

**Thern**

# Case History



Marine



## Recovering the B-25 Plane



D&J Machinery used Thern TA winches with a 4-part line rig to firmly and precisely lift a vintage B-25 from the bottom of Lake Murray.

All over North America, Thern winches are part of a wide variety of lifting applications and every one is different. That was certainly true for a project with D&J Machinery of South Carolina in the summer of 2005. Located 150 feet below the surface and sitting on the muddy floor of South Carolina's Lake Murray was a piece of the past- a vintage World War II era

B-25 bomber. D&J was going to raise it back to the surface and Thern air winches were chosen to help.

The circumstances of this particular lift were unique for a couple of important reasons. First, unlike most of the jobs Thern winches are involved with, this lift was an underwater lift where precision control and handling of the bomber were crucial to the success of the lift. Second, because the bomber was antique, underwater, and buried in the lake's mud floor, the load was extremely fragile compared to the standard Thern load. It would all come down to precision. Would Thern's TA7 air winch be up to the task?



One of the two BIG RED air winches used on D&J's lift barge.

The two Thern "Air Tuggers" (TA7-36MX1) employed by D&J were part of a utility lift barge. The winches, connected to a 4-part line rig, served as both the primary and secondary units in case any problems occurred during the lift.





**Above:** The crew prepares the equipment; including the Thern TA series BIG RED air winches, for the lift.

**Below:** The B-25 shown successfully raised from Lake Murray’s muddy floor, the smooth control of the TA Series Air winches did not require any assistance!

D&J had only estimates as to how much the load would weigh; they knew the weight of the plane itself, but factoring in the mud made it an estimation game. With that in mind the divers located the plane, attached the lift cables and the process began. In the end, all 41,000 lbs. were successfully raised to the surface.

Reports on the TA7’s performance were excellent! The lift was successful, due in no small part to the high level of control and security provided by Thern’s TA series air winch. D&J reported that the TA7 was so precise that they were able to safely maneuver

the plane to within two inches of the barge! They specifically complimented the band brake feature, which they credited as the primary reason for such a smooth lift. The barge also had competing winches on board, but D&J said they strongly preferred the Thern winches because of the superior level of control they afforded their team.

The Murray Lake Lift represents a delicate lifting procedure in a special environment where Thern TA series winches performed above and beyond expectations, showcasing Thern, Inc as a leader in precision lifting equipment. The B-25 lift is the subject of a History Channel documentary as part of the “Mega Movers” series.



## APPLICATION DETAILS

Lifting or pulling:	Lifting
Line pull required:	41,000 lb with 4 part line
Line speed required:	30 fpm
Travel distance of load:	175 feet
Power source:	Air

