and "Monogram" picture tubes through the medium of your local newspaper.

- TV Commercial Kit (Form 6F-913). It consists of TV slides and scripts that announce the RCA "Big 2" in picture tubes and allow time for your local service story.

- Radio Commercials (Form 6F-914). Professionally prepared for your local use, these radio scripts have time allotted at the end of each for your selling message.

After final inspections are completed, an RCA "Monogram" factory-rebuilt TV picture tube is placed into a carton for shipment. Manufactured under strict factory supervision and control at the Marion, Ind., plant, "Monogram" tubes are economy-priced products for replacement use.



Decal (Form 6F909)

Jumbo Postcards (Form 6F910A, at left, and Form 6F910B)



It's Just About Here!

Fifth Annual National Television Technicians' Week Officially Registered to Begin Monday, March 23rd

Television dealers and service technicians by the thousands have started the "count down" for the launching of the fifth annual National Television Technicians' Week, officially registered with the United States Chamber of Commerce for March 23rd to 28th.

This RCA-sponsored 1959 celebration is only a few days off . . . and service-dealer shops across the nation are blooming with colorful new NTTW sales promotion materials. Prepared by RCA and available to you from your local RCA distributor, these special merchandising aids will increase your sales and prestige by building local consumer enthusiasm for the quality products and services which you offer on a year-round basis.

As in the past four NTTW campaigns, the current week-long salute again serves to remind TV-set owners of the service technician's importance in bringing to the American public its greatest form of home entertainment. It calls attention to the fact that not only do you have the servicing experience, technical training, ability, and knowledge required of a competent service technician, but that you also own the proper electronic tools with which to do a good TV repair job.

With National Television Technicians' Week right around the corner, RCA is going all out to publicize the

event in your behalf. Some 25,000,000 TV viewers in over 6,500,000 set-owning families in the United States will read the Technicians' Week ad in the March 21st issue of TV GUIDE. Millions have already seen RCA's fast-moving TV commercial on the March 7th Perry Como Show and on the March 17th Eddie Fisher Show. And the NBC Monitor radio program is carrying the NTTW message to many more.

Your local RCA distributor is also doing his utmost to help you reap the maximum benefits that are due you from the effective 1959 NTTW program. In addition to his personal advertising and promotional efforts, he stands ready to provide you with any or all of the new Technicians' Week merchandisers you may still need in order for you to conduct the kind of NTTW promotional campaign that benefits your community role.

Here are the RCA NTTW promotions available for your immediate use:

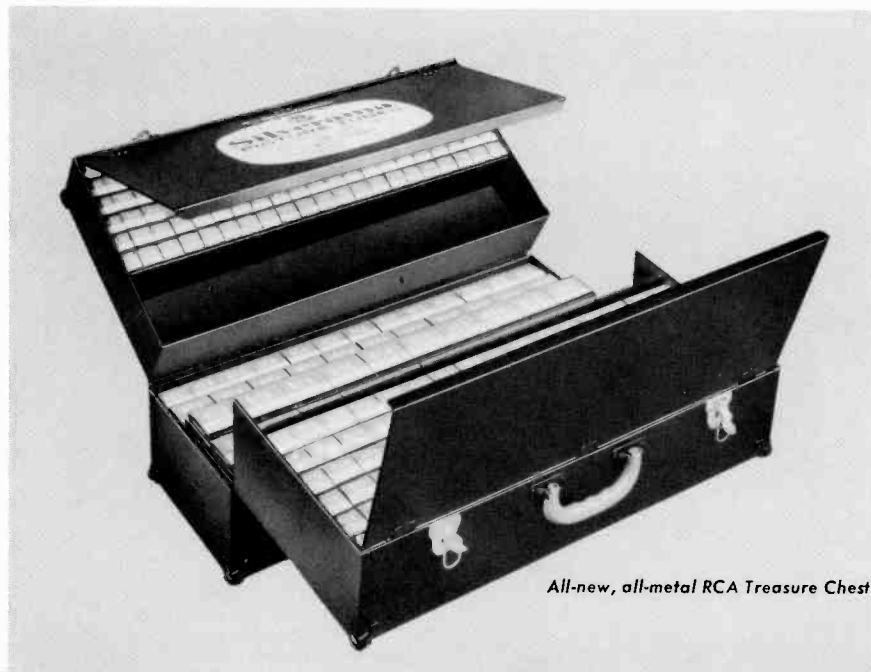
(1) The handsome National Television Technicians' Week Symbol (Form 4F160). A majestic and powerful hand finished in gold, it holds aloft a medallion signifying your integrity, skill, and experience. The symbol's inscribed ebony base praises the independent TV technician for his magnificent achievements in a dynamic industry.

(2) The NTTW Promotion Package



NTTW Symbol (Form 4F160)

Now Obtainable Free with Purchases of RCA Entertainment Receiving Tubes: an All-New,



All-new, all-metal RCA Treasure Chest

An all-new, all-metal RCA Treasure Chest and a new, compact, easy-to-use RCA Service Parts Info Kit are now available to you from your local RCA tube distributor. Ask him without delay how you may obtain these valuable time-savers free of charge with your purchases of RCA entertainment receiving tubes.

* * *

Stronger than ever, the all-metal RCA Treasure Chest (Form 4F190) is constructed of durable steel. Here is a tube carrying case that features all of the remarkable advantages that have made the RCA Treasure Chest a "must" for service technicians like yourself who want the very best in labor-saving servicing aids.

The new all-metal RCA tube caddy

Punching Information Service Technicians Can Use to Prepare Special Cards for RCA's Portable WT-110A Automatic Electron-Tube Tester

Tube Type	Hole Locations	Notes
1AF4	A7 B1 D6 E3 G2 J2 K9 L5 M5 M6 N3 N6	—
1C5GT	A2 B7 C7 D5 E4 G3 J9 K6 L5 M2 M6 N1 N6	—
1DN5 Pentode Unit	A7 B1 D6 E3 G2 J5 K8 L5 M5 M6 N3 N6 (Card 1 of 2 cards)	—
1DN5 Diode Unit	A7 B1 G4 K7 L4 M5 M6 N3 N6 (Card 2 of 2 cards)	Reject if below 2
1G6GT	A2 B7 D4 D5 F3 G6 J2 K10 L5 M5 M6 N3 N6	Test P1 and P2
1LC5	A1 B8 C8 C4 D6 E3 G2 I6 I10 J3 K7 L5 M5 M6 N3 N6	—
1LG5	A1 B8 D6 E3 G2 J2 K6 L5 M5 M6 N3 N6	—
1Q5GT	A2 B7 C7 D5 E4 G3 I6 I10 J9 K5 L5 M5 M6 N3 N6	—
2EN5	A3 B4 C5 F2 G7 I6 I10 K7 L3 L6 L8 M3 M6 N2 N6	Test P1 and P2; reject if below 4
3B4	A4 A5 B2 D3 E1 G7 J10 K7 L1 L6 L7 M2 M6 N1 N6	—
3C2	A2 B7 G10 K1 L5 M2 M6 N4 N6	Reject if below 4
4BA6	A3 B4 C7 C2 D1 E6 G5 I6 I10 J2 K6 L1 L6 L7 M4 M6 N1 N6	—
4DE6	A3 B4 C7 C2 D1 E6 G5 I6 I7 J1 K5 L7 L6 L1 M6 M1 N6 N5	—
5BZ7	A4 B5 B9 C8 D7 F1 G6 I7 I8 J1 K4 L1 L6 L7 M4 M10 N1 N9	Test P1 and P2
5CG4	A2 B8 F4 G6 K6 L5 L6 L10 M5 M10 N2 N9	Test P1 and P2; reject if below 5
5EA8 Pentode Unit	A4 B5 C7 D2 E3 G6 I6 I10 J2 K3 L1 L6 L7 M5 M10 N1 N9 (Card 1 of 2 cards)	—
5EA8 Triode Unit	A4 B5 C8 D9 G1 I6 I9 J1 K1 L1 L6 L7 M5 M10 N1 N9 (Card 2 of 2 cards)	—
5EH8 Pentode Unit	A4 B5 C1 C6 D7 E8 G9 I10 I6 J2 K4 L1 L6 L7 M5 M10 N1 N9 (Card 1 of 2 cards)	—
5EH8 Triode Unit	A4 B5 C6 C1 D2 G3 I6 I10 J2 K8 L8 L6 L1 M5 M10 N1 N9 (Card 2 of 2 cards)	—
6AC5	A2 B7 C8 D5 G3 I7 I9 J1 K9 L1 M3 M10 N1 N9	—
6AD7GT Triode Unit	A2 B7 C8 D1 G6 I6 I10 J1 K10 L1 M3 M10 N1 N9 (Card 1 of 2 cards)	Has low GM, a special reject point has been established; reject if below 3
6AD7GT Pentode Unit	A2 B7 C8 D5 E4 G3 I6 I10 J9 K6 L1 M3 M10 N1 N9 (Card 2 of 2 cards)	—
6AQ8 (ECC85)	A4 B5 C3 C8 D2 D7 F1 G6 I6 I7 J1 K5 L1 L6 L7 M5 M10 N2 N9	See instructions for gas test
6BD5GT	A2 B7 C3 D1 E8 G5 I6 I10 J8 K7 L1 L6 L7 M3 M10 N1 N9	—
6BM8 (ECL82) Pentode Section	A4 B5 C2 D3 E7 G6 I6 I7 J1 K4 L1 L6 L7 M5 M10 N2 N9 (Card 1 of 2 cards)	—
6BM8 (ECL82) Triode Section	A4 B5 C8 D1 G9 J2 K7 L1 M5 M10 N2 N9 (Card 2 of 2 cards)	See instructions for gas test
6BV8 Diode Section	A4 B5 C7 C8 F9 G6 I6 I10 K6 L3 L6 L8 M5 M10 N2 N9 (Card 1 of 2 cards)	Test P1 and P2; reject if below 4
6BV8 Triode Section	A4 B5 C1 D2 G3 I6 I7 J1 K4 L1 L6 L7 M5 M10 N2 N9 (Card 2 of 2 cards)	—

Tube Type	Hole Locations	Notes
6BX4	A3 B4 C7 F1 G6 K6 L5 L6 L10 M5 M10 N2 N9	Test P1 and P2
6BX7GT	A7 B8 C6 C3 D4 D1 F2 G5 J7 K5 L6 L7 L1 M10 M4 N9 N2	Test P1 and P2
6BY7 (EF85)	A4 B5 C1 C3 D2 E8 G7 J1 I6 I7 K6 L1 L6 L7 M5 M10 N2 N9	—
6CA4 (EZ81)	A4 B5 C3 F7 G1 I6 I10 K7 L4 L6 L10 M5 M10 N2 N9	Test P1 and P2; reject if below 5
6DE7 Triode Unit 1	A4 B5 C8 D7 G6 I10 I6 J7 K10 L7 L6 L1 M10 M4 N9 N2 (Card 1 of 2 cards)	—
6DE7 Triode Unit 2	A4 B5 C9 D2 G1 I6 I10 J10 K9 L8 L6 L1 M10 M4 N9 N2 (Card 2 of 2 cards)	—
6DJ8 (ECC88)	A4 A5 C3 C8 D2 D7 F1 G6 I9 I10 J1 K1 L1 L6 L7 M5 M10 N2 N9	Test P1 and P2
6DK6	A3 B4 C7 C2 D1 E6 G5 I10 I7 J1 K7 L8 L6 L1 M10 M4 N9 N2	—
6DN7 Triode Unit 1	A8 B7 C6 D4 G5 I6 I10 J6 K5 L1 M3 M10 N9 N1 (Card 1 of 2 cards)	—
6DN7 Triode Unit 2	A8 B7 C3 D1 G2 I10 I6 J8 K7 L7 L6 L1 M3 M10 N9 N1 (Card 2 of 2 cards)	—
6DT5	A4 B5 C7 D3 C1 G9 I10 I6 J9 K6 L7 L6 L1 M10 M4 N9 N2	—
6DT8	A4 B5 C3 C8 D2 D7 F1 G6 J1 K6 L1 L6 L7 M10 M3 N1 N9	Test P1 and P2
6DW5	A4 B5 C7 D3 D6 E1 G9 I6 I10 J8 K1 L1 L6 L7 M4 M10 N2 N9	—
6EA8 Pentode Unit	A4 B5 C7 D2 E3 G6 I6 I10 J2 K3 L1 L6 L7 M4 M10 N2 N9 (Card 1 of 2 cards)	—
6EA8 Triode Unit	A4 B5 C8 D9 G1 I6 I9 J1 K1 L1 L6 L7 M4 M10 N2 N9 (Card 2 of 2 cards)	—
6EB8 Pentode Unit	A4 B5 C6 D7 E8 G9 I10 I7 J1 K7 L8 L6 L1 M10 M4 N9 N2 (Card 1 of 2 cards)	—
6EB8 Triode Unit	A4 B5 C1 D2 G7 I6 I10 J2 K6 L1 M10 M3 N9 N1 (Card 2 of 2 cards)	—
6EH8 Pentode Unit	A4 B5 C6 C1 D7 E8 G9 I10 I6 J2 K4 L1 L7 L6 M10 M4 N9 N2 (Card 1 of 2 cards)	—
6EH8 Triode Unit	A4 B5 C6 C1 D2 G3 I6 I10 J2 K8 L8 L6 L1 M10 M4 N9 N2 (Card 2 of 2 cards)	—
6EM5	A4 B5 C7 D3 D6 E1 G9 I6 I10 J8 K9 L1 L6 L8 M5 M10 N2 N9	—
6EW6	A3 B4 C2 D1 E6 G5 I6 I9 J1 K6 L1 L6 L8 M3 M10 N1 N9	—

Tube Type	Hole Locations	Notes
6SV7 Pentode Unit	A7 B8 C3 D2 E4 G6 I10 I6 J2 K3 L4 M10 M5 N9 N2 (Card 1 of 2 cards)	—
6SV7 Diode Unit	A7 B8 C3 G5 I6 I10 K7 L7 L6 L3 M10 N9 N4 N2 (Card 2 of 2 cards)	Reject if below 4
6U7G	A7 B2 C5 C8 D10 E4 G3 I6 I10 J6 K10 L6 L7 L1 M3 M10 N1 N9	—
7EY6	A2 B7 C8 D5 E4 G3 I6 I10 J7 K9 L1 L6 L8 M2 M10 N4 N9	—
7G7	A1 B8 C7 D6 E3 G2 I6 I10 J2 K3 L1 L6 L7 M3 M10 N1 N9	—
7K7 Diode Unit	A1 B8 C7 F5 G6 I6 I10 K3 L4 M3 M10 N1 N9 (Card 1 of 2 cards)	Test P1 and P2; reject if below 3
7K7 Triode Unit	A1 B8 C2 D4 G3 I9 I10 J1 K8 L1 M3 M10 N1 N9 (Card 2 of 2 cards)	—
7R7 Diode Unit	A1 B8 C7 F3 G4 I6 I10 K1 L4 M3 M10 N1 N9 (Card 1 of 2 cards)	Reject if below 3
7R7 Pentode Unit	A1 B8 C7 D6 E5 G2 I6 I10 J2 K1 L1 M3 M10 N1 N9 (Card 2 of 2 cards)	—
7W7	A1 B8 C4 C5 C7 D6 E3 G2 I8 I10 J1 K6 L1 L6 L7 M3 M10 N1 N9	—
8BQ5	A4 B5 C3 D2 E9 G7 I6 I10 J5 K7 L1 L6 L8 M5 M10 N3 N9	—
8CN7 Diode Unit	A4 A5 B9 C3 F2 G1 K7 L3 L6 L8 M4 M6 N1 N6 (Card 1 of 2 cards)	Test P1 and P2; reject if below 3
8CN7 Triode Unit	A4 A5 B9 C6 D7 G8 I6 I10 J2 K7 L1 M4 M6 N1 N6 (Card 2 of 2 cards)	For gas test, see instructions
8EB8 Pentode Unit	A4 B5 C6 D7 E8 G9 I10 I7 J1 K7 L8 L6 L1 M10 M3 N2 N9 (Card 1 of 2 cards)	—
8EB8 Triode Unit	A4 B5 C1 D2 G3 I6 I10 J2 K6 L1 M3 M10 N2 N9 (Card 2 of 2 cards)	—
9BR7 Diode Section	A4 B5 C8 F6 G7 I6 I10 K7 L3 L6 L8 M5 M10 N4 N9 (Card 1 of 2 cards)	Test P1 and P2; reject if below 4
9BR7 Triode Section	A4 B5 C3 D2 G1 J1 K7 L1 L6 M5 M10 N4 N9 (Card 2 of 2 cards)	See instructions for gas test
12A4	A4 B5 C1 D7 G9 I6 I10 J4 K6 L1 L6 L8 M2 M10 N4 N9	—
12AH7GT	A7 B8 C2 C4 D1 D5 F6 G3 I6 I10 J6 K6 L1 M2 M10 N4 N9	Test P1 and P2
12BW4	A4 B5 C9 F1 G7 I6 I10 K5 L5 L6 L10 M2 M10 N3 N9	Test P1 and P2
12DQ7	A5 B3 B4 C1 D2 E8 G7 I7 I10 J1 K10 L1 L6 L9 M2 M10 N4 N9	—
12DS7 Diode Section	A4 B5 C8 F9 G1 I6 I10 J3 K10 L3 M2 M10 N3 N9 (Card 1 of 2 cards)	Test P1 and P2; reject if below 4

(More card-punching information on next page)



In preparing a punched card: first, line up index slots and bottoms of Master Card and blank card. Clip the two cards together. Next, as shown center, use a sharp-pointed pencil to inscribe hole outlines on blank card. Then, center each penciled-hole outline exactly in die on top of punch before punching hole.

Tube Type	Hole Locations	Notes
12DS7 Tetrode Section	A4 B5 C8 D7 E3 G6 I6 I10 J2 K6 L2 L6 L8 M2 M10 N3 N9 (Card 2 of 2 cards)	—
12DT5	A4 B5 C7 D3 E1 G9 I6 J9 K6 L6 L7 L1 M10 M2 N4 N9	—
12DT8	A4 B5 C3 C8 D2 D7 F1 G6 J1 K6 L1 L6 L7 M2 M10 N4 N9	Test P1 and P2
12DW8 (Card 1)	A4 B5 C8 D7 G6 I7 I10 J2 K3 L2 M2 M10 N3 N9	See instructions for gas test
12DW8 (Card 2)	A4 B5 C3 D2 G1 I8 I10 J1 K6 L2 L6 L7 M2 M10 N3 N9	See instructions for gas test
12DW8 (Card 3)	A4 B5 C8 G9 I6 I10 K4 M2 M10 N3 N9	Reject if below 4
12DY8 Tetrode Unit	A4 B5 C2 D1 E3 G6 I6 I10 J2 K3 L2 L6 L7 M2 M10 N3 N9 (Card 1 of 2 cards)	—
12DY8 Triode Unit	A4 B5 C7 D9 G8 I6 I10 J1 K10 L2 L6 L7 M2 M10 N3 N9 (Card 2 of 2 cards)	—
12ED5	A3 B4 C1 D5 E6 G7 I6 I10 J6 K7 L1 L6 L8 M2 M10 N4 N9	—
12EM6 Diode Section	A4 B5 C2 G9 I6 I10 K1 L4 M2 M10 N3 N9 (Card 1 of 2 cards)	Test P1; reject if below 3
12EM6 Tetrode Section	A4 B5 C2 D1 E3 G6 I6 I8 J1 K10 L2 L6 L8 M2 M10 N3 N9 (Card 2 of 2 cards)	—
12EK6	A3 B4 C7 C2 D1 E6 G5 I10 I6 J1 K6 L6 L7 L2 M10 M2 N9 N4	—
12EN6	A2 B7 C8 D5 E4 G3 I10 I6 J9 K10 L9 L6 L1 M10 M2 N9 N4	—
12EZ6	A3 B4 C2 C7 D1 E6 G5 I6 I10 J3 K8 L2 M2 M10 N4 N9	—
12J7GT	A2 B1 B7 C5 C8 D10 E4 G3 I6 I10 J6 K8 L1 M2 M10 N4 N9	—
12S8GT Diode Unit	A8 B7 C2 F1 G4 I6 I10 K2 L4 M2 M10 N4 N9 (Card 1 of 3 cards)	Test P1 and P2; reject if below 2
12S8GT Diode Unit	A8 B7 C5 G3 I6 I10 K1 L4 M2 M10 N4 N9 (Card 2 of 3 cards)	Reject if below 3
12S8GT Triode Unit	A7 B8 C2 D10 G6 I6 I10 J2 K9 L1 M2 M10 N4 N9 (Card 3 of 3 cards)	—
12SR7 Diode Unit	A7 B1 B8 C3 F4 G5 K8 L4 L6 L7 M2 M10 N3 N9 (Card 1 of 2 cards)	Test P1 and P2; reject if below 3
12SR7 Triode Unit	A7 B1 B8 C3 D2 G6 I6 I10 J7 K8 L1 M2 M10 N3 N9 (Card 2 of 2 cards)	—
13DE7 Triode Unit 1	A4 B5 C8 D7 G6 I10 I6 J7 K10 L7 L6 L1 M10 N9 M1 N3 (Card 1 of 2 cards)	—
13DE7 Triode Unit 2	A4 B5 C9 D2 G1 I6 I10 J10 K9 L8 L6 L1 M10 M1 N9 N3 (Card 2 of 2 cards)	—
17BQ6GTB	A2 B7 C8 D5 E4 G10 I8 I10 J10 K5 L1 L6 L7 M3 M9 N2 N8	—
17D4	A7 B8 C3 G5 I6 I10 K5 L4 L6 L10 M4 M9 N2 N8	—
17L6GT	A2 B7 C8 D5 E4 G3 I6 I10 J8 K10 L1 L6 L9 M4 M9 N2 N8	—
27	A1 B5 C4 D3 G2 I6 I9 J8 K9 L1 M4 M6 N2 N6	—
5844	A3 B4 C7 D5 D6 F2 G1 J2 K10 L1 L6 L8 M5 M10 N2 N9	Test P1 and P2
ECC81	Use 12AT7 Card	—
ECC82 (12AU7)	A4 B5 C3 C8 D2 D7 F1 G6 I6 I10 J5 K9 L1 L7 L7 M2 M10 N3 N9 (This test provides conditions other than zero bias.)	Test P1 and P2
KT88	A2 B7 C8 D5 E4 G3 I6 I10 J4 K6 L1 L6 L8 M5 M10 N2 N9	—

Additional card-punching information will appear in subsequent issues.

Six New Mercury Batteries Among Dozen Types Added To Battery Line

Mercury batteries continue to grow in popularity — especially for replacement use in the industrial electronic equipment which service technicians are being called upon to maintain and repair in ever-increasing numbers. Prompted by this expanding demand, and a constant desire to stimulate your industrial battery business, RCA recently rounded out its battery line by adding six new mercury types.

Available from your local RCA battery distributor, the new RCA mercury battery types are as follows:

- The VS143—a 1.34-volt battery that is interchangeable with the Eveready E1 and the Mallory RM1R. It is for use in industrial test equipment and miniature transistor devices.

- The VS144—a 1.34-volt battery interchangeable with the Eveready E12 and the Mallory RM12R. Its application includes use in portable dictation equipment and industrial test equipment.

- The VS145—a 1.34-volt battery interchangeable with the Eveready E400 and the Mallory RM400R. It is for use in miniature transistor radios and industrial test equipment.

- The VS147—a 1.34-volt battery interchangeable with the Eveready E630 and the Mallory RM630R. It is for use in miniature transistor radios (Philco) and lab instruments.

- The VS148—a 2.7-volt battery interchangeable with the Eveready E132 and the Mallory TR132R. It is for use in transistorized personal paging devices and in industrial test equipment.

- The VS149—a 4-volt battery interchangeable with the Eveready E133 and the Mallory TR133R. Its application includes use in Motorola personal paging devices, industrial test equipment, and radiation detection devices.

* * *

In addition to these six mercury types, your local RCA dis-



The NTTW Promotion Package (Form 4F163) contains the NTTW Window Display (left), two attractive window streamers (below), and a well-planned kit of radio and TV spot commercials, newspaper ad mats, and publicity stories.



(Form 4F163). Created to make your shop a center of attraction during the "big" week, it features a dignified NTTW window display that accentuates the fact that you are an expert in your trade. The package also contains two colorful window streamers and a well-planned advertising kit.

(3) The NTTW Symbol Bank (Form 4F166). A special souvenir giveaway item, you can use this bank to build goodwill while promoting your services. It is an attractively fashioned reproduction of the dramatic medallion featured in the NTTW Symbol. Constructed of durable high-quality plastic, the NTTW Bank looks well both in the home and in the office. It is useful as

well as good-looking, too. Small wonder it is proving to be in widespread consumer demand. Let your customers know you are offering the NTTW Bank during National Television Technicians' Week—and you will bring them in for those extra visits.

(4) The illuminated RCA Electron Tube Clock (Form 4F174). It features an easy-to-read face with raised numerals, a gold plastic sales message panel, soft lighting by self-contained fluorescent tube, and a dependable electric unit. This modern clock measures 15¼ inches by 7 inches and comes equipped for wall mounting and counter use. It is also perfect as a night light.

(5) The RCA Store Hours Sign (Form 4F176). Just what you need to inform your customers of your business hours. Constructed of heavy-gauge steel, this sign measures a convenient 9½ inches by 13¾ inches. It comes supplied with large suction cups for easy mounting on the inside of your front door as well as keyhole slots for flush mounting. Hours and days, printed on durable vinyl tape, can be changed by rotating the handy knobs on each side of the sign. There's also room to write additional store hours on the tape, if required.

The back of the RCA Store Hours Sign carries a cheerful "Thank You—Call Again" message.

All-Metal RCA Treasure Chest and a Compact, Easy-to-Use RCA Service Parts Info Kit

is designed to carry a full complement of more than 260 receiving tubes in a wide selection of types and sizes. All type numbers are in full view when the case is opened.

Some of the many features which assure long trouble-free service with the new RCA Treasure Chest are: full-length one-piece hinge, unique construction to relieve handle strain and increase rigidity without adding weight, and durable handsome finish. Measurements of the all-metal RCA Treasure Chest are a convenient 21¼ inches by 16 inches by 8¾ inches.

* * *

The compact new RCA Service Parts Info Kit contains vital servicing data which you can use right on the job. In the handsome reusable plastic case, you

find a copy of the new RCA Service Parts Directory for RCA Victor TV Receivers (SP-1042) and the RCA Radio and Record Changer Service Parts Directory (SP-1008B).

The RCA Service Parts Directory (SP-1042) presents TV service information for more than 250 color and black-and-white models of late 1955 and all 1956 and 1957 RCA Victor television receivers. It also features: circuit diagrams, individual top and bottom chassis views, and complete parts lists; special fully illustrated sections containing valuable hints on servicing printed-circuit boards and field-adjustments on color receivers; service hints on adjustment of picture tubes and UHF/VHF tuners; service information including exploded view draw-

ings and fully illustrated trouble-shooting hints on 2- and 4-speed record changers; and a comprehensive cross-reference of all RCA model names to model numbers.

The RCA Radio and Record Changer Service Parts Directory (SP-1008B) combines a phonograph cartridge guide with a radio and phonograph parts directory of all RCA Victor models manufactured from 1954 through 1958. It also features: a list of major replacement parts for RCA Victor radio and "hi-fi" equipment; a list of major replacement parts for RCA Victor record changers; a phonograph cartridge guide, including diagrams of cartridges and styli for easy identification; and a comprehensive index by model number.

tributor can also provide you with six other new RCA batteries—the VS324, VS334, and VS335 for use in transistor portable radios and the VSO34A, VSO35A, and VSO36A for use in flashlights, electronic toys, and miscellaneous electronic applications.

A 4½-volt battery used in many of today's foreign as well as domestic transistor portable radios, the VS324 is interchangeable with the Eveready 243, the NEDA 1610, and the Burgess 2Z3.

The VS334 and VS335 join with RCA's VS336 as special versions of standard 1½-volt single-cell batteries. You will like this RCA battery trio—and so will your customers. Readily identifiable by their coppertone labels, these batteries offer you more sales and profit. They offer the portable radio user longer battery life and, thus, fewer battery changes.

RCA's VS334 is interchangeable with the Eveready 1015, the NEDA 15, and the Burgess 930, while the VS335 is interchangeable with the Eveready 635, the NEDA 14, and the Burgess 130. The VS336 is interchangeable with the Eveready A-100, the NEDA 13, and the Burgess 230.

The other three new RCA batteries — the VSO34A, VSO35A, and VSO36A — are all 1½-volt types.

The VSO34A is interchangeable with the Eveready 915, the NEDA 15, and the Burgess Z. The VSO35A is interchangeable with the Eveready 935, the NEDA 14, and the Burgess 1. And the VSO36A is interchangeable with the Eveready 950, the NEDA 13, and the Burgess 2R.

* * *

List prices (optional) are as follows:

Type	List Price (Optional)
VSO34A	\$.15
VSO35A	.20
VSO36A	.20
VS143	.59
VS144	1.25
VS145	.36
VS147	.45
VS148	1.25
VS149	1.75
VS324	1.70
VS334	.20
VS335	.25
VS336	.25



RCA's 20 millionth black-and-white television picture tube comes off the assembly line at the company's plant in Marion, Ind. D. Y. Smith (left), Vice President and General Manager, RCA Electron Tube Division, and L. Gillon, Plant Manager at Marion, examine the milestone tube.

Manufactured by RCA at Its Marion, Ind., Plant

20 Millionth Black-and-White Picture Tube

A new production record was established last month when the Radio Corporation of America's 20 millionth black-and-white TV picture tube came off an assembly line at the company's plant in Marion, Ind.

D. Y. Smith, Vice President and General Manager, RCA Electron Tube Division, who made the announcement, said that the Marion plant is currently operating six days a week to keep pace with the increased orders for black-and-white television picture tubes.

Besides Mr. Smith, other executives of the RCA Electron Tube Division who watched as the landmark tube received its final inspections were L. S. Thees, General Commercial Manager; J. B. Farese, Manager, Entertainment Tube Products Department; W. H. Painter, Manager, Administration, and L. Gillon, Plant Manager at Marion.

Mr. Smith said that RCA makes more than 76 different types of black-and-white TV tubes ranging from a 5-inch type to a 27-inch type. This wide variety, he added, is necessary to meet the requirements of the RCA Victor Television Division and other TV set manufacturers as well as the replacement market.

"RCA began the mass production of picture tubes in 1946. Because the infant television industry grew slowly in the beginning, it was not until June of 1949 when the company made its first millionth unit. The industry achieved a peak production rate of 13,700,000 picture tubes in 1956 and last year made about 12,000,000 units. During 1959, manufacturers are expected to turn out a total of 12,800,000 picture tubes.

"Picture tube manufacturing has undergone countless changes and technical advances over the last decade. RCA engineers have made many improvements in the fluorescent screen phosphors and the electron gun, and introduced various types of deflection systems. In recent years, the trend has been toward shorter and shorter picture tubes for more compact TV sets.

"In 12 years of mass producing picture tubes, the Corporation has made more than seven million metal-shell types and nearly 13 million all-glass types. If all these tubes were placed end-to-end, they would span a distance of more than 6,000 miles. Furthermore, a train of more than 33,800 freight cars would be required to transport them in one shipment."

Mr. Smith stated that tremendous quantities of materials were utilized to make 20 million picture tubes. In fact, he pointed out, RCA required more than 170,000 tons of glass in the form of envelopes. The company also used for picture tubes thousands of tons of stainless steel; 1,700 miles of tungsten wire; and 16,000 miles of nickel and copper wire.

"Our new production achievement," he added, "reflects the wonderful support we have received from manufacturers of television receivers in the United States and abroad, independent service technicians, dealers, distributors, and our many suppliers from coast-to-coast. It also is a tribute to more than 3,000 employees of the RCA Electron Tube Division who are directly engaged in the engineering, manufacturing, marketing, and distribution of RCA picture tubes."

Electronics Servicing is Big Business

by R. B. Sampson

Manager, Market Research
RCA Electron Tube Division

A service-dealer's operations statement is a fertile source of information. But it must be prepared in sufficient detail and it should always be examined with a critical eye.

One item on the statement is "payroll." Under this heading we find such expenses as technician's wages and clerical and administrative salaries. The ratio of this total expense to income from service sales is of tremendous importance. It is the heart of good cost control. The ratio will vary slightly with the size of the business but, generally speaking, it should be held within 40%, particularly in an organization of four or more employees.

Why is this ratio so important? The answer to this is simply that if a dealer has a 40% ratio, it means that the payroll costs have absorbed 40¢ of each dollar of service revenue. With a minimum profit objective of 10% on gross income, then all other expenses — including the cost of material, travel, rent, depreciation, etc.—must be held at 50% of the sales dollar. A good operations statement will provide the information you need to control these expenses within that figure.

Failure to hold the payroll ratio in proper relationship to service sales indicates a weakness somewhere in the service charge or payroll cost structure. It can be one or the other or a combination of both. In either event, the sources of the trouble should be determined so that corrective action can be taken.

Some Examples

Let's take the following simple cases in connection with income from service calls:

At \$5.00 per call and a \$2.00 hourly wage rate, a field technician, with an average of eight completed calls per day, will maintain a 40% cost ratio. If only seven calls are completed, the ratio becomes 46%. At \$5.00 per call and a \$2.50 wage rate, the ratio rises to 50% for eight completed calls.

In the first instance, the payroll ratio is satisfactory because of a high productivity rate of one completed call per hour for an eight-hour day.

In the second case, the unsatisfactory 46% ratio is occasioned by a productivity index of only seven calls per eight-hour day. The action called for here is improvement in the productive output



R. B. Sampson

or an increase in the \$5.00 service charge.

In the third situation, the \$5.00 rate on a \$2.50 hourly wage creates a 50% ratio with eight calls per day. If this productivity index can be maintained, then the payroll ratio can be brought into better balance by increasing the service charge to \$6.25.

These examples are an oversimplification of an extremely important factor in a service-dealer operation: the relationship of wage costs to field-service and shop fees. In practice, the daily time reports should reflect the actual performance record of the field and shop technicians. Then, by measuring actual performance against standards or averages, the trouble spots that lead to a high-cost ratio and losses can be detected.

A high payroll ratio to service income is an indication of inefficiencies in group or individual performance. The causes for poor productivity, of course, stem from many sources. While it is possible to detect some out-of-line conditions by visual control, better results can be obtained from a few well-designed cost records. For example, the technician's daily time report will provide a complete record of his productive and non-productive time, as well as other pertinent information concerning the day's activity. By summarizing these individual reports into a weekly productivity report, a good index is provided for evaluating individual and overall performance against averages or standards established for that purpose.

What are some of the operating inefficiencies which require constant scrutiny? Surely the problem of non-productive time ranks first in importance.

What is your ratio of productive to non-productive hours? Or to ask it in another way—for each eight hours of paid time, how many are productive? One dealer reported only 5½ hours as an average. Another said 6.7 hours. In any case, non-productive time is a cost factor that must be controlled—first, by having information regarding its source and, secondly, by corrective action to keep the ratio at a minimum.

Areas to Watch

Some of the areas to watch in connection with non-productivity are the technician's check-in time in the morning and evening, errors in dispatching, faulty information regarding customer complaints, failure to have proper parts, call-backs, and pick-up time for parts. You are completely familiar with all these problem areas and, in repeating them, I am only calling attention to their frequency and significance from the standpoint of their effect on your profit objectives.

Is there any doubt about the value of the payroll ratio as a profit indicator? If

Industrial Types Included

Ever on the lookout for new products to increase the avenues of profit for the dealer and service technician, RCA, the world leader in the business of sound, has done it again!

In the last issue, you read about RCA's introduction of a magazine-loaded sound tape cartridge. Now RCA has further added to your sales potential. The company's already comprehensive line of magnetic recording sound tape and tape accessories has again been expanded, this time to include 19 industrial types for the home, school, and semi-professional recordists, as well as for radio and TV sound applications and commercial recording studios.

Designed to NAB and EIA reel and hub specifications and offered by your RCA distributor in thicknesses of ¾, 1, and 1½ mil, the 19 RCA industrial sound tapes consist of eight 1.0-mil Long-Play types (269C1, 270C1, 271C1, 272C1, 276C1, 277C1, 278C1, and 279C1), three tensilized Mylar* Extra-Long Play types (273C1, 274C1,

your bookkeeping and cost records enable you to control this cost, then an important step has been taken to bring your business into a profit position.

Parts and Materials

Next on an informative operations statement is the cost of parts and materials. Again, these costs should be related to service income to determine if a proper ratio is being experienced. While variances will exist among service-dealers, the average is probably within a 20% to 22% range. The important point for the individual service-dealer is to determine a good operating standard and then to control the costs within this limitation. Abnormal costs at any time will require an investigation to determine the causes.

The ratio of material costs to service income will indicate weak spots in the cost structure, if they exist. In this case, attention is directed to the control over inventory and supply items. Are all materials charged out to the technicians and shop orders? Are these materials priced properly on the job ticket? Losses from pilferage, shrinkage, obsolescence, and careless handling of materials may be substantial if proper safeguards are not provided.

Overhead Expenses

Thus far in our analysis, we have used 62¢ of each dollar of service income—40¢ for payrolls and 22¢ for the cost of parts and materials. The bal-

ance, or 38¢, must cover the overhead expenses (including rent, advertising, telephone, travel, depreciation, etc.) plus an amount for profit.

While singly the overhead expenses are not large in relation to payroll and material costs, collectively they aggregate 28% of the total expense structure. Obviously, a cost factor of this amount should be controlled in the same manner as for the larger categories.

Two of the larger items of expense in this group are travel/truck time and advertising expenditures. Truck and travel time will probably absorb another 6% of the remaining 38%; advertising will take about 3%. Hence, the four categories—payroll, material costs, travel, and advertising—consumed 71% of the service income, or 71¢ of the sales dollar. To this we should add a minimum of 10% for profit. We then have 19% left to absorb not less than 10 items of additional overhead. I will not review these expenses at this time; obviously, they too must be kept within bounds if a minimum profit of 10% on gross income is to be realized from your efforts.

Objective: Profit

I noted previously that the one overriding purpose in applying service-management principles to a servicing business is to produce a profit. Obviously, service management is much broader in concept and in practice than has been mentioned in this column.

A full-scale discussion of service-management techniques in electronics servicing would involve subjects such as: analysis of market potential, methods to increase sales revenue, ideas to cope with seasonal sales factors, advertising and promotion programs, credit and collection control and, certainly, the problem of recruiting competent technicians. Space does not permit a discussion of these problems at this writing; but there is no doubt whatever that these items fall within the general concept of service management for servicing dealers.

In Conclusion

May I conclude this issue's column with this thought: keep your service business in proper balance. To word it another way, watch the ratios of the major operating areas of your business; keep them in proper relationship, one to the other.

The service income dollar cannot be stretched. You can, however, control the component costs and expenses so as to produce a reasonable return of profit. As we have seen, the profit margin is slim at best. But your risks in that respect can be minimized through sound service management techniques and a comprehensive understanding and awareness of the factors which comprise the cost and expense structure of a servicing business. I hope I have contributed to your own thoughts and ideas in that regard.

in RCA's Comprehensive Line of Magnetic Recording Sound Tape

and 275C1), and eight 1.5-mil Professional Grade types (265C1, 266C1, 267C1, 268C1, 280C1, 281C1, 282C1, and 283C1).

Reel size and description, length and base material of these industrial sound tape types are as follows:

- 265C1—NAB hub, 2400-foot acetate (plastic) base.
- 266C1—10½-inch NAB metal reel, 2400-foot acetate (plastic) base.
- 267C1—10½-inch NAB plastic reel, 2400-foot acetate (plastic) base.
- 268C1—10½-inch EIA plastic reel, 2400-foot acetate (plastic) base.
- 269C1—NAB hub, 3600-foot acetate (plastic) base.
- 270C1—10½-inch NAB metal reel, 3600-foot acetate (plastic) base.
- 271C1—10½-inch EIA plastic reel, 3600-foot acetate (plastic) base.
- 272C1—10½-inch NAB plastic reel, 3600-foot acetate (plastic) base.

● 273C1—10½-inch NAB metal reel, 4800-foot Mylar base.

● 274C1—10½-inch EIA plastic reel, 4800-foot Mylar base.

● 275C1—10½-inch NAB plastic reel, 4800-foot Mylar base.

● 276C1—NAB metal hub, 3600-foot Mylar base.

● 277C1—10½-inch NAB metal reel, 3600-foot Mylar base.

● 278C1—10½-inch EIA plastic reel, 3600-foot Mylar base.

● 279C1—10½-inch NAB plastic reel, 3600-foot Mylar base.

● 280C1—NAB metal hub, 2400-foot Mylar base.

● 281C1—10½-inch NAB metal reel, 2400-foot Mylar base.

● 282C1—10½-inch EIA plastic reel, 2400-foot Mylar base.

● 283C1—10½-inch NAB plastic reel, 2400-foot Mylar base.

Intended for the exacting requirements of radio and TV sound applications and commercial recording studios, the industrial tapes feature essentially

flat response throughout the entire audio-frequency spectrum, dimethyl silicone impregnation for permanent tape lubrication, high-tensile strength, and uniformity of output from reel to reel.

List prices (optional) are:

Type	List Price (Optional)
265C1	\$ 8.50
266C1	10.90
267C1	10.90
268C1	10.90
269C1	10.90
270C1	12.85
271C1	12.85
272C1	12.85
273C1	20.50
274C1	20.50
275C1	20.50
276C1	12.00
277C1	14.40
278C1	14.40
279C1	14.40
280C1	12.10
281C1	14.50
282C1	14.50
283C1	14.50

*"Mylar" is a registered DuPont trademark for its polyester film.



POSTAGE

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Electron Tube Division
Harrison, N. J.

Compliments of Your
Local RCA Distributor

Headquarters for:

RCA Tubes
Batteries
Electronic Components
Test Equipment
Technical Publications

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TO

Form 3547 Requested



Buy four 7-inch reels of RCA Sound Tape... and get one
RCA Victor pre-recorded stereo tape for just \$1.00 more!

Here's your chance to stock up on the world's finest magnetic recording tape... and receive a *fabulous bonus at the same time!* RCA Sound Tape is famous for superb high-fidelity reproduction, long life and dependability. With the purchase of every four 7" reels of this premium quality tape you will receive a coupon. This coupon is worth \$3.95 toward the cost of a popular \$4.95 value RCA Victor tape recording in "Stereo Orthophonic" High-Fidelity Sound.

BETTER HURRY! Offer is for a limited time only. Selections are listed

on the coupon. Simply mail the coupon with \$1.00 to RCA Victor Records. The Stereo Tape of your choice will be forwarded to you by return mail.

For the finest in magnetic recording tape, RCA makes available a wide selection of *Sound Tape* on the popular 5" and 7" reels, on splice-free Mylar* and acetate bases. Also look for these popular tape recording accessories: Tape Storage Chest, Splicer, Leader and Timing Tape. Available wherever superior tape recording products are sold.

*DuPont Reg. TM



RADIO CORPORATION OF AMERICA
Electron Tube Division
Harrison, N. J.