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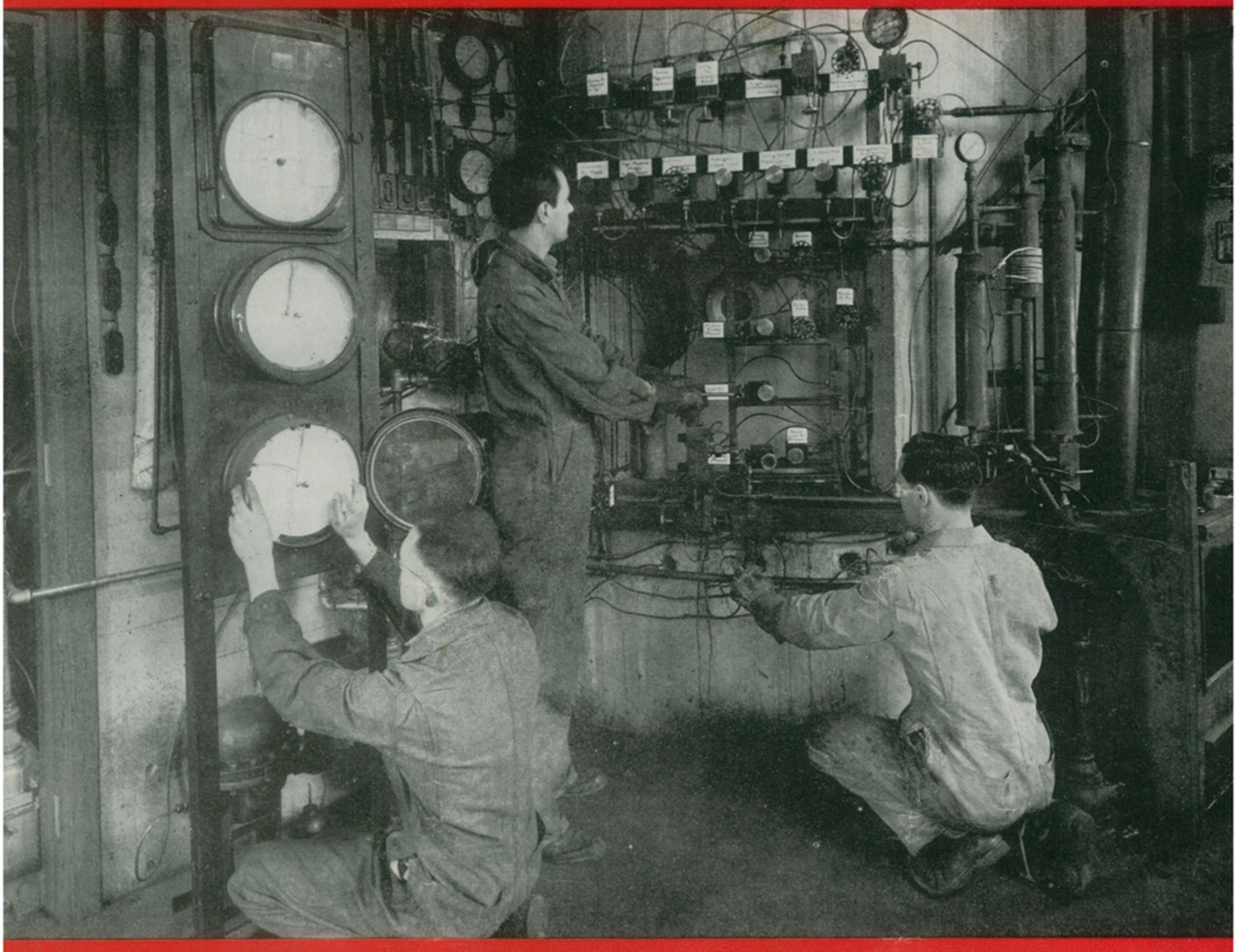
SCIENCE NEWS LETTER

THE WEEKLY SUMMARY OF CURRENT SCIENCE • AUGUST 7, 1943



Gasoline from Coal

See Page 84

A SCIENCE SERVICE PUBLICATION

Do You Know?

Rock dust, used in coal mines to reduce exploision danger, also retards the decay of mine timbers.

Paraguay is a bilingual nation; Spanish is the official language but the language of the native Guarani Indians is widely used and is constantly heard in the national legislature.

The pleasant lemonlike *scent* in soaps and cosmetics frequently is from an extract from Cymbogon grass, a wild plant in the Far East; the grass is now being grown in Middle America.

War uses of *silver* include its use in airplane bearings, brazing alloys, electric contacts and photography, and as a substitute for copper in fine wires, and for copper and tin in plating processes.

Canada reports its experimental crops of *kok-saghyz,* the rubber-producing Russian dandelion, to be fairly successful; crops were tried at eight agricultural experiment stations across the Dominion.

Citronella oil, formerly obtained from Java and Ceylon, now produced in small quantities in Middle America, is the basis of many important aromatics used in soaps, cosmetics, perfumes, pharmaceuticals and flavors.

Radio *weather reports* were sent for nine months from an isolated Greenland ice cap outpost by seven Army men, now returned, who managed to keep alive through subzero weather, blinding blizzards and a 170 mile gale.

Question Box

Page numbers of Questions discussed in this issue:

Most articles which appear in SCIENCE NEWS LETTER *are based on communications to Science Service, or on papers before meetings. Where published sources are used they are referred to in the article.*

Great Britain is receiving monthly from Belgian Congo about 1,000,000 carats of *industrial diamonds.*

Raspberry canes should be cut out immediately after fruiting to reduce pests and permit new canes to make better growth.

The *bird* collection in the Chicago Academy of Sciences now includes 10,000 specimens.

A 400,000 horsepower *hydroelectric plant* at the Des Joachims dam on the Ottawa River in Ontario is soon to be constructed.

SCIENCE NEWS LETTER

Vol. 44 AUGUST 7, 1943 *No. 6*

The weekly Summary of Current Science, published every Saturday by SCIENCE SERVICE, Inc., 1719 N St., N. W., Washington 6, D. C. NOrth 2255. Edited by WATSON DAVIS.

Subscriptions—$5.00 a year; two years, $7.00; 15 cents a copy. Back numbers more than six months old, if still available 25 cents.

Cable address: Scienservc, Washington.

New York office: 310 Fifth Avenue, CHickering 4-4565.

Entered as second class matter at the postoffice at Washington, D. C., under the Act of March 3, 1879. Established in mimeographed form March 18, 1922. Title registered as trademark, U. S. and Canadian Patent Offices. Indexed in Readers' Guide to Periodical Literature, Abridged Guide, and in the Engineering Index.

The Science Observer, established by the American Institute of the City of New York, is now included in the SCIENCE NEWS LETTER.

The New York Museum of Science and Industry has elected SCIENCE NEWS LETTER as its official publication to be received by its members.

Member Audit Bureau of Circulation. Advertising Representatives: Howland and Howland, Inc., 393 7th Ave., N.Y.C., PEnnsylvania 6-5566; and 360 N. Michigan Ave., Chicago, STate 4439.

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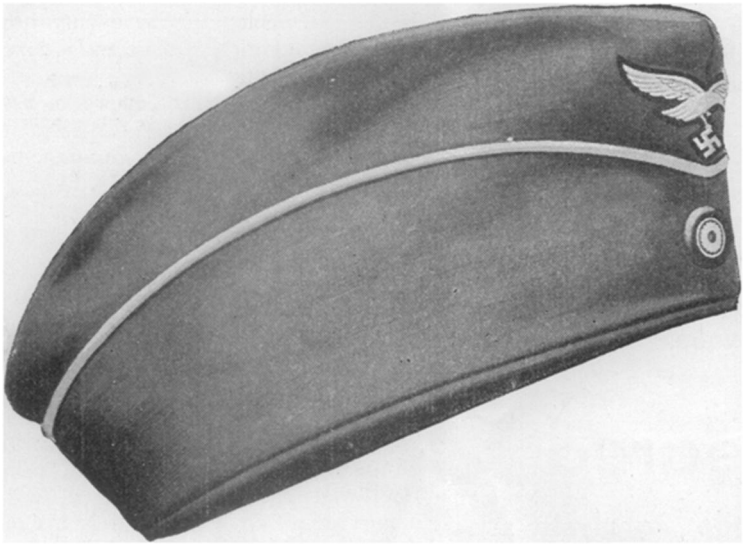


What goes on under a Nazi pilot's cap?

PUT YOURSELF IN HIS PLACE . . . in his cockpit climbing swiftly away from an Axis airfield into a pitch-black night . . . bomb racks loaded . . . heading for Yank-held territory.

How would your mind work (under a Nazi bonnet), if you knew Radar's sleepless, X-ray "eyes" were waiting up to greet you . . . on warships, airfields, and lookout posts of the United Nations' forces?

What would you be thinking . . . knowing that Radar was robbing you of "surprise", the attacker's one tactical advantage . . . detecting you as much as 130 miles from your target? *Always* watching you . . . in storm, clouds, and fog . . . five miles up or skimming the waves! . . . *marking you for ambush and destruction!*

When the flak whams accurately through the clouds to rip jagged wing holes; when you meet night fighters who need no flame from your exhausts for true aiming, wouldn't you momentarily doubt the infallibility of the "master race"?

Wouldn't you nurse a scowling respect for American ingenuity? For Radar was developed in the United States . . . pretty much the product of Navy and Army research laboratories who weren't as unprepared as you thought.

And shouldn't it occur to you that a fellow can't win when he's fighting against a nation with the inventiveness and resources to produce weapons like this?

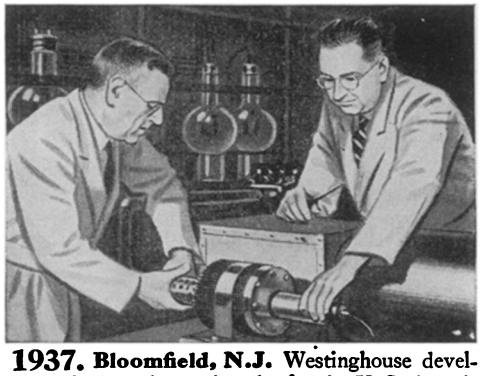
Westinghouse Electric & Manufacturing Co., Pittsburgh, Pa.

Westinghouse was making Radar 18 months before Pearl Harbor. Since then, Westinghouse production of radio communications equipment, including Radar, has increased 41 times!

Westinghouse

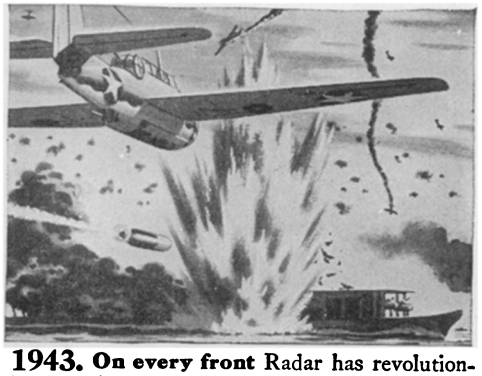
PLANTS IN 25 CITIES . . . OFFICES EVERYWHERE

1922. Naval Laboratory, Anacostia, D.C. Dr. A. Hoyt Taylor and Leo C. Young, observing that radio signals were reflected by passing ships, saw in it a means of detecting enemy vessels in darkness and fog. This was the birth of Radar!



1937. Bloomfield, N.J. Westinghouse developed the key electronic tube for the U. S. Army's *first* Radar equipment used to detect aircraft. Radar focuses invisible, ultra-high-frequency waves traveling at 186,000 miles per second.

1941. Pearl Harbor, T. H. Approaching Jap bombers were detected by a Westinghouse-made Radar when 132 miles distant. Because a flight of American planes was expected, no warning was sounded.



1943. On every front Radar has revolutionized naval and air battle tactics . . . and multiplied a hundredfold the range of human vision. In days to come, Radar will guide air transports and ocean liners safely through fog and darkness.