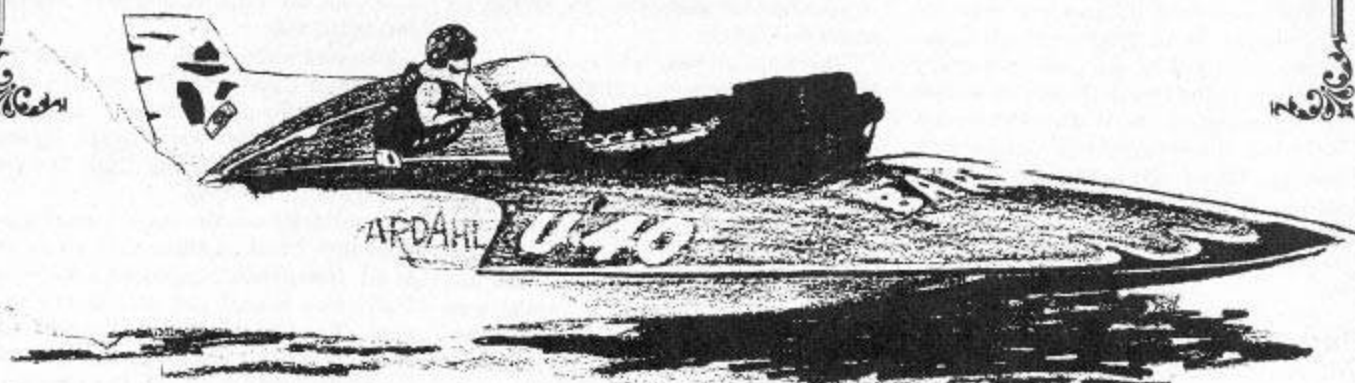


The Story of National Champion
Miss Bardahl



and... The Costly
Custom World
of Unlimiteds

A SPECIAL FEATURE WRITTEN EXCLUSIVELY FOR BOATING NEWS MAGAZINE BY EILEEN CRIMMIN WITH PHOTOGRAPHS BY BOB CARVER. TURN PAGE

The Costly Custom World of Unlimiteds

THIS YEAR less than two dozen unlimited hydroplanes will raise roostertails on their circuit while campaigning in a ten-race season.

In some of these races the entry list may drop to a total of four boats.

The knowledge that so few competitors engage in so brief a schedule occasionally fielding so small an entry list staggers the rest of the sports world.

Unlimited racing is dwarfed by enterprises like baseball, basketball, football, horse and auto racing. These sports annually stage hundreds of events involving thousands of participants and tens of thousands of spectators.

But however small in number, unlimiteds loom large in scope. Few sports, including horse racing, require such large sums to field an entry. Few command such rabid fans. Few surpass in thrills and excitement.

Once a competitor or fan is hooked on unlimiteds he clings to the sport with a loyalty and tenacity other sports can well envy — and do. For the sport of racing an unlimited is far from an easy one.

It's not a case of joining the gang, getting a glad hand, learning the ropes and being "brought along" by veteran campaigners. Unlimited camps pretty much go it alone from start to finish. There are no books titled "Happy, Helpful Guide to Winning the Gold Cup," or "Timely Tips to Unlimited Campaigners."

There is only a long road of trial and error, winning a little here, losing a little there, learning all the time and spending along the way.

Spending. There's an unlimited racing joke that says, "If you've got a spare half million, try unlimiteds." Only it's really no joke. Original equipment and a five-year campaign will consume about that figure.

Let's concede that point. Unlimited racing is costly. Then, to catch a glimpse of how costly, let's take a close-up look at just one camp, its boat the *Miss Bardahl*, owner Bardahl Chemical Corporation and representative owner, Ole Bardahl.

Presently, *Miss Bardahl* is reigning

National High Point Champion and Gold Cup Champion. Both titles represent the culmination of seven years of campaigning. The High Point title is the second time around. The boat is the third in the Bardahl series of hulls.

The driver is the sixth man to warm the upholstering of a Bardahl cockpit. The crew chief is the third man on that totem pole. And when you look around hard you find that Ole Bardahl and son-in-law Bill Simpson are the only two remaining survivors of the original idea about getting a boat and going unlimited racing!

An idea — that's where an unlimited camp begins. With the Bardahl Corporation the idea of using machinery as a testing and proving ground for their automotive oils and additives was a natural. If that machinery was engaged in spectacular and dramatic action, so much the better.

The firm already was sponsor of an Indianapolis race car. The next logical area to appraise was airplane, boat, motorcycle or sports car racing.

Boat racing had fired the northwest to fever-pitch in 1950 when Stan Sayres brought the Gold Cup to Seattle with his revolutionary three-pointer *Slo-Mo-Shun IV*. By 1957 a brief look into unlimited history showed its racing was spectacular enough — in one race two participants were killed; in another every entry blew up, caught fire, sank or was in some exciting way demolished — and, obviously, the mechanical stress was severe enough to give Bardahl products a rugged test.

Unlimiteds got the corporate nod and the Bardahl camp came into existence.

"Some camp!" Ole Bardahl is a tall, tough Norwegian with a snorting sense of humor. "We didn't have a darn thing" said the man whose ire and organization eventually would correct a few long-standing difficulties in the sport. "No boat. No driver. No crew chief. No crew. No shop. Nothing. Except a commitment that we had entered unlimited racing."

Like most new owners, Bardahl discovered there was no such thing as buying a boat at the nearby friendly marina. Nor was it sensible to buy a used, and usually unsuccessful, craft. One unsatisfactory skirmish of sponsoring a used boat soured the camp on that route.

So Bardahl was in the market for a designer and boat builder. About the time the company discovered there were only two of them dealing more or less regularly in the commodity, the gradual dawning of Great Truth was upon the firm.

Unlimited racing is a custom sport at custom prices. And unaccustomed though you may be to this sort of thing,

you get accustomed to it fast or you don't play.

Bardahl wanted to play. They got accustomed fast. They hired Ted Jones to design and build a new boat. In addition, Jones served as advisor to the corporation during their initial introduction into the intricacies of obtaining obsolete airplane engines, specially designed gear boxes and all the other wiring and plumbing so necessary to get the boat going.

The new *Miss Bardahl* performed well indeed. She was hauled to Lake Chelan and the Apple Cup Regatta. There Ole Bardahl's daughters, Evelyn and Lillian, christened the virtually untested craft. After which, with Norm Evans at the wheel, she averaged 101.618 mph to win the event! With Mira Slovak helming she also won the Buffalo Launch Club Regatta and set a lap record of 107.784!

The rest of her 1958 record went like this: Gold Cup, DNF; President's Cup, third; Sahara Cup, second; Diamond Cup, DNF; Silver Cup, third; Rogers Memorial, first; Mapes Cup, second; Governor's Cup, third.

A top dog from the start, a go-or-blow boat that finished third and up or not at all, *Miss Bardahl* captured a National Unlimited High Point title in her first year of competition. Snorter that she was, she quickly got the nickname "The Green Dragon"; and the Bardahl family and corporation was hooked on unlimited hydros.

The years between 1959 and 1962 were not as kind to the camp as were 1958 and 1963. But win or lose, the behind the scenes effort that kept *Miss Bardahl* on the circuit followed essentially the same pattern followed today.

Although the boat is campaigned, it is the camp that campaigns—a nice distinction which often escapes fans and casual spectators. Acquiring equipment, maintaining, repairing and replacing it is a round-the-year, sometimes round-the-clock job.

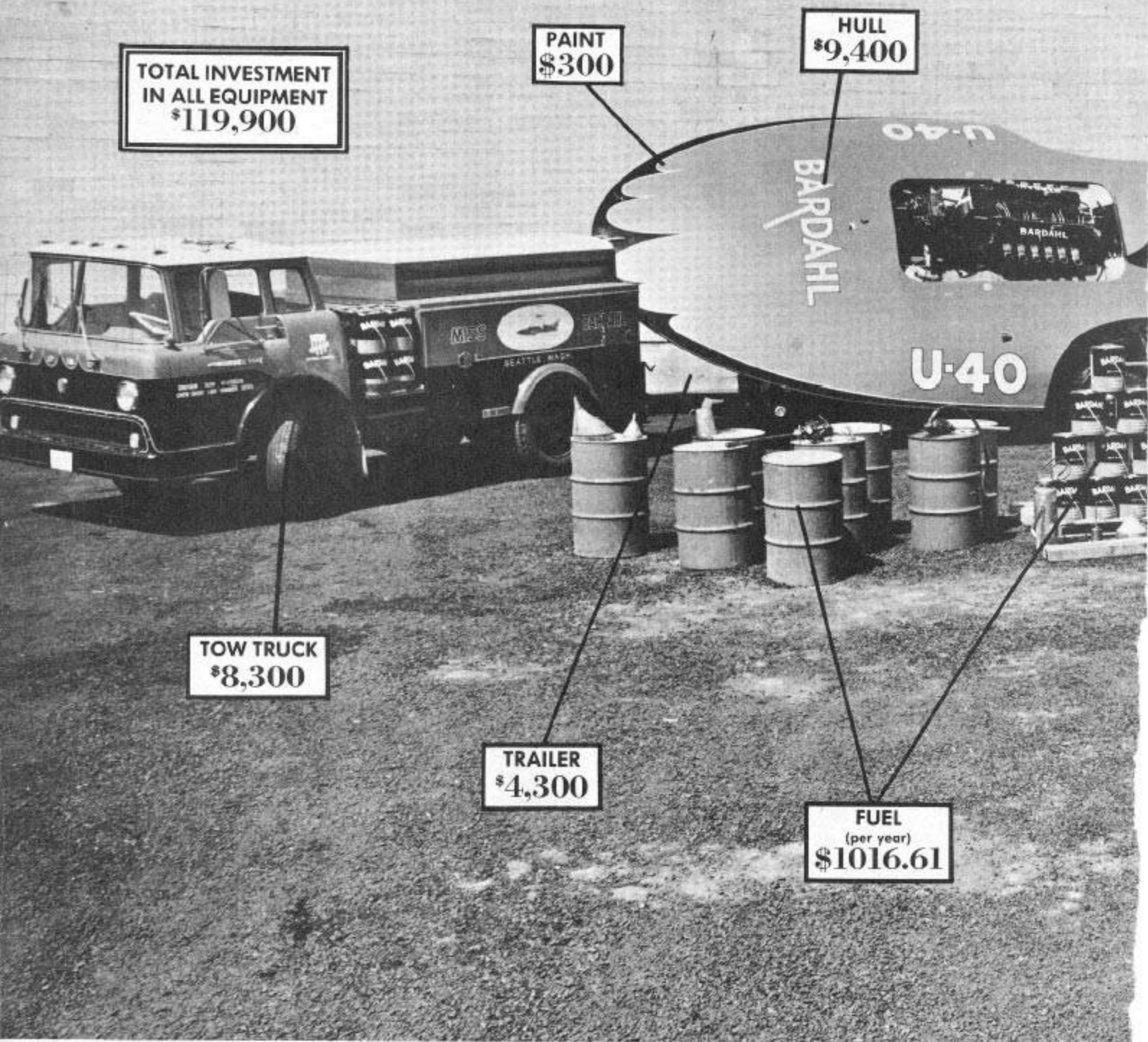
In 1962 the camp purchased a new hull. Another Jones design, it waltzed into its home shop very slim in profile, much wider in the tunnel and bearing a \$9,400 price tag. A new, lower road-hugging trailer came to \$4,300 and new tow truck consumed \$8,300. A new van to complete the highway safari cost \$11,400.

The new *Miss Bardahl* moved into a spot where the housekeeping, so to speak, already was set up. An inventory of engines awaited her, 23 stock engines to be exact, nine of which are now modified for racing. Initially, each had cost from \$550 to \$1,500, depending upon circumstances of purchase.

Each is valued after modification at \$5,000, but there is little doubt that much more than that amount goes into



OLE BARDAHL, PRESIDENT OF BARDAHL INTERNATIONAL CORPORATION.



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these modifications in the form of wages, parts, machinings, etc. Nevertheless, final value must be rated at what a

hot engine would sell for if any buyer were interested in purchasing one. So Bardahl's racing engines are worth \$45,000. Let's average the remaining 14 at \$1,000 each for a total of \$14,000.

A single gear box will set the budget back \$5,000. Bardahl's camp has four, or \$20,000 worth.

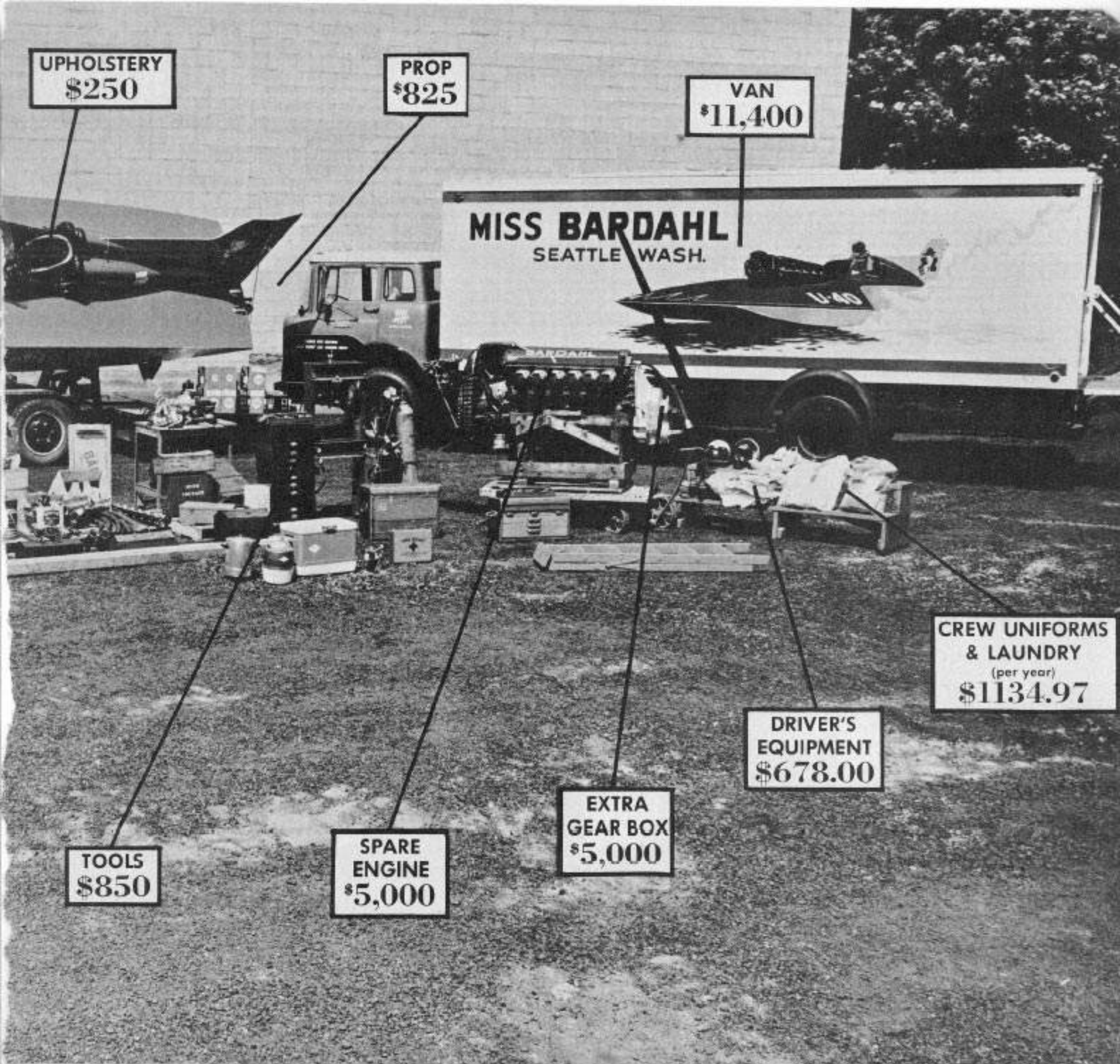
Propellers are not exactly inexpensive. They range in price from \$450 to \$1,200, again depending on purchase circumstances, type, make, etc. Bardahl has four in stock, four on order. Why so many? Each in combination with other factors—engine, speed, rpm's, etc.—gives the boat a specific

type of performance, specific handling characteristics. Anyway, let's average their cost at \$825 each, or \$6,600.

Material and machining of the propeller shaft used only \$300; the boat's paint job, \$350 and custom construction and upholstery of the seat and cockpit required a minimum outlay of \$250.

Totaled, the Bardahl camp has in the neighborhood of \$119,900 invested in present unlimited racing equipment. This is an expensive neighborhood however you look at or spend it.

The camp can't move a truck or turn a prop without the following expenses which prove unlimiteds are like babies



UPHOLSTERY
\$250

PROP
\$825

VAN
\$11,400

MISS BARDAHL
SEATTLE WASH.

CREW UNIFORMS
& LAUNDRY
(per year)
\$1134.97

DRIVER'S
EQUIPMENT
\$678.00

EXTRA
GEAR BOX
\$5,000

SPARE
ENGINE
\$5,000

TOOLS
\$850

OVER \$100,000 IS INVESTED IN EQUIPMENT NEEDED TO FIELD THE SPORT'S FRONT RUNNER

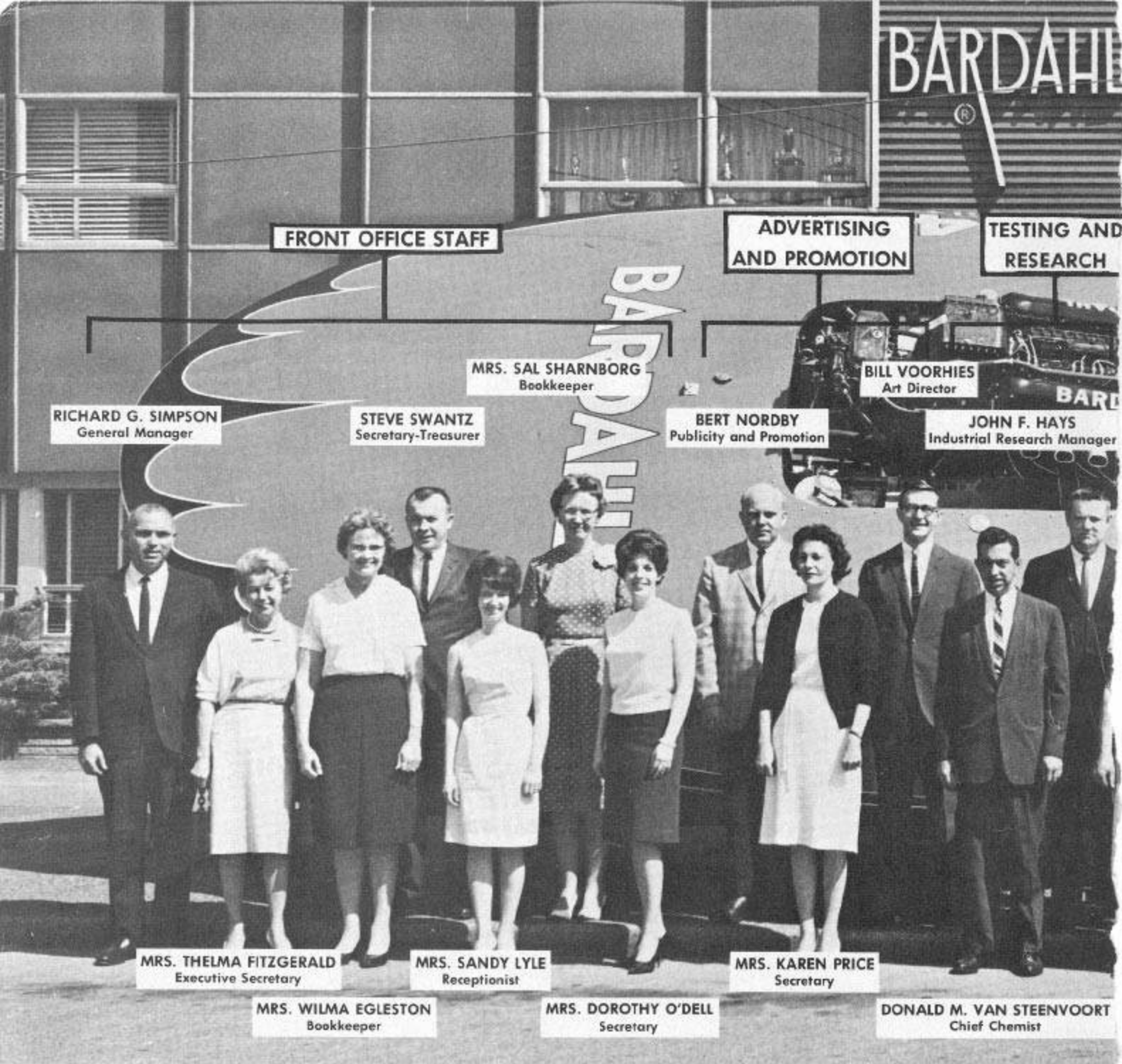
—it's not the original cost but the upkeep that sinks the budget.

Engines and parts eat up a jingling \$24,000 a year. Tools for the shop and crew of six men run \$870 annually. Truck expenses rise quickly to \$5,600, and even uniforms and laundry nibble into \$1,200 very effectively.

Care to pay a yearly insurance bill of \$3,500? And vital personnel transportation fares of \$4,600? Hotel bills of \$3,700 are not unusual and meals can digest \$2,800 without so much as a burp.

We're pushing along toward an annual \$40,000 pretty fast and probably

• Why there aren't more campaigners on the unlimited hydroplane circuit is indicated in the photo above—the costs of equipment needed to field an entry of championship calibre is staggering. Shown is the car-lot full of machinery, vehicles, parts and products necessary for just one race. Bardahl tow truck (left) carries equipment on both sides, engines in the bed and pulls tilt-trailer with "Miss Bardahl" in tilted position to conform to minimum highway regulations. When traveling, engine well is empty. Van (far right) is traveling machine and storage shop. Interior is custom finished with shelves, bins, work surfaces and storage cupboards to house spare parts, tool chests, tools, gear and all equipment needed far from home. Foreground stacks of gear include all equipment necessary to compete in one race; i.e., fuel, fueling pumps and funnels, gears, extra hosing with couplings, extra props, mechanics rolling board, tool cases and chests, extra shafts, oxygen cylinder and torch gear, spare helmets, coveralls, life jackets, boots, full engine with gear box and carburetor, ice chest, coffee maker, vacuum jug, first aid kit, flashlights, drop lights, etc., etc. What's the ladder for? "Painting the ceiling," say crew.



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you wonder how these little nibbles add up to such a big money bite so quickly.

Unless you've had a good look inside the unlimited sport, it's hard to understand that unlimited racing is not only a world of custom equipment, but of custom working and custom living.

Take props, for instance. You need a new one. You need it tomorrow, or at the latest, the next day. But your manufacturer is in Europe. There's no time to write him a letter enclosing a carefully filled-out specification sheet designation exactly the prop you need.

You pick up the phone. Trans-Atlantic call at overseas rates. You don't just say "Send me a prop," you read the spec sheet. If the connection is fuzzy,

you repeat quite a bit of it. At overseas rates.

The prop is air-freighted to you immediately. At this rate the prop, base priced at \$450, can rocket quickly to a total cost of \$500 to \$700. That's custom working.

The matter of custom living is easily explained. A crew of four men attends *Miss Bardahl* at all race sites. Enroute each must be moteled or hoteled and fed. Since their safari (tow-truck, trailer and van) is cumbersome, it's not practical for them to meander along the back streets of town seeking lower priced accomodation as you and I do

CREW MEMBERS**SALES DEPARTMENT****GARY BREAKFIELD**
Crew Member**PHIL HASTINGS**
Part-Time Crew**BILL HENDRIX**
Part-Time Crew**TOM REID**
Regional Sales Manager**LIN SALMON**
Salesman**LEO VANDEN BERG**
Crew Chief**JERRY ZUVICH**
Crew Member**NORM TYKEN**
Plant Superintendent**ED MOSS**
Part-Time Crew**MRS. BETTY VINCENT**
Secretary**DAN BOOTH**
Salesman

in our dusty compacts.

They stop at the bigger motels which have parking space big enough to contain the rolling stock, and rates big enough to help reimburse the investment in this expanse of real estate.

At the race sites most camps stay in one or two hotels/motels designated "official accommodations." Generally they're selected for nearness to the pit area. "Special" rates are offered. (There's always puzzlement about whether the "special" is higher or lower than usual rates). Needless to say, accommodations are never cut-rate. Generally, they lean toward first-

MORE THAN TWO DOZEN PEOPLE WORK YEAR AROUND FOR THE MISS BARDAHL CAMP

* Because the Miss Bardahl project is deeply involved with product research, testing and development and plays an integral part in Bardahl Company promotion, nearly everyone working for the firm in any capacity plays some role in the enterprise during each racing season. Approximately 1,000 members of the Bardahl national sales force, for example, aid the cause by distributing placards, signs, pins, etc. whenever the boat appears in their locale. While it is impossible to list all of those who contribute some small effort, those posed in the photo above are perhaps most vitally connected with the venture and work the hardest on a full-time, year-around basis to help keep the 1963 National Champion out in front. Missing from the photograph are some of the most important figures of all in the Miss Bardahl camp including Ole Bardahl, himself, president of the firm; Ron Musson, driver and public relations director; Dixon Smith, crew member; and volunteer crew workers Roger Kruse, Bill Gauntlett and Howard Fisher.

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class de luxe, or outright luxury.

Meals on the road or at race site are eaten at the most convenient restaurant. There's no time to hunt around, either for good food or moderate prices. So that "convenient" is spelled e-x-p-e-n-s-i-v-e. You and I might breakfast for 75c, but camps seldom get by for less than \$1.50 each, and a \$2.95 check is not unusual among hearty eaters.

Can they get better organized and save expense? Not really. Factors of equipment failure, human error and physical limitations make it impossible to operate an unlimited camp like a discount house or unlimited racing on a trans-continental train schedule.

Unlimiteds function pretty much like Cape Kennedy... "sorry folks, the weather's bad... sorry everybody, something broke down... sorry people, fuel trouble... sorry... sorry...!"

Anyway, custom equipment, custom working, custom living as just cited—that's what makes the unlimiteds expensive.

So what with one thing and another like Parking, Taxi and Bus Fares, Crane Operators, Taxes, Freight, Telephone and so on — 1963 cost of campaigning *Miss Bardahl* to the two top titles in unlimited racing rose to \$61,191.20. (And it would not be surprising if another \$5,000 had dribbled away unrecorded simply because it's difficult to know where to charge it off.)

\$61,191.20. That would buy a fine steak dinner on Mt. Olympus among the Greek Gods.

And that really isn't all.

Because other services affecting the *Miss Bardahl* are charged to other areas of the business, they do not show in the costs directly attributable to the corporation's unlimited racing.

For instance, public relations effort and direct advertising must be charged to the company's overall Advertising and Promotion program. Since the boat is commercially sponsored, the final goal of all effort is to increase sales of Bardahl products. Unless the boat's performance on race courses and appearance in shoreside exhibitions throughout the country is exploited fully, these costs are unjustified.

Therefore, the *Miss Bardahl* is pre-announced seasonally by a Press Book distributed nation-wide. Photographs are circulated. Banners appear on fence posts and phone poles. Placards rise in store windows. Buttons appear on lapels. Driver, crew and owner are interviewed on radio and tv. Press releases are composed and mailed periodically. Sportswriters doing column or side bar, or magazine writers composing features are assisted to insure that Bardahl facts are in order.

(In addition to the personnel pictured in the photos, 10 employees were directly involved in compiling this story. No. 11 was Ole Bardahl himself.)

All this requires considerable effort and cost. But the cost is interwoven with other promotion costs and not easily isolated. Even estimates are not available.

Another area vital to *Miss Bardahl* is the firm's chemistry lab and staff. As a testing ground for oils manufactured by the firm, *Miss Bardahl* is supplied with various old and new formulas. Some have been highly tested. Some, never.

Records must be kept of what formula is used, when, and what its performance results were. These records then must be evaluated. After which the chemist may sigh with relief or groan with consternation, "Back to the test tube again."

Can this work and its cost be separated from regular laboratory work consisting of experiment, quality control, testing, and so on? No. This department's function is integral to the entire business and in this respect the *Miss Bardahl* is simply another tool, subordinate to the real purpose of the firm—sales.

Any costs overlooked? As a matter of fact, quite a few. How about cost of original shop space, shelves, work benches; original shop machinery and tools? How about external costs like charges made for printing all banners, placards and other material pertaining to the boat. How about cost of water used in cleaning the hull? Detergent? Paper toweling? Sponges? How about Band-Aids waiting for the nicked fingers of the crew?

It's these little and not so little items that keep unlimited racing a truly gilded sport.

Miss Bardahl's annual expenses are about average for the contingent. Although nobody knows to the exact penny how much was spent, it's generally conceded that Bill Waggoner and his *Maverick* sustained the highest campaigning costs—around \$100,000 a year.

Bob Gilliam with his *Fascination* fleet probably spends the least. Nobody can guess what that amount might be. Gilliam likes to scrounge. He's a hamburg-

er-eating Cadillac-driving fellow who is undoubtedly the happy-go-luckiest owner in the sport.

If this cold-eyed money view takes all the glory and glamor out of campaigning an unlimited, then a major point mentioned previously needs re-emphasis.

The camp's function is to dramatize and bring attention to the Bardahl name and products. In this function they've been highly successful. But, like the man with tiger by tail who quickly discovered the real question was who caught whom, the Bardahl Corporation has found itself caught up in unlimited racing with a zest that belies any "business only" approach.

No matter how carefully the boat is exploited for business purposes and experimental testing, it is raced in the sporting tradition—to win.

The Bardahl family takes personal interest in the craft and, time permitting, appears at various regattas to watch it race. They root, hoot and holler for "their boat" and are as concerned about and active within politics and inner workings of unlimited racing rules, sanctions, boards, etc., as any "sportsman" participating in the game as a hobby.

In fact, it was Ole Bardahl who put out one of many strong statements about unlimiteds that helped clear up some harrassing internal situations which, in turn, paved the way for the present gradual enlargement of unlimited racing.

Ole is a member of the Unlimited Contest Board and Gold Cup Contest Board. Presently, driver Ron Musson is Vice Chairman of the Unlimited Racing Commission, Western Division, and member of the Gold Cup Contest Board.

Within the limitations of any competitive group effort and its own organization, the Bardahl camp has cooperated and argued with, led and followed the sporting contingent of which it is a member.

The camp has been roundly beaten; has been roundly victorious. It has been discouraged, disgusted, tired, angry and numb. But over the long haul it has always campaigned, and that's what counts most.

On the bad days the camp has decided justifiably that unlimited racing is the lousiest sport in the world. On the good days the same camp has decided justifiably that unlimited racing is the finest sport in the world.

And on the in-between days when spirits are neither high nor low, the Bardahl Corporation owner and personnel can take a quick look at the shelves of trophies, and at the expense figures in the account books and decide calmly and honestly... "It's worth it."