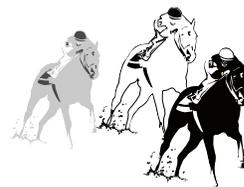


# Deep Water Handicap



## Race Results

This year there was no Triple Crown winner and also no winner in the Amelia Earhart Deep Water Handicap. As previously reported, Mike Kammerer's "In Search of Amelia" effort scratched when its underwater search technology proved to be less efficient than advertised; Dana Timmer's "Howland Landing" search was a nonstarter; and we can now report that the David Jourdan's Nauticos \$1.7 million dollar expedition, led by Earhart author Elgen Long, completed 27 days of searching before the failure of the cable winch hydraulic system brought operations to a halt. An estimated two-thirds of the targeted area had been covered without result. Jourdan says that Nauticos plans to return to the area near Howland Island in the near future to complete the search but no date was given.

According to a press release on the Nauticos website (www.nauticos.com) the Nauticos search area was developed using the company's proprietary RENAV system to analyze data collected by Long and others. However, a key element in Long's data has recently been shown to be in error.

In his book *Amelia Earhart: The Mystery Solved*, Elgen Long alleges that Earhart's statement "wind 23 knots" in an in flight transmission heard by the radio operator in Lae, New Guinea, refers to a headwind. He also interprets her message "speed 140 knots" (just over 160 mph) to be airspeed rather than groundspeed. Such an increase over the airplane's flight-planned cruise speed of 150 mph could only be achieved by higher power settings which would use more fuel and would explain why the airplane ran out of gas in the area where Nauticos was searching. Long justifies his assumptions about wind and speed by saying:

According to the Lockheed Model 10 Flight Manual, with

a headwind of 26.5 mph (23 knots) the correct true airspeed for maximum range is 160.5 mph.

But that's not what the manual says. In a California university collection TIGHAR member Alan Caldwell (#2329) found the full text of Lockheed Aircraft Corp. Report No. 487 "Range Study Of Lockheed Electra Bimotor Airplane" by C.L. "Kelly" Johnson dated June 4, 1936. The document specifically addresses the performance of the Model 10E on long range flights and contains the performance chart that Long used to draw his conclusion. Unfortunately Long seems to have miscalculated. As discovered by TIGHAR member Oscar Boswell (#2340), even if Long's 26.5 mph headwind assumption is correct, the recommended adjustment in airspeed is only 5.3 mph, not 10.5. There is, in fact, no correlation between Lockheed performance data and Long's assumptions about what Earhart said.

Elgen Long's guess about where to search for the Earhart Electra could, of course, still be correct but it now appears that the data upon which Nauticos has defined its search area are flawed.

*This chart is a facsimile of the actual performance chart appearing in Lockheed A/C Report No. 487.*

