

Aspen Launch Newsletter

Proto Type Makes Maiden Voyage

September 16, 2008 our 26' test hull splashed for the first time – how sweet it IS. Unfortunately, I was not on board due to some complications from breaking my heel in August. The 26's first run was good, but as is normal the boat had a few glitches-a hose clam here, a drip there after about 30 minutes the team had her running well and ran preliminary performance numbers and determined we needed a slight (1.25 inch) reshaping of the transom to smooth the flow in that area. Yesterday we were back out on the water in crystal clear conditions and running 100% with our hull prototype. Here's what we found:

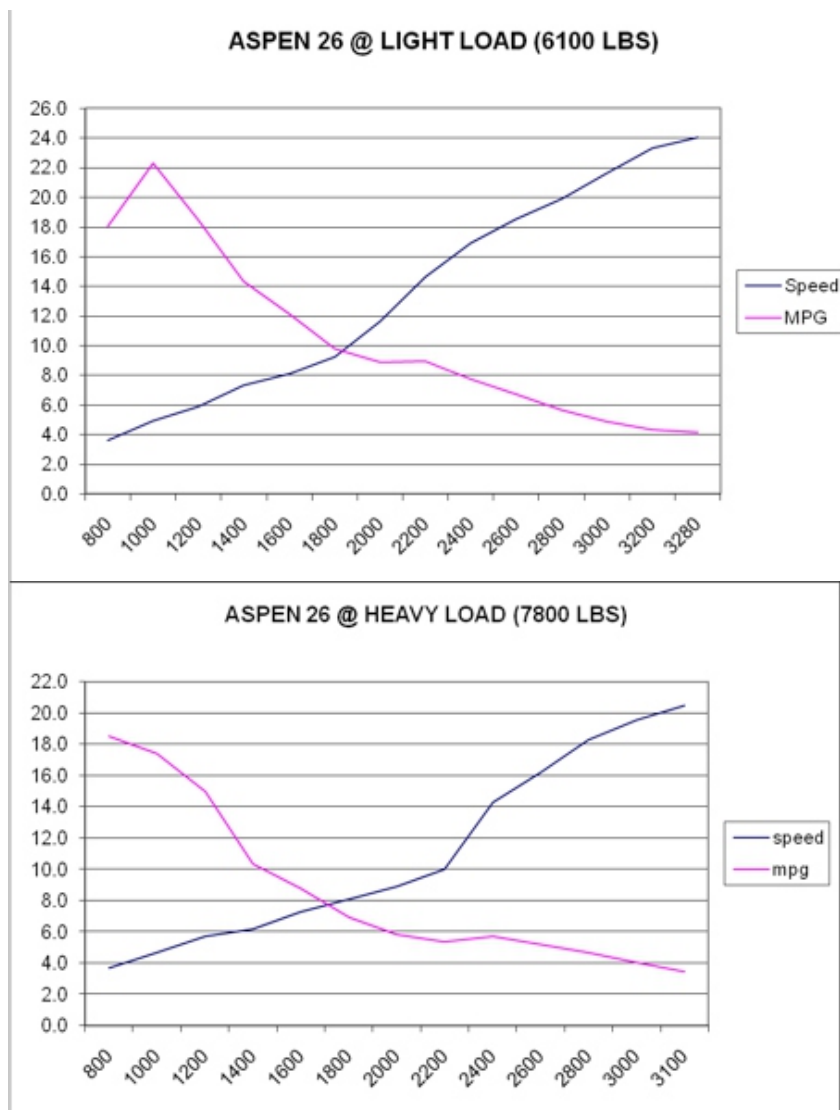
Straight Line tracking hands off the wheel is balanced and true. This was the biggest unknown in the design as there were so many variables involved to get this just right at each speed. Aspen's patent pending Self Balancing Power Proa hull design works delightfully. Total helm correction is just 3 degree's and it's consistent from 5Mph through 24Mph. Few mono hulls are this close. The helm is light and balanced at all speeds. Slow speed tracking and high are direct, predictable and natural. While running at any speed you have no sensation at all that it is a single engine cat.

Top Speed heavy ship with the single Yanmar 110Hp engine and a test weight of 7,900 pounds carrying 4 people, 450 gallons of water ballast, tools and gear was 21Mph. This equates to a 39' Aspen with all tanks full and all gear and people on board. The 39' will be 1-2 Mph faster yet in this heavy ship condition due to its proportionally longer waterline length and proportionately larger 380Hp engine. Fuel economy was exceptionally good, we used 1.28 gallons to run a measured 6 mile course this equates to 4.8 Mpg running at 17.5 Mph. Heavy the 26 burns just a little over 3 gallons per hour, truly exceptional for a 10 ft beam 7,800 pound all sea capable 26.

Top Speed Light ship (6,700 pounds) was 24.5 Mph, fuel economy at 75% power, cruising at 18.8Mph was 6 Mpg again burning about 3 Gph. As many of you know, this is exceptional performance the typical 26-28'er would burning 9-12 gallons per hour or more.

Tunnel Clearance the tunnel runs dry and is well clear of the water at all test weights. This was a design goal to reduce drag and insure soft ride in all seas. The new stepped tunnel aft of the area where the typical cat's standing wave falls off is working as planned.

Fuel Economy at trawler speeds 7.5 Mph preliminary testing shows 12-14 Mpg depending on load, we have several adjustments and tests that could extend this even farther. When viewing the charts there are some very unusual efficiency's available if you're willing to go 4.5 Mph 18-22Mpg. Speed/Fuel Burn is on the left in MPH/MPG, RPM is at BTM.



Areas to Tune and Improve

We have several areas that we want to test and adjust. Steering rate with the current steering ram is a bit slow we will install a faster acting ram. The bows mist a tiny amount at the heaviest loads with max speed we will reshape a small section. Slow speed near dock maneuvering is sleepy we will add 2" to the rudder.

Testing Yet to Do

Big Seas/Storm testing in the Straights of Juan De Fuca, Best Prop's – Trawler speeds, Bow thruster-stern thrusters.

Summary

We have a World changing home run. You all need to come take a ride and see for yourself (Wednesdays and Saturdays in October). The boat is a delight to run and handle but watching it run by you from the dock at 14-24Mph is just something to see. The bow opens just a small shift of white water 6" high, the mid-ship wake is only a ripple, the wake at the transom is reminiscent of a 10 ft. inflatable tender, the tunnel shows 10-14" of light right through the center and the hulls inside wake are minimal. The boat passes by almost silently, it's special, it just oozes efficiency.

