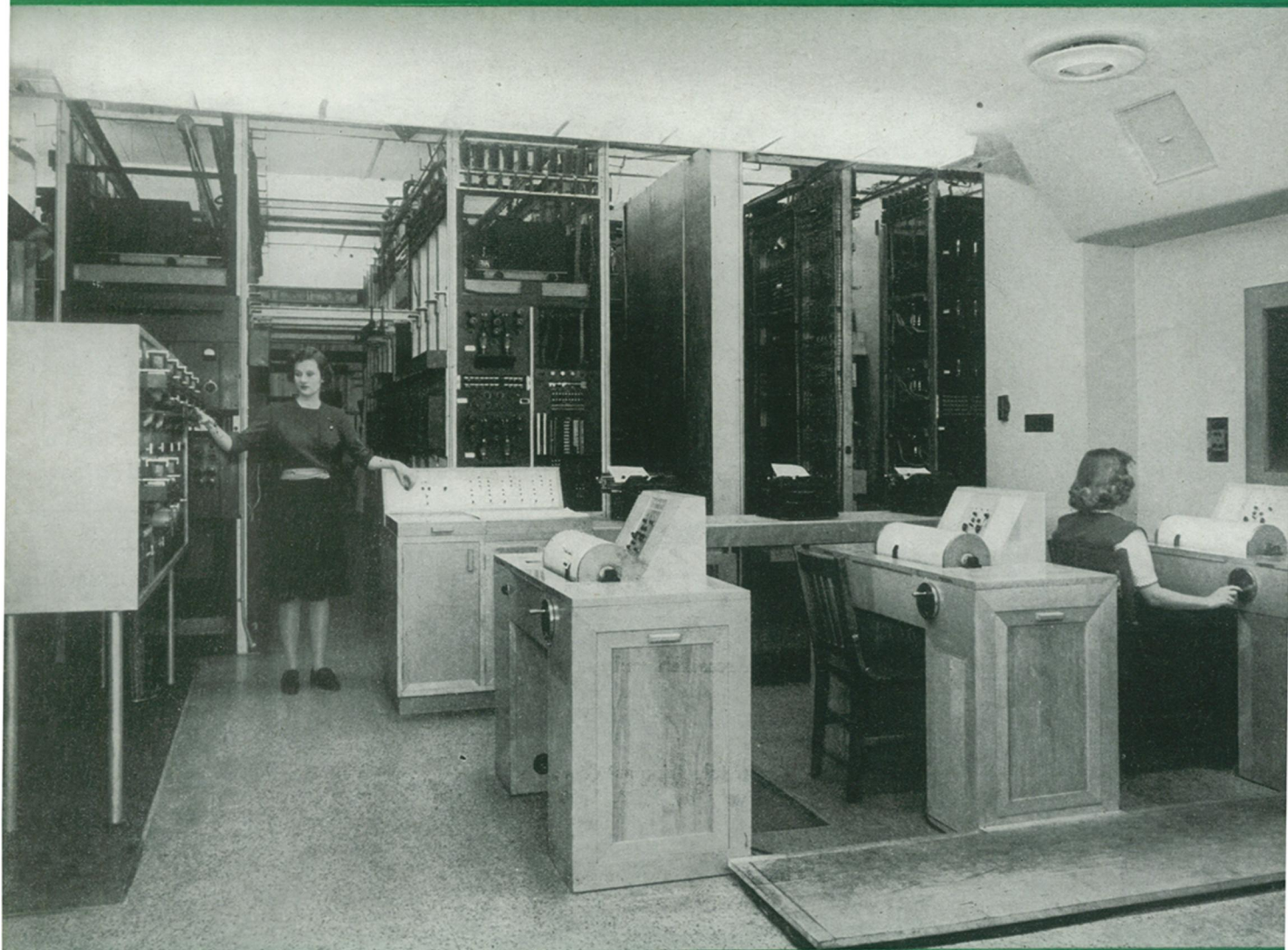


15¢

# SCIENCE NEWS LETTER

THE WEEKLY SUMMARY OF CURRENT SCIENCE • NOVEMBER 10, 1945



Problem Solver  
See Page 291

A SCIENCE SERVICE PUBLICATION



One of the many ways radar can serve aviation is by enabling the pilot to "see" through fog and darkness.

## **Radar—a "Moving Roadmap" for Flying**

Pilots can now have an accurate radar "road map" of the earth below—showing landmarks and major details of terrain. Radar will make it a whole lot safer to fly at night or in stormy weather—as well as in broad daylight.

This is only one of the many possible uses for radar. For example, radar will "see" icebergs or islands many miles away—day or night—and enable ships to avoid them. It will provide man with an amazing new "sixth sense"—and will be used in a great many ways yet to be discovered.

RCA research and engineering played a leading role in developing radar. Similar research goes into *all* RCA products.

And when you buy an RCA Victor radio or television set or Victrola, made exclusively by RCA Victor, you enjoy a unique pride of ownership. For you know, if it's an RCA it is one of the finest instruments of its kind that science has achieved.

Radio Corporation of America, Radio City, New York 20. *Listen to The RCA Show, Sundays, at 4:30 P.M., Eastern Time, over the NBC Network.*

### **HOW RADAR WAS BORN**

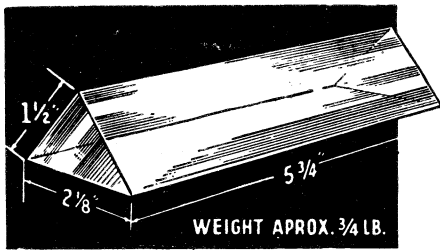
During RCA experiments at Sandy Hook in the early 1930's, a radio beam was shot out to sea. Men listening with earphones discovered that this beam produced a tone upon hitting a ship that was coming into the New York harbor.

Later on the question arose, "If radar could 'hear' couldn't it be made to 'see'?" So the viewing screen—or scope—was incorporated into radar. This scope is an outgrowth of the all-electronic television system that was invented and perfected at RCA Laboratories.



**RADIO CORPORATION of AMERICA**

# WAR BARGAINS in LENSES and PRISMS



### SILVERED TANK PRISM

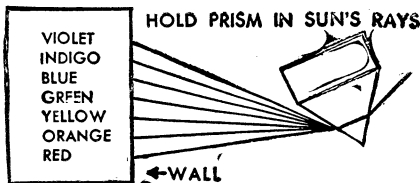
Stock No. 3004-Q-----\$2.00 each Postpaid

### PLAIN TANK PRISM

Stock No. 3005-Q-----\$2.00 each Postpaid

FOUR TANK PRISMS—Special—\$7.00 Postpaid

The most sensational bargain we have ever been able to offer.



## TANK PRISMS

In order that the tank driver shall not get shot in the face, 2 of these Silvered Prisms are used to make a Periscope. We have secured a number of these that are very slightly chipped, making possible their sale at a very low price. They are 90-45-45 degree Prisms of huge size—5 3/4" long, 2 1/2" wide, finely ground and polished. Used to build a Periscope . . . excellent also for experiments, classroom demonstrations. Some of our ingenious customers have used these prisms to make camera stereo attachment, range finder, etc. Prism easily converted into desk name plate by affixing gold letters. 100 gold letters supplied at only 10c. (Order Stock No. 3008-Q.) Normally these prisms would retail from \$24 to \$30 each.

**TO SEE THE COLORS OF THE SPECTRUM** hold a plain tank prism in sun's rays as shown in drawing. White incident light which passes through prism is thus broken up into a band of primary colors known as the spectrum—a beautiful sight! By looking through a tank prism at a certain angle you can see a world of colors everywhere. Truly amazing!

All items Finely Ground and Polished but Edges Slightly Chipped or Other Slight Imperfections Which We Guarantee Will Not Interfere with Their Use. Come Neatly Packed and Marked. Excellent for Xmas Gifts.

TO KEEP, POSTED on all our new Optical Items, send 10c and your name and address to get on our regular "Flash" mailing list.

16 MM PROJECTOR CONDENSING LENSES—Consists of two Condensing Lenses with combined F.L. of one inch.  
Stock #4026-Q-----\$1.00 Postpaid

8 MM PROJECTOR CONDENSING LENSES—Consists of two Condensing Lenses with combined F.L. of 1/2 inch.  
Stock #4027-Q-----\$1.00 Postpaid

35 MM KODACHROME PROJECTING LENS SET—Consists of Achromatic Lens for projecting, plus a Condensing Lens and piece of Heat Absorbing Glass with directions.  
Stock #4025-Q-----\$1.95 Postpaid

LENS FOR KODACHROME EYE-VIEWER—Color corrected cemented Lens 38 mm. diam., 2 inch F.L.  
Stock #6129-Q-----\$1.00 Postpaid

14-POWER COLOR CORRECTION MAGNIFIER SET—Consists of 2 perfect 18 mm. diam. Achromatic Lenses and section of metal tubing for mount.  
Stock #1044-Q-----\$1.55 Postpaid

OPTICS FROM 4-POWER PANORAMIC TELESCOPE—Excellent condition. Consists of Objective Prism, Dove Prism, Achromatic Objective Lens, Amici Roof Prism, Eye Lens Set (. . . a \$60.00 value)  
Stock #5016-Q-----\$6.00 Postpaid

MONOCULAR SETS OF LENSES AND PRISMS  
From Navy's 7x50 Binocular. All the optics you need to make a 7 Power Monocular. (Buy 2 sets to make a Binocular.) Complete Directions included.  
Stock #5101-Q-----\$5.00 Postpaid

SPECTROSCOPE SET . . . These sets contain all Lenses and Prisms you need to make a Spectroscope plus FREE 15-page Instruction Booklet.  
Stock #1500-Q Hand Type Spectroscope-----\$3.45 Postpaid  
Stock #1501-Q Laboratory Type Spectroscope-----\$6.50 Postpaid

### MICROSCOPE SETS

Consisting of 4 Cemented Achromatic Lenses for making a 40 Power Pocket Microscope or 140 Power regular size Microscope. These color corrected Lenses will give you excellent definition and may be used for Micro-photography.  
Stock #1037-Q-----\$3.00 Postpaid

Consisting of Prism, Mirror and Condensing Lens. These used together with Stock #1037-Q will make an excellent Micro-projector enabling you to get screen magnification of 400 to 1000 Power according to screen distance.  
Stock #1038-Q-----\$2.00 Postpaid

## TANK PERISCOPE

### Complete Set Mounted Components

Rugged, strong, originally constructed for U. S. Tank Corps. Consists of 2 fine Periscope Mirrors mounted in metal and plastic. Perfect condition. Only plywood body frame is required to finish this exceptional periscope. First surface mirror is well protected by glass windows. Set weighs 2 3/4 lbs. Overall length of mount 6 1/2", width 2 1/2". Would normally retail at \$40 to \$50.  
Stock #700-Q \$3 Complete Set Postpaid

TWO SETS (4 UNITS)  
SPECIAL ----- \$5.50 Postpaid

### SPECIALS IN LENS SETS

Set #1-Q—"Our Advertising Special"—15 lenses for \$1.60 Postpaid, plus 10-page idea booklet. For copying, ULTRA CLOSE-UP SHOTS, macrophotography, experimental optics, magnifying and for making a two power f/16 Telephoto Lens, "Dummy Camera," Kodachrome Viewer, DETACHABLE REFLEX VIEWFINDER for 35 mm. cameras stereoscopic viewer, ground glass and enlarging focusing aids, TELESCOPES, low power Microscopes and for many other uses.

SET #15-Q—"THE EXPERIMENTER'S DREAM"—62 LENSES, PRISMS AND OPTICAL ITEMS, AND NEW 50-PAGE BOOK, "FUN WITH CHIPPED EDGE LENSES." \$15.00 Postpaid. The variety of Lenses and Prisms in this dry drill enable you to conduct countless experiments, build a great variety of Optical Equipment. A sensational buy.

### NEW 50-PAGE IDEA BOOK "FUN WITH CHIPPED EDGE LENSES"

Contains wide-variety of projects and fully covers the fascinating uses of all Lenses and in sets listed above . . . only \$1.00 Postpaid.

THICK FIRST SURFACE MIRROR—From Range-finder—size 78 x 94 mms.—1/2" thick very flat optical glass. May have very slight scratch on chromium and aluminum coated surface. A \$60.00 value.  
Stock #533-Q-----\$2.00 Postpaid

CLEANING BRUSH SET—12" flexible, plastic, hollow handle, circular construction. 4 brushes to set, range stiff to soft. Stock #504-Q (Reg. \$6.00 value)-----Price \$1.00

RAW OPTICAL GLASS—An exceptional opportunity to secure a large variety of optical pieces, both Crown and Flint glass (seconds) in varying stages of processing. Many prism blanks.  
Stock #703-Q 8 lbs. (Minimum weight)-----\$5.00 Postpaid  
Stock #702-Q 1 1/2 lbs.-----\$1.00 Postpaid

MAGNIFIER SET—5 magnifying Lenses—Powers from 1 to 10.  
Stock #1026-Q-----\$2.00 Postpaid

RETICLE SET—5 assorted, engraved reticles from U. S. Gunsights.  
Stock #2035-Q-----\$1.00 Postpaid

### ALL THE LENSES YOU NEED TO MAKE YOUR OWN TELESCOPE!

#### ALL ARE ACHROMATIC LENSES

**GALILEAN TYPE**—Simplest to Make but has Narrow Field of View.

Stock  
#5018-Q—4 Power Telescope-----\$1.25 Postpaid  
#5004-Q—Small 2 Power Pocket Scope-----\$1.00 Postpaid

**TERRESTRIAL TYPE**—Have Much Wider Field of View than Galilean Type..

Stock  
#5007-Q—11 Power Telescope-----\$3.20 Postpaid  
#5008-Q—20 Power Telescope-----\$3.45 Postpaid  
#5009-Q—40 Power Telescope-----\$7.45 Postpaid

**PRISM TELESCOPES**—Uses Prism instead of Lenses to Erect Image and are much shorter than Terrestrial Type. Have wide field of view.

Stock  
#5010-Q—6 Power Telescope-----\$3.00 Postpaid  
#5011-Q—11 Power Telescope-----\$3.25 Postpaid  
#5012-Q—20 Power Telescope-----\$7.25 Postpaid

**PRISMS:** If you mount right angle Prism in front of Camera Lens and point camera straight ahead, you can take shot to left or right side without subjects knowledge. Technique successfully used by famous Press Photographers.

Stock No.	Type	Base Width	Base Length	Price
3040-Q	Right Angle	33 mms.	23 mms.	\$ 1.00
3042-Q	Right Angle	41 mms.	40 mms.	1.00
3045-Q	Right Angle	70 mms.	168 mms.	8.00
3001-Q	Lens Surface	20 mms.	14 mms.	2.00
3006-Q	Porro-Abbe	9 mms.	9 mms.	.25
3009-Q	Porro	52 mms.	25 mms.	1.00
3010-Q	Porro	43 mms.	21 mms.	.50
3016-Q	Pentagon	45 mms.	22 mms.	.75
3029-Q	Dove	16 mms.	65 mms.	1.25
3036-Q	80 Degree Roof	60 mms.	36 mms.	4.00
6136-Q	Rhomboid	20 mms.	17 mms.	.50
3049-Q	Right Angle	69 mms.	167 mms.	10.00
3047-Q	Right Angle	53 mms.	103 mms.	4.00
3038-Q	Roof Prism	18 mms.	34 mms.	2.50

ORDER BY SET OR STOCK NO.

• SATISFACTION GUARANTEED

• IMMEDIATE DELIVERY

# EDMUND SALVAGE COMPANY, P. O. Audubon, New Jersey