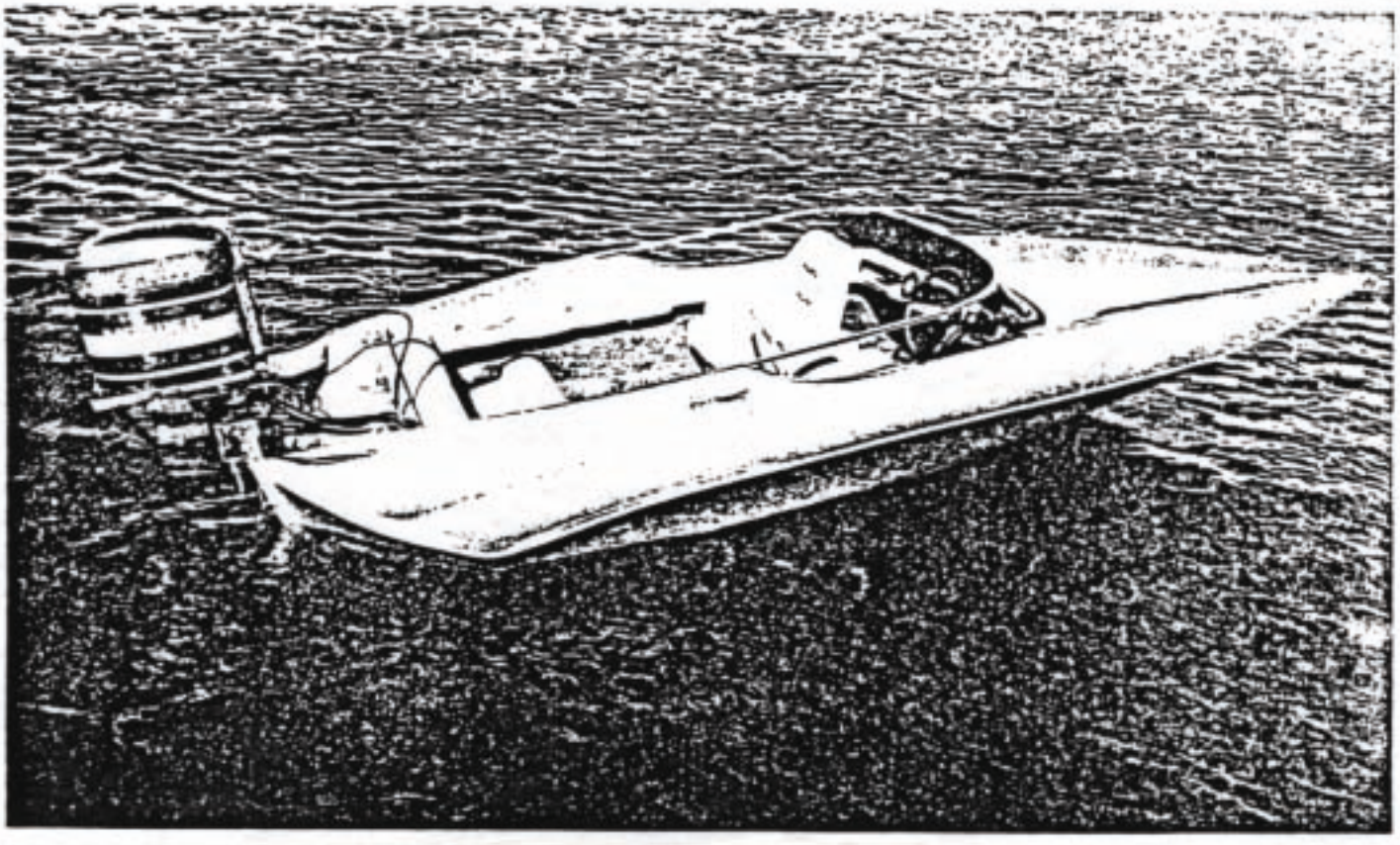
HydroStream 17' Vector

Power: Mariner 115



When you look at the factory address for HydroStream Boats, you'll probably wonder why this Minnesota based outboard high performance stalwart participated in the West Coast version of the Performance Trials.

Undoubtedly, HydroStream earned their reputation by building some of the fastest clamp-ons to ever hit the waterways east of Colorado, however, scheduling difficulties prohibited their attendance in Cypress Gardens this year. Since we've always been especially interested in monitoring this provocative manufacturer's innovations, we were glad that HydroStream made the long trek to Lake Mead from the deep snow country. If you've ever dreamed of owning a super performing compact outboard you will also be pleased that the extra effort was made.

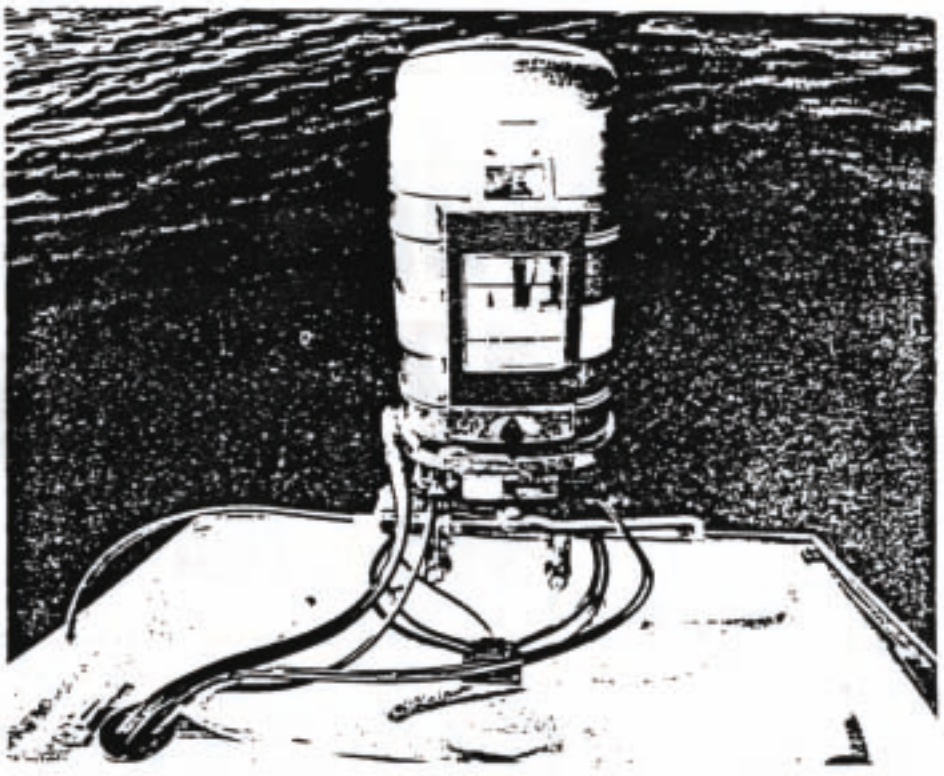
Shortly before this year's Trials, the Powerboat staff discussed with HydroStream's management what boat and engine package, given today's market, would best represent this long time Performance Trials participant. After a lengthy discussion, HydroStream decided to build, and more importantly rig a 17'1" Vector, not simply for top-speed

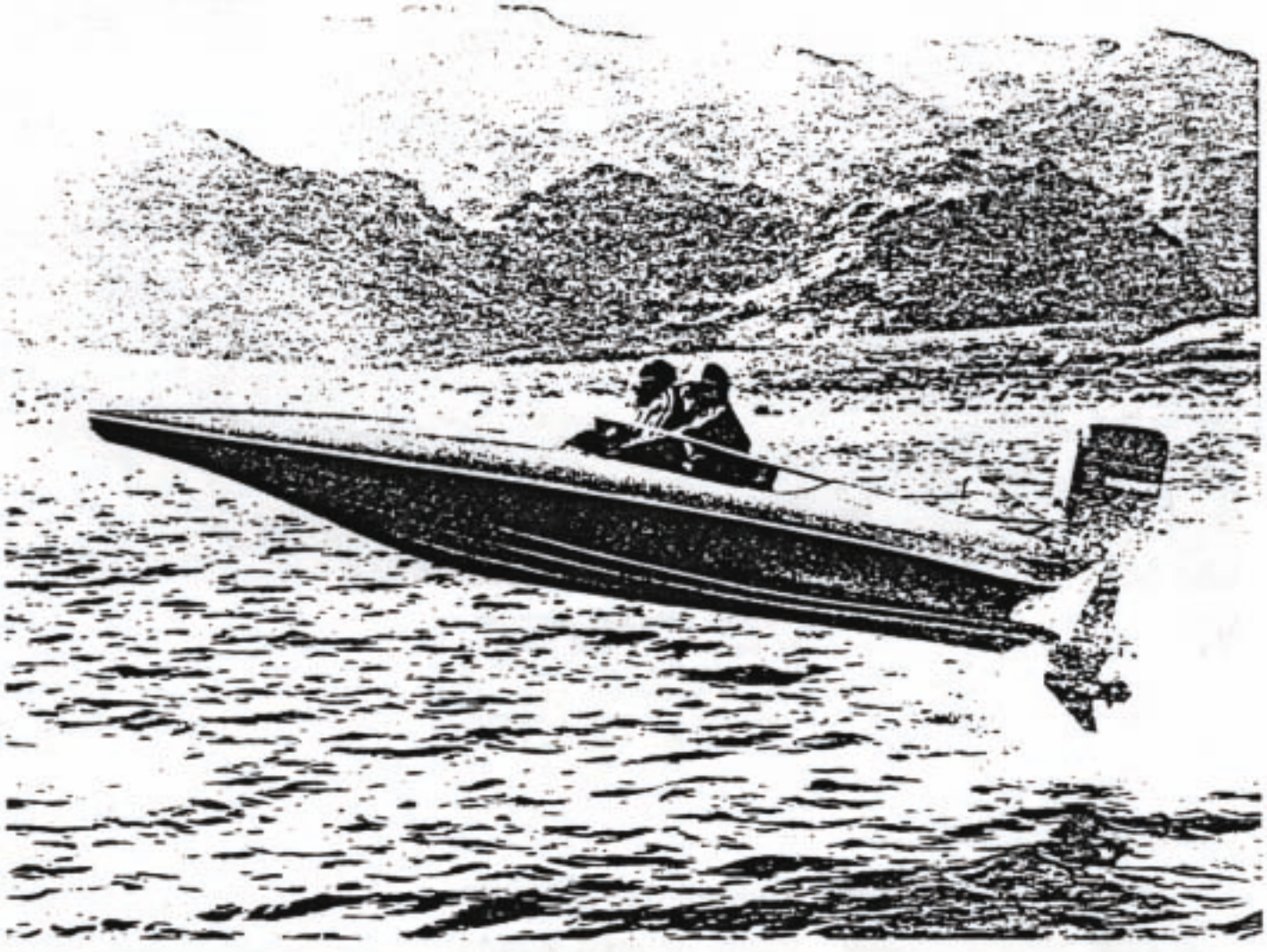
but instead, for multi-purpose recreational use.

We were already well aware of HydroStream's high speed potential from the APBA record book as this manufacturer holds countless kilo, circle and marathon marks in outboard racing. What we wanted to learn was how one of these sleek, lightweight hulls would rate if it was prepared exclusively for our particular testing format ... which is very close to the way you'll be using your boat.

To demonstrate what they can offer the family man, HydroStream equipped our test machine with a 115 Mariner outboard and a 12¾ x 21 three bladed Quicksilver aluminum prop. The slim Mariner powerplant was mounted very conservatively on the transom. Trim was restricted so we couldn't "fly" the boat beyond a sensible cruise attitude even if we wanted to. Smart move.

Weighing in at only 680 pounds without engine, the HydroStream Vector is one of the lightest 17 footers available today. This is a very important buying consideration given the poor on-the-road towing characteristics of the modern family





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automobile. Fully rigged, the package tipped the scales at slightly under 1,000 pounds so even a mid-sized car should be able to handle some moderate distance towing.

Because of the rigging considerations, the HydroStream Vector proved a very formidable machine on the bottom-end. With the Mariner pulled all the way in, the boat darted on plane in just a shade over two seconds. Throttle response was excellent on the low-end and the boat had a comparatively low minimum plane speed of 14 mph. Looking at our acceleration curve, you'll see that the HydroStream was able to reach top-end in 13 seconds which is very impressive.

Even though the boat was set up for overall handling, there is no way to take the performance spunk out of a HydroStream of any length or power source. Spinning the Mariner at 6,000 rpm we were able to record a very brisk 54.5 mph reading on our calibrated instruments. This speed was definitely an exceptional mark for a 17 footer, however, the real good news was that we were able to run our test candidate Vector across Lake Mead in 15 mph winds flat-out without any feel of kiting or chine walking. Tracking at high speed was almost as good as it was in the cruise range as the trim stop helped keep the bow in the water at all times. In fact, for our tests, we felt that the restrictions were a little too stringent as the boat could have easily picked up 3-5 miles per hour with freer trim and not sacrificed controllability.

The selection of the Mariner 115 was an ideal choice on the Vector. We found the powerplant very smooth, responsive and fuel efficient. Judging by the boat's consumption figures of 5.7 and 9 gph at 25, 35 and 45 mph respectively, it's going to be almost impossible to not get at least 5 mpg no matter how hard you push on the throttle.

In our wake jump photograph you can get a very good look at the underside of the HydroStream Vector. Bottom design is what makes any high performance boat really tick. As you notice although the boat had a 17'1" centerline measurement, the actual potential wetted surface was considerably less because of the hull's unique "partial area." In addition HydroStream incorporated a racing refined pad bottom that provided pads of stability and lift.

It has been our experience in the past that outboard "pad" bottom boats haven't been responsive in the slalom course, however, the Vector was a worthwhile exception. Particularly at 20 and 30 mph, the boat turned with effortless accuracy to both the left and right. The Mariner engine felt no feeling of torque on the wheel. At higher speeds the boat didn't carve an exacting arc as it did in the cruise range, however, we never felt that the boat would ski or dart out of control.

The biggest improvement we noted on the Vector compared with other HydroStream models we have tested in the past, was the boat's excellent ride in rough water. Because of the hull's light weight, it got a little high in the wake jump test, however, the ride was very level. There was never any sign that the boat was going to come down hard on the transom. To our amazement, the Vector knifed through swells with incredible ease, demonstrating a characteristic we're not accustomed to seeing in a true

BOB NORDSKOG ON PERFORMANCE: *"This is probably the finest combination HydroStream has ever presented in our Performance Trials' program. The Vector was a magnificent handling 17 foot boat with crisp performance characteristics in all aspects of testing. The Mariner 115 is the ideal powerplant for this machine as far as I'm concerned. Low speed punch and handling were excellent as the boat got on plane effortlessly. The Vector was very simple to drive in the cruise range as the trim limitations allowed maximum extension of the engine without any indication of bow kiting or chine walking. Even with the somewhat conservative set-up, the Vector still had exciting top-end capability, recording a maximum speed of 55 mph. In fact, I felt the boat was really a little too glued in on the big-end but for the average family boater, it's better to be ultra-safe than a little bit sorry. In the slalom course, the boat was exceptional at speeds to 35 mph, then I started to detect a loss in turning sharpness as the boat rose on the pad. Considering the very light total weight of the package, I must admit that the HydroStream really shocked me in the rough water. The boat, unlike most of the outboard thoroughbreds I've tested, maintained a very level attitude coming off the swells. Even running in a foot and a half roller condition I couldn't possibly get myself in trouble no matter where the trim or throttle was situated. For me, there is nothing quite equal to driving a solid performing high speed outboard and the HydroStream Vector gets my vote as being one of the most enjoyable performers in the '81 testing program."*

NORM TEAGUE ON DRY LAND INSPECTION: *"HydroStream builds boats in a very smart way, by concentrating on the important aspects of hull construction and leaving the frills for those who want to overspend their money. It's amazing how HydroStream can keep the weight down on this Vector without sacrificing rigidity or durability. The boat's lay-up was more than adequate for the intended use of the hull. Mold work was good and the boat's metalflake finish was attractive if you like the razzle-dazzle look. Considering their racing reputation, it's not surprising that the engine installation, steering, fuel tank assembly and battery mounting on the Vector were all first rate. The boat had a good amount of storage space, the dashboard was well laid out and the seats were very suportive. On the negative side, I felt the windshield installation was a little flimsy and deck hardware was scant."*

WADE WORLEY ON SKI TOW PROFICIENCY: *"I could find almost no faults with the HydroStream Vector as a water ski tow machine. The boat had good bottom-end even with the 12-3/4 x 21 prop. The Vector left a very good wake for recreational and advanced slalom skiing. No sway, transom tuck or corrections needed in the steering wheel when test skier Rusty Hood made his cuts. Throttle response was very sensitive, the boat always maintained a good attitude and the navigator's seat easily swiveled for simple spotting. About the only real drawback on the Vector as a ski boat was extreme difficulty in boarding and debarking because of the hull's very unique deck contour."*

MARK SPENCER—OVERALL SUMMARY: *"Sometimes HydroStream's ultra-high performance image detracts from the company's recreational qualities. The Vector is a perfect example of an outboard performance boat that, when rigged properly, is a dynamite all-around package. The boat had exceptional performance, got good fuel economy, ran rapid on the top-end and was a solid skiing package. For the average boater, the trim limitations were very worthwhile as there was no way to get in trouble. For the money, this is an impossible combination to beat in the 17 foot outboard market."*

high performance outboard hull design.

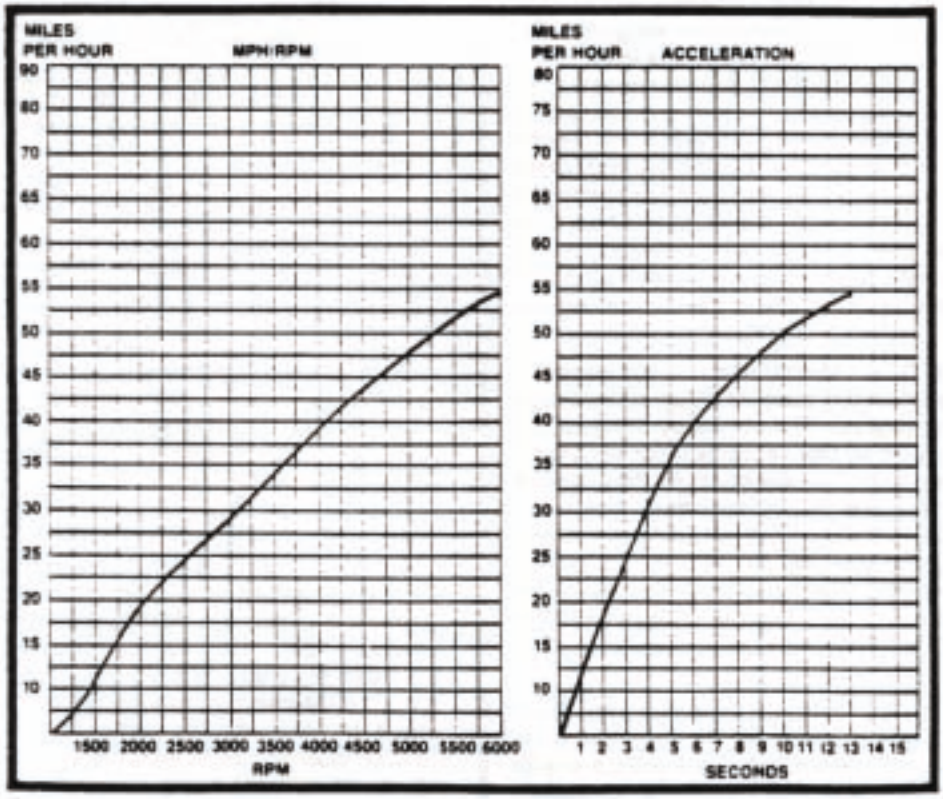
As a water ski tow vehicle, the Vector tested on par with many of the industry's finest 17 footers. Take-off power was very good as we were able to yank test skier Rusty Hood from the water in under three seconds. On plane, the boat left a very minimal wake that had little turbulence and no roostertail. Even advanced slalom skiers would find the boat more than acceptable as it provided a rock solid foundation for hard elbow-tucking cuts. For the recreational hot dogger, the boat left a distinct crest that would allow some maneuvers but aerial antics would be limited.

Because of the deck and hull design, visibility on the Vector was always completely unimpaired. However, at the right angle, the boat's metalflake finish gave off a substantial amount of glare.

In regard to styling, HydroStream owners can say without hesitation that their boat is unique in an industry filled with copy-cat designs. Not only does HydroStream take a completely different approach to bottom design, but their deck and side contour is an easy-to-spot trademark on any body of water where people like their boating with performance gusto.

For a 17 footer, the Vector's cockpit space was reasonably spacious. The boat came complete with twin forward facing bucket seats and a rear bench couch. The cockpit was very narrow in relation to the boat's 89" beam. HydroStream is concerned with passenger comfort as the gunnels were well padded and a teak grab rail was provided for the navigator.

To HydroStream's credit, the interior design, quality of construction and attention to detail were held within sensible limits to keep the overall price of the boat down. In other words, HydroStream concentrates on simplicity, quality and the basics so you don't have to sell the family jewels if you want to break into recreational boating. **PR**



HULL SPECIFICATIONS

Make/Model	HydroStream Vector
Hull configuration	Deep vee
Length	17'1"
Beam	89"
Hull weight (without engine)	680 pounds
Construction process	Hand lay-up
Passenger capacity	680 pounds
Retail price as tested (not including trailer)	$7,935

STANDARD EQUIPMENT: Deep pile marine carpet, Ride Guide, rack and pinion steering, low profile tinted windscreen.

OPTIONAL EQUIPMENT: Deluxe special edition package including two-tone special edition color scheme (choice of ten variations or custom available on request), teak grab rail, gauge panel, switch panel, running lights, dual steering, 16 gallon fuel tank, mooring cover.

OPTIONAL EQUIPMENT ON TEST BOAT: Deluxe special edition package, 16 gallon fuel tank.

COLOR OPTIONS: Red, blue and apricot metalflake and special edition options.

ADDRESS OF HULL MANUFACTURER:
HydroStream
180 First St., S.E.
New Brighton, MN., 55112

ENGINE AND PROPULSION SPECIFICATIONS

Make/Model	Mariner 115
Cylinder type	In-line six
Cubic inch displacement	99.6 c.i.
Maximum horsepower at rpm	115 at 5000
Prop:	12¾ x 21 three bladed Quicksilver

MEASURED PERFORMANCE DATA

Indicated top speed-calibrated speedometer	54.5
Indicated top speed-stock speedometer	53
Recorded top speed-radar gun	54
Measured top speed-measured 1/8 mile	52.5
Maximum rpm-calibrated tachometer	6,000
Maximum rpm-stock tachometer	6,000
Time to reach plane	2.13 seconds
Minimum plane speed	14 mph
Distance to stop from 35 mph	200 feet
Decibel reading (35 mph at 50 feet)	80 dB(A)

FUEL CONSUMPTION DATA

25 mph	consumes	5 gph	=	5	mpg
35 mph	consumes	7 gph	=	5	mpg
45 mph	consumes	9 gph	=	5	mpg

CONSTRUCTION-WORKMANSHIP EVALUATION

Fiberglass lay-up	9
Mold detail and finish	8
Placement and quality of deck hardware	7
Dashboard instrument lay-out	9
Controls placement	8
Installation of electrical wiring	8
Installation of fuel tanks	9
Seat padding	7
Access to minor services	10
Storage space	7
Access to storage space	7
Interior styling	8

PERFORMANCE EVALUATION

LOW SPEED

Tracking	9
Throttle response	9
Shifting of passenger weight	8
Docking maneuverability	8
Visibility coming on plane	9
Ease of boarding and debarking	7

CRUISE SPEED

Tracking	9
Throttle response	9
Slalom course at 20 mph	9
Slalom course at 30 mph	9
Slalom course at 40 mph	7
Rough water ride attitude	9
Hull recovery in rough water	9

HIGH SPEED

Tracking	8
Throttle response	8
Right turn	7
Left turn	7
Visibility	10
Ride comfort	8

WATER SKI EVALUATION

Take-off power	8
Tracking consistency of hull	9
Throttle sensitivity	9
Visibility coming on plane	10
Visibility at speed	10
Wake	9
Ease of boarding and debarking	6

TEST STAFF

Test Driver	Bob Nordskog
Test Observer	Mark Spencer
Ski Driver	Wade Worley
Ski Observer	Danny Churchill
Skier	Rusty Hood
Dry Land Inspector	Norm Teague