

## AVIATION

# Aid for Plane Landings

► THE WATCHFUL eye of a new breed of radar has gone into 24-hour-a-day operation at the municipal airport in Norfolk, Va., to aid in establishing better air traffic and landing patterns.

The radar's rotating antenna throws out an electronic beam that scans the sky 30 to 60 miles from the airport. Airplanes reflect "echoes" to the antenna. These echoes appear as "pips" on the radar screen. Stationary objects, such as buildings, are not traced on the picture tube's face. This makes it easier for the operator to distinguish approaching aircraft.

Map overlays can be placed over the radar screen to show the locations of all high obstructions dangerous to approaching planes. During periods of poor visibility, the operator can direct planes safely past these obstacles by radio.

Designed and built by General Electric engineers, the radar has been approved by the Civil Aeronautics Administration. It was created because better means of controlling the approach and landings of aircraft were needed.

During periods of poor visibility, the new radar can be used with the airport's precision approach control aids. This permits the airport control tower to schedule the arrival of inbound planes so they can be "fed" into the precision approach control system at a rate that is both the most efficient and the safest.

The radar antenna and receiving set can be situated two miles from the airport, if such a site yields better range and perform-



**SCREEN OF NEW RADAR** — *The location of all moving aircraft within 30-to-60-mile radius can be spotted with this new radar.*

ance. The picture is fed via coaxial cable to a viewing screen in the control tower.

Sixteen airports now have been outfitted with the radars. However, the Norfolk municipal airport is the first landing field to have its set commissioned for operation. Other airports now are awaiting the new equipment.

Science News Letter, August 29, 1953

## MEDICINE

# Headaches From Anxiety

► THE HEADACHES so many high blood pressure patients have are usually due to anxiety, or worry over having high blood pressure, rather than to the high blood pressure itself.

A study of 200 patients with severe high blood pressure and of a number of controls shows this, Dr. I. McD. G. Stewart of the University of Bristol and United Bristol Hospitals declares.

Of 104 patients who had high blood pressure without knowing it, only three volunteered the statement that they had headaches. Another 14 admitted having headaches when questioned. But of 96 patients with equally high blood pressures who knew they had this condition, 71 complained of headache, most of them in terms characteristic of anxiety.

Another 18 complained, "with abundant organic justification," of something else than headache, such as the pain of angina pectoris, visual disturbances and the pain of ulcers or cancers which they had in addi-

tion to the high blood pressure. "One stalwart" declared that he felt "perfectly fit," though he had as severe high blood pressure as others in the group.

Nerve-cutting operations and new drugs for lowering blood pressure may prolong life, postpone heart failure and improve visual difficulties. But, Dr. Stewart points out in *Lancet* (June 27), measure for remedying high blood pressure should not be judged on the basis of relief of headache because this symptom is so often a product of anxiety rather than high blood pressure.

The anxiety type of headache, Dr. Stewart finds, starts shortly after the patient learns he has a high blood pressure. The sufferer may be beyond middle age and is commonly a woman. Bizarre complaints, such as "blackouts," "dizziness" and "weakness," often go with the headache. Patients say the headache is "perpetual," but suggestion that a given treatment will help may bring relief.

Where there is an "organic" headache

with high blood pressure, the headache is more like migraine except there is no "aura," or pre-headache visual symptoms. This organic headache with high blood pressure, like the anxiety one, is often "bad in the morning," and is made worse by worry. But where the anxiety one may be lessened by activity, the organic one is made worse by it.

Science News Letter, August 29, 1953

## ANTHROPOLOGY

# Teeth of "Missing Link" Resemble Those of Man

► FRESH EVIDENCE that the very human-like child's fossil skull found in a cave in South Africa was really human or the missing link between the ancestors of the apes and of man is presented in *Nature* (Aug. 8).

The place of this little "Taungs Baby" in man's family tree has been the subject of much discussion among anthropologists for years. Some have thought that the skull was that of one of the South African great apes. Others suggested that it might have belonged to an early Bushman. But the teeth were of great interest to scientists. Despite the fact that they were baby teeth, they already showed signs of wear in the typical human pattern.

Now two British mathematicians, Prof. J. Bronowski and W. M. Long, have applied a complicated mathematical technique to the problem. They studied four carefully chosen dimensions of eight baby canine teeth from the Taungs skull and from other Australopithecine remains found in South Africa.

The little fossil milk teeth, they found, are quite similar to one another. And, as a group, they are very similar to the milk canine teeth of modern European man. They are unlike those of modern anthropoid apes.

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## ASTRONOMY

# Discover New Comet In Southeastern Sky

► A NEW comet has been spotted in the constellation of Aquarius, the water carrier. It is of 15th magnitude, too faint to be picked up except by a powerful telescope.

The object, known as Comet Harrington after its discoverer, Robert G. Harrington of the California Institute of Technology, is moving very slowly southward. It was discovered as part of the sky survey being conducted by Palomar Observatory and the National Geographic Society. News of its discovery was bulletined to astronomers by Harvard College Observatory, clearing house for astronomical information in the Western Hemisphere.

This is the fifth new comet Mr. Harrington has spotted in the last two years.

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