

Official portrait (¾ front view) of the Swamp Skipper, Model 5, at Aberdeen Proving Ground in 1948. It had winches at front and rear.

Higgins' Swamp Skipper

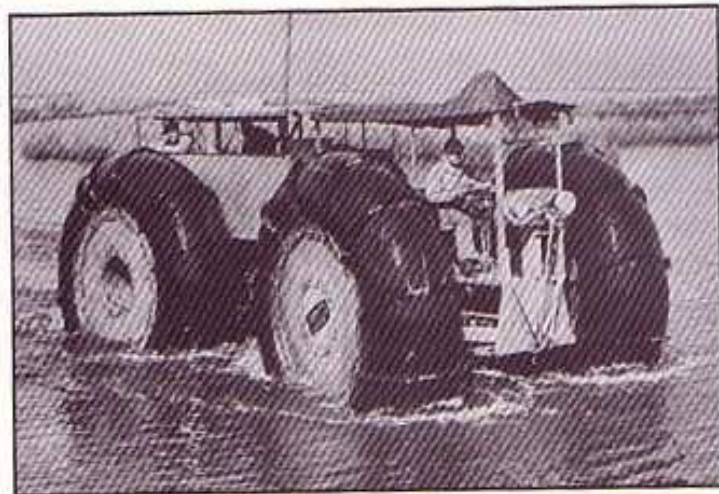
An early, amphibious, Big-Wheeler

In order to achieve larger ground contact area for improved flotation, designers have often turned to making the wheels (not to mention tracks) of their vehicles larger and/or wider. Nicholas Straussler, inventor of the Lypsoid tyres, believed in width, main-

taining an acceptable diameter. Other advocates of the wide type included Good Year with their Terra-Tires in the 1950s.

Large-diameter wheels had disadvantages but in spite of being awkward and impractical in most applications they

were used for some early amphibious vehicles where the overall size of the machine was of minor importance, or even advantageous. An inherent benefit of large wheels was that they could easily be made watertight and thus provide buoyancy.



'Marsh Buggy' used by Gulf Oil prospectors in 1940/41. This rig was claimed to have 'the largest tyres ever made' (by Goodyear). They had a diameter of ten feet, weighed 315 lb. each and were fitted on hollow, aluminium wheels.

An example of such a vehicle was the 'Marsh Buggy' (alias 'Swamp Buggy') which was devised for oil prospectors in America in 1940/41. With its huge tyres, fitted with chain-like fins, this rig could run over dry ground and mud as well as in water with equal ease. Other prototypes with floating wheels were Agnides' 'Roller' and 'Rhino' (see *W&T* 16).

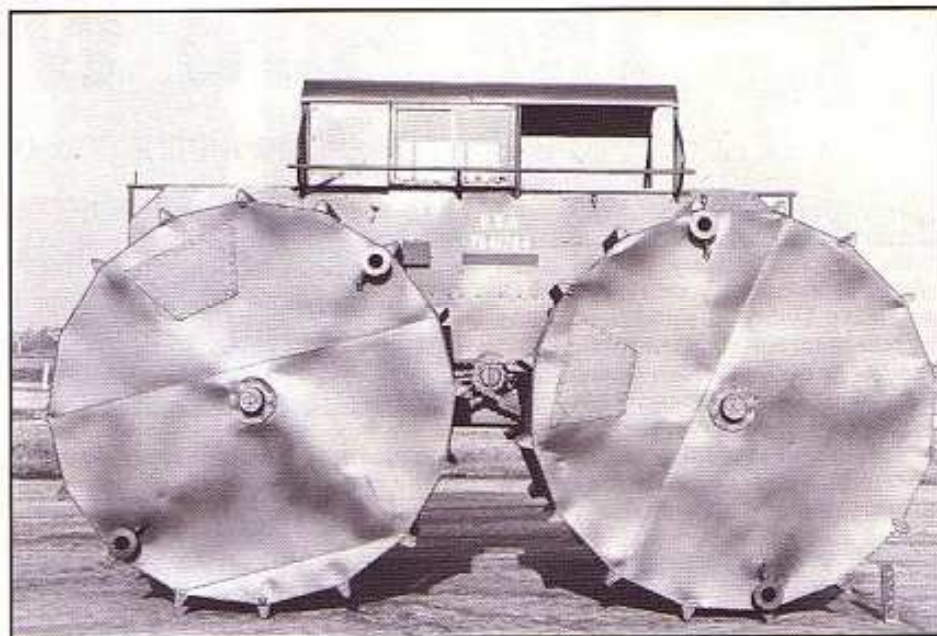
The machine we are looking at here was, like the 'Marsh Buggy', designed and built for non-military purposes, namely rescue and survey work in the Louisiana swamp country. The manufacturer was J. C. Higgins Boat Company and its price is said to have been \$6,000, in the late 1940s. The US Army in those post-war years experimented with numerous all-terrain vehicles (ATV) and propulsion systems and acquired one of Higgins' monster swamp buggies in 1948.

Known as the Swamp Skipper, Model 5, the amphib carried US Army registration 7041764. It had huge welded-steel drum-type wheels with a diameter of about seven feet, which could be fitted with pivoting 'steppers'. They were chain-driven, via a 5-speed gearbox, by an air-cooled engine of about 40 bhp and it had lever-actuated skid steering. One of the (unsprung) axles was centrally pivoted, providing limited articulation to maintain ground contact of the wheels (most of the time) in agricultural tractor fashion. Overall dimensions were approximately 15 feet long, 12 feet wide and 10 feet high (our sources of information do not quite agree on the precise details).

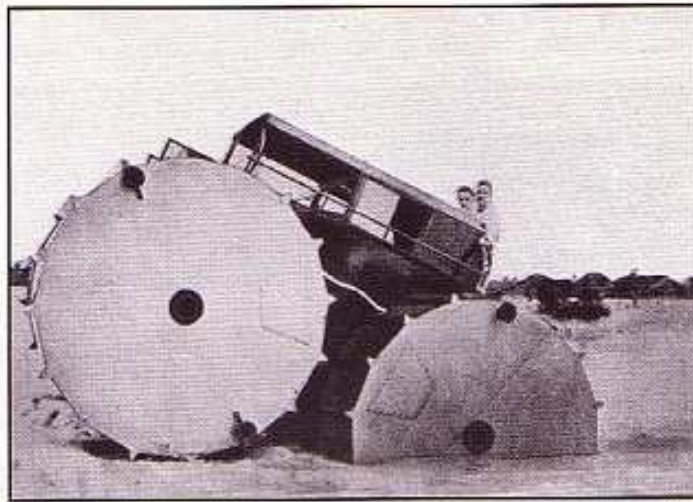
The Swamp Skipper's main disadvantages were its lack of load space, power and speed and the military at Detroit Arsenal and Aberdeen Proving Ground soon discontinued the tests. The cumbersome machine remained in the APG inventory (numbered MCV 361) for a year or two but was then auctioned and bought by an Army surplus dealer who in the early 1950s sold it to one Bill Oliver in Fort Lauderdale, Florida. Mr Oliver, according to a 1954 write-up in *Mechanix Illustrated* bought it unseen; he had only called to enquire about 'any



The Higgins-built amphibian at Aberdeen Proving Ground seen here with and without its 40-inch 'steppers'. Reportedly (and not surprisingly) it was also tried with steel rings welded around the wheel outer edges to improve the ride on hard ground. Stencilled below the USA registration number was 'Swamp Skipper 327-22-000' (hardly visible here). The Automotive Division Test number was 764.



big wheels they might have' for a hunting in the Everglades, but of his experiences and the ATV's subsequent fate we have no knowledge (yet). □



The machine when in possession of its civilian Florida owner, who called it his 'Swamp Cadillac'.