



**DELTA WING MODEL**—Research model of a delta wing prepared for launching at the NACA's pilotless aircraft research station at Wallops Island, Va.

Although the models are lost at sea, their record is not. Their flight and behavior are recorded by motion pictures on fast-moving strip film. Two types of radar are used, the Doppler and a flight path radar. Very important are tiny telemeter

electronic instruments within the model which send radio signals continuously to instruments at the ground-station. They provide up to ten kinds of information on flight characteristics, including roll, drag, flutter and skin temperatures.

Science News Letter, June 2, 1951

#### NUTRITION

## Special Foods for Wounded

► THE ARMY Medical Corps is looking for special foods for its wounded. Right now, wounded soldiers in Korea who need their nutritional balance re-established receive aid from an aid station hospital pack containing such hot, stimulating beverages as cocoa, tea and coffee.

However, this is not enough. Lieut. Col. Carl J. Koehn, chief of the nutrition branch in the Office of the Surgeon General, wants the food industry to develop a high protein, high calorie drink which could be simply prepared by medical corpsmen under front line conditions. It should be in dry powder form and probably be constituted of 60% milk, he said. It must taste good, too, he said, or the wounded men might not drink it. The powder must mix well with water and stay mixed so that it can be fed the wounded through nasal tubes if necessary.

This drink would be useful not only in the aid station at the front lines but

also at the clearing and collecting stations and in the evacuation hospitals. It would reduce the effect of shock and mean the difference between life and death for some of the wounded.

Clearing and collecting stations and also portable surgical and evacuation hospitals now are on what is called "operational B Rations" plus a fixed hospital ration supplement for the estimated 15% of the hospital population which medically would require more proteins. This does not meet the needs of a treatment diet.

Col. Koehn also wants industry to work on the problem of a stable fat emulsion to be used for vein feeding of patients when they cannot be fed either through the mouth or with a tube. This problem, complicated by the necessity of shipping and storing the emulsion, is admittedly difficult.

Science News Letter, June 2, 1951

#### PHYSICS

## Moon Rocket Would Shed Sections on Way

► THE FIRST rocket to try to reach the moon will probably shed pieces from itself one by one during the trip.

With fuels now available, the best way to make the extremely long distance rocket flights to the moon or other planets would be a rocket built in stages, Anthony Nerad of the General Electric Research Laboratory told the New York section of the American Chemical Society.

These sections would drop off one by one after the fuel is used. Because of fuel costs, chemicals rather than atomic energy will be more likely to be used for rocket power, he said. Hydrogen gas seems to offer some important theoretical advantages for the propellant.

Science News Letter, June 2, 1951

#### SOCIOLOGY

## Reduced Death Rates Give Hope Man Can Conquer War

► WAR'S CASUALTIES in an atomic age can be conquered by an application of man's social intelligence, judging by the way that we have been able to reduce the menace of deaths from airplane accidents, railroad travel, infected milk and lynchings.

Optimistically viewing the over-towering crisis of the atomic age, Dr. Hornell Hart, Duke University sociologist, reasons that our recent failure to achieve equal success with war casualties need not be regarded as conclusive.

The railroad death rate required 50 years to be reduced to one-tenth of its 1890 level. The airplane death rate was cut to one-tenth of its 1930 level in 15 years. Dr. Hart views this as evidence that social change is taking place at faster and faster rates.

The persistent decline of lynchings is regarded as especially significant by Dr. Hart because the lynching problem is considered parallel to the problem of dealing with international warfare.

Science News Letter, June 2, 1951

#### INVENTION

## Magnets Help Housewives Ease Burden of Heavy Iron

► THE BURDEN of using a heavy flat-iron by the housewife, or exerting heavy downward pressure on a light iron, is relieved by a so-called magnetic electric iron on which patent 2,554,111 was awarded to Charles A. Leonard of Cincinnati, Ohio. It is an ordinary electric iron but within it are permanent magnets. The ironing board used with it contains a magnetic material. Magnetic attraction between iron and board gives the necessary pressure.

Science News Letter, June 2, 1951