

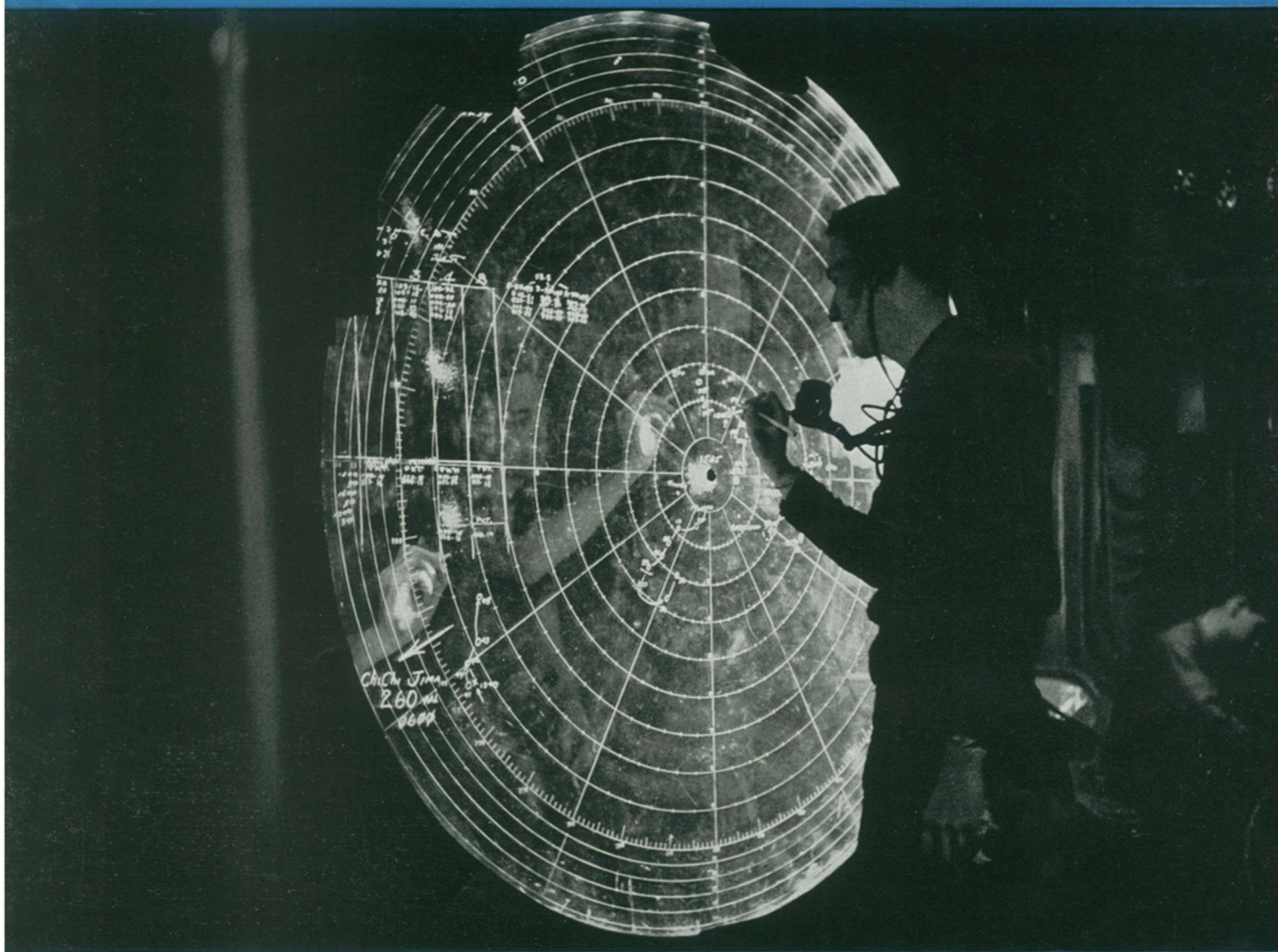
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# SCIENCE NEWS LETTER

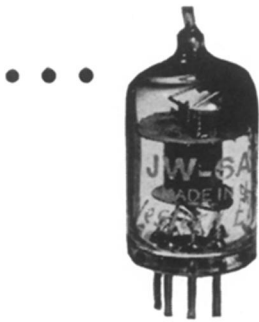


THE WEEKLY SUMMARY OF CURRENT SCIENCE • NOVEMBER 24, 1945



Vital Information  
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A SCIENCE SERVICE PUBLICATION

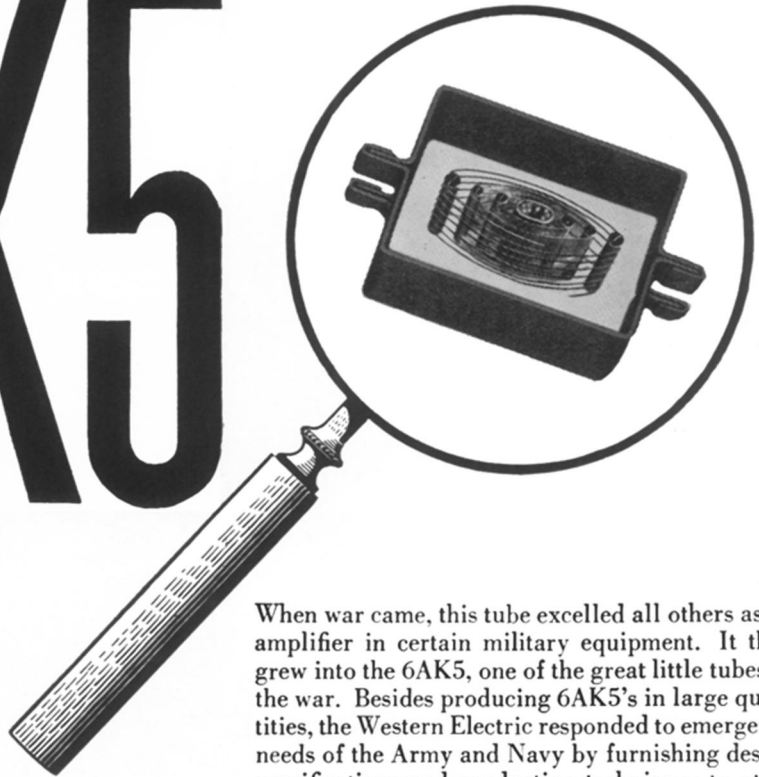


### TINY GIANT WITH A HISTORY

Long before the war, the men who design your Bell Telephone System were looking for an electron tube with frequency capabilities never before attained. With it, they could transmit wide bands of telephone messages — several hundred of them — simultaneously through coaxial cable — economically, and over long distances.

They developed a tube which set a new standard in broad-band, high-frequency amplification. So minute that its electrode system had to be inspected under a magnifying glass, the tube could amplify either the voices of 480 people talking at the same time, or the patterns of television. Long-distance transmission became a commercial reality.

# 6AK5



When war came, this tube excelled all others as an amplifier in certain military equipment. It then grew into the 6AK5, one of the great little tubes of the war. Besides producing 6AK5's in large quantities, the Western Electric responded to emergency needs of the Army and Navy by furnishing design specifications and production techniques to other manufacturers, of whom at least five reached quantity production. On every battlefield it helped our ships and planes to bring in radio signals.

Developing electron tubes of revolutionary design has been the steady job of Bell Laboratories scientists ever since they devised the first practical telephone amplifier over thirty years ago. Now tubes like the 6AK5 will help speed the living pictures of television, as well as hundreds of telephone conversations simultaneously over the coaxial and radio highways of the Bell Telephone System.

#### BELL TELEPHONE LABORATORIES

*Exploring and inventing, devising and perfecting for continued improvements and economies in telephone service.*



# Who is the most unusual person on your Christmas List?

Wouldn't he (or she) like a gift of twelve packages, one to arrive each month in 1946?

In each 1946 gift package, there will be one or more objects of science, and with each object, a museum-style legend card, which will tell at a glance what these things of science are. Included will be the sheets of explanation, that give the interesting details of discovery, of development, of manufacture, and that tell how to perform unusual experiments with the contents of the package.

Since late in 1940, packages like these have been going forward to members of the THINGS of science group. Glance over this list, then decide whether a membership which brings monthly packages on subjects as widely varied as these, isn't just the thing for that most unusual person on your Christmas Gift list.

Perching Plants	Talc	Coal By-Products
Optics	Nylon	Lithium
Plastics	Fiberglas	Upholstery
Strategic Minerals	Seeds, Medicinal and	Cork
Bread Vitamins	Condiment Plants	Rayon
Fingerprinting	Sulfur	Prince Rupert's Drops
Bi-Metallic	Treated Wood and	Felt
New Fabrics	Cloth	Material Detecting
Whey Candy	Buoyant	Sweetness
Meteorite	Salt	Lignin
Plant Hormones	Synthetic Rubber	Glass Fiber
Fire Psychology	Transparent	Dehydrated Food
Mineral Optics	Packaging	Spice
Indicators	Casein	Rubber Plants
Fern Fossils	Plywood	Plastic Pilot Aids

You know one or more who would thank you again and again for such a gift. If you are not yourself a member, you could hint to someone that you'd like it as a gift yourself.



## Twelve Surprises plus another we'll add

The 1946 THINGS of science will be unusual; every month's package will be a surprise. A Christmas Membership to THINGS of science will bring the 12 units of 1946, plus the December 1945 unit which we will add to your gift with our compliments, to arrive in time for Christmas. We will make out and mail a Christmas card with your name as donor, announcing your gift. Each membership is \$4 a year, postpaid. You will find a handy order coupon below.

### Gift from

T-918

MY NAME \_\_\_\_\_

STREET ADDRESS \_\_\_\_\_

CITY & STATE \_\_\_\_\_

Mail this order to THINGS of science, 1719 N St., N. W., Washington 6, D. C. for the 12 units of 1946 plus the December 1945 unit.

- I enclose \$4.00 for the following  
 Please bill me after Christmas

### Gift to

PLEASE PRINT

STREET ADDRESS \_\_\_\_\_

CITY & STATE \_\_\_\_\_

MAKE OUT Christmas Card  
TO READ from \_\_\_\_\_