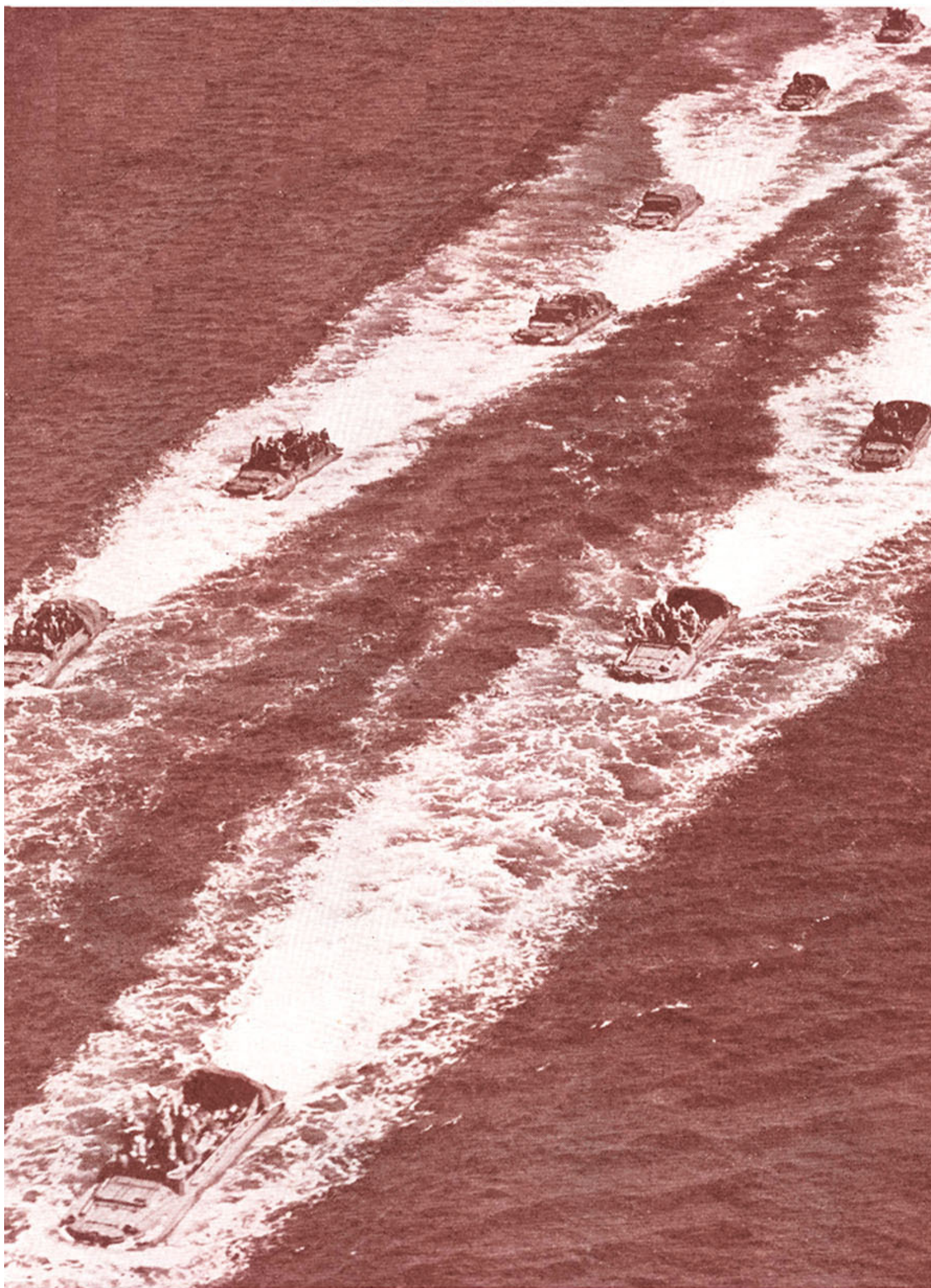


Collier's

JULY 31, 1943

SHORE-TO-SHORE INVADERS

BY GURNEY WILLIAMS



Dozens of "Ducks"—the Army's new 2½-ton amphibian trucks—plow through the ocean to prove they are as much at home at sea as on land. Their speed is a secret but their value in shore-to-shore invasion operations is obvious

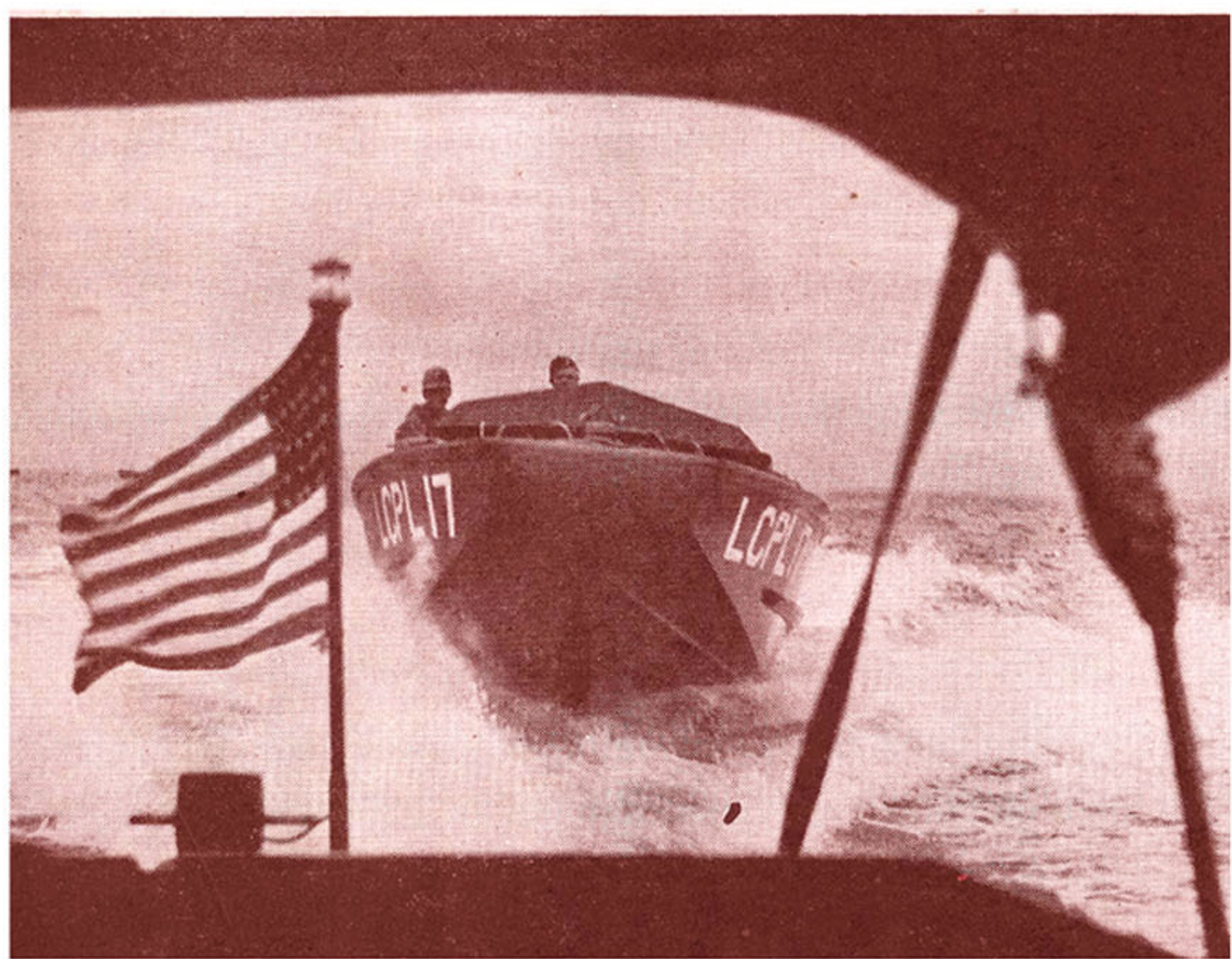
Storming an enemy beach from a transport is a Marine specialty, but the Army's new Amphibian Engineers travel in the same boats all the way

A BUNCH of sun-tanned soldiers wandered into Sarasota's Main Street one day last April dressed according to G.I. but wearing paratroopers' boots with pants legs tucked inside. Military Police from the local air base took one scowling look and swarmed down on the visitors. "Pull those pants legs," they barked, "outta those shoe tops!" But the amphibian engineer soldiers just laughed and laughed, because their dress (which includes the ski troopers' peaked caps and Navy rain suits) was regulation.

You couldn't blame the MPs, though; it was the first time they'd seen any representatives of the Engineer Amphibian Command, an invasion outfit that got under way in May, 1942, and has since quietly and busily worked its way out of the experimental stage. One unit of this new outfit got its baptism in the African invasion last November, and the 2,170-mile trek of thirty-some landing barges from Florida's west coast to the shores of Cape Cod this spring received some notice; but up to now anything else about the Command has been known publicly only by a few hundred shore vacationers and several thousand sea gulls.

The motto of the Engineer Amphibian Command is Put 'Em Across and its principle is aptly put by Brigadier General Daniel Noce, chief of the U. S. Army's amphibious operations in the European theater, who built this vital force from scratch.

2 Shore-to-Shore



A fast LCP (Landing Craft Personnel) roars toward the beach. This high-powered counterpart of the bootlegger boat of Prohibition has no ramp but backs quickly off the beach after the men leap over the side.

"Water between us and the enemy," he says, "is an avenue, not an obstacle."

The need for a special amphibian force is pretty obvious. Over long stretches of water, men and matériel must of course be carried by transports. For these the Navy is responsible, and their landings are referred to as "ship-to-shore" operations. The separate and distinct function of the amphibian engineers is "shore-to-shore" transportation. The shortest crossing might be a river too wide to span with a ponton bridge. The longest crossing under good weather conditions might be a hundred miles or more. Thus the shore-to-shore system may be used in crossing the Mediterranean, the English Channel, or from island to island in a series of hops all the way from New Guinea to Tokyo.

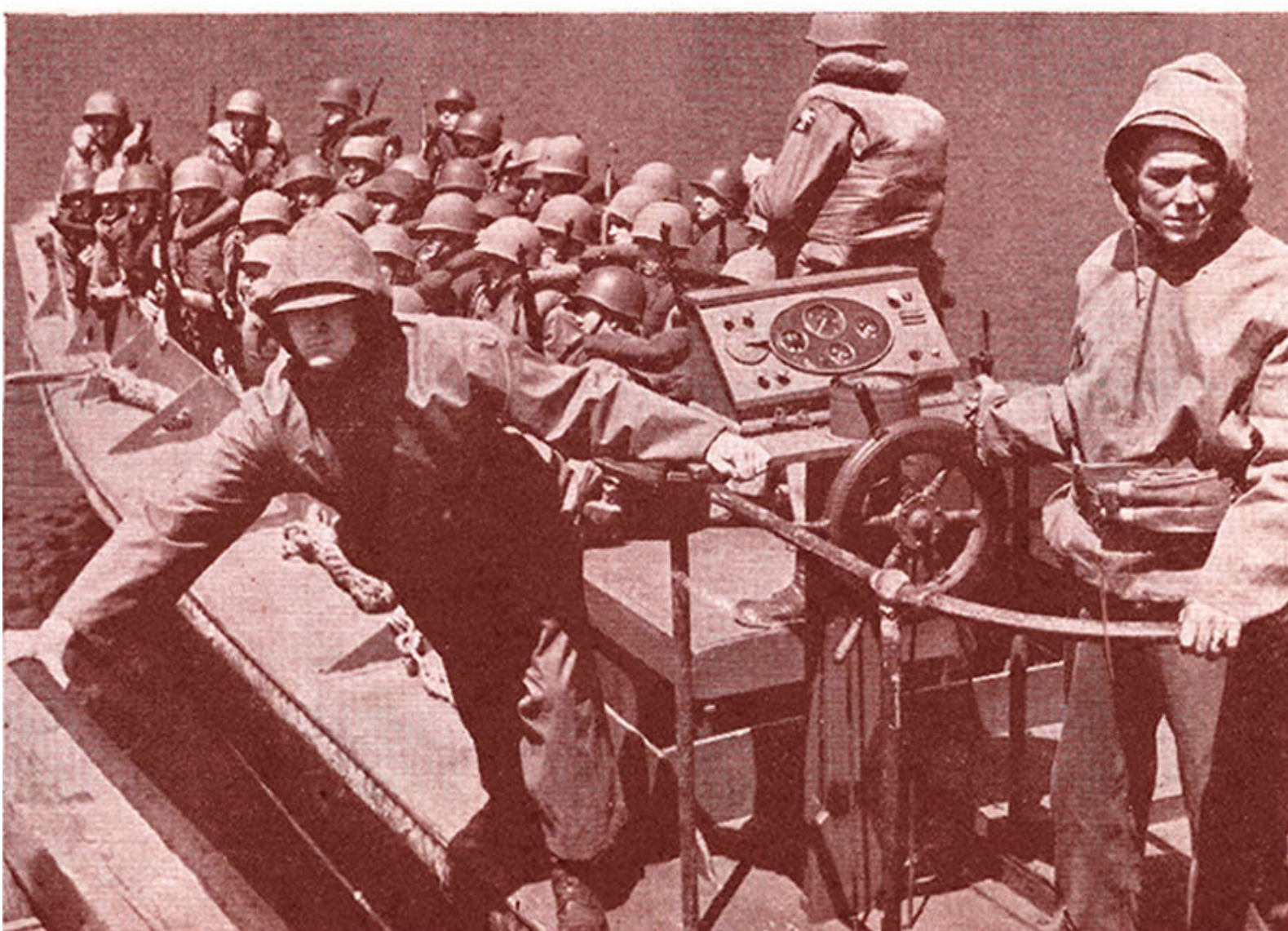
When military men in this country realized that a specially trained and equipped amphibian force was a necessity, they turned first to the Marines, who, long before this war began, had learned the technique of landing in lifeboats and getting the craft back off the beaches.

About three years ago the Leathernecks refined their equipment by adapting the special boats with which Prohibition's bootleggers put their heavy cargoes ashore from Florida to Maine. For the rum-runners, Caribbean boatbuilders had evolved a special type of high-speed, spoon-bowed, shallow-draft barge with a bottom designed to stand up under sand-bar groundings, and with the ability to back out into the surf for a quick getaway. This type of craft, equipped with a ramp in the bow for quickly unloading personnel and supplies, was the answer for the Army. The Navy's Bureau of Ships produced these boats for the E.A.C. and is still responsible for procuring all of the amphibian engineers' floating stock.

A little over a year ago, General Noce gathered together at Camp Edwards a nucleus of men from nearly every branch of the service. They represented the Coast Guard, the Marines, the Coast and Geodetic Survey; even British Combined Operations and the Royal navy.

While they worked out the details of shore-to-shore invasion, an officer-procurement program got under way. In reply to a letter dispatched to yacht clubs and other organizations having to do with boats came 15,000 applications from enthusiastic boatmen, professional and otherwise. Likely candidates were interviewed and within 90 days the officer ranks were filled.

Enlisted personnel (and some of the officers) consists largely of former clam



In the smallest of the ramp-loading barges, troops shove off from a "friendly shore" to attack an "enemy shore". Army crew wears the Navy rain (or zoot) suit and self-inflating belts

diggers, lobstermen, pleasure craft owner-operators, river boaters, speedboat racers, and farm boys who grew up with gasoline and Diesel engines. These and thousands of specialists—marine maintenance men, pilots, navigators, ship's carpenters, long-shoremen and demolition experts—were trained in one or more of the E.A.C.'s 58 special technical schools.

There are four elements to the amphibian engineer's mission. First is water transport of combat units from a friendly "near shore" to a hostile "far shore." Supported by naval and air forces the engineers must clear and mark the beach, unload supplies, demolish obstacles, build roads and lay out dumps for ammunition, gasoline and oil, water and rations. Their third job is the evacuation of the wounded, salvageable equipment and prisoners. The last gigantic chore is to resupply the combat outfits. All this may go on for weeks until adequate port and dockage facilities are available. E.A.C. personnel is trained to fight, but theoretically only 10% of their job is fighting.

Transport for Any Operation

What and how much the landing craft carry—and they can transport anything up to a 30-ton tank—is limited only by the number of boats available. The personnel work with everything from nine-man rubber boats to the huge LCT (Landing Craft for Tanks) which is manned by the Navy. In between, there is the small LCVP (Landing Craft for Vehicles and Personnel) and the medium LCM (Landing Craft for Mechanized Equipment). All are ramp-loading and crewed by three or four men whose titles—coxswain, boatswain, engineman and seaman—are something new under the Army sun. Completing the fleet are Patrol, Command and Navigation boats, and amphibian vehicles.

The latter class includes the now familiar Alligator (amphibian tractor) and the recently announced Duck, which got its name effortlessly from the manufacturer's designation DUKW. Almost incredibly versatile, it's a 2½-ton, six-wheel truck chassis with a boat built around it. A ride in a Duck from road to beach, through breakers, into the ocean and back again, is something astonishing in vehicular sensations.

One of the E.A.C.'s headaches was developing a standard landing craft which could be made in pieces and sent abroad in the hold of a transport. While all the Joe Knows bellowed that it couldn't be done, the Command and the Bureau of Ships and one Mr. Higgins of New Orleans went

4 **Shore-to-Shore**



Salt water dripping off its hull, a Duck rolls ashore after its sea trip. Ducks carry men or cargo.

ahead and did it. On a certain Saturday of last year the decision to adopt the new boat was made. On the following Monday several hundred E.A.C. men were at the Higgins factory to begin a 30-day training period on the assembly lines. Five days later, experts were overseas supervising the building of "far shore" assembly lines for the parts Higgins turned out. Plenty of these boats are bobbing around in foreign waters today. At the Higgins plant, 3,000 different parts are being fabricated, boxed, crated, lowered into the holds of transports and taken overseas in units of a hundred. The plan saves 80% of the space formerly required and has cleared the decks for planes, heavy machinery and other items that can't be stowed below.

The 2,170-mile trip completed in May by more than thirty E.A.C. barges from the Florida training camp to Cape Cod proved that the Army's salt-water soldiers are at home asea. The ten men in each boat slept on rough, built-in bunks and did their own cooking in temporary galleys. Gray-painted canvas coverings protected them from the light hurricanes and heavy seas they encountered, and at least two of the crews hammered together authentic Chick Sale booths and set them high out over the stern, half moons and all. A "ground crew" followed them up the coast in trucks, but a maintenance boat at the tail end of the mile-long column made all necessary repairs to engines and hulls.

A rough log of the trek tells the story of this, probably the Army's most unorthodox maneuver to date. Total elapsed time: 38 days; total running time: 26 days; average daily distance traveled: 87 miles. Farthest point from land: 45 miles. Longest nonstop run: 132 miles.

Incidentally, the 303 men and officers on this trip rode out storms and rough water like seasoned sailors, thanks a lot to Lt. Col. L. L. Barrow, of the Williams Hospital at Camp Edwards. Since the early days of training, Col. Barrow has been developing a seasickness remedy and now he's pretty sure he has a formula for all types of motion sickness. As part of the experiments, the world's first and only seasickness machine was planned and put together. It is something Rube Goldberg ought to see. On each end of a mechanical seesaw is a cubicle equipped with a seat, blackout shades and lights. Also, in doubtful cases, a washbasin. With a man in each chair, a couple of switches are snapped on, the cams, gears and levers begin to grind, and the cubicles move in three directions at once with distressing realism. (The Williams Hospital is thus probably the only institution of its kind that takes a perfectly well man and does its best to make him sick.)

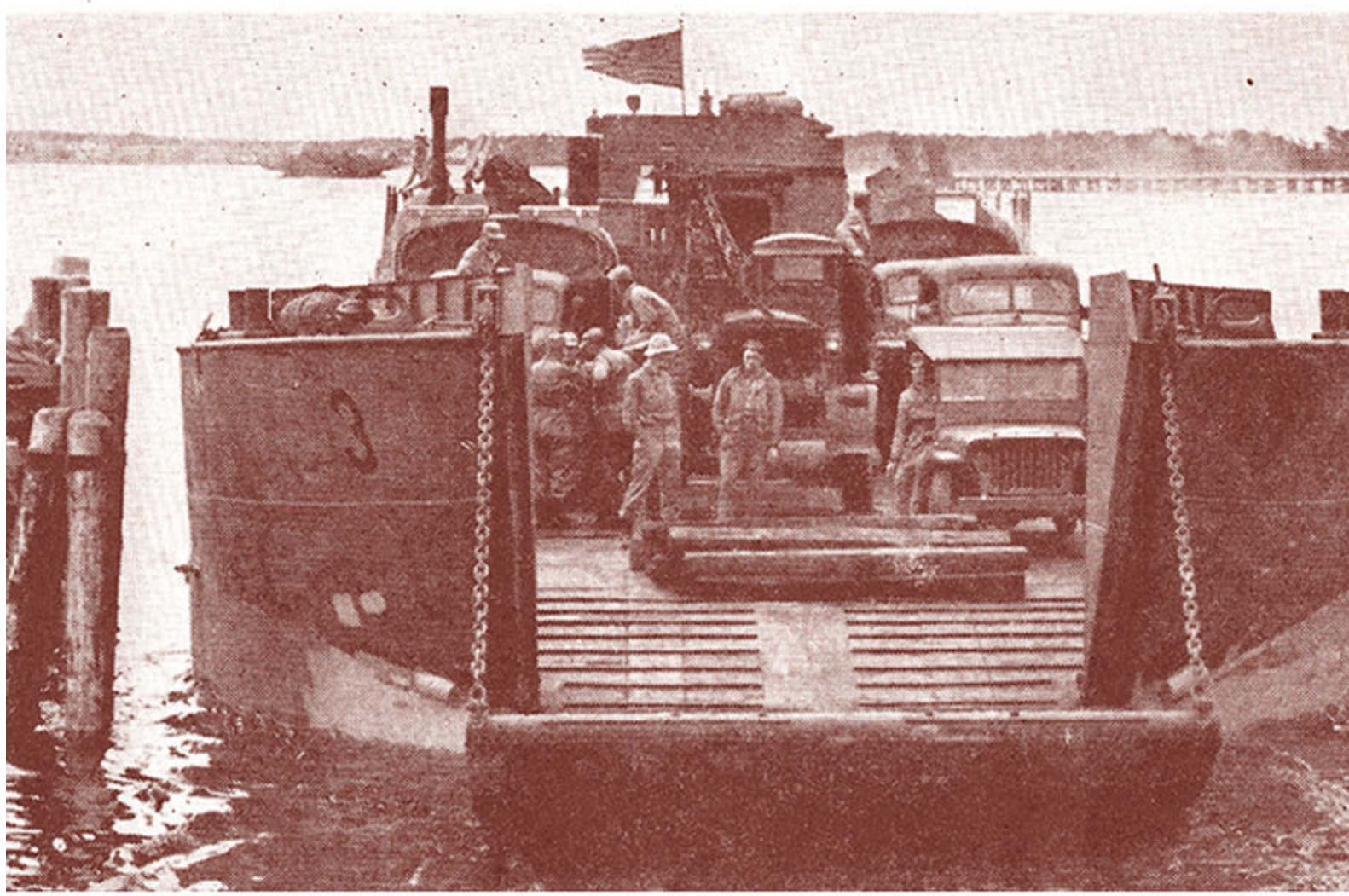
Some of the hundreds of men tested have succumbed to the machine in three

Shore-to-Shore

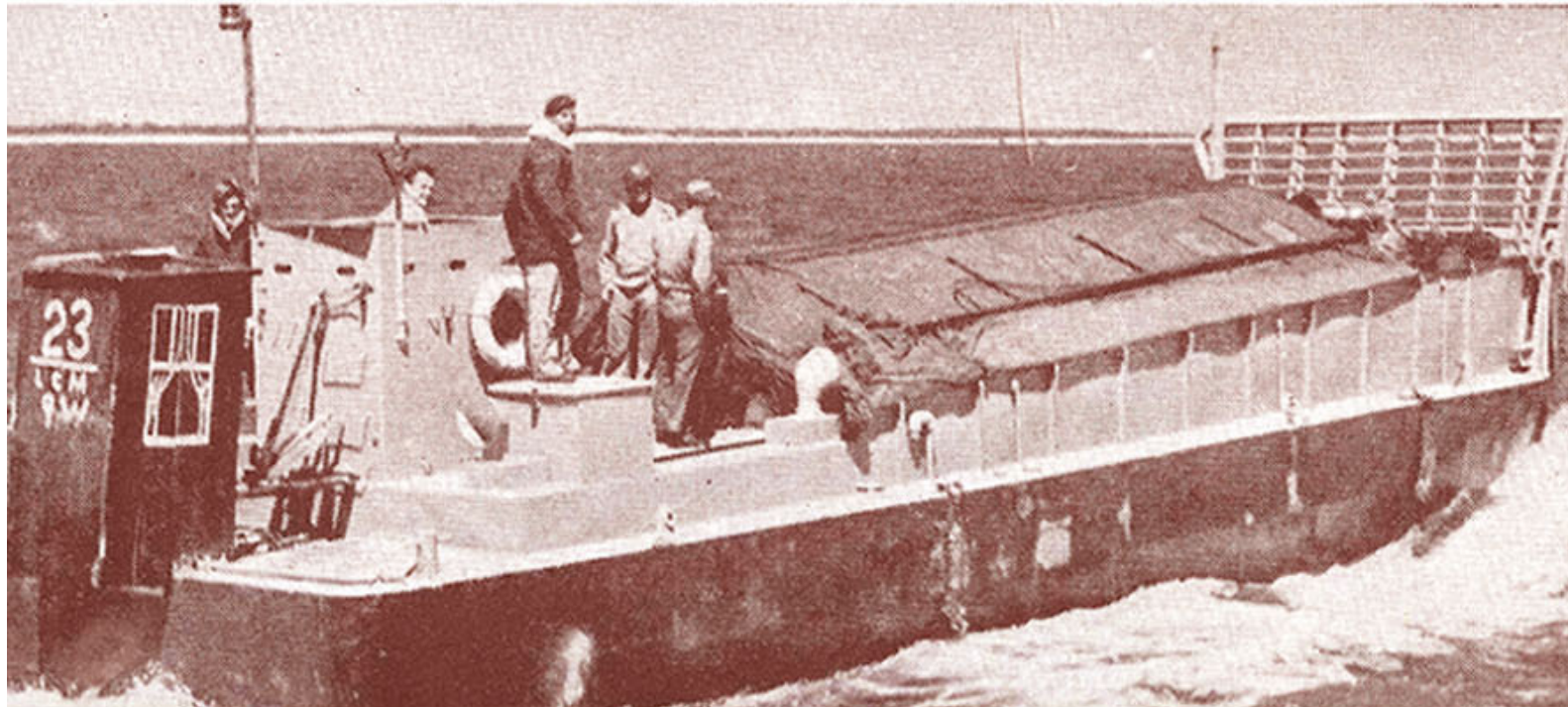
minutes; others have managed to hold out for half an hour or more. Almost all of them weathered a second indoor voyage with the aid of the capsule cure. This boon to motion-conscious travelers is known as U. S. Army Development Type 2116X318049Z—but you and I will have to continue to get green around the gills while in transit until peace comes and the Army releases the formula.

The difficulties encountered in the planning and execution of any specific invasion are enormous, and the variations are endless. No one knows this better than the boys who wear the red sea horse on the left breast and the blue and gold shoulder patch of Combined Operations: the eagle, tommy gun and anchor, representing the forces involved—air, land and sea.

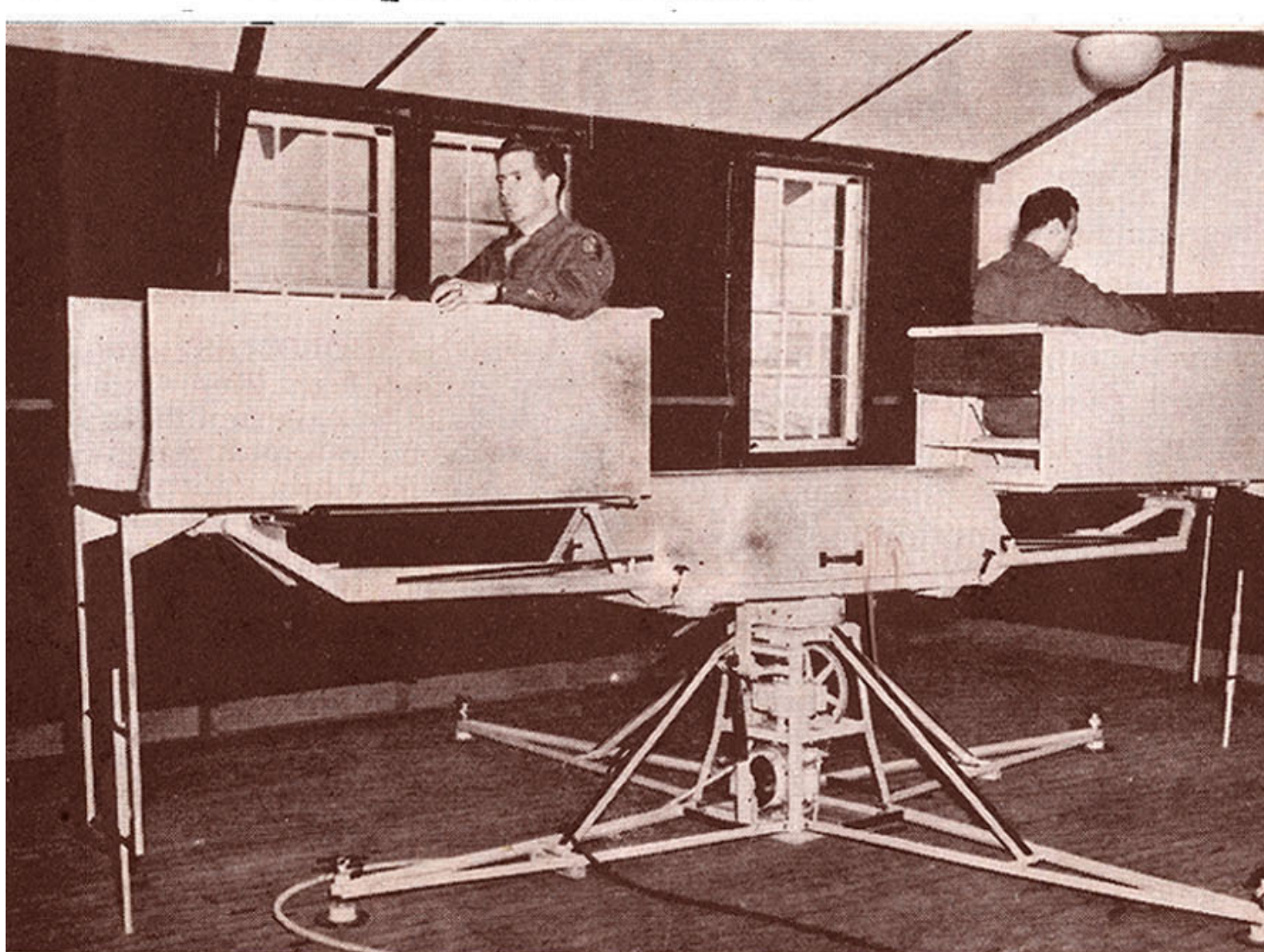
Keep a weather eye out for the doings of the American Engineer Amphibian Command. Theirs is the job of being among the first to start the ball rolling. It'll be up to them to keep it rolling until there are no more War Bonds for sale.



The largest of the landing barges transports heavy supplies and vehicles ranging from jeeps to tanks.



One of the 30-odd tank lighters nears the end of the 38-day voyage from Florida to Massachusetts. Bunks under canvas slept 10 Few barges boasted the "plumbing" seen here at stern with painted window



The world's only seasickness machine, shown at rest with metal hoods removed, determines the soldier's allergy to motion. Collier's correspondent vouches for its realism; he he lasted less than four minutes

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