U. S. ARMY-NAVY JOURNAL OF RECOGNITION

GLIDER PICK-UP

APRIL, 1944
NUMBER 8

RESTRICTED

TOWED BY C-60 CARGO PLANES, CG-4A'S SAIL OVER COUNTRYSIDE. ONLY OPERATIONAL U. S. GLIDER TO DATE, CG-4A TOOK PART IN THE SICILIAN INVASION

WAR GLIDERS

NEW DESIGNS SHOW GREAT PROMISE FOR AIRBORNE ATTACK AND SUPPLY

Big, rugged and ugly, military gliders are designed to be stuffed with all the weight they can carry and are capable of setting down rapidly once tow lines are released. Unlike graceful civilian sailplanes, which have low wing-loading and are built to take advantage of every bit of wind which may keep them aloft, these landing barges of the air are not designed to soar and do not have the aerodynamic beauty of sport gliders.

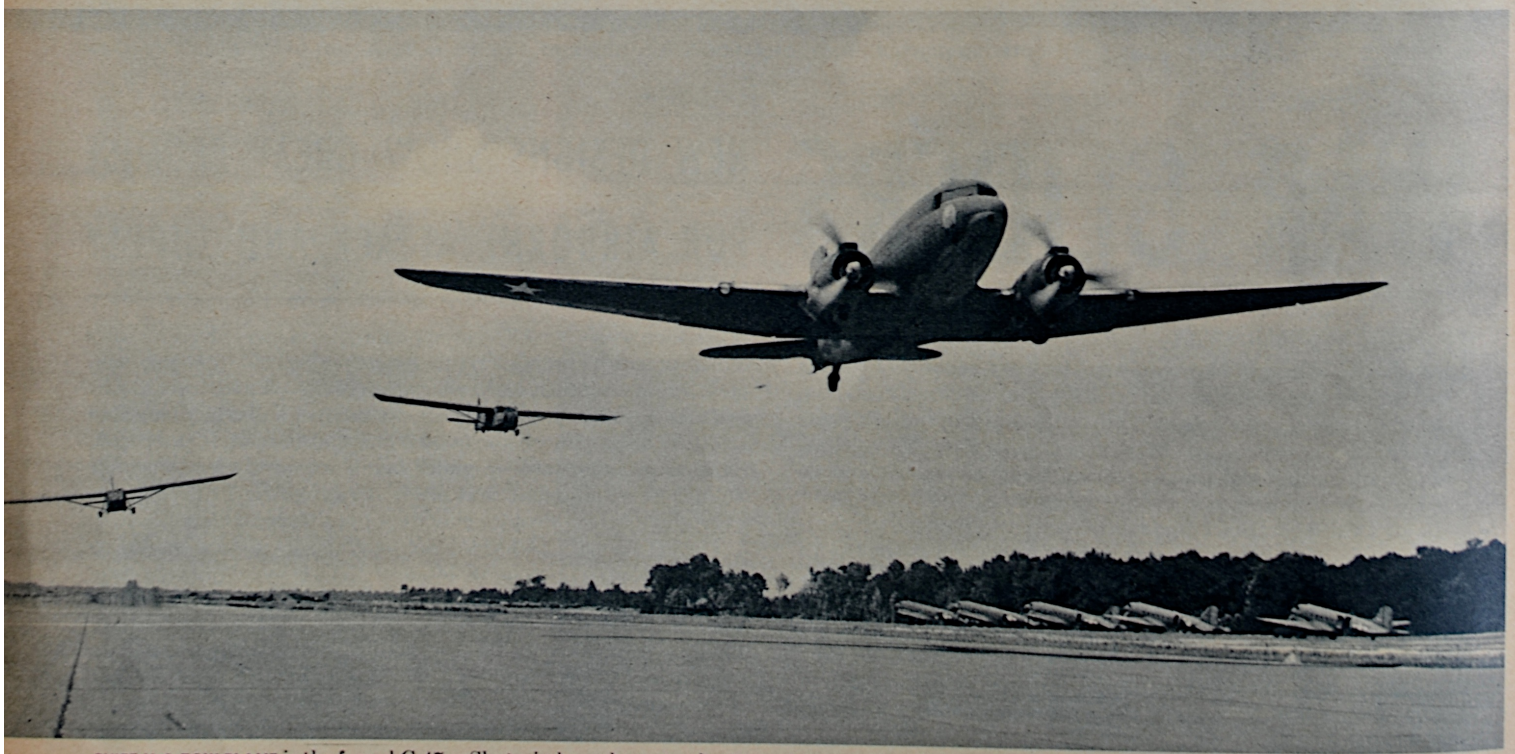
In airborne operations gliders are likely to dive in after paratroopers have gone in to mark drop zones. The glider borne troops and paratroops are likely to be the initial assault wave back of enemy lines, their mission being to seal off enemy reserves, destroy communications, and perhaps seize an aerial beachhead. During this stage of the assault gliders are important since they carry heavy weapons which cannot be dropped by parachute and can deliver a formidable and concentrated load of men at a predetermined spot.

In addition to its use as an assault weapon, the glider has many applications in the field of supply. Able to slide in on terrain which would wreck a cargo plane, gliders can deliver all sorts of equipment including aircraft repair shops, field kitchens, complete radio, weather and radar stations, jeeps and trucks. Aircraft equipped with pickup gear can recover a glider from a field 1,200 ft. long with obstacles 50 ft. high at both ends (*see cover*). Even more important—a glider being retrieved can bring out wounded or equipment that needs salvage or repair. Moreover, a tow plane which drops a glider does not have to land.

The delivery of CG-4A gliders to operational units of the Troop Carrier Command began in January 1943, while first large-scale maneuvers with the CG-4A's were held the following May. The first and so far only combat use of gliders by the Allies was in the 8th Army sector of the Sicilian invasion with U.S. CG-4A's and British Horsas taking part. They contributed heavily to Gen. Montgomery's swift success in the early phases. With gliders already standard in German tactics and likely to be used on a larger scale in future Allied operations, the *Journal* is presenting the principal U.S., British and German types on the following pages.

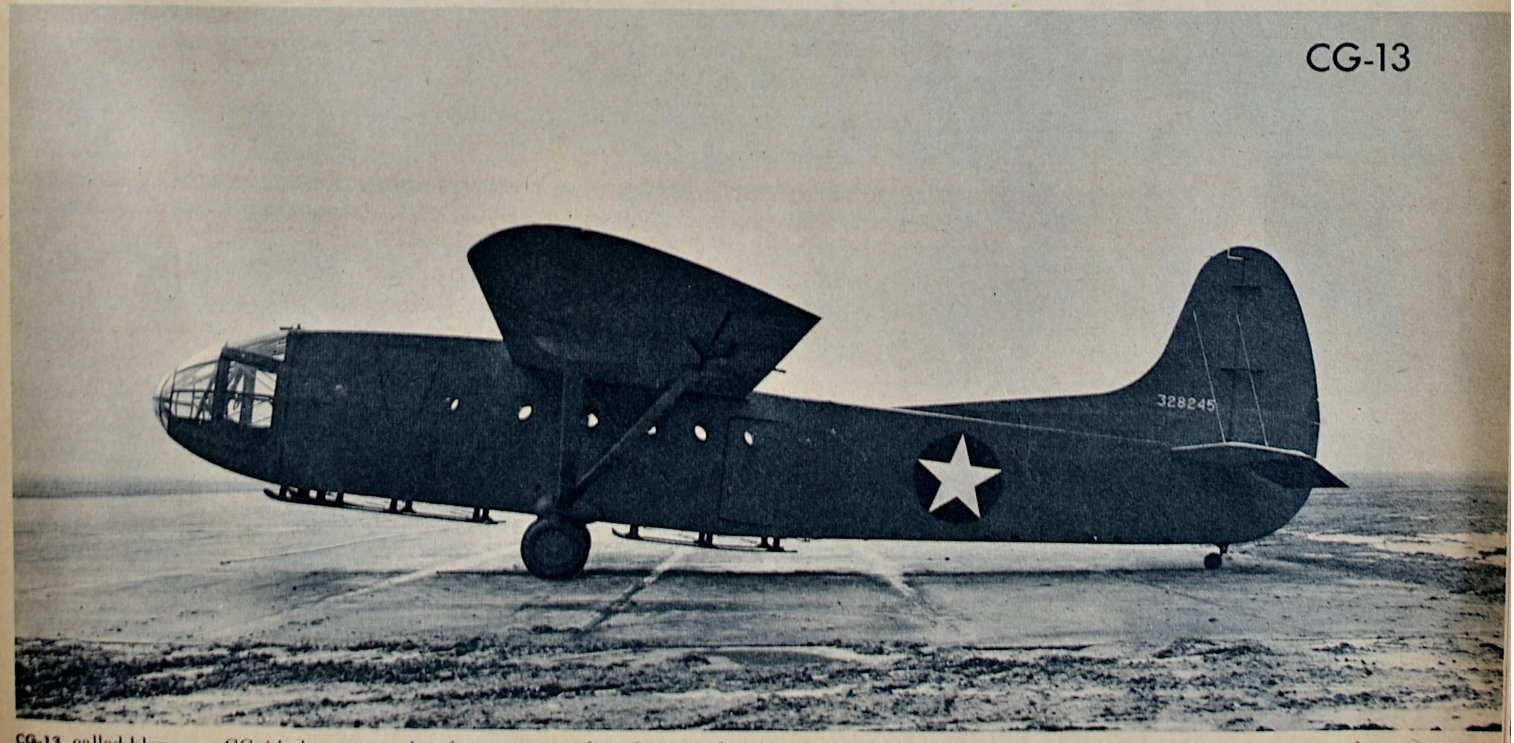
HIGH STRAIGHT WING and large fin curving well forward help identify CG-4A. Designed as tactical glider, it is not an ideal cargo carrier.

WITH CREW OF TWO, CG-4A can take 13 fully-armed men into battle. The load can include jeep or 75-mm. AT gun. Airflow spoilers atop wing give fast rate of sink.



CHIEF U. S. TOW PLANE is the famed C-47 or Skytrain here shown towing two CG-4A's. Air superiority in the locality is fundamental prerequisite for a successful glider operation. Fighters are needed for air cover before, during and after the landing to protect gliders and tugs which make up glider trains.

TWIN-BOOM GLIDER, typical example of advanced designs under development in this country, appears to be cleaner aerodynamically than many existing gliders. Both U.S. and British operational types are characterized by long bulky fuselage. Model shown above somewhat suggests "flying wing."



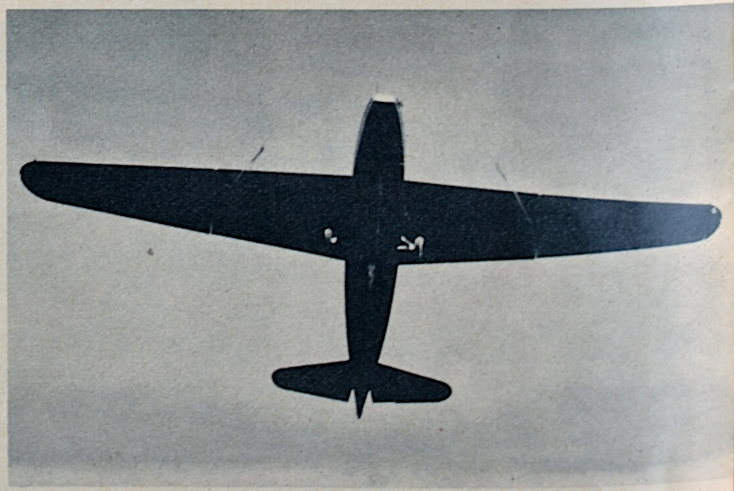
CG-13, called blown-up CG-4A, has same wing, but more spacious fuselage to accommodate over 2½ times CG-4A's load. Production model will have non-retractable tricycle landing gear. Able to carry a 105-mm. howitzer or 1½-ton truck, the 13 foreshadows an increased use of cargo gliders.

HORSA

AIRSPEED HORSA, shown being towed by Whitley glider tug, is RAF's most important glider. With slightly greater wingspan than CG-4A, it is 19 ft. longer, can carry 30 men. The Horsa and Hamilcar (*below*) are Britain's only operational types at the present time, although RAF also uses CG-4A, call-

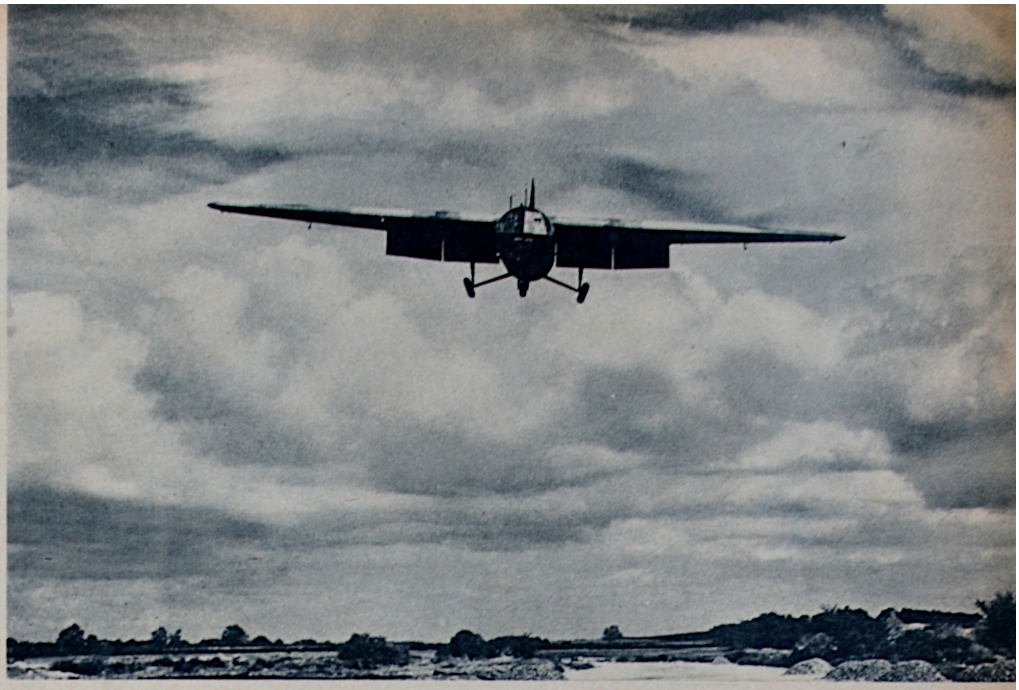
HAMILCAR

HEAVY BODY, huge wing, distinctive high fin and rudder serve to distinguish the Hamilcar. Undercarriage resembles that of U. S. glider types.



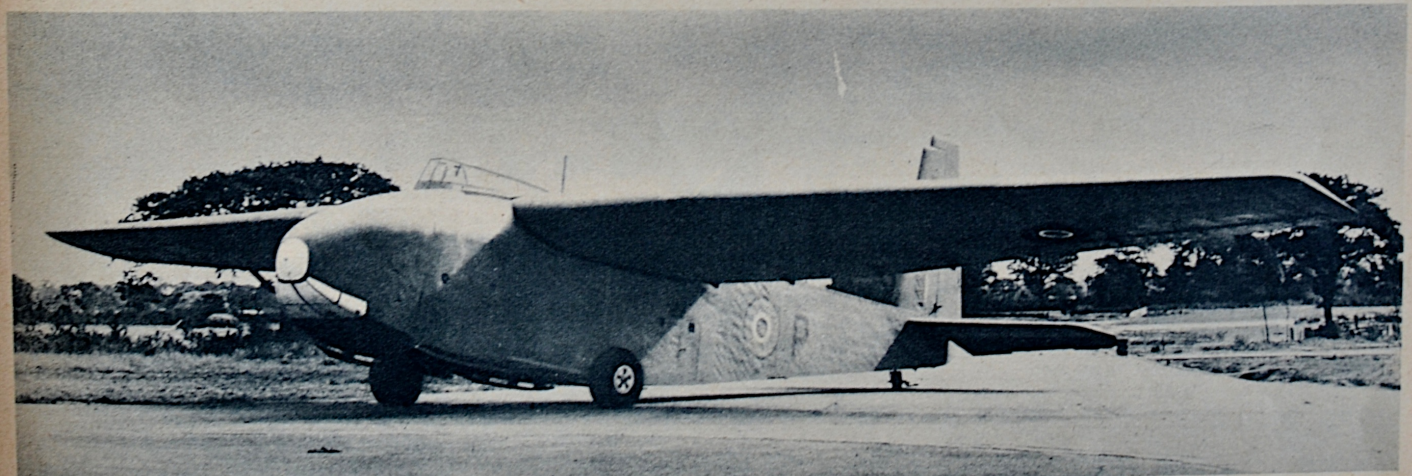
BIGGEST OPERATIONAL GLIDER of the Allies, the Hamilcar can carry airborne tank into action. About as long as the Horsa, it matches B-24's wingspread.

ing it Hadrian. High tailplane, long nose are Horsa's most important recognition features.

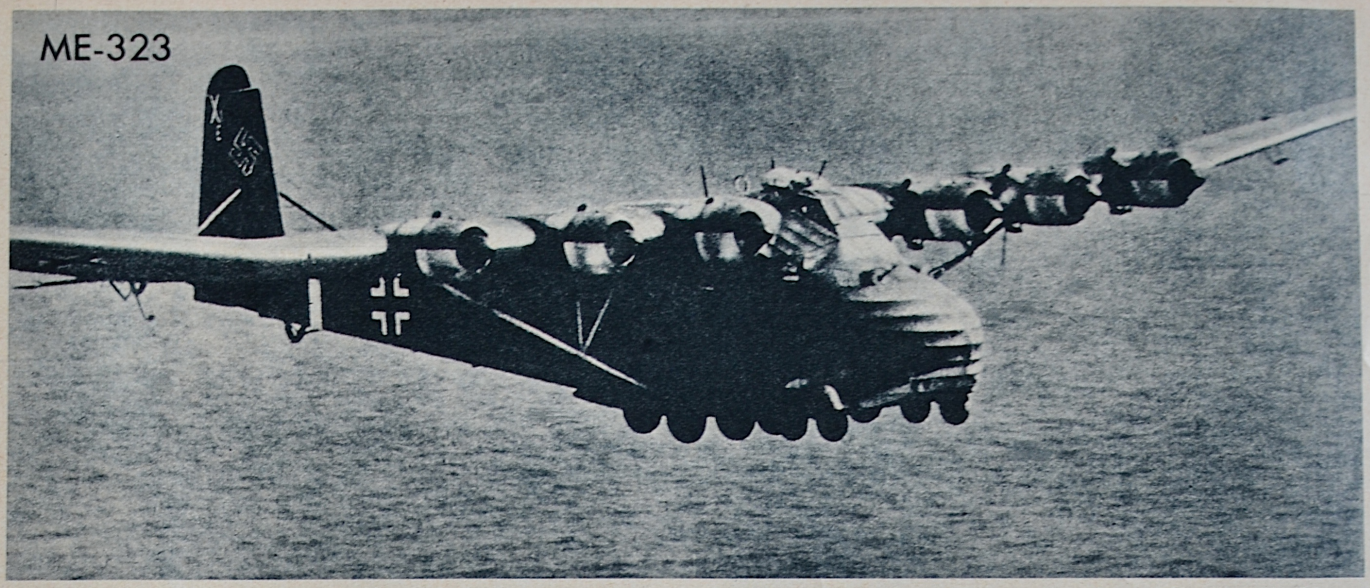


WITH FLAPS DOWN, Horsa can dive at a 45-degree angle. Standard practice is for glider train to approach at 100-ft. altitude to cut chances of radar detection, then climb to 300 ft. for good diving angle.

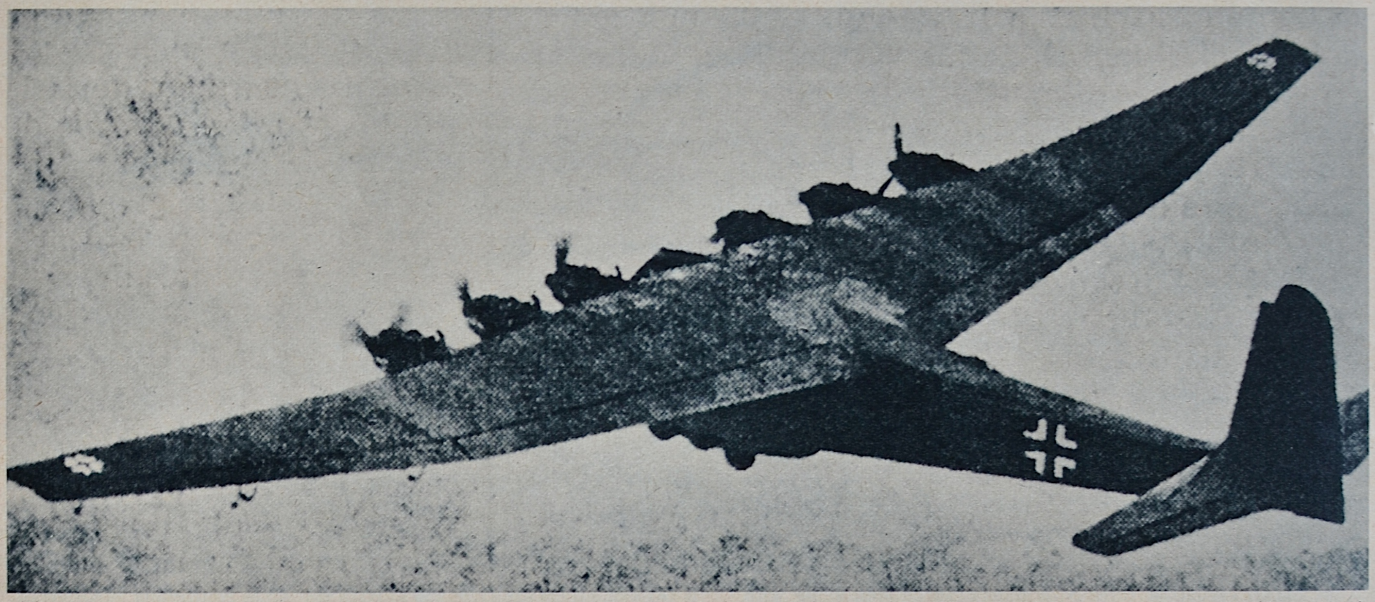
FIRST GLIDER to have tricycle landing gear, Horsa may also be seen without an undercarriage. Horsas were used along with CG-4A's in airborne phase of attack on Sicily for their first operational test.



COCKPIT ABOVE WING emphasizes Hamilcar's great size. Unlike the Germans, Allied experts do not favor powering big gliders although experiments with light engines have been made on both the Horsa and the CG-4A gliders. No quantity production of these models has been undertaken.



MESSERSCHMITT 323 is an aerial monstrosity with six engines, ten wheels to handle immense weight. Developed from the Messerschmitt 321 glider, first observed on a field at Merseburg in Central Germany, the Me-323 can carry 130 men or 18 tons of cargo including small tank, 3-ton truck.



SLOW AND VULNERABLE, Me-323's were butchered trying to evacuate troops from North Africa. It is, however, being produced in increasing numbers, particularly for the Russian front to counteract poor ground communications. Plane now has armor for crew, may carry up to 18 machine guns.

MAW OF Me-323 opens to receive its load. Claimed by Germans to be the largest land plane in the world, it has a top speed of 190 m.p.h., cruises at 135, has 500-mile range. Though Gnome-Rhône engines give total of 5,790 h.p., fully loaded Me-323 needs rockets for assistance at take-off.