



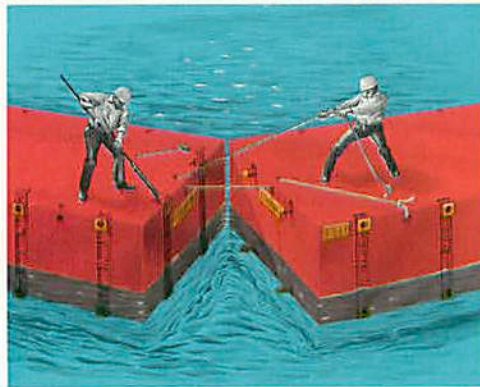
A 12,000 ft. capacity rig moving onto location in the Great Salt Lake. At a draft of 4.0 ft. this assembly has a buoyant capacity of 1000 tons.

The Way To Be Exactly Where You Should Be For Petroleum Activities

Flexifloat

CONSTRUCTION SYSTEMS

Flotation For Seismic, Drilling, Completion and Workover Operations in Land Locked Waters, Marshes and Shallow Bay Areas.



Top: Drilling operations under way in Lake Texoma. The two Flexifloat drive-on transport barges carry service trucks and drilling materials directly to the well site, thereby eliminating the need to rehandle material at the shore.

Bottom: Two assemblies at the drilling location serve as transport barges for service equipment and materials.

Top: Lifting clevis at balance center of Flexifloat facilitates unloading and placing the unit.

Bottom: The Flexilock system is divided into two locking units, one male the other female. An inexperienced crew of two or three men with a hammer, pry bar and short sections of rope can assemble two modules in a few minutes.

Promising development areas still exist that have been considered too difficult to reach for seismic work, drilling and other requirements to achieve economical production. Now the industry has discovered the means to locate and supply conventional land-based equipment at exactly the desired spot by use of Flexifloats in land locked waters, marshes and shallow bay areas.

Flexifloats, in both slotted and center-well configurations, have been used for core and seismic hole drilling. Geophysical surveys have been performed on Flexifloat assemblies at locations from the swamplands of Louisiana to the lakes and bays of Alaska, in water depths ranging from 2.5 feet to over 60 feet.

In addition to seismic work, the portable, shallow-draft Flexifloat units have been used in numerous applications involving drilling, well completions, laying flow lines and well workovers.

One recent drilling application was in Utah's Great Salt Lake where Flexifloats provided economical flotation in this remote location. In this operation the drilling barge was comprised of nine rows of Flexifloats locked together to form a barge that was 180' long by 90' wide, with a moon pool of 20' x 10'. Two service barges, powered by 300-horsepower out-drives, were used to move the drilling barge from the shoreline to the drilling site and later to move equipment from the shore to the rig.

Robishaw Engineering's Flexifloats have been used over the years in other drilling and well service applications. The Robishaw staff is experienced in determining the optimum configurations required for these operations.

WHAT IS THE FLEXIFLOAT SYSTEM?

The Flexifloat System is a combination of standardized interlocking flotation modules and attachments to provide a tailor-made platform to meet various job requirements. Flotation modules are manufactured and stocked in three model series. Each series is designed for a specific range of operational capabilities. The sizes of the three model series are:

Series	Width	Depth	Length	
			Duo-Floats	Quadra-Floats
H-50	7.5'	46.0"	15.0'	30.0'
S-50	10.0'	60.0"	20.0'	40.0'
S-70	10.0'	84.0"	20.0'	40.0'

All Flexifloats are designed for overland transport by truck and trailer. A built-in lifting clevis at the balance center provides for easy lifting from the transport and into the water.

Flexifloat modules can be locked together on both sides and ends by utilizing the integral male and female lock connections to form a rigid platform. Configurations can be designed that are capable of supporting the heaviest land-based rigs.

All units are built using special manufacturing procedures and under close quality control to assure complete interchangeability and ease of assembly in the field. The patented lock connections are able to withstand both tension and shear loads of up to 140,000 pounds per pair. All modules have a deck work load capacity of 5,000 psf.

The Flexifloat System includes several means of anchoring and positioning the assembled modules. For most applications, the Flexispud attachments are used to effectively resist lateral hull movement caused by wind and wave forces. The Spud Well, which serves as a vertical guide sleeve for the Spud Column, connects to the Flexifloat by either male or female lock connections. In deeper water depths, or for operation in extreme weather conditions, a variety of anchor arrangements to maintain location over the drill site may be employed.

CONFIGURATION DESIGN ASSISTANCE AND SERVICE

Robishaw Engineering, in conjunction with your staff, will design the proper configuration to meet your specific requirements. A Robishaw representative will be present at the launch site for consultation, if desired.

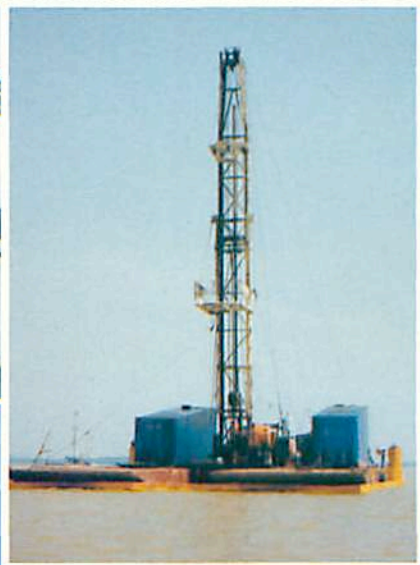
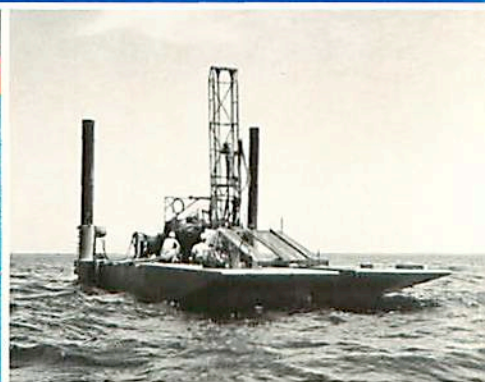
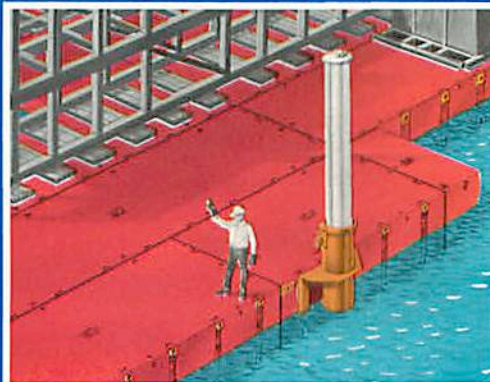
If any unexpected condition arises while the units are in service, Robishaw Engineering has personnel available for advice to meet the situation. As Flexifloat assemblies are comprised of a number of individual, water-tight sections, damage if it occurs, is usually confined to single units which can be readily field repaired or replaced with minimal downtime.

Top: Flexispud attachments lock onto the Flexifloats, and the spud is seated into the lake floor to secure the barge's position.

Bottom: Flexifloat assembly with Flexiramp for ease in drive-on-and-off loading of wheeled vehicles at the shoreline.

Top: This assembly used a slotted configuration for drilling shot holes for seismic exploration. The location was in semi-protected water 60' deep. These Series S-50 Flexifloats were held in position with 75' long gravity spuds, driven by hydraulic winches.

Bottom: Flexifloats are being used to support a truck-mounted workover rig in Lake Texoma.



Utilizing the same Flexifloats used in the Lake Texoma drilling operations, field personnel rearranged the modules to make a lay barge assembly for the installation of flow lines from the wellhead to shore.



Now, with Flexifloats you can more easily position equipment for seismic, drilling, completion and workover operations at the most efficient spot . . . inland waters, marshes or shallow bay areas. We invite your inquiries about your specific needs. Robishaw Engineering will help you be where you need to be with its flotation equipment, engineering assistance, and experienced service to the petroleum industry.



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