

## AERONAUTICS

# Triple-Deck Airplane

**New British Blackburn four-motor ship will carry eight automobiles and 42 passengers plus crew. Useful for tourists who want their cars with them.**

➤ A NEW triple-deck British airplane for carrying automobiles and passengers, just revealed, indicates the increasingly important part that aviation is playing in transporting freight. The two lower decks of this plane will hold eight automobiles and the upper deck will accommodate 42 passengers plus the crew.

This triple-deck freight airplane, which will be ready for use early in 1953, is a version of the Blackburn four-motor Universal Freighter, now Europe's largest carrier plane. Cars will enter the plane to its lowest deck through large doors at the rear. Inside they will be raised to the middle floor by means of an elevator. While designed particularly to carry automobiles, the plane can be used to transport other vehicles or can be used for general freight.

Many types of cargo planes have for several years been in wide use and many of them can accommodate automobiles. Few, however, are for both passengers and automobiles, a handy type for tourists who want to take cars with them.

Among American cargo planes are some which are converted passenger planes or versions of former passenger planes. The Boeing Stratofreighter is a version of the civil Boeing Stratocruiser. The Consolidated-Vultee military C-99 is a version of the famous bomber, the B-36, made by the same company. The Douglas cargo Globemaster, the C-124, the biggest transport plane used by the Air Force, is an extensively modified version of the C-74 Globemaster. It has "clamshell" doors on the front end which can be opened to permit tanks and trucks to be driven into it up a special ramp.

Notable among American freighter planes is the Fairchild Packet, sometimes called the flying boxcar. It is a twin-engine aircraft, with the engines in wing housings that project well to the rear and are connected at their rear ends with a horizontal tailpiece. Wings and tailpiece are high enough in the air when the plane is on the ground to permit loaded trucks to back in under them to the giant doors on the rear of the fuselage.

A new version of the Packet is under construction. It will have a detachable cargo-carrying fuselage with its own wheels so that it may be towed along the ground. When it is detached, the working part of the craft, with pilot's cabin, wings, power and tailpiece, can jockey itself over another cargo fuselage, pick it up and fly it away.

A helicopter which can pick up and carry the same cargo fuselage is under development. The idea is that the combina-

tion will make it possible to deliver a loaded fuselage to an airport where it can be picked up by the helicopter. It then can be carried to places occupied by troops that cannot be reached by airplane but where the small space required for a helicopter landing can easily be cleared.

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## ENGINEERING

## Conveyor Belt Walk Gets Scientific Data

➤ CONVEYOR BELT sidewalk, 85 feet long and two feet wide, has been in experimental use in Akron, Ohio, for a year to obtain scientific data which may find application in the proposed subway shuttle system between Times Square and Grand Central Station, New York City.

The type of "moving sidewalk" used, developed and installed by Goodyear Tire and Rubber Company, looks much like the moving stairs now widely used but lies flat on the earth. Like the escalator, it has a moving handrail to be grasped by the passenger. It is driven by electric motors geared for speeds from less than one mile to five miles an hour.

The fast-moving section of the moving sidewalk, 68 feet in length, has an entrance section and an exit at its ends. Passengers entering step on to the entrance belt while walking at one and a half miles per hour. Associated with the belt sidewalk were many types of instruments to record the data desired.

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## HERPETOLOGY

## Rattlers Avoid Men While Men Fear Snakes

➤ "OPERATION RATTLESNAKE" will be conducted in the oil-producing areas of California during the next few weeks by Dr. Raymond B. Cowles and Edgar Lundeen of the University of California at Los Angeles. They will:

1. Determine where and in what numbers rattlesnakes are present.
2. Develop control measures.
3. Reduce fear of snakes through an information program.

The work for the Richfield Oil Corporation will be conducted principally in Kern, Santa Barbara and Los Angeles counties where a "rattler" problem exists around oil wells, pipe lines, and storage tanks.

Fear of snakes, oil field workers not ex-

cepted, mostly is psychological, Dr. Cowles points out. If impressed upon the workers that snakes seek to avoid human beings as much as the latter seek to avoid snakes, half the problem is solved.

"The great danger is coming on to a snake before he sees you and gets out of your way," says Dr. Cowles. "Areas such as oil fields—where vegetation has largely been removed—are not nearly so dangerous as those that hunters and fishermen move in."

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