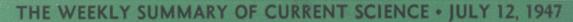
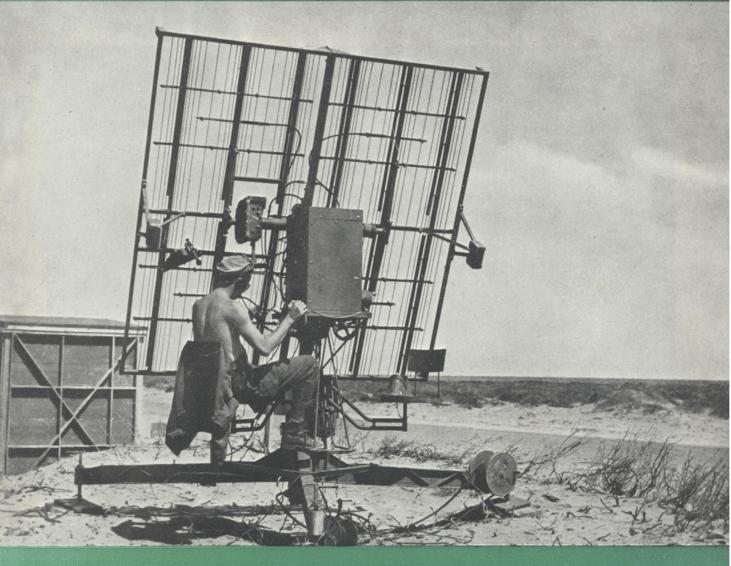


SCIENCE NEWS LETTER

Vol. 52, No.





Spotting Weather

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A SCIENCE SERVICE PUBLICATION

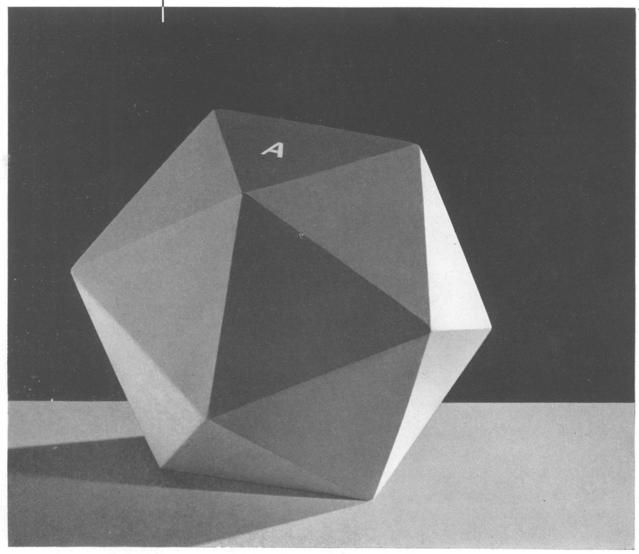
It tells when you will telephone

"It" is an icosahedron—a solid with twenty regular faces. The laws of probability say that if you roll a hundred icosahedrons on a table, eleven or more will come to rest with side "A" on top only once in a hundred throws.

Identical laws of probability rule the calls coming into your local Bell Telephone exchange. Suppose you are one of a group of a hundred telephone subscribers whose practice is to make one three-minute call each during the busiest hour of the day. The chance that

eleven or more of you will be talking at once is also only one in a hundred. Thus it would be wasteful for the Bell System to supply your group with a hundred trunk circuits. Eleven trunks will suffice to give you good service.

Telephone traffic conditions vary. But you can be sure, wherever you live, that Bell Telephone Laboratories research, which pioneered in applying probability theory to telephone traffic, is everywhere helping to make the most use of costly equipment.







EXPLORING AND INVENTING, DEVISING AND PERFECTING, FOR CONTINUED IMPROVEMENTS AND ECONOMIES IN TELEPHONE SERVICE

WAR BARGAINS in LENSES and PRISMS

ASSEMBLE YOUR OWN BINOCULARS!

Save More Than 1/2 Regular Cost Complete Optics! **Complete Metal Parts!**



GOVERNMENT'S 7 X 50 BINOCULARS

Here's an unusual opportunity to secure a fine set of Binoculars at a substantial saving of money. Offered here are complete sets of Optics and Metal Parts for the 7 x 50 Binoculars. These components are new and all ready for assembly. We supply full instructions. Limit-1 set of Metal Parts and 1 set of Optics to a customer.

METAL PARTS—Set includes all Metal Parts—completely finished—for assembly of 7 x 50 Binoculars. No machining required. Bodies have been factory hinged and covered. A sturdy Binocular Carrying Case is included with each set of Metal

Stock #841-Q-7 x 50 Metal Parts_\$36.20 Postpaid

OPTICS—Set includes all Lenses and Prisms you need for assembling 7 x 50 Binoculars. These Optics are in excellent condition—perfect or near perfect and have new low reflection coating.

Stock #5102-Q—7 x 50 Optics.....\$25.00 Postpaid

NOTICE: If you buy both the Binocular Optics and the Binocular Metal Parts, your purchase becomes subject to 20% Federal Excise Tax. Be sure to add amount covering tax to your remittance or your order cannot be filled.

ARMY'S 6 X 30 BINOCULARS

No Carrying Case with any Sets shown below. M-13A1 sets are waterproof model. M-3 sets are not waterproof. Limit—1 Set to a Customer on all Sets shown below.

COMPLETE OPTICS & METAL PARTS—Model M-13A1, 6 x 30 Binoculars. Everything you need—ready for assembly. When finished will look like a regular factory job costing \$102 to \$120. The Optics are new, in perfect or near-perfect condition. Have new low reflection coating. Metal Parts are new and perfect, all completely finished. No machining required. Bodies factory hinged and covered. Complete assembly instructions included.

Stock #830-Q40.00 Postpaid, plus \$8.00 tax-Total-\$48.00

COMPLETE OPTICS & METAL PARTS—Model M-3, 6 x 30 Binoculars. The Optics in this set are new, perfect or near-perfect. Prisms have new low reflection coating. Factory mounted Eye Piece and Objective Assemblies not coated. Metal Parts are perfect, new, ready for assembly. When finished, this will look like a regular factory job, except a name has been filed off a cover plate. No machining required. Bodies factory hinged and covered.

Stock #831-Q\$35.00 Postpaid, plus \$7.00 tax-Total-\$42.00

METAL PARTS ONLY—Model M-13A1, 6 x 30 Binoculars. No Optics. Same Metal Parts as described for Stock #830-Q.
Stock #832-Q—6 x 30 Metal Parts...\$25.00 Postpaid

Stock #832-Q-6 x 30 Metal Parts...\$25.00 Fostpain METAL PARTS ONLY—Model M-3, 6 x 30 Binochalars. No Optics. Some machining on these Metal Parts required. Bodies hinged and Prism Shelves have placed, but you must tap them. Prism Shelves have been machined. Six lead spiral focusing threads have been cut. Some less difficult components you must thread and machine yourself, but all material you need is furnished except body covering material and Obtics.

Optics. Stock #833-Q—6 x 30 Metal Parts...\$12.00 Postpaid

SAME OPTICS AS ABOVE-Coated-but slight sec-

onds. \$12.75 Postpaid If you buy both the Binocular Optics and the Binocular Metal Parts, your purchase becomes subject to 20% Federal Excise Tax. Be sure to add amount covering tax to your remittance or your order cannot be filled.

Optics and Metal Parts are Available for Monoculars (½ a Binocular). For Complete Details, Write for Bulletin #14-Q.

Set #1-Q-"Our Advertising Special"—15 lenses for \$1.60 Postpaid, plus 10-page idea booklet. For copying, ULTRA CLOSE-UP 9HOTS, macrophotography experimental optics magnifying and for making a two power \$\forall 16\$ Telephoto Lens, "Dummy Camera," Kodachrome Viewer, DeTACHABLE REFLEX VIEWFINDER for 35 mm. cameras, steroscopic viewer, ground glass and enlarging focusing aids, TELESCOPES, low power Microscopes and for many other uses.

NEW 50-PAGE IDEA BOOK "FUN WITH

CHIPPED EDGE LENSES"

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

35 MM KODACHROME PROJECTING LENS SET—Consists of 2 Achromatic Lenses for projecting, plus 2 Condensing Lenses and a piece of Heat Absorbing Glass with directions.

Stock # 4029-Q\$3.10 Postpaid

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

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

WE HAVE LITERALLY MILLIONS OF WAR SURPLUS LENSES AND PRISMS FOR SALE AT BARGAIN PRICES. WRITE FOR CATALOG "Q"—SENT FREE!

MOUNTED KELLNER TELESCOPE EYE PIECE—Perfect, coated, in Ordnance sealed boxes. F.L. 1¾ inches. Outside dia. of steel mount 40 mm. \$3.15 Postpaid

OPTICAL BENCH KIT—(Not a War Surplus Item)
Everything you need, including four Lens Holders for
checking Focal Lengths and setting up Lens Systems.
Stock #53-Q\$8.50 Postpaid

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. (min. wt.) \$5.00 Postpaid Stock #702-Q-1½ lbs. . . . \$1.00 Postpaid

BOMBER SIGHTING STATION—A double end Periscope
Type Instrument of highest precision. Brand new and
in perfect condition. 6 ft. tail, shipping wt. 380 lbs.
Orig. cost \$9,850. Consists of numerous Lenses. Prisms,
Mirrors, Gears, Motors, Metal Parts and Electrical
Gadgets.
Stock #914-Q.........\$50.00 F.O.B. Oklahoma

ORDER BY SET OR STOCK NO.

Items, send 10c and your name and address to get on our regular "Flash" mailing list

NEVER HAS THERE BEEN SUCH A SENSATIONAL BARGAIN **BUBBLE SEXTANT**

Type A-10



Used by the Army Air Forces, these Bubble Sextants cost the Govt. about \$200 each to make. At our price of \$12.50, you can quickly see that this is a wonderful bargain. Included with your Bubble Sextant shipment will be a sturdy wooden Carrying Case, equipped with catches and handle, 5 spare waxed paper discs, flashlight with rheostat for using Sextant at night. (Uses ordinary flashlight cells which are not furnished.) Auxiliary 2 Power Galilean Telescope for use on faint stars, Allen wrench, 1 spare marking point. Though wartime used, these Sextants have been, where necessary, completely repaired, collimated, and put in good working order. The light bulb has been tested. The Bubble is in working condition. All other working parts have been checked and are in good order. Because these Sextants have been wartime used, we make the following guarante: if you are not satisfied that our Sextant is exactly as we represent it, return it within 10 days and your money will be refunded. Full directions on how to use the Bubble Sextant will accompany your shipment.

Stock #924-Q \$12.50 Postpaid

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With Polarizing Variable Density Attachment—Can be used as Slide Viewer, or take it apart and you can get polarizing variable Density Attachment, Mangin Concave Mirror, Reflector Plate, Metal Reticle, Window, Lamp Housing, Ring and Bead Sight. The Polarizing attachment alone is worth many times the price of entire unit. Consists of 2 Polarizing Filters mounted with small handle which rotates one around the other. May be used in Photography, Research, Experiments, as Light Dimmer, etc.

which with the protography, and in Photography, and in Photography, Dimmer, etc.

Stock #908-Q _______\$5.00 Postpand

Same Unit Without Polarizing Attachment
Stock #916-Q ______\$2.50 Postpaid

PRISMS—PLAIN OR SILVERED

214" wide, finely

90-45-45 deg. 5%" long, 2%" wide, finely ground and polished

tock No. Item Price 3004-Q—Silvered Prism (Perfect) _____ \$2.00 Postpaid

3005-Q—Plain Prism (Per-fect) ______ \$2.00 Postpaid (Illustrated Book on Prisms included FRFF)

MOUNTEOR PROJECTING LENS SYSTEM Black plastic body, size MCHMIDT OPTICAL SYSTEM Black plastic body, size and Signalling Units. Govt. cost \$134. Limit—1 to a Signalling Units. Govt. cost \$134. Limit—1 to a Stock #730-Q \$20.00 F.O. B. Audubon Stock #770-Q \$6.00 F.O. B. Audubon Stock #770-Q \$5.00 F.O. B. Audubon

SATISFACTION GUARANTEED

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