

GENERAL SCIENCE

Defense Plan Out-Moded

The present plan for civilian defense seems designed for World War II rather than for World War III. The civilian defense group needs broader powers.

► "THE NEW federal plan for civil defense seems to me to be more like a plan for World War II than for World War III, a plan for TNT bombs rather than for A-bombs, so far as its administrative aspects are concerned," James M. Landis, civil defense director in the last war, told Science Service.

The new plan was sent to Congress by President Truman on Sept. 18. It declares that the real responsibility and authority in civil defense lie with state and local governments, that the proposed Federal Civil Defense Administration shall confine itself mostly to advice, research and coordination.

"There should be some ultimate source of command direction," Mr. Landis said, "and that source should be the federal government itself. I am afraid that the authors of this new plan do not realize how hard it is to get neighboring states to work together."

Mr. Landis pointed out that not only are there often political differences between states, but also in industrial states, many times, the governors and the mayors of the principal cities do not agree.

"The possibility of A-bomb attacks," he went on, "makes it much more necessary to set up overall command of civil defense resources and manpower. It is the extent of devastation which determines the amount of mobilization of resources necessary to meet the attack.

"A-bombing will require much interstate action. This new plan is adequate for the kind of bombing envisaged in World War II instead of World War III."

Mr. Landis said he believes the nation is going a little slow in its planning for civil defense. Even under the philosophy of this new plan, the states and cities are not moving fast enough, he declared.

"Congress should act during this session," he urged, "to establish an operational Civil Defense Administration with broader powers than those envisaged in the legislation suggested by President Truman."

Mr. Landis added that he does not think Congress will act until the next session convenes in January.

The former dean of the Harvard Law School who took over World War II's civil defense effort from the late Mayor Fiorello La Guardia said he hopes that the relations between the military and civilian aspects of defense against A-bombs will be carefully worked out.

"In World War II," he recalled, "some of the military in this country didn't want

to bother with civil defense. Their attitude seemed to be that the civilians could take care of themselves.

"Military air defense areas," he advised, "should be carefully coordinated with civil defense areas, and the mobility of military resources should correspond with the mobility of civil defense resources."

Science News Letter, September 30, 1950

AERONAUTICS

Instrument Carrier Drops From Seven-Mile Altitude

► INSTRUMENT-CARRYING aviation models are being dropped with relative safety from airplanes at altitudes of from 35,000 to 40,000 feet, it was revealed at Moffet Field, Calif., at the Ames Aeronautical Laboratory of the National Advisory Committee for Aeronautics.

These instrument carriers are unpowered bomb-like models that fall by gravity. In their drops from such heights they may acquire speeds slightly faster than that of

sound. The type used, with test wings, tails and control surfaces on a streamlined body, weigh upwards of 1,000 pounds.

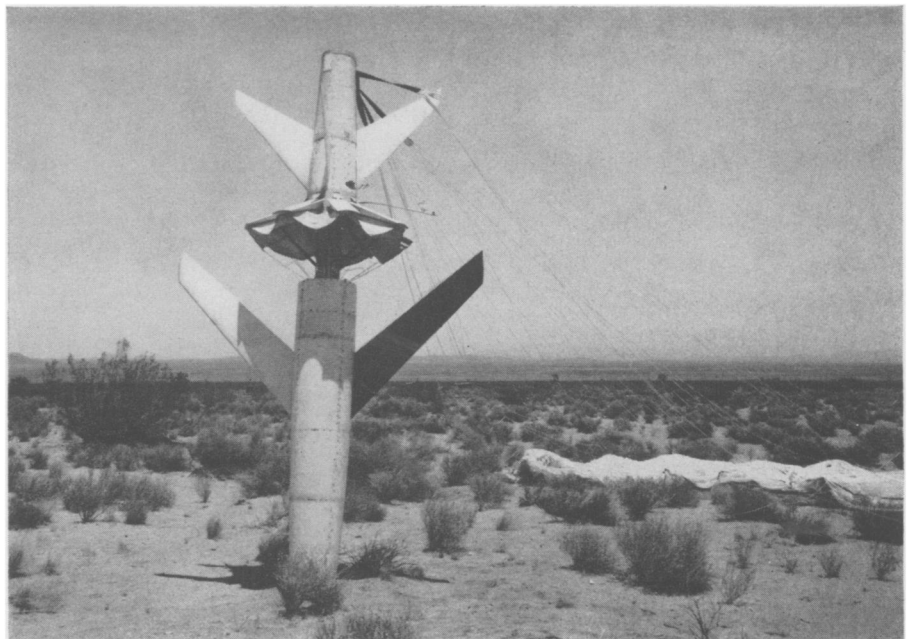
During the fall, engineers at ground stations determine the velocity of the falling body with optical and radar tracking units. Meanwhile, measurements of such factors as drag and lift on the body and the test wing, tail or control surface are being recorded on instruments inside the body.

The features that enable this falling carrier to hit the earth with little damage to itself and none to the instruments are dive brakes and a parachute. The dive brakes, strong umbrella-like devices, open at a pre-determined point. The parachute is automatically released from a storage compartment in the tail when the speed of the body has been slowed by the brakes to a point where the parachute can be safely used.

The falling body program is one of several methods employed by scientists of the NACA to obtain more complete information on aerodynamic forces at transonic speeds near that of sound. The speed of sound is approximately 760 miles per hour at sea level. The falling body methods are in addition to work with wind tunnels.

In one of the methods not using wind tunnels, small models are mounted on the wing of an airplane that goes into a speed dive during which the forces acting on the model are measured. A second method utilizes models mounted on rockets fired from the ground. A third utilizes the specially-built, rocket-powered Bell X-1 airplane and other jet engine planes.

Science News Letter, September 30, 1950



RECOVERY ASSURED—A free-falling body, after a drop of nearly seven miles, hits the earth. Its descent first checked by automatic dive brakes, shown open, and then by the parachute which is shown at the right, the body is buried nose first in the sandy soil of the California desert. The model wings are undamaged and the instruments and the records made during the fall are safe.