



**OLDEST MEXICAN**—The recently found bones of an ancient man are spread out before the scientists who are busy with his restoration. Dr. T. Dale Stewart of the U. S. National Museum (left) holds the skull of a modern Indian for comparison. At the right is the Mexican anthropologist who made the discovery, Dr. Javier Romero. The case in which Dr. Romero brought the bones by airplane to Washington is shown at the far right.

told a little group of scientists and newspapermen at the U. S. National Museum after his arrival. The rest will come out as his much-broken face bones and what is left of his skeleton are pieced together by Senor Javier Romero and Dr. T. D. Stewart of the National

Museum. After comparative studies, in which the huge collection of Indian skulls will be used for comparison, Tepexpan Man will return to his native country, where he will be "in residence" at the Mexican National Museum.

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#### AERONAUTICS

## Supersonic Flight Ahead

Unconventional planes, still cloaked in military security, may lead to man's flying faster than the speed of sound. New planes do not have limits of XS-1.

► THE ARMY is building new, high-speed aircraft for research on flight faster than the speed of sound, Col. Philip B. Klein of the Army Air Forces Air Materiel Command, Wright Field, Ohio, revealed at the meeting of the American Society of Mechanical Engineers in Chicago.

Describing the AAF's experimental rocket plane, the XS-1, Col. Klein said

that the new planes will "give us the answers beyond the limits of the XS-1."

The new aircraft are still cloaked in military security, but Col. Klein reported, "all of them are rather unconventional in appearance in that they have either swept-back wings, very thin wings with a very small aspect ratio or are tailless or semi-tailless."

The XS-1, Col. Klein declared, was

not designed for flight at speeds faster than the speed of sound. The XS-1's job is "to explore the transonic region and to provide us with actual flight data which might enable us to build a supersonic plane in the near future," he said.

"We want to be certain that when we do venture into the transonic region we have an aircraft strong enough and controllable enough to cope with whatever unpredictable effects may be manifested," the AAF officer explained.

The XS-1 has several advantages from being launched from a "mother" B-29, Col. Klein told the engineering society.

Launching the high-speed plane in the air avoids dangers from heavily loaded take-offs with rockets for power, makes possible test glide flights without power, saves fuel and simplifies transportation of the plane, he said. Another advantage is raising the potential speed of the XS-1 from 1,100 miles per hour from a ground take-off to 1,700 miles per hour from launching in the air.

These speeds are strictly "potential," Col. Klein warned. "For quite some time our flying will be done at subsonic speeds (less than the speed of sound)" he stated.

Col. Klein said the AAF does not know when it will be able to fly faster than the speed of sound, but, he added, "So far as we know, there is no limit as to how fast a man-carrying aircraft can be made to fly."

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#### METEOROLOGY

## Radar Now Used To Spot Invading Storm Clouds

See Front Cover

► RADAR apparatus like the one shown on the front cover of this week's SCIENCE NEWS LETTER, which during the war kept an alert watch for enemy airplanes, now is used in weather observation.

The radar can pick up the electrical forces generated in thunderclouds and possible electrical disturbances to communication. It is also used to follow the balloons that carry radios for broadcasting weather data from aloft.

The apparatus shown on the cover is at the Air Weather Service Station at the guided missiles proving ground at White Sands, New Mexico, where the Army Air Forces has a staff investigating atmospheric conditions at altitudes previously inaccessible.

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