

**OUTBOARD**

DECEMBER 1955 — 25 CENTS

INBOARDS

# *BOATSPORT*



**HOW TO SOLVE  
THE MARATHON FUEL PROBLEM**

**TUNING THE BIG TWINS  
FOR "36" COMPETITION**



# BOAT SPORT

Now Published

# 8

## TIMES A YEAR

Next issue

### MARCH

Publication date Jan. 16  
(Advertising closing date Nov. 9)

### APRIL

Publication date March 1  
(Advertising closing date Dec. 30)

### MAY

Publication date April 2  
(Advertising closing date Feb. 1)

### JUNE

Publication date May 2  
(Advertising closing date Mar. 1)

### JULY

Publication date June 1  
(Advertising closing date April 1)

### AUGUST

Publication date July 1  
(Advertising closing date May 2)

### SEPTEMBER

Publication date Aug. 1  
(Advertising closing date June 1)

### DECEMBER

Publication date Nov. 1  
(Advertising closing date Sept. 1)

## COVER STORY

OUR COVER shows Jack Abraham crossing the finish line in the seventh Milwaukee Sentinel - Winnebago Outboard Marathon. Besides winning in Class DU, Abraham was the first driver to complete the long grind. His average was 47.03 mph, which set a new record for this event.

This photograph was taken from a helicopter and is reproduced by courtesy of Kiekhaefer Corporation, manufacturer of Mercury outboard motors.

# BOAT SPORT

## CONTENTS

COVER STORY .....	2
AROUND THE BUOYS .....	3
<i>Personalities and events.</i>	
HOW TO SOLVE THE MARATHON FUEL PROBLEM By Hank Wieand Bowman .....	4
BOAT SPORT COVERS THE RACING SCENE By Blake Gilpin .....	8
<i>Highlights from here and there on the 1955 outboard circuit.</i>	
TUNING THE BIG TWINS FOR "36" COMPETITION By Shanon Place .....	14
OUTDOORS WITH THE OUTBOARDS By John G. Kingdon .....	16
TORQUE TALK By Lou Eppel .....	18
<i>On-the-scene report of the Gold Cup race.</i>	
HOW TO BUILD A PLYWOOD PLANKED RUNABOUT By Hal Kelly .....	20
<i>Details of "Airborne's" construction.</i>	
IT'S NEWS .....	24
<i>New Products and parts.</i>	

Photos in this issue reproduced by permission of Ace Hoffman Studios, Water Skeeter, Atlantic Hydrofin Corp., Oliver Motors, Bill Holman, Glen L. Marine, Crow's Nest, Robert Oggero (Monte Carlo), Marston A. Pierce, National Outboard Association, Robert H. Miller, Carver & Swanson, Hank Wieand Bowman, Hal Kelly, Kiekhaefer Corp. (Mercury motors), Evinrude Motors, American Power Boat Association.

Joseph J. Hardie • Raymond J. Kelly, Publishers

Harold Hersey, Editor

Hank Wieand Bowman, Technical Editor

Richard Van Benschoten, Associate Editor

Paolo Speroni, European Correspondent

George Weaver, Art Director

Harold Nankin, Art Assistant

Donald Skier, Art Assistant

Dec., 1955—Vol. IV, No. 5 (Whole Number Twenty-three). BOAT SPORT is published eight times a year, with issues dated Mar., April, May, June, July, Aug., Sept., and Dec., by H-K Publications, Inc., 1140 East West Highway, Silver Spring, Maryland. Editorial and Executive offices: 215 Fourth Ave., New York 3, N. Y. Application for modification of second-class entry pending at the Post Office at Silver Spring, Maryland. Copyright, 1955, by H-K Publications, Inc. Although unsolicited manuscripts and pictures are handled with care, this magazine assumes no responsibility for their safety. Printed in U.S.A. For advertising rates address: Advertising Department, BOAT SPORT, 215 Fourth Ave., New York 3, N. Y. (Phone GRamercy 5-2509). West Coast Repr. NED BRYDONE-JACK, 714 W. Olympic Blvd., Los Angeles 15, Calif. (Richmond 8-7327.) Subscription rates: Annual (8-issue) subscription \$2.00 in U.S.A. and its possessions and territories—\$2.40 in Canada and elsewhere. Two-year (16-issue) subscription \$3.50 in U.S.A. and its possessions and territories—\$4.30 in Canada and elsewhere.

(Below, top) a CIU runabout in French Tourisme class, which is the same as our "36" class. (Bottom) An almost perfect start on very smooth water, with six boats almost bow to bow!



KING OF THE movie cowboys, Roy Rogers, driving a Glasspar hull equipped with two Mercury Mark 55Es, won the annual United Sportsmen's Armada from the California mainland to Catalina Island and return for the second year running. The course was laid out from Cabrillo Lighthouse to Casino Point on Catalina and return, a distance of 22 miles. Rogers, carrying veteran international racer Elgin Gates as passenger, covered the distance in 39 minutes and 10 seconds including a brief stop on the return trip to help out racing buddy, Ray Camp. The distance was run through a pea soup fog which caused heartbreak for some of the entrants who strayed way off course; one, in fact, was picked up 20 miles from the route by a Coast Guard Auxiliary.

\* \* \*

Lloyd A. (Nip) Flack of the Port Perry Yacht Club and C.B.F. Zone 2 BU Champion for 1954, has forwarded along some information about this fast growing Lindsay, Ontario, Canadian group. The club has mushroomed in a few years to roughly a hundred racing members, mainly outboarders, most of whom live in Oshawa, Bowmanville, Ajax, Toronto or Port Perry itself, which is situated on the southern end of Lake Scugog, 50 miles northeast of Toronto. The club boasts an electric starting clock and its own comfortable club house with spacious well-kept rooms, docks and plenty of pit facilities.

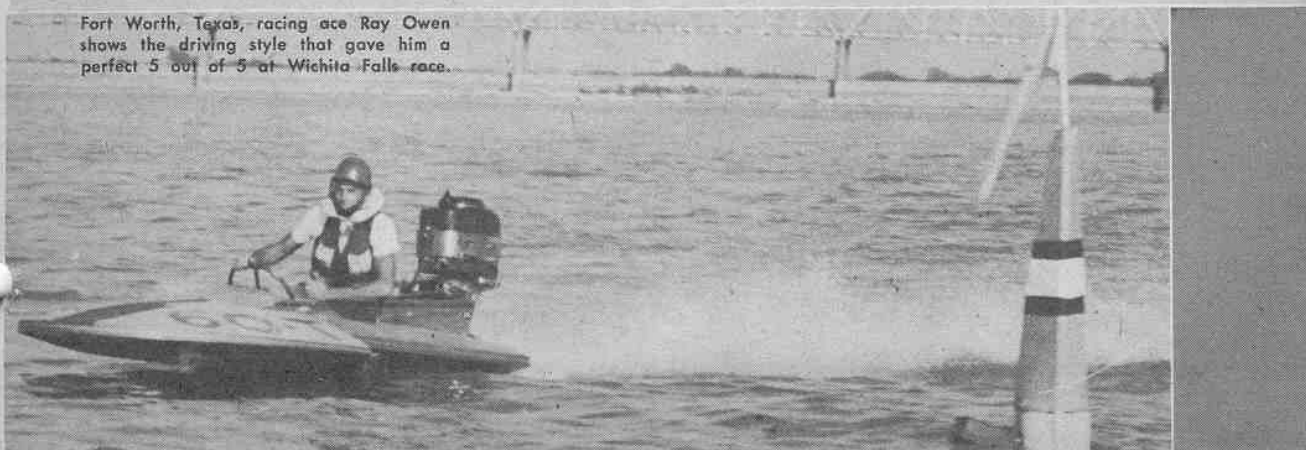
This year for the first time the club in addition to two Boat-a-Cades, one C.B.F. sanctioned race and five club races, also sponsored a 34-mile outboard marathon.

It is interesting to note that the first Canadian outboard mile trials were held at the Port Perry Yacht Club at the close of the Toronto Canadian National Exhibition last September. Record holders and their mph averages are: A Stock Hydro, Ron France, Toronto.

(Continued on Page 31)

## AROUND THE BOUYS

Fort Worth, Texas, racing ace Roy Owen shows the driving style that gave him a perfect 5 out of 5 at Wichita Falls race.



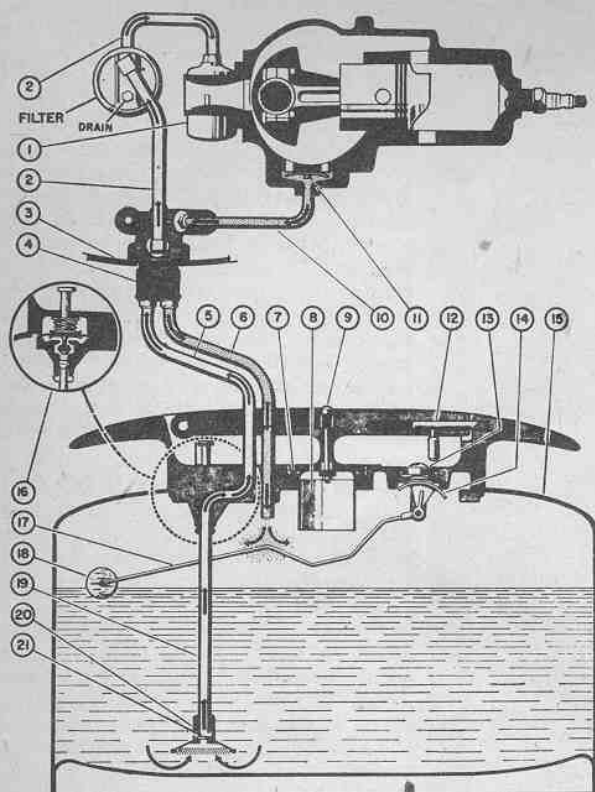
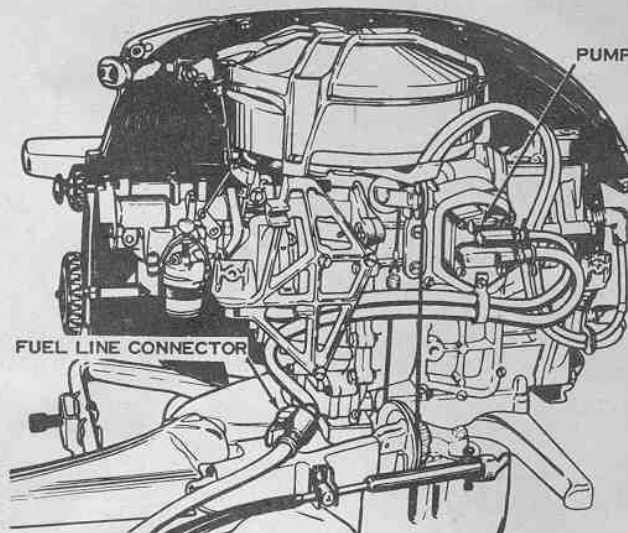


FIGURE 1.  
Pressure Fuel System

- 1 Carburetor
- 2 Fuel line, filter to carburetor
- 3 Bottom cowl
- 4 Twist connector
- 5 Fuel line, tank to twist connector
- 6 Air line, tank to twist connector
- 7 Seal
- 8 Extension tube, filler opening
- 9 Pressure relief valve
- 10 Air line, crankcase to connector
- 11 Pressurized valve, crankcase
- 12 Release latch
- 13 Magnifying lens
- 14 Graduated sector
- 15 Remote fuel tank
- 16 Priming pump
- 17 Float arm
- 18 Float
- 19 Fuel pick-up tube
- 20 Disc filter
- 21 Check valve

A typical pressure fuel system used on Mercury motors is shown here, with schematic flow of fuel indicated and component parts identified.

Location of diaphragm fuel pump on upper cylinder by-pass cover plate is shown in this diagram of a conversion kit for Evinrude Big Twin or Johnson 25 to make single line, vacuum type system.



## HOW TO SOLVE THE MARATHON FUEL PROBLEM

By Hank Wieand Bowman

THREE TYPES of fuel systems are used in stock outboard racing boats, depending upon the class. The simplest is the gravity feed system with the fuel tank located on the powerhead. The force of gravity assures a steady flow of fuel from the tank on the motor to the carburetor. This type fuel system must be vented. Completely closing off the tank would render the system inoperable. Gravity feed is used on the Class AU Mercury KG-4s and on the Evinrude and Johnsons in CU class.

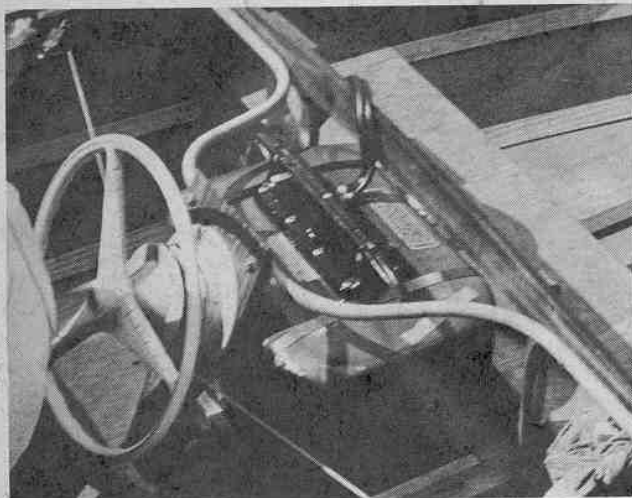
The second type fuel system is the pressurized portable remote fuel tank type which is used with Mercury Mark

20Hs in BU class, the Mark 40H Mercury in DU class, the Johnson 25 and the Evinrude Big Twin in "36" class. This is a dual hose remote fuel tank system. Some method is provided to prime the carburetor initially but, once the motor is started, crankcase compression supplies air pressure through one hose from the motor back to the fuel tank and this air pressure in turn forces fuel back through the return line into the carburetor. The system calls for a closed air-tight fuel tank and some type of check valve to prevent air under pressure from returning to the crankcase.

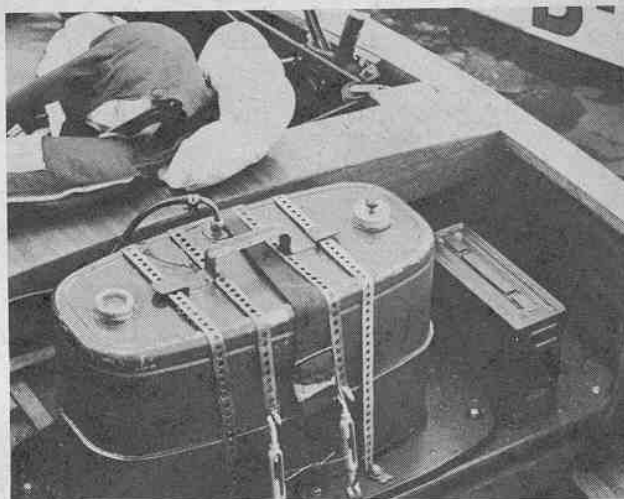
The third system is the vacuum portable remote fuel tank system, which is used on the Mercury KG-9 DU motors and the Champion Hot Rod BU. In this system, only a single line is required from the vented remote fuel tank to the carburetor. A positive AC fuel pump picks up pumping action once the motor is started similar to the gravity system.

Fuel problems should be understood by both the closed circuit racer and the marathon racer. The marathon racer in certain instances requires additional equipment and greater storage  
(Continued on Page 6)

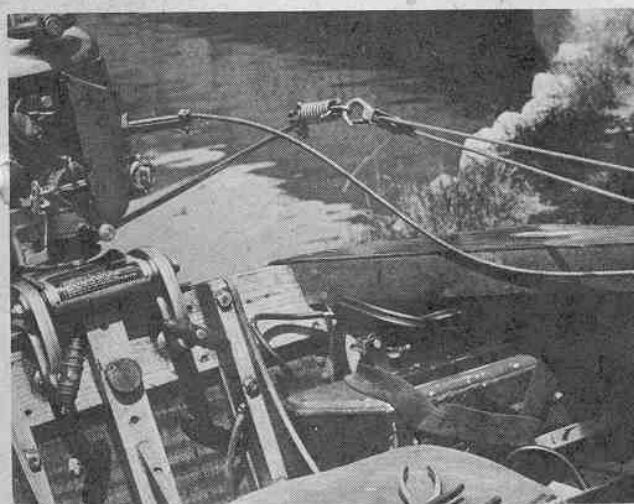




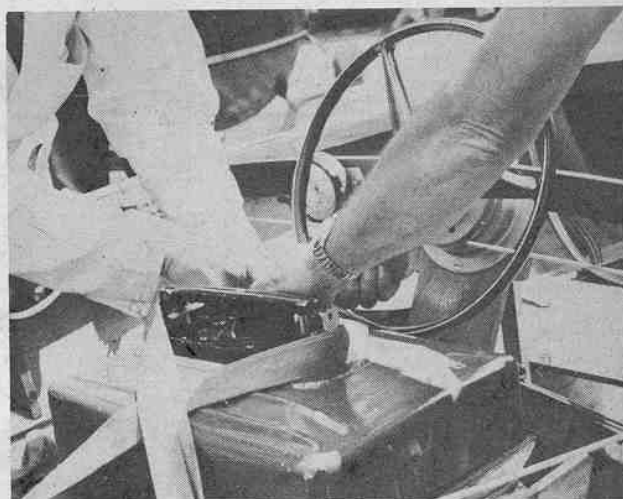
Notice the position of this well-secured 6½ gallon auxiliary fuel tank and the wheel mount on this installation made in a BU runabout.



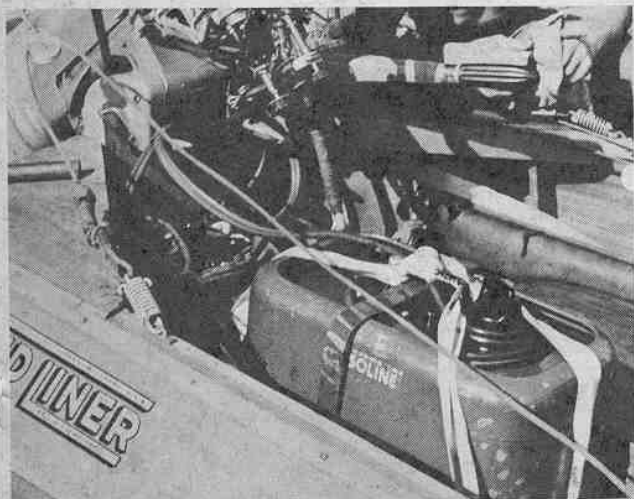
A single line pressurized auxiliary tank, with integral pump on the right and filler top on left, makes for good class AU installation.



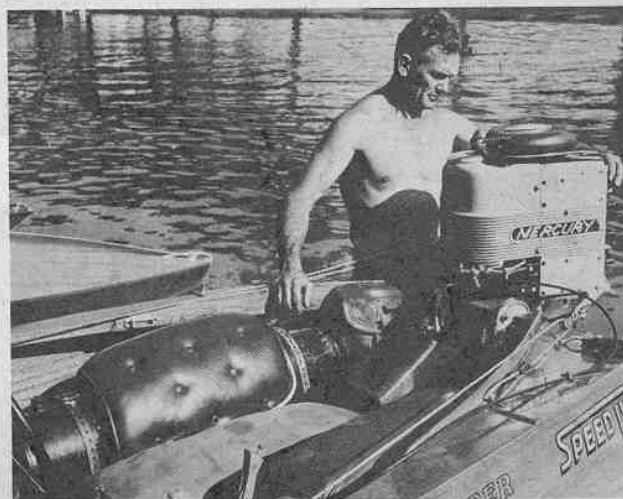
In addition to 10-gallon tank forward, made of components of smaller remote tanks, this BU has a 3-gallon auxiliary mounted at the stern.



Note how fuel tank components have been welded into place on this BU installation. The ends of handles have been cut off of the tank.



This "36" class installation has been strapped into position on the starboard side. An additional tank is carried forward on port side.



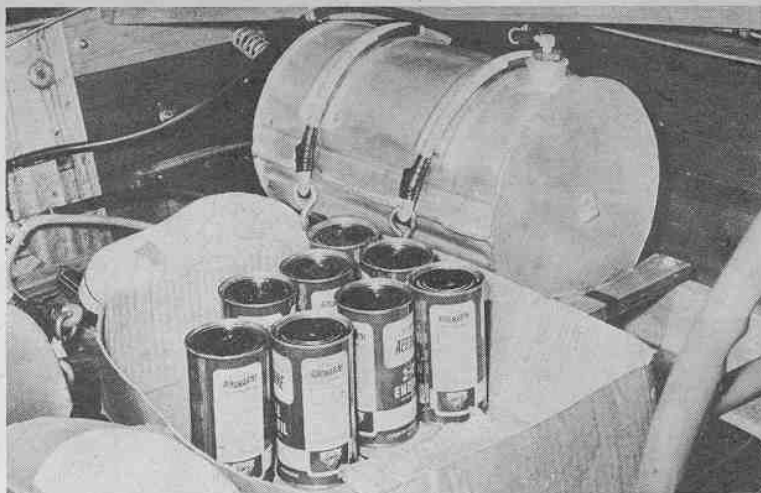
Fred Snyder, winner of two '55 marathons, uses a single line system with two special aluminum tanks for Merc KG-9. Note protective pads.

(Continued from Page 4)

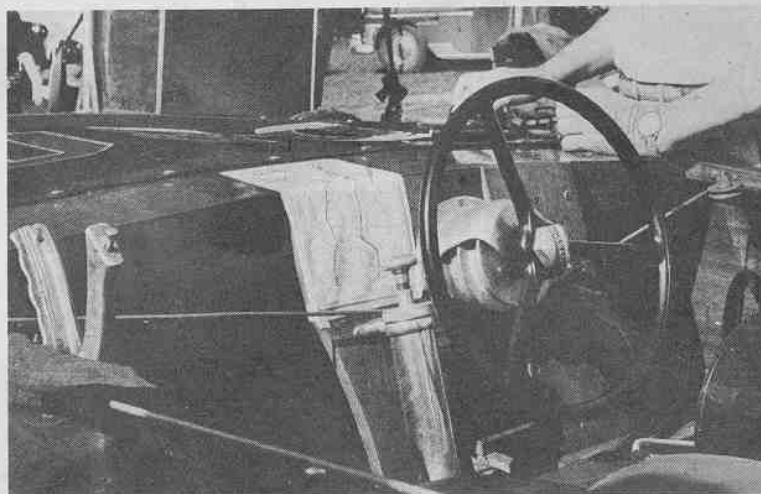
capacity for fuel. Neither the marathoner nor the closed course racer can expect winning performance unless the fuel system is up to snuff.

The gravity feed type presents no problem whatever to the closed course racer other than being certain that his fuel lines and the tank itself are clean, free of any gum deposits, sludge or lacquer deposits, and that the fuel lines to the carburetor are internally clean, sound and free from leaks. Several methods may be used to rig up a marathon arrangement on the gravity feed set-up. The contents of the tank itself, which is integral with the powerhead, are not sufficient to run the distance, and since stopping to pour gas into the vented integral tank would be too time-consuming, some method must be devised to provide a continuous flow of fuel from a remote tank storage location to this tank.

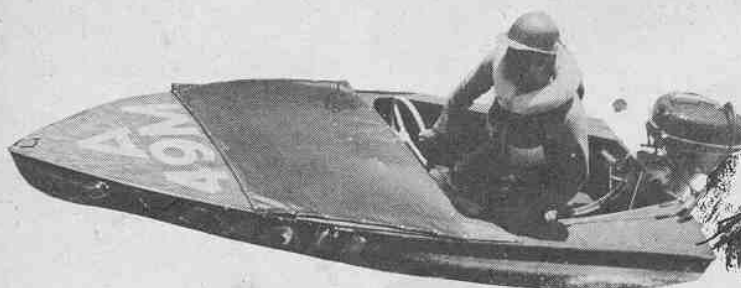
The first thing that is required is to make up a transfer cap for the standard tank. The stock filling and venting cap provided with the motor includes a breather hole only, but a transfer cap must be made up which will include a right angle copper tubing to which can be connected a  $\frac{3}{8}$ " i.d. fuel line. Also from the cap a breather of approximately  $\frac{1}{8}$ " to  $\frac{3}{16}$ " in diameter must be provided to vent the tank on the motor. This is frequently designed in a gooseneck fashion extending several inches above the filler cap itself so that the tank may be completely filled before any overflow will come out through the breather tube. In all instances, a clear flexible neoprene fuel line is recommended since it will not be subject



A pressurized system using dual aluminum tanks. Crankcase air pressure from Merc Mark 40H goes into port tank, which in turn pressurizes tank barely seen at left.



Hand pressure pump on DU is auxiliary for shifting fuel from sealed port tank to vented starboard tank on vacuum hook-up. Handy chart of Winnebago land course was furnished by Socony Vacuum Oil Co. (Below) Note transfer cap and fuel line lead.



to damage caused by excessive vibration and is largely impervious to deteriorating effects of oil or any acids present in the fuel or lubricant. A clear hose has the added advantage of providing a quick check as to whether or not fuel is being pumped properly from the remote tank to the tank on top of the motor.

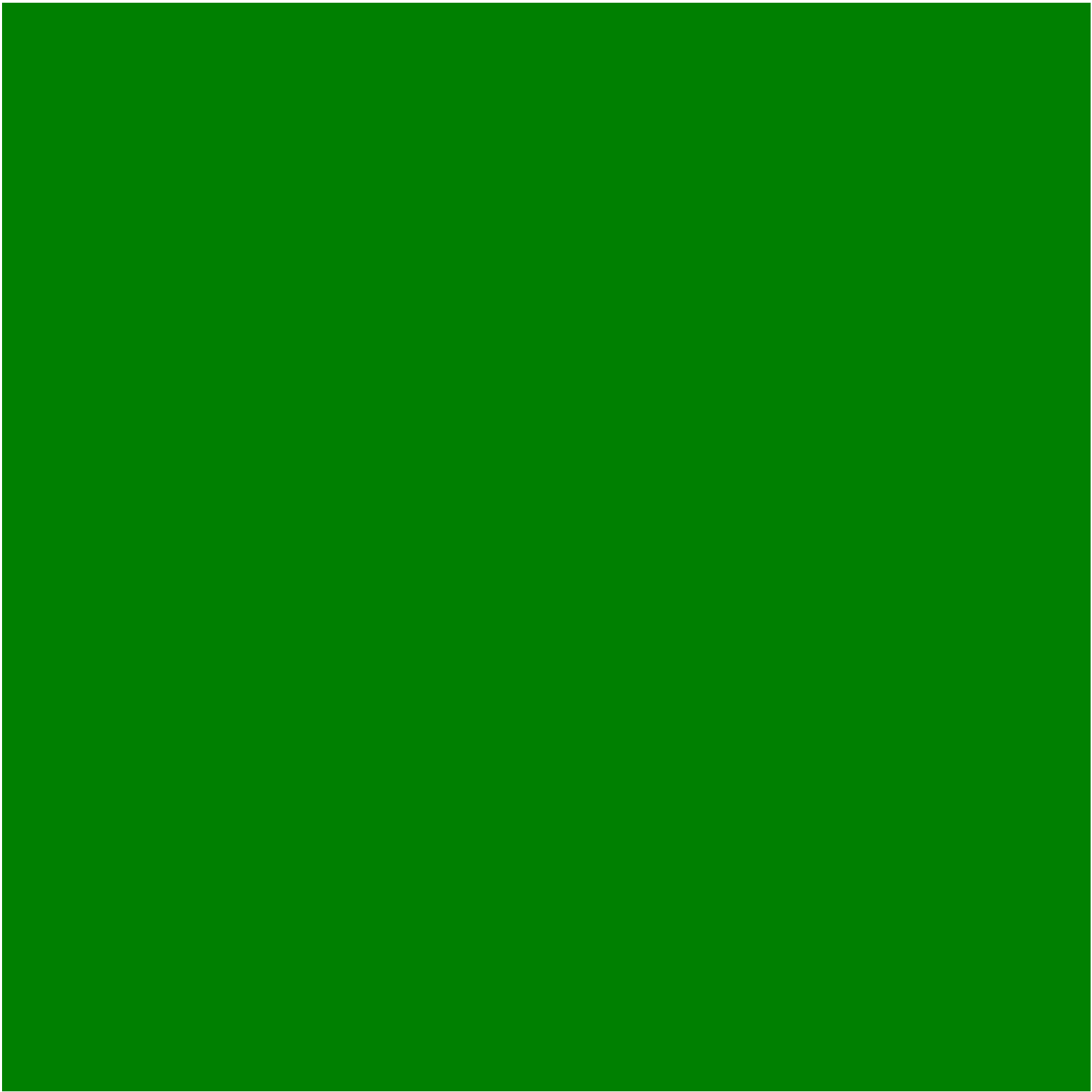
For the convenience of the marathoner, Kiekhaefer Corporation makes a 10-gallon auxiliary fuel tank (part #1219-638A2) equipped with a hand pump which is designed for transfer of fuel to the integral fuel tank of the motor, either when the motor is or is

not running. The Kiekhaefer Corporation also makes a fuel transfer cap (part #36-23454A1). Either of these components may be bought through a local Mercury dealer. In rigging an auxiliary system to the gravity feed type, remember that the remote tank or auxiliary must be sealed so that pressure may be built up in it to feed fuel to the vented tank on the motor. Some form of pump must be used to provide the needed pressure on the auxiliary tank.

Several types of pumps can be used if you prefer to fabricate your own pump. A hand wobble pump is perfect-

ly suitable and may be bought at any government surplus store. Some drivers prefer an electric Bendix fuel pump which operates from a hot shot battery. The immediate criticism comes up—well, suppose something happens to the electric system on the Bendix type, how will you get your fuel through? A good battery is all that is required as the pumps are largely foolproof. In general, with a take-off from the bottom of the fuel tank with a closed, pressurized remote tank, the boat's motion alone will usually build up sufficient pressure to provide a flow from the remote fuel tank without any other



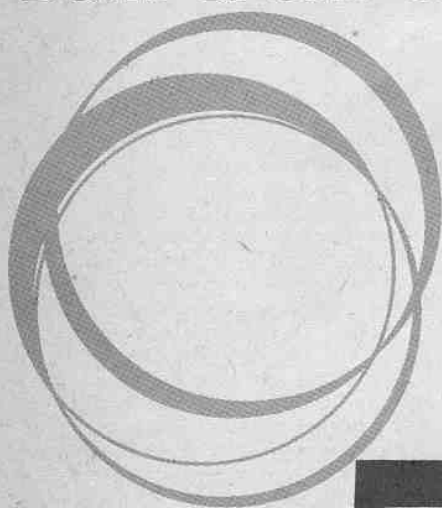




HIGHLIGHTS FROM HERE AND THERE  
ON THE 1955 OUTBOARD CIRCUIT

## BOAT SPORT COVERS THE RACING SCENE

By Blake Gilpin

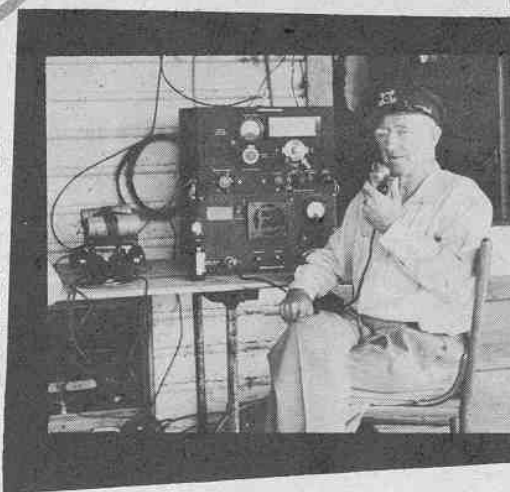


Danny Bartron traveled from Tunkhannock, Pa., to event in Clarksville, Va., only to wind up as a "Hell Diver."



Leo J. Promen was head of important air-water-land rescue operations at this year's WinnebagoLand event.

Jack Abraham of Fremont, Wisc., won first place in DU at WinnebagoLand, and became first winner who lived right on the course.



SKY-TOSSED rooster tails, bouncing runabouts, wave-skipping hydros and the high-winding drone of super-revving motors was the order from Coast to Coast and Border to Border, with more racing and more competition in 1955 than in any previous season.

In the alcohol ranks, multi-record holder and standout driver of the winter months, Bud Wiget, Concord, Calif., was largely landborne, confined for most of the season to his hop-up shop, working up long-promised hot irons for his clientele. Bill Tenney, Dayton, Ohio, continued his record breaking ways, setting new B Hydro marks through both the A.P.B.A. and the N.O.A. miles. Tenney averaged 67.296 mph at Clarks-

ville, Va., for a new A.P.B.A. mile mark, a bit less than his N.O.A. mile average established at Knoxville, Tenn., of 68.311. Both new records were established with a Neal three-point hydro powered by a Johnson SR with a Mercury Quicksilver lower unit.

At Quincy, Ill., early in the season, Rusty Scheckelhoff, of Troy, Ohio, set the pace with three first places and two fourths for the Yankee contingent to top the N.O.A. Rebels in Division I of the annual North-South tangle. N.O.A. high scorer for the losing Rebels was Bob McGinty, Corpus Christi, Tex., who continued to show up in the winners' ranks during the balance of the season.

In the deep south Harrie Hayden,

New Orleans, La., appeared to be the A.P.B.A. alkie standout. In the northeast, it was Vic Scott in B, C and F Hydro with the North Belmore, N. Y., racing veteran occasionally moving down into the southern seaboard area to show the boys in A.P.B.A. Region 4 the quickest way home.

Noticeably missing from competition was Gil Petermann, for a long time one of the most colorful competitors along the Atlantic Seaboard. Jimmy Campbell, Danville, Pa., romped rampant in A Hydro ranks, once dominated by Petermann.

Lower unit builder Herschel Starnes of Hickory, N. C., made his presence felt in both A.P.B.A. and N.O.A. events





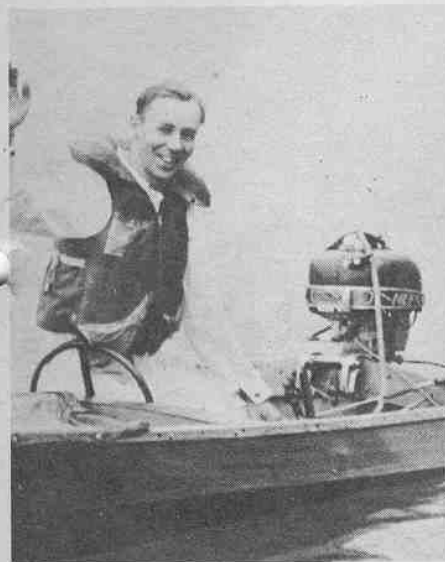
An Evinrude-powered Speedliner carried Frank Gienger to a Class CU victory at Winnebago-land.



Les Kahn, over-all winner of 1000 Islands grind, shakes with Marcel Raveau, designer and builder.



Gene Aubrey drove his BU Sid-Craft to a win in BU in 1000 Islands Marathon on the St. Lawrence.



William R. Smith took AU win in this homemade hull at 50-mile marathon held in Detroit, Mich.



Most consistent marathon racer of the season was Craig DeWald, who campaigned in Class AU.



Bob Murphy, Class "36" winner at Winnebago-land, relaxes after grueling eighty-mile distance.

south of the Mason Dixon line with an aggressively handled PR, though perennial front-rank runner, Doug Creech continued to be the toughest man to beat to the finish line on the You-all circuit. Creech won three of the four alcohol Southeastern Divisional titles posted at Bug Island Lake, Clarksville, Va. Creech copped straight heats in Class A and merged a second and first in Class C for the PR title. Starnes won the F event. Vic Scott won B Hydro but since he was racing out of his own Northeast Division, second place finisher Dough Creech technically became the Division champion in B, too.

Traveler Dennis Martin of Jackson, Mich., 1954 N.O.A. Class B champion showed up frequently in the winning ranks in both B and C at races throughout the entire midwest, east and south.

The alcohol drivers throughout the entire mid-eastern section of the country split allegiance between A.P.B.A. and N.O.A. so that as frequently as

not, names such as Tenney, J. J. Arthur, Martin, Campbell, Starnes and Creech appeared in the winners' lists of events sanctioned under the banner of either organization.

On the West Coast, Ward Angille, Daly City, Calif., whose name has appeared in record books for a decade and a half, proved to be old in experience as he ably provided tough competition in both C and C Service Hydro. Tommy Ingalls of Bakersfield, Calif., was another driver who could be counted on to be among the front runners at any Pacific coast hydro event.

The stock outboard scene continued to grow in scope, with the focus divided between closed course events and the long-distance grinds. In general, the winners of the marathons seem to be specialists in that field; many of the long-grind racers competed in no other form of racing.

Prominent among the 1955 marathoners was Craig DeWald, a 15-year-

old Reading, Pa., high school boy who consistently not only finished any long distance grind he started but was more frequently than not in first or second place at the tired end of the event. DeWald has had a colorful career for so young a racer. At fourteen in his first season of racing, he not only won the year's biggest and toughest marathon, the Milwaukee Sentinel—Winnebago-land 88-miler (then 92 miles) and several other major marathons in Class AU but nearly had his career wiped out at its outset when he flipped in a closed course event he was leading, was run over by a following boat, suffered a number of broken ribs and serious cuts necessitating 100 stitches. DeWald was back this season more strongly than ever, driving a homemade hull based on Dry Run boat plans and powered by a three-year-old Mercury 15-cubic-inch which has yet to let him down.

Veteran marathoner Fred Snyder, (Continued on Next Page)

(Continued from Preceding Page)

Lancaster, Pa., who at one time or another has won nearly every major grind, was an in-and-outer during '55. In several events he made a somewhat poor showing. Then, as if to prove that the master's touch has not been lost, Snyder copped a 75-miler at Hartford, Conn., and then a hair-raising 104-miler at Eastmanville, Mich., moving up from behind in the final mile to take that one.

Les Kahn, New York City, was another constant threat in DU. Kahn won at Norfolk, Va., over a rough 60-mile distance and again at Alexandria Bay, New York in the relatively smooth 87.5 mile St. Lawrence River event.

A marathon event now in its third year, which jumped from the minor league rating into the big time largely through the combined promotional efforts of the Belle Isle Outboard Club in cooperation with the Detroit Times, is the 50-miler on the Detroit River. Surprise over-all winner was Dominic Martines, Livonia, Mich., who led Al Nausieda, Chicago, Ill., across the line by a scant 3-second margin, besting such local standout marathoners as Detroit's Ray Lenk, Skip Forcier and one-time Winnebago winner, Dick Gallagher.

Tom Conte, Montgomeryville, Pa., 1954 Delaware River marathon winner, led home a disappointingly small 48-boat field at the Solomons, Md., 50-miler.

The toughest event for the long distance drivers was still to be run at the time this report is being written. It was a new addition to the marathoners calendar, the Stockton to Redding, 216-miler which may rival the long-established 115-mile Needles, Calif., event in the west.

In closed course events, each section of the country was developing its outstanding drivers as the racing focus shifted from Florida and beamed out throughout the entire forty-eight States. Familiar names such as Rocky Stone, Willamina, Ore.; Burt Ross, Jr., Seattle; Bill Larsen, Jr., and Bob Larsen, De-Lake, Ore.; Bill Olson, Tillamook, Ore.; Don Benson, Seattle were intermingled with less familiar drivers who began to develop winning ways. Allen Megguier, Salem, Ore.; Arvid Nyleen, Willamina; Don Atchison, Oswego, Ore.; John Hartley, Coquille, Ore.; Gil Ward and Paul Woodroff, Salem; Glen Kach, Portland, Dan Sizemore, Maple Valley, Wash.; Dick Stephenson, Pyallut, Wash. and Bob Waite, Kirkland, Wash., all looked as though they would be strong potentials at the Devil's Lake, Oregon, A.P.B.A. Stock Nationals.

In California, a strong contingent of stock drivers who were well established in 1954 again wrote the boat racing headlines during the summer months. Chuck Boring, Modesto; Eddie West, Berkeley; Bob Parrish of Bakersfield; Howard Thompson, Downey; Ron Loomis, Santa Barbara; Bud David, Modesto and Vic Bonham, Pomona dominated stock action throughout the State. In the Middle Atlantic States,

John Wehrle, Hackensack, N. J. and John Shubert, Clifton, N. J., were hard to brush and stood out from the pack in A and B stock events while Horace (Duke) Macconi, Penns Grove, N. J., dominated both the DU and DSH ranks.

Farther south, Buddy Flemming of Edgewater, Md.; Bill Wenger, White Rock, S. C.; Jack Holt, Fort Belvoir, Va.; Fred Deal, Newton, N. C. and Guy Hamilton, Jr., New Bern, N. C., were usually to be found well up at checkered flag time.

In New York State, Allyn Guerin, Webster, showed that he hadn't lost his one-time champion's touch. Nick Chapman from Long Island kept his home town East Moriches well represented in the winners' ranks in both closed course and marathon competition while to the north Walt Robbins and his son Robert Robbins (BU winner at Winnebago) of Springfield, Mass., gave the B and D Stock Runabout boys plenty to consider along with one-time alky hydro racer, Jim Loomis, Camden, Conn., who now campaigns a successful DSH.

Chris Erneston, Skipper Ritter, Don Baldaccini, Dave Alsop and Jack Sellers, all Floridians, who had swept the winter circuit in most stock classes continued through the summer months at the same trophy garnering tempo.

However, of all the areas in which races were conducted, none showed as much growth and popularity as the stock racing activity through the Great Lakes region of Michigan, Ohio, Illinois and Wisconsin. On most weekends, race dates were scheduled for both Saturdays and Sundays. Elimination heats were a foregone conclusion since most regattas were represented by 100 to 175 entrants. Breaking through for a win in that type competition was plenty tough.

The new "36" class which came into its own from a small start in Illinois rapidly spread with names such as Larry Freeman, Milwaukee; George Cassi and Bob Murphy, Springfield, Ill.; and Pete Guibor, Ottawa, Ill., frequently showing up in the winner's circle with Freeman the dominant driver in

(Continued on page 12)



This courtesy pick-up boat made frequent appearances at racing events in the Michigan area during 1955 to help drivers and sponsors as well.



Pit view at Shreveport, La., at N.O.A. alky burner event. Stars were Bob McGinty (4 firsts) and Clint Cavin, Jr., (3 firsts & 1 second).





Belle Isle Marathon DU trophies are given (r. to l.) by Blanche Wise to Dominic Martinez, 1st, Al Nausieda, 2nd, and George Gillette, 3rd.



An AU runabout shown taking to the air in the N.O.A. North-South Championships. Jim Doty won two straight heats in this 15-cubic-inch event.



Yanks became N.O.A. North-South champs by beating Rebels in two of three divisions. Jim Griffin here gets trophy from Dr. G. W. Reichardt.



Division III of annual North-South N.O.A. championships was held on Cumberland River at Clarksville, Tenn., where hydros met rough water.



N.O.A. Division IV championships were held on the Ohio River, Cairo, Ill. Clyde Davie and Cecil Wagner divided honors for modified Bs.



Women finishers of Detroit marathon get trophies from Lee Schoenith. From left, Helen Bucurestean, Elsie Scherer and Charlotte Gallagher.

## BOAT SPORT COVERS THE RACING SCENE

(Continued from Preceding Page)

the class. Gerry Waldman, Milwaukee, who in 1954 seemed to have lost his winning combination at the Nationals came back strongly at the Region 7 championships copping first in A Stock Hydro and showing some fast running equipment in other classes. Bill Hering of Sheboygan was consistently hot in BSH as was Clarence Norgal Hales Corner, and Dave Cortney, Neenah, in BU and DU. Bill Janz of Chicago was scorching summer circuits in DSH along with such other drivers as Lee Dingman, Peewaukee, Wisc., William Holloway, Tip City, Ohio, and Larry Kruger, Celina, Ohio. Dean Chenoweth of Xenia, Ohio, continued to show promise of fast running equipment as was evident at his lone winter appearance on the Florida Circuit. Cappy Trotter of Rockford, Ill., was another consistent performer as were Bill Leutner, Milwaukee, Wisc.; Bill Schrewe, Sheboygan, Wisc., and Ralph Tatgenhorst, Lansing, Ill. One of the most popular of the drivers from Wisconsin was Jack Abraham, Fremont, who not only helmed his Mercury Mark 25 DU Thompson hull to first home in the WinnebagoLand grind but was often found among the winners of BU and DSH closed course events.

All in all, the season has been out-boarding's most terrific one. National champions and the high point winners are still to be determined. The only major problem presenting itself is some solution to the endless elimination heats at many of the stock regattas which cause the officials to work from dawn to darkness and spectators to become confused by the far more than scheduled number of events listed on the program. (End)



Robert Robbins drove Sid-Craft to victory in WinnebagoLand BU class.



BOAT SPORT's Blake Gilpin interviewing Fred Snyder and Chet Michaels.



ASHs in action at A.P.B.A. Region 7 Championships, Winneconne, Wis.

**BOAT SPORT COVERS THE RACING SCENE**







Bill Harper starts to lose his Kish DU hull at Clarksville, Virginia.



Les Kahn, over-all winner at 1000 Islands, also won Norfolk marathon.



A BSH heat at A.P.B.A. Region 3 Championships, at Laurel Lake, N. J.



One of the pits at 1000 Islands marathon, near Alexandria Bay, N. Y.



Tullio Celano, Sr., won in AU at 1000 Islands with 33.98 mph average.



Clarence Norgal catches wake in BU heat at Region 7 Championships.

# TUNING THE BIG TWINS FOR "36" CLASS COMPETITION

By Shanon Place



Class is quite popular in Europe, where it is called *Categorie CIU* for 585 cubic centimeter motors. This is beautiful view of Port of Monaco,

<sup>1</sup> near Monte Carlo. Note that all boats in this photograph are manned by a team of two, whereas in the U.S. driver is only person aboard.

EARLIER this season BOAT SPORT announced the probationary introduction by the American Power Boat Association of Class "36" for stock outboard motors with a range of 30 to 36 cubic inches piston displacement. During the year the class has grown in popularity with new equipment being registered each week and more and more contestants taking to the big alternate firing twins.

In 1955 the Evinrude Big Twin and the Johnson Sea Horse 25, both of 35.7 cubic inches piston displacement, with  $2\frac{7}{8}$ " bore and  $2\frac{3}{4}$ " stroke, were about evenly selected in numbers by drivers entering the class. In 1956 a third motor, the new Buccaneer 25, will unquestionably also have its adherents.

Though these motors are raced in stock condition with only a limited number of alterations being allowed,

these few modifications are exceedingly important to the driver planning to race with success.

The hulls used for "36" are runabouts which, with the driver (plus riding mechanic if desired, though we've yet to see a two-man "36"), securely fastened coaming pads, seats, cushions, permanent hardware, flotation equipment and racing clothes of the driver (and passenger, if carried), excluding life jacket, helmet and knee pads, must weigh a minimum of 435 pounds. The hull is strictly a matter of the driver's own personal taste, though the runabouts, of course, must conform to the A.P.B.A. hull dimensions requiring minimum over-all length of 13', a minimum of 48" over-all width, 16" minimum molded depth and 12" minimum depth from sheer to keel line, measured at the transom.

Our concern, however, is the set-up of the motor for best performance under competitive conditions.

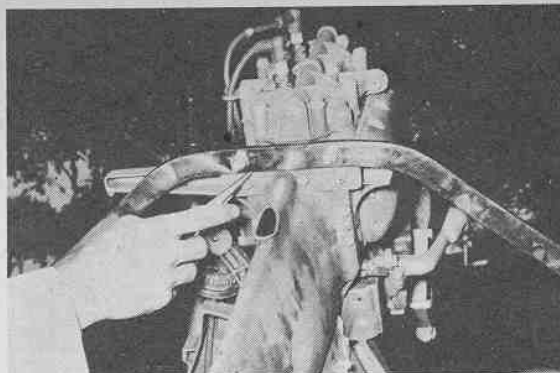
Though the class is relatively new, it like all new classes, is suffering from growing pains. The first of these made itself felt at the Milwaukee Sentinel-Winnebagoland Marathon, and the problem at this writing has not been ruled upon. Under the rules there is a clause which states, "there shall be no substitution of components, such as lower units, carburetors, magnetos, etc., unless furnished by the manufacturer as a replacement or a modification for the particular model . . . in this way old models may be brought up to date by addition of late model parts of the same basic engine."

There is little to base a choice upon between the Johnson Sea Horse 25 and  
(Continued on Page 25)





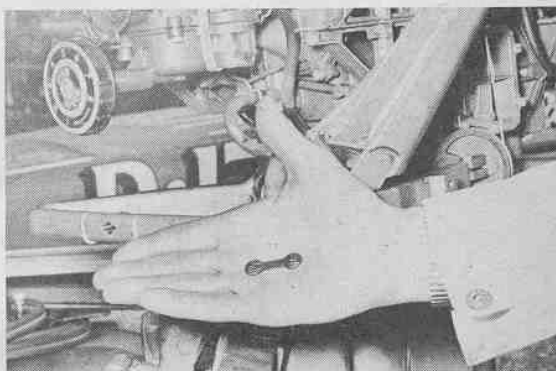
Jack Rowe, St. Joseph, Mich., points to the pawl which should be filed down  $\frac{1}{4}$ " so timing can be changed to racing setting.



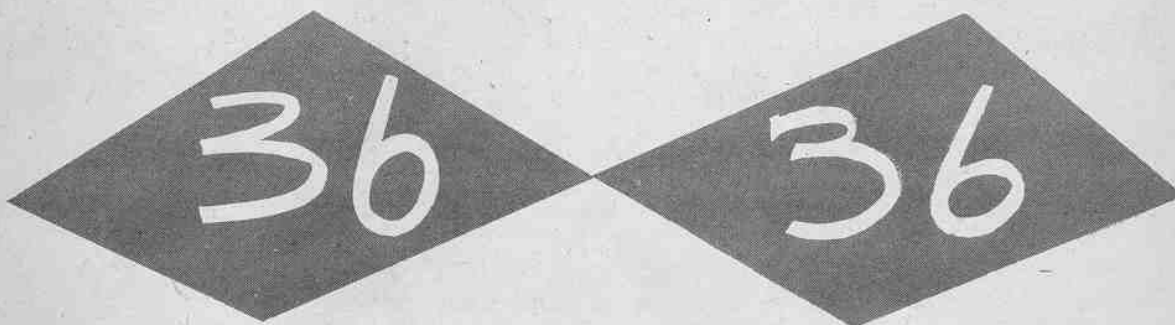
Mercury KG-9 type steering bar installed on special bracket bolted to power head is recommended as a racing refinement.



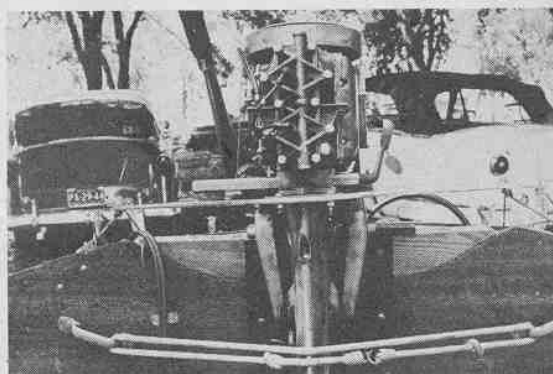
Helen Bucurestean gets help from husband Nick before start of the 50-mile Belle Isle Marathon. She was first woman finisher.



Two small rubber discs held in position by spring make fuel pressure valve. Check it frequently during the race season.



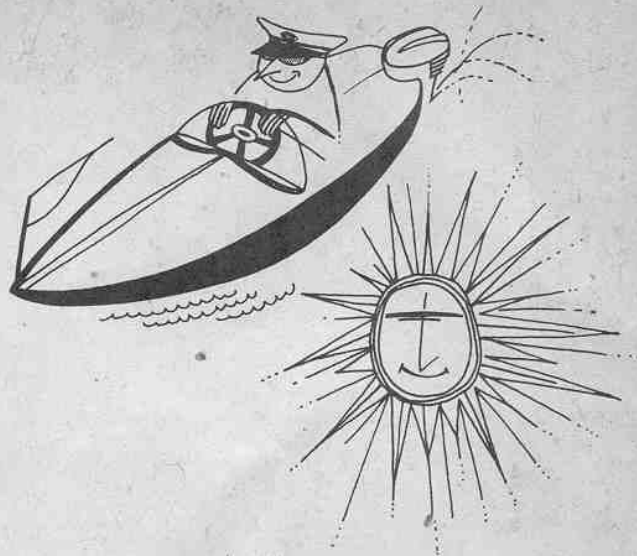
Proper propeller is important. Two frequently used are the Oakland Johnson (left) and Michigan, with shock absorber.



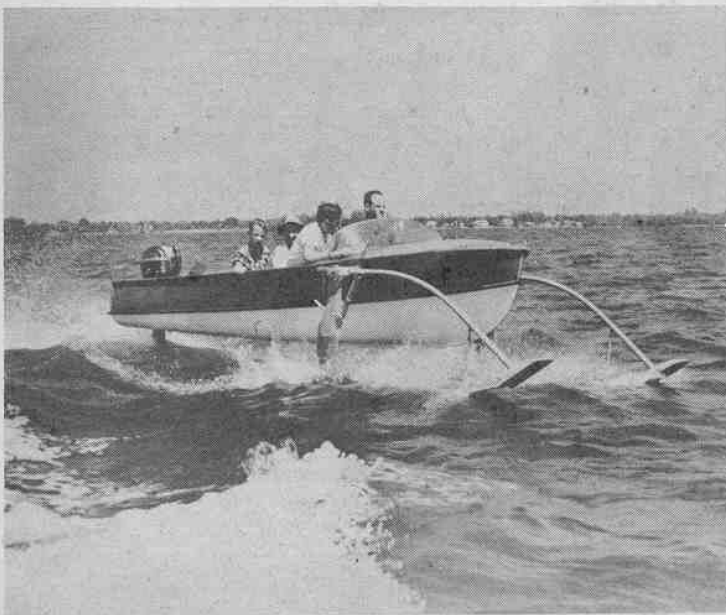
This transom has been built up to 17  $\frac{3}{8}$ " for more speed. The tie-down is a combination of bungee cord and coil springs.

# OUTDOORS WITH THE OUTBOARDS

By John G. Kingdon



Want to rise above the waves and "fly"? A Hydrofin kit is said to add as much as 50% to a boat's speed and to ride smoothly over rough water.



Bert Bennett, Philadelphia sportsman, heads out into Little Egg Harbor Bay on Long Island in a 16-foot outboard powered garvey wearing two-piece foul-weather suit from Crow's Nest.





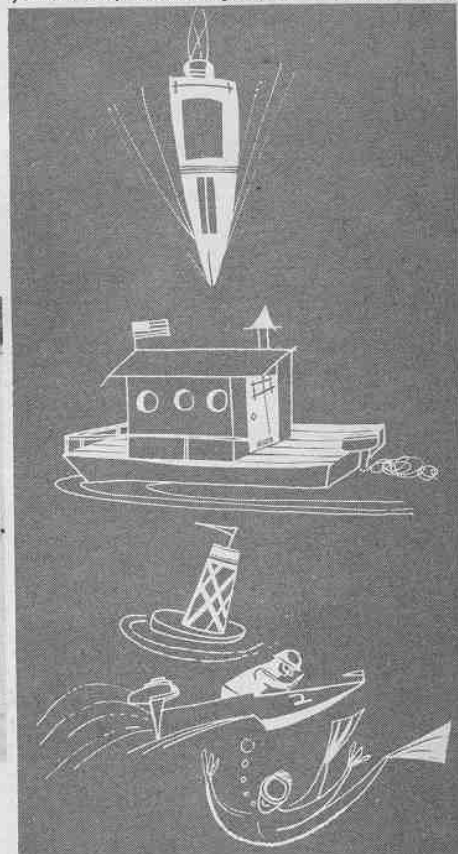
Swimming from an outboard is fun for the whole family. Dad is here checking up on his young son's technique. Two Oliver 15s power this Dunphy Muskies runabout.



Water-Skeeter pontoon boat takes motors up to 3 hp and is hard to beat as a fishing craft in shallow, snag-filled marshes and ponds.



A transom assembly from one of Glen L. Marine's do-it-yourself kits, which range from 11' utilities to cruisers.



HAVE YOU started to plan for next season? If not, you are missing a lot of fun because winter-time dreaming with its attendant scribbling of lists, poring over charts, overhauling equipment and purchasing new gadgets is almost as pleasurable as summer-time boating.

ONE THING that should be high on your list of things to be bought is a really small outboard motor to use as auxiliary power. A couple of years ago, we covered many hundred miles in an 18-foot outboard cruiser powered by a 25-hp motor. In the forepeak locker, we carried a 1½-hp motor. A lightweight stern bracket on one side of the transom allowed the small motor to be used without disturbing the big one. And we used it often.

When trolling for fish, for instance,

it produced less speed than the big motor could even when throttled way down. It also burned less fuel and it didn't foul up and "four-cycle" as the big motor might have if operated at trolling speeds for any considerable length of time. And, certainly not least important, it permitted us to cruise off shore with an easy mind because we always knew that it was available to take us back to port in case the big motor broke down.

Of course, the big motor, being one of today's dependable products, didn't ever fail us, but even the most perfect things can prove troublesome once in a while and it was certainly nice to know that we weren't going to be stuck in the middle of Long Island Sound or several miles east of Scotland Light with no way of limping back to port.

Equally practical is the use of a small

motor as an auxiliary on a big sports runabout. With the large motor, you can cover many good fishing grounds in a day's time. Once at a likely spot, the big power plant is shut off and the small one is started. You then glide along effortlessly while you either probe the shore line with casts or troll lures astern.

AND SPEAKING of motors, their care and repair is a topic that is interesting at any season of the year. One Evinrude dealer on Long Island, in cooperation with the local high school's adult-education program, taught outboard-motor maintenance to fifteen people last winter during a three-month course. There was no charge to the students and among the subjects covered were Outboard Motor History, Trouble Shoot-

(Continued on Page 29)

## first:

Lee Schoenith, eventual Gold Cup winner, was unaware of his victory until hour after the finish; even then it was not made official.



THE EVENTS which took place during the actual running of the three thirty-mile heats of the 48th Gold Cup Race on August 7 in Seattle were, without a doubt, merely in keeping with the turbulent events of the preceding week, and also an introduction to the post-race tempest-in-a-teapot which had all of Seattle aquiver.

Somehow all of the pre-race hassle over Referee Mel Crook's ruling eliminating the "under the bridge" flying start, practiced in the past by Lou Fageol and "Slo-mo-shun V," paled into insignificance when the race itself actually took place. The waters of beautiful Lake Washington were practically ideal for the big boats. The

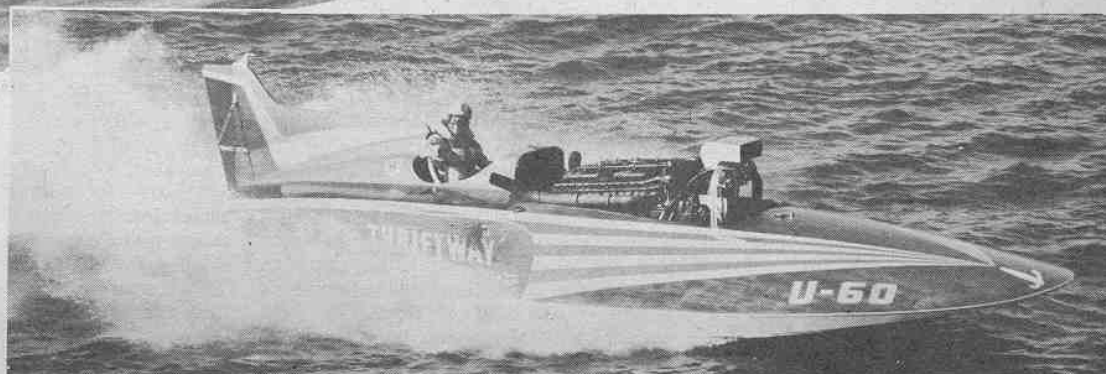
## Torque

original field of thirteen entries had been whittled down to ten by the withdrawal of Ray Crawford's Zephyr "Fury," a broken super-charger quill shaft on George Simon's "Miss U.S." and the scratching of "Slo-mo-shun V" after Lou Fageol's fantastic 360-degree loop in a qualifying trial.

Eight of the Unlimiteds actually crossed the starting line in the first heat. Two boats were out: "Such Crust III" unable to get started in the pits, and Henry Kaiser's "Scooter II" beached with a hole in her hull before the start. At the start, it was Lee Schoenith in "Gale V" over first, followed by Bill Cantrell in "Gale IV."

(Continued on page 32)

"Miss Thriftway", designed by Ted Jones, built by Les Staudacher, was driven by Bill Muncey to two first places and a third for runner-up.





# TALK

By Lou Eppel

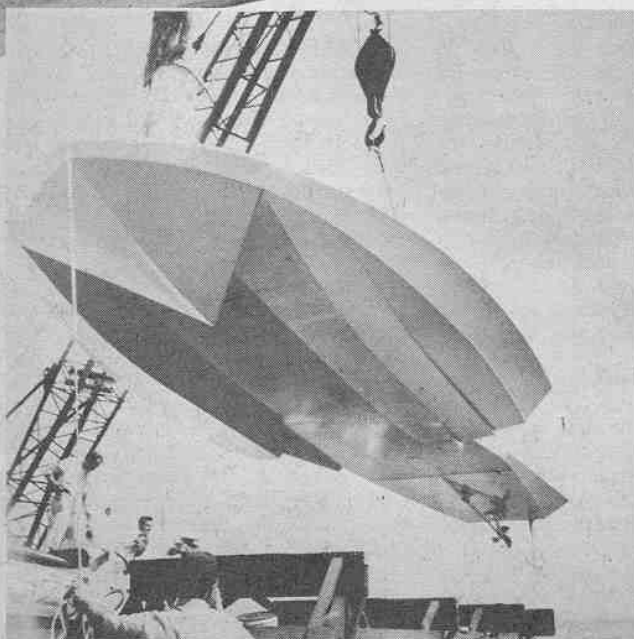
INBOARD RACING AUTHORITY AND MEMBER  
OF A.P.B.A. GOLD CUP COMMITTEE REVIEWS  
SEATTLE'S "ALLISON IN WONDERLAND" EVENT

first:

"Gale V" took two second places and one third, plus bonus points, to win the three-heat, ninety-mile Gold Cup race.

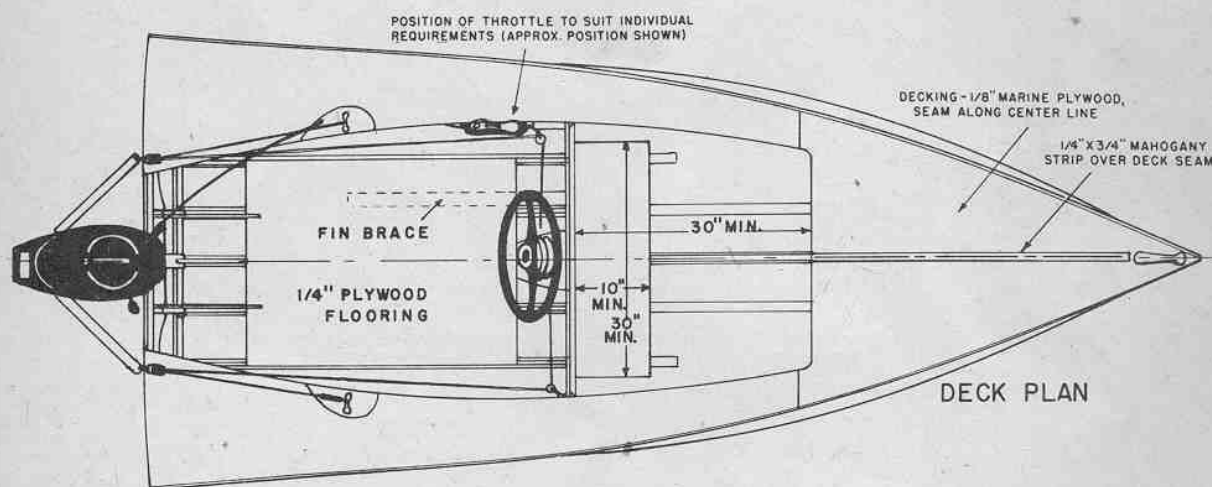


(Below, left) An unusual hull shot of an unlimited hydroplane. This is Guy Lombardo's "Tempo VII". (Below) One of the pits at Seattle.



# HOW TO BUILD A PLYWOOD PLANKED RUNABOUT.....

By Hal Kelly



"AIRBORNE" is basically a class "B" Runabout but can be enlarged to a "D" Runabout and will qualify under the 1955 A.P.B.A. rules. Built with the materials listed she will weigh 130 pounds with all hardware.

To avoid confusion, let me explain that there are two "Airbornes": the one I ran last season and this one. They are almost identical but this one has tumblehome forward of amidship on the sides.

"Airborne" will take any motor from 7 hp to 25 hp with safety and hold four people with comfort. If you plan to use a regular pleasure motor the transom should be about 15" high. She also makes a fine boat for water skiing. Plywood in 12' lengths would be ideal, but if not you will have to glue up two 8' lengths. A typical plywood joint is clearly illustrated on this page. A two-inch bevel is best done with a good size hand plane with the plywood clamped to a flat surface.

When building "Airborne," stick to the materials listed. Don't mistake Philippine mahogany for mahogany. That stuff is best suited for the making of cigar boxes; it is too brittle for boats. Let's face it—this is not meant to be a one-season boat; given reasonable care it will last for many years. It cost me about \$125 and 75 hours work. You'll spend a few hours alone getting a nice slick bottom.

After accumulating the stock listed in the bill of materials, you are ready to start on the ribs.

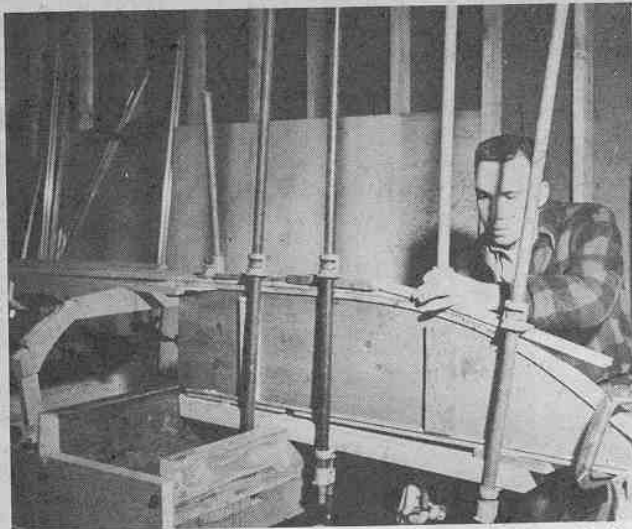
Cut all of your rib components and place them on full-size rib drawings, using Anchorfast nails and screws.

The bottom of each frame is continuous from chine to chine; sides of frames are 1 3/4" wide and straight-sided; the large gussets form the non-trip chines. Place the frame components on the layout and hold them in place with temporary fastenings. Place two plywood gussets over frames (one on

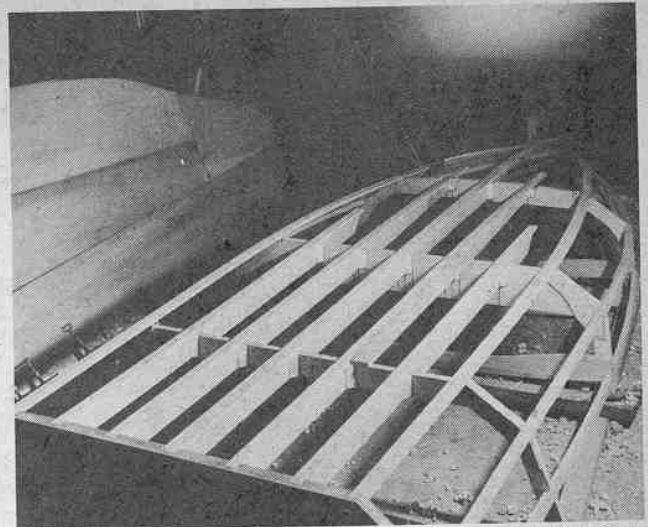
each side) and fasten with glue and 1" Anchorfast fastenings. You'll have to drill undersize pilot holes. There should be at least three Anchorfast fastenings in each frame piece. When both sides are finished, carefully turn the frame over and fasten the gussets on the other side. Before lifting the frame from the drawing, carefully inscribe the center line on one face.

Assemble the transom and the transom frame. Cut transom from 1/2" solid mahogany and transom framing from 3/4" mahogany. First assemble the transom frame and carefully notch for battens, keel, chines, and sheer before assembling transom framing. All lapped joints should fit snugly. Coat the mating surfaces of the joints and aft surfaces of framing with Weldwood glue and clamp the transom and framing together. Bore for fastenings and screw the frame to the transom with 1 1/4" No. 8 flathead wood screws. Allow one  
(Continued on Page 23)

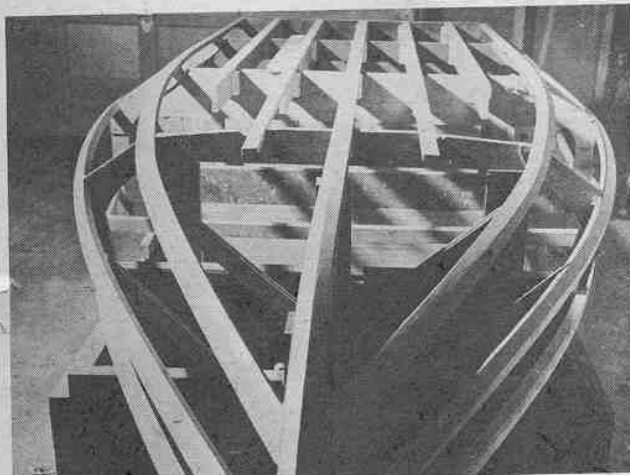




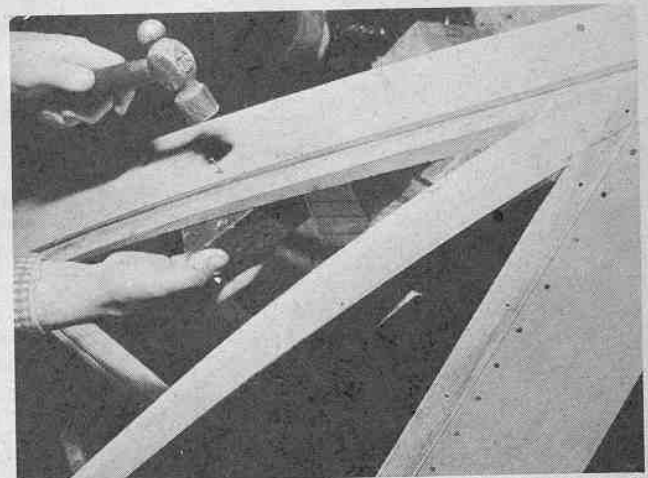
Here the ribs are set up on a rather extensive jig. Keel is backed up with a piece of mahogany  $\frac{1}{2}$ -inch by  $1\frac{1}{2}$ -inch forward of rib No. 1.



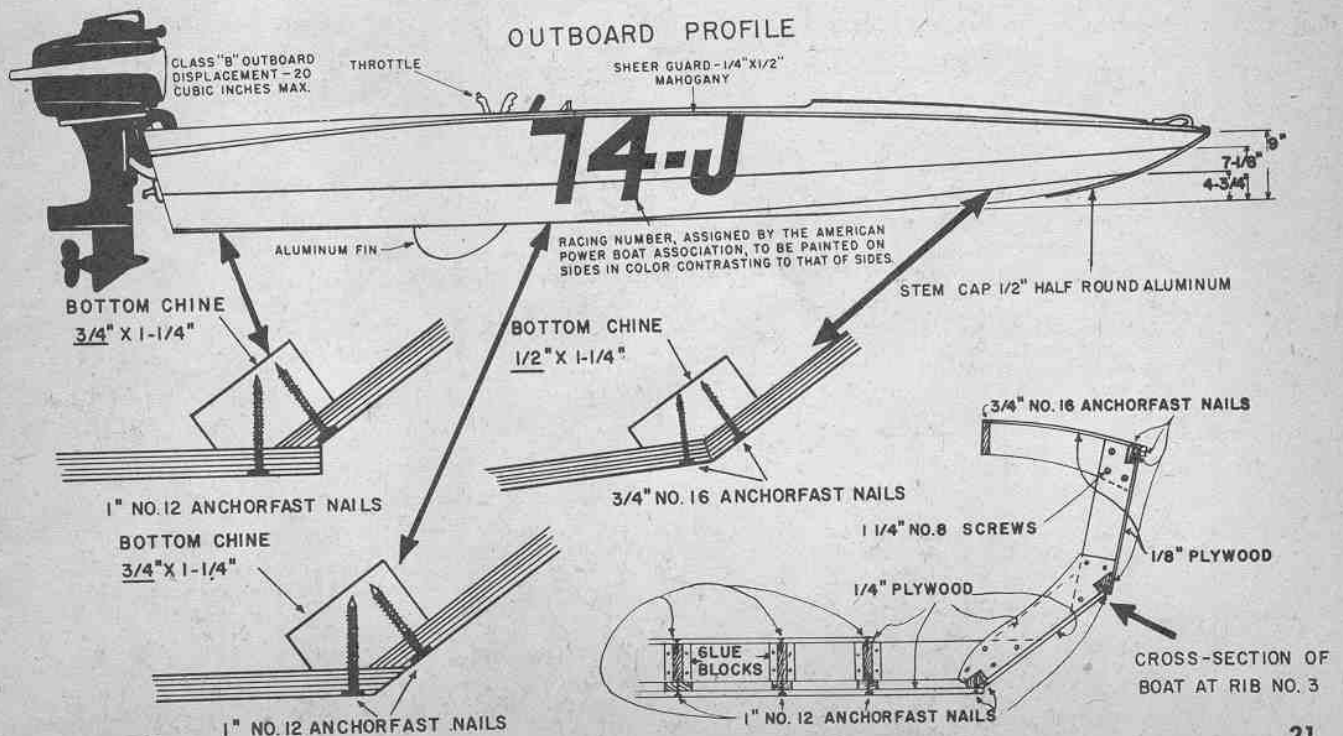
If you have a wooden floor in your shop you can nail right to it. In this case the floor was of concrete and this simple jig worked nicely.



Here the frame is all faired, ready to receive plywood. This takes more patience than it does skill. Fin brace is next to batten No. 2.

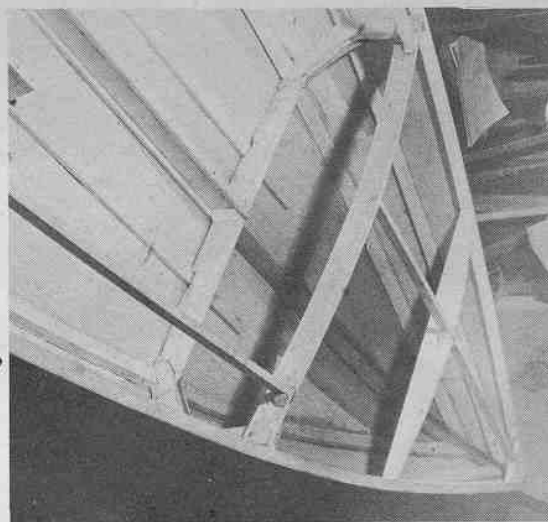


The non-trip chines are glued and  $\frac{3}{4}$ -inch No. 16 Anchorfast nails are used at bow, where bottom will butt against chines for about 3 ft.

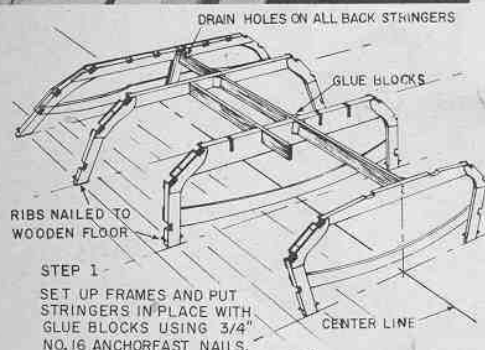




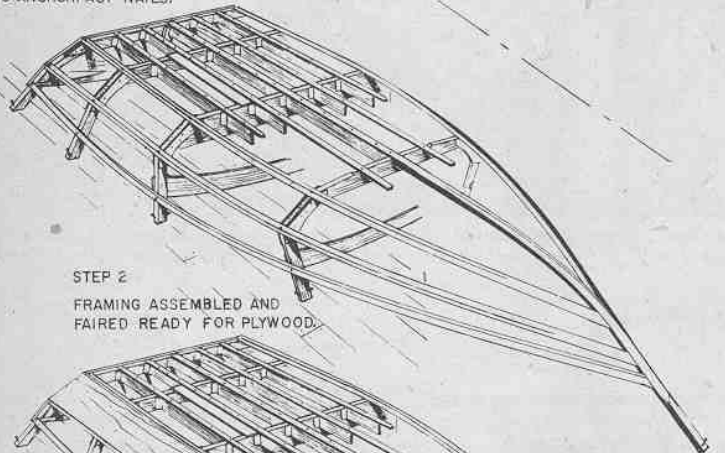
Detail of inside of stem. Mahogany was used under the stem piece forward of rib No. 1, thus the stem is 1" x 1½" at this point.



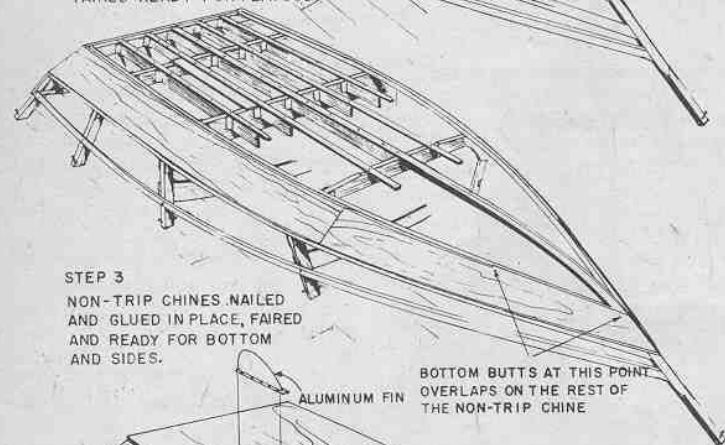
Bow is complete, ready for decking. Four coats of varnish have been put on under deck—easier now than later.



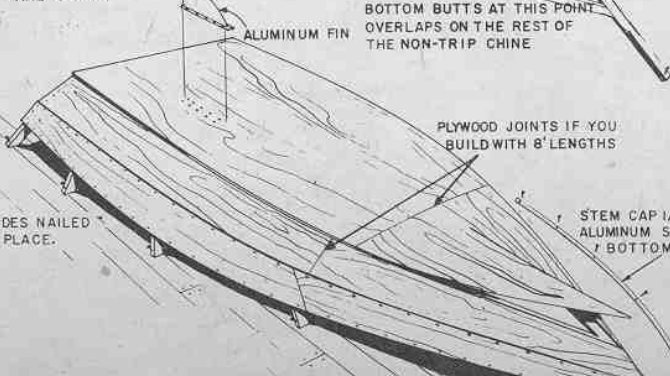
STEP 1  
SET UP FRAMES AND PUT STRINGERS IN PLACE WITH GLUE BLOCKS USING 3/4" NO. 16 ANCHORFAST NAILS.



STEP 2  
FRAMING ASSEMBLED AND FAIRED READY FOR PLYWOOD.



STEP 3  
NON-TRIP CHINES NAILED AND GLUED IN PLACE, FAIRED AND READY FOR BOTTOM AND SIDES.

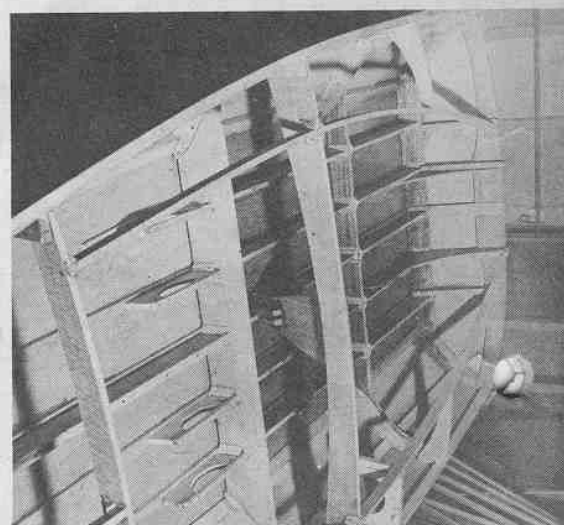


STEP 4.  
BOTTOM AND SIDES NAILED AND GLUED IN PLACE.

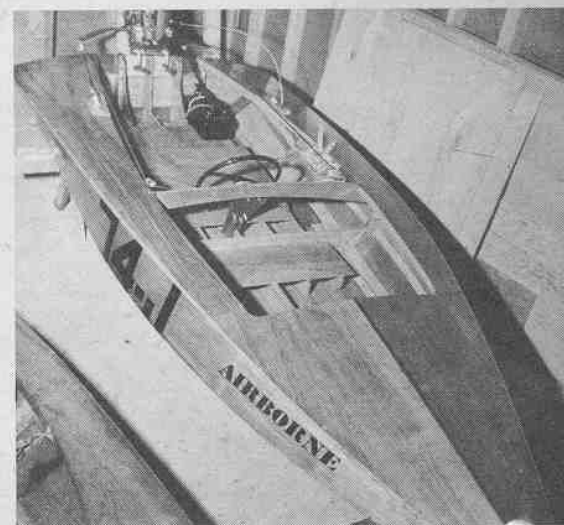
BOTTOM BUTTS AT THIS POINT OVERLAPS ON THE REST OF THE NON-TRIP CHINE

PLYWOOD JOINTS IF YOU BUILD WITH 8' LENGTHS

STEM CAP 1/2" - HALF ROUND ALUMINUM STRIP TO COVER BOTTOM SEAM.

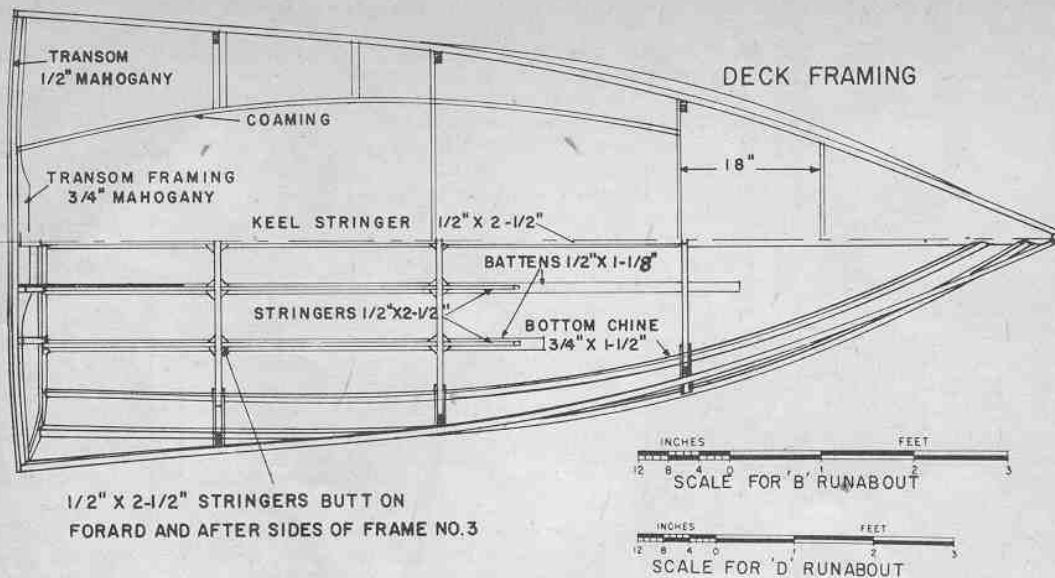


This photo shows how bottom is glued and nailed with Anchorfast nails to battens.



"Airborne" is all set set up, ready to race, with her A.P.B.A. number painted on side.





(Continued from Page 20)  
day for the glue to fully set before taking off the clamps. The keel and stem are one piece.

Forward of Rib One the keel (which is  $\frac{1}{2}$ " x  $1\frac{1}{2}$ " spruce) is backed with a piece of mahogany  $\frac{1}{2}$ " x  $1\frac{1}{2}$ "; both are glued together after the proper shape has been obtained, and, steaming is not necessary.

After the glue in the frames is hardened, remove the clamps and cut the notches for the sheer and chines. Note that only in frame No. 2 do the bottom stringers go through.

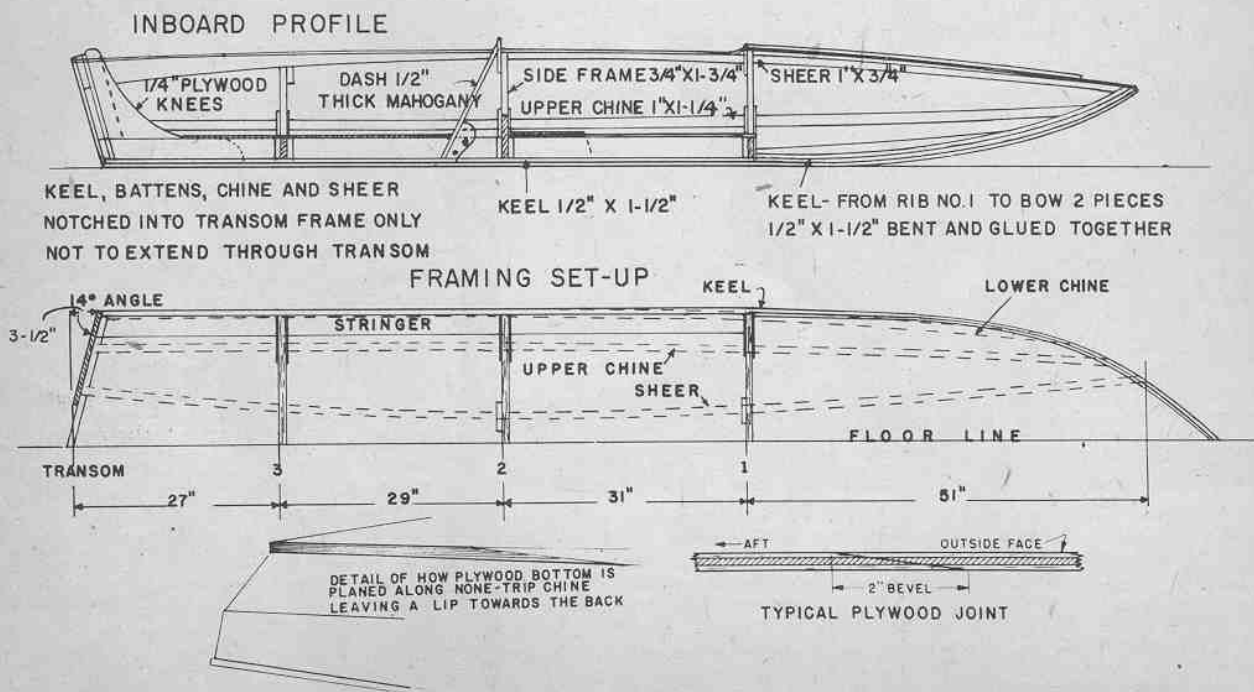
The boat should be built on a level wooden floor, or on a wooden cradle laid on a concrete floor in a space about

the size of a one-car garage. Lay out the center line and frame lines on the floor or cradle according to the spacings given in drawing, using such temporary bracing as you feel necessary. Set up frames and transom; a couple of nails will hold each frame to floor or cradle. When all is securely erected, coat the bottom stringers and notches with glue and slip into place. Then fasten to ribs and transom with blocks, using glue and  $\frac{3}{4}$ " No. 16 Anchorfast nails. Next slip the keel into place with glue and  $1\frac{1}{4}$ " No. 8 flathead wood screws, using two screws to secure keel to transom and one about every 10" to the bottom stringer. After all the battens are in place, screw them to the bottom string-

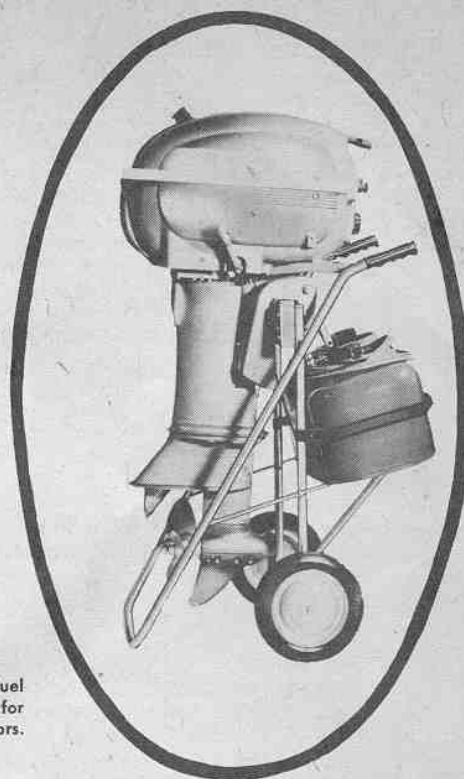
ers, as was done with the keel. Next secure the chines and sheers, using glue and  $1\frac{1}{2}$ " No. 8 flathead wood screws. Where they butted against the stem and transom, bevel them to obtain a good landing, one screw at each frame, transom and stem. The bottom chine, which is white oak, is cut thinner from the bow to Rib No. 1, where it gradually takes on its original thickness. The front part of the lower chine is  $\frac{1}{2}$ " x  $1\frac{1}{2}$ " in size; this will allow it to bend better and lighten the nose. Don't forget fin bracing from frame No. 2 to frame No. 3.

Before fitting the planking, bevel the frames, chines, sheers and keel, using

(Continued on Page 28)



# It's NEWS



The Lumex motor and remote fuel can carrier is a convenience for owners of larger sized motors.

## MOTOR AND FUEL CAN CARRIER

A handy item, particularly for the owner of a relatively heavy outboard motor, is the Lumex motor carrier which not only serves also as a motor storage stand but contains a convenient rack for simultaneous transport of motor and remote fuel tank. The deluxe carrier (Model #203), is priced at \$19.95. It is manufactured by Lumex, Inc., 11 Cleveland Street, Valley Stream, N. Y.

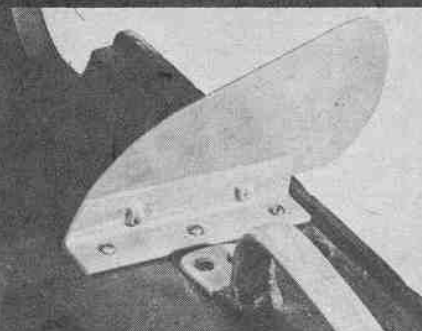
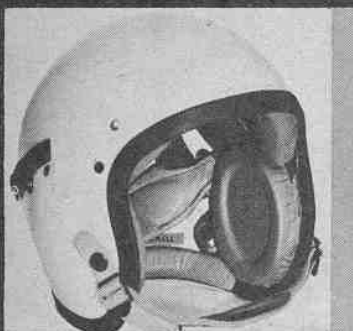
## SPORT LADDER

A new adjustable boarding ladder, ideal for water skiers and swimmers to climb back into high gunwaled hulls, is made of aluminum alloy, with rubber guards to protect boat sides. Steps are readily adjustable with a wrench that is included with the kit. The two-step model sport ladder is 3'8" long and lists at \$14.95, from its manufacturer, Holmes Outboard Motor Mount, San Leandro, California. A single-step model lists at \$10.95.

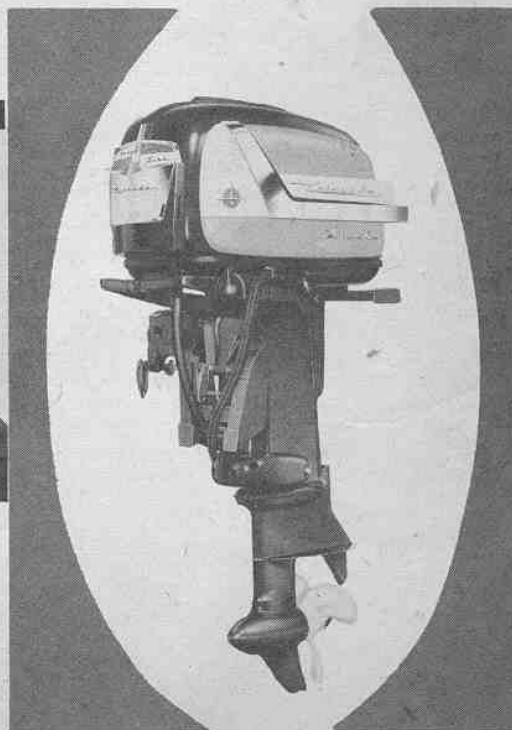
## LIGHTWEIGHT RACING WHEEL

Kiekhaefer Corporation, Fond du Lac, Wisconsin, carries an excellent three-stroke, 15" diameter, die cast aluminum racing wheel which weighs only 5 pounds 6 ounces. It is equipped with molded nylon bushings, impervious to the elements and is available in either green, red, navy blue or ivory at \$14.95. It is claimed to be the lightest and the strongest racing wheel ever designed.

(Continued on Page 34)



(Above, left) The Gentex safety helmet has interior padding and contains flotation material. (Above, center) Included in the new Blitz line of marine hardware is a transom fin for hydros. (Right) the new Evinrude Lark, a 30 hp outboard, heads their 1956 line.





## Tuning the "Big Twins" for "36" Competition

(Continued from Page 15)

the Evinrude Big Twin other than cowl color, and the cowl is usually removed for racing to offer more ready access to plugs and motor parts as well as to modestly reduce over-all weight. 1955 models of both motors had rubber and spring suspension to eliminate vibration. The rubber and spring suspension was designed for reduction of noise, something of considerable importance to the pleasure boater but not of any note to the racer. There are, however, a few drivers who feel that some of the horsepower developed in these later models is absorbed by the spring mounting, hence they prefer the pre-1955 models. The lower unit of the late '55 models has been beefed up somewhat and is 1/32" bigger. Thus, the drivers who are looking to every speed potential, prefer the earlier models with the older style units, which being slightly smaller, present somewhat less underwater drag.

However, the cylinder blocks of the later model 1955s are slightly modified by means of elongating the exhaust ports, and the boys in the know quickly realized that they could pick up a bit of added speed by using the late model blocks. The problem arose as to whether or not the combination of a 1955 cylinder block run with a '54 lower unit would or would not present a hardship to those drivers who were racing a complete pre-'55 powerhead and unit or a complete '55 powerhead and unit. The thought, of course, being that the ideal combination was the pre-'55 powerhead equipped with the more efficient late model '55 blocks and a less cumbersome 1954 or older unit.

I have no intention of getting into this argument, which I hope will have been settled by the time this article is printed. I have mentioned it, however, both as a warning and also as a tip to the newcomers to the class who should consult the Stock Outboard Racing Commissioner prior to setting up the faster combination to be certain that it is considered legal.

The two "36" models used during 1955 and the probable three that will be in action in 1956 are the two-port, two-cycle type which rely on an automatic leaf valve arrangement for crankcase induction. The leaf valves, of which there are two sets consisting of six leaves each arranged in daisy petal fashion, are mounted on a plate in front of the crankcase. The leaf plate is constructed of beryllium copper, specially heat treated and will not warp. The leaves, under no circumstances, should be bent by hand and no attempt should be made to alter them. They should be inspected for cracks, dirt, gum or lacquer, and the faces should be cleaned and damaged reeds replaced.

The carburetor, which is of the float-feed, dual jet type, is equipped with

high and low speed jets. Unlike some carburetors, the high and the low speed jets on the "36s" do not function independently of each other. Though there is a minimum of vaporization at the low speed jet at full throttle, the low speed jet does function throughout the entire speed range of the motor. Thus in cornering, any driver who as a safety factor may have closed the low speed or idling valve entirely, may actually cause the motor to stall in the corner or at least to starve for fuel and lose power and speed. Since a modest amount of fuel is fed into the venturi by the low speed jet even at full throttle, the low speed jet also adds, though slightly, to maximum speed if properly adjusted.

Some Big Twin and Sea Horse 25 models were equipped with solid butterfly shutters, others with butterfly shutters which had holes drilled in them. The only carburetor parts change that is permissible within the rules, is to replace the perforated butterfly (should your motor be so equipped) with a solid one since this will permit a more rapid shut-down of the motor in the event of a flip, and may help prevent any extensive internal damage.

Fuel reaches the carburetor by a two line (air and fuel) pressure system from a pressurized tank. It is essential that tank, lines, valves and other components of this system be in perfect functioning condition. Crankcase pressure supplies the pressure to the tank via the air line. A check valve located under a plate at the point where the air line ties up with the powerhead (indicated by thumb direction in picture showing the connected rubber discs) should be removed and both the rubber discs and the tension retaining spring inspected to be certain that the check valves are sealing tightly. Their rubber discs are, subject to wear and the spring may lose tension. Both components are inexpensive and should be replaced if there is any question that they are faulty.

The remote fuel tank is equipped with a diaphragm hand pump. This is used only to pump fuel when the carburetor bowl is empty, which will be noted when there is little or no resistance to pumping action. If the motor appears to starve for fuel at high speeds and pumping manually corrects this condition, check the remote fuel tank for an improperly installed or faulty diaphragm which is located under the pump push-button. The fuel tank on the "36" plays an extremely important part in carburetion. The motor cannot function properly with a faulty fuel tank. Fuel problems can usually be traced to a punctured diaphragm, a loose nut at the end of the pump shaft, air seepage due to a damaged gasket around the filler cap, a clogged inlet screen at the bottom of the diaphragm pump, improperly seated or sticking pressure

(See Over)

# BOAT KITS

8 ft.  
to  
21 ft.



by  
Custom-Craft

**OVER 60 MODELS**  
INCLUDING WORLD'S MOST  
COMPLETE SELECTION OF  
**CLASS RACERS**  
and "Flying-Stern" models!

**\$49.50 up**

## WORLD'S MOST COMPLETE LINE OF REAL PERFORMANCE BOATS!

Boat racing enthusiasts will find the exact boat they're looking for among the over 60 models being offered for 1956. There are A-B, CD Stock and 3-point hydros, the Jet, Hurricane and Thunderbolt Racing Series. Only Custom-Craft features the exclusive "Flying Stern" which increases speed, stability and maneuverability. Custom-Craft also has the most complete line of dinghies, skiffs, inboard and outboard utilities and runabouts, cruisers and sailing dinghies in the industry. They're easier to assemble, better designed and contain the best materials available. See the 1956 Custom-Craft line before you buy ANY boat kit!

### Send 35c for BIG 1956 CATALOG

**SPECIAL OFFER:** Send \$1.00 and get the big 1956 kit catalog PLUS valuable book "Boat Selection, Operation and Maintenance."

# ARMOR GLASS

**Leak-Proof Your Boat  
and End Annual  
Painting, Calking!**

### SUPER-XXX RESIN

New Custom-Craft Armor-Glass is easy to apply on any wood boat, big or small. Adds strength and protects against deterioration. Never needs painting. Hundreds of uses. SEND 10c for FOLDER and measuring chart or send \$1.00 for folder and TWO valuable booklets "How to use Armor-Glass" and How to build fiberglass boat or car body." PATCH-REPAIR KIT: \$5—includes generous supply Armor-Glass plus plan for tool or tackle box.

# BOAT PLANS

World's  
Finest  
Designs



**Over 150 Modern Plans  
with  
Full-Size Patterns**

Build your own boat the modern way... the Custom-Craft way, with large scale building plans plus full size paper patterns. Saves time, effort and money! Custom-Craft has the World's largest selection of up to the minute designs for boats of all types: Racing classes, cruisers, inboards, outboards, sailboats, etc.

**ALL TYPES  
6 to 35 ft.**

Racing enthusiasts especially will like the wide selection of class racing designs featuring A-B, CD Stock and three point hydros, famous "Cracker Box" and many other championship designs. Also many exclusive Custom-Craft designs such as the famous "Pontoon" racers and "Flying Stern" models. All Custom-Craft plans are complete with instructions and hints on building. Send for complete details today!

### SEND 35c FOR 1956 CATALOG

1956 Catalog PLUS helpful booklet on boat building only \$1.00 (Tells the A-B-C's of boat building).

# BOAT HARDWARE FITTINGS

**MARINE BUYER'S GUIDE**  
World's largest, most complete catalog of full racing and speedboat accessories, general boat hardware, fittings, paint, marine engines, conversions, kits and hundreds of other bargains.

### CATALOG 35c

Catalog PLUS booklet "How to paint, outfit and care for your boat," \$1.00.

CUSTOM-CRAFT (DEPT. N) BUFFALO 7, N. Y.

release valve, a punctured tank, a loose filter cap or leaking hoses.

The float level of the carburetor must be correct, that is, the cork face of the float should come to rest flush with the upper face of the carburetor bowl. To check the float, remove the small pin, float and arm assembly from the brackets provided on the carburetor body. Lift the float free and remove the float valve and also remove the float valve seat with a screwdriver. Sticky gum and lacquer can cause eccentric float reaction. Thoroughly rinsing the float, the valve and the valve seat with a gum solvent will offset any tendency toward sluggish float action. If the tapered face of the float valve is worn and grooved, it should be replaced since this also may cause faulty float action and surging in the motor's performance. Should the float not come to rest flush with the carburetor bowl, bend the float arm gently up or down to get a level and to free the float action. When re-installing, be certain that the bowl gasket is undamaged and replace it with a new gasket if necessary.

It is recommended that the filter be removed from the glass filter bowl on the fuel line. The filter can cause a slight restriction of fuel flow and since for racing purposes at least, all fuel should be carefully strained before being added to the gas tank, straining eliminates any need for a filter.

If you are planning to race a "36" in marathon competition, you can expect to cover approximately 8 to 9 miles to a gallon of fuel. This should serve only as a guide. You should make your own fuel consumption tests, since it will vary somewhat from one boat and motor set-up to another.

Basic adjustments for high and low speed needles are a full turn on the low speed needle and  $\frac{3}{4}$  turn on the high speed needle. You should be certain that the packing nuts are sufficiently tight so that the needle adjustment will not be lost due to vibration during operation.

Normally spark and throttle control are synchronized. However, for racing purposes the spark is not connected with the throttle but rather is controlled by the tiller bar spark control with a spring loaded hand throttle controlling the fuel metering. This does mean, however, in the event of a flip, the motor may not shut off entirely immediately upon release of the throttle, but if the driver is thrown, the motor will doubtless stall because the spark will be overly advanced for the amount of fuel supplied by the idling jet.

The most important point concerning ignition, aside from good coils and condensers, which should be tested and discarded if not perfect, is to be certain that the faces of the breaker points mate perfectly. Though the factory recommends setting the points at .020", for racing purposes most drivers recommend .015" to offset high speed breaker arm lag. Breaker point sets should be replaced periodically.

Some of the drivers, too, in order to get a maximum spark advance of 34°

to 35° before top dead center, file the armature plate stop so that the advance may exceed the factory setting. Since the motor will be winding in excess of normal-to-be-expected operation, I would suggest the cooler range J-6 spark plugs rather than the J-6-Js normally fitted to the motors. Plugs should be gapped .030".

Steering is the next concern. The simplest means to set up a good, sturdy steering arrangement is to make a U-shaped steel bracket, as pictured, cut out so that it will fit around the exhaust tube. Three powerhead studs are then removed and the plate is bolted to the cylinder and crankcase assembly. A Mercury racing KG-9 type steering bar is bolted to the outer side of this plate.

The propeller with which the motor was equipped will probably be a three-blade 10 $\frac{3}{8}$ " by 12 $\frac{1}{2}$ ". This three-blade prop must be replaced by a two-blade of greater diameter. Some of the drivers use an Oakland Johnson; others prefer Michigan wheels. The Oakland Johnson model recommended is the 9 $\frac{1}{2}$ " x 16". Three different Michigans have found adherents: the bronze AJC-461, which is a 10" x 15 $\frac{1}{2}$ ", AJC-462, which is 10" x 14" and will generally be found not to have sufficient diameter, and the AJC-463 steel prop which is 10" x 15 $\frac{1}{2}$ ". Any of these four propellers will give an increase of approximately four miles per hour minimum over the standard three-bladed wheel. It must be understood, however, that all of these wheels are merely starting points. The winning driver will be the one who does a lot of testing and spends a lot of time altering, cupping and modifying these stock props to suit his own peculiar combination of weight, hull design, motor performance and personal driving characteristics.

The bronze shear pin should be replaced by a steel pin. The Michigan wheels vary from the Oakland Johnson in that the Michigan wheels are equip-

ped with a shock absorber hub, which Michigan terms its "cushion-hub" and which offers a certain added freedom from worry of pin shearing.

The final consideration is one of transom height. The "36s" are originally recommended for 15" transoms on pleasure runabouts. However, greater speed can be obtained by jacking the motors considerably higher on the transom of the utility runabout used for racing. I would suggest a starting point of 16 $\frac{3}{8}$ ", working upwards by 1/16" increments of shim stock until the perfect riding position is achieved. Remember, however, that the proper engine height for smooth water will probably be too high for peak efficiency on rough water, so that engine height and motor-transom angle again will be problems for individual experimentation and will vary with course conditions.

Don't forget to tie down your motor to the transom. The tie-down method pictured uses a combination of bungee cord and coil springs. It was set up by metallurgical lab worker and spare time racer, Jack Rowe. My personal preference is for a tie-down location closer to the driveshaft housing than the carrying handles offer on Rowe's installation. This, too, however, is somewhat a matter of personal choice. The important thing is to be sure that the motor is not going to kick up and twist, causing you to take a nasty spill at high speed and also to present a following boat with a madly whirling propeller to crawl on top of.

The "36" class should go off probation early next year and become a permanently accepted A.P.B.A. class. Such a new class is an invitation for lots of new ideas and experimentation by each individual driver and before another year is out, routine straight-away speeds of 38 to 40 mph will unquestionably move well up into the 40 to 50 mph bracket as drivers learn more about proper propellers and other speed influencing refinements. (End)

## How to Solve the Marathon Fuel Problem

(Continued from Page 7)

carrying capacity for the contemplated marathon distance with approximately one gallon to spare. The location of the tank and its size is a matter of personal choice. Some drivers alter its location dependent on water conditions, using a sternward location for smooth water and a spot closer to the bow for rough water events.

The bulk of the motors in competition in BU, "36" and DU use the pressurized type fuel system. The pressurized fuel system creates the greatest number of marathoners' problems since it is more subject to malfunctioning. With a DU a marathoner can expect to consume between 6 and 6 $\frac{1}{2}$  gallons of fuel an hour. This means for a 100-mile marathon, he will have to carry 13 gallons to be on the safe side, assuming he figures he can average 50 mph, including running time with a heavy fuel load. Gasoline-oil fuel mix-

ture weighs approximately 6 $\frac{1}{2}$  pounds per gallon so that a 13 gallon fuel load is the equivalent of carrying approximately 85 additional pounds of weight. It isn't however weigh-in weight since the fuel will be consumed by the time you reach the finish line. Every added pound cuts down somewhat on the over-all peak speed of a rig so that careful fuel consumption testing will eliminate carrying unnecessary weight. Also many drivers prefer lightweight aluminum fuel tanks as an added load saver to the heavier steel tanks provided by the manufacturer.

The simplest way to provide the necessary fittings for a home fabricated tank is to take the top with its components from a standard pressurized 6 $\frac{1}{2}$  gallon tank and weld this top to the new auxiliary tank. You must remember that with the custom or home-made tank, a depth of 9" should not be exceeded or the fuel pick up feed will



# REGAL LINE *Lancer*

Accommodations for two or more. Two permanent 6' 6" berths, provision for concealed marine toilet. Unique forward hatch. This boat will ride well in rough water. Designed by R. C. Cole. Write for complete information. Prices Start at \$795.00.



*St. Cloud* MARINE MFG. CO.  
1111 MASS. AVE. ST. CLOUD, FLORIDA

not extend to the bottom of the fuel tank and you will be carrying excess weight in fuel.

However, since quite a few drivers prefer several smaller tanks to one large tank, a word of caution should be offered here. With a pressurized tank system, the simplest method and most efficient is to provide both tanks with the necessary complete top-of-the-tank hook-up. For the greatest ease and speed of changing tanks underway, both tanks should be equipped with sets of dual leads. Then a simple switch of leads, which will not reduce speed if done rapidly, can be made underway.

Another method is to seal off the liquid fuel line at the top of one set of components, link the two tanks together with liquid fuel leads and then draw fuel from one tank only, i.e., the one farthest removed from the air pressure intake with a bottom of the tank lead.

The Class "36" motors can be converted over to a single line vacuum tank system by means of factory kits which include a diaphragm type fuel pump which is adapted to the by-pass of the top cylinder, a filter primer assembly used to force sufficient fuel into the carburetor to start the motor so that the diaphragm pump may take over, a single pronged fuel connector to replace the original dual line connector, and a plug for the intake manifold air passage. These components may be bought through any Johnson or Evinrude dealer and were designed to replace the Mile-Master type remote fuel tanks on runabouts where a greater fuel capacity was required. The fabricated tank for this conversion, as with the gravity feed, and vacuum type, must be vented.

With the vacuum fuel system, if two tanks are used, two may be linked together with a take-off fuel lead from one tank only. With this type system, a primer tube may be installed right in the line. This primer tube, too, is a Mercury factory part (#32-22840A1).

The Champion BU Hot Rod is equipped with a diaphragm fuel pump and a single lead into a vented vacuum system tank. Champion Hot Rod competitors have found that they run ap-

proximately 15 to 16 minutes on a gallon of gas.

Since the only one of the three systems that presents any real trouble is the pressure fuel system, it's well to know where problems may occur and how to check for them in advance. Primary difficulties arise from air or pressure leaks which can occur in the remote tank around any of its fittings, in either the air pressure line to the fuel tank or the liquid fuel to the carburetor lines or around the air-check valve at the crankcase.

Fuel tank components should be thoroughly cleaned. The Mercury tank components may be removed by unscrewing eight retaining screws which secure the entire handle assembly to the tank. Next loosen the coupling nut and the fuel pick-up tube to free the filter head. Parts should be cleaned with benzol and replaced, making certain that the handle assembly gasket is in good condition.

Trouble may be caused by any of these conditions: damaged diaphragm of the priming pump; sticking check valves in this pump; faulty gaskets; clogged screen over liquid fuel line; a loose fuel pipe in the pump housing; faulty or clogged fuel lines and connectors.

Many fuel problems during competition are caused by the driver himself, in conjunction with poor location of lines. Chet Michaels, for example, lost a first place at a major regatta after holding the spot for 87 miles by accidentally kicking loose a fuel tank fitting.

Les Kahn, in a major marathon, nearly lost out when he inadvertently stepped on his flexible fuel line and pinched off his source of fuel supply.

Mounting of tanks and their location is important both to over-all boat balance and protection of the tanks and their accessories from damage. Tanks should be securely fastened to strength members and preferably mounted in some form of shock absorbing mountings. All pipe thread connections and clamped joints should be cemented with a gasoline resistant cement such as Gasolite. Take precautions in mounting (See Over)

**NEW '36 CATALOG**  
**NEW '36 MODELS**  
**BOAT KITS**  
**BOAT PLANS**

**BUY DIRECT-SAVE UP TO 2/3! FACTORY-TO-YOU! No Dealers**

You SAVE the PROFIT  
Save on the finest quality boat kits. Lowest prices in history. Mahogany decks, brass screws, easy to build. 23 models 8-19' All types!

**SEND 10c FOR 1956 KIT CATALOG!**  
Includes Fiberglass-Accessories-Trailers, etc.

**OVER 50 PLANS with FULL-SIZE PATTERNS**  
Send 10c for NEW PLAN CATALOG. Build your boat from modern, easy-to-follow plans with patterns. Saves time and money! All types included: Pans to Cruisers from 6' to 25'.

**CRAIG-CRAFT (DEPT. 50) TONAWANDA, N.Y.**

**Boat Show Issue  
of  
BOAT SPORT**

**Will be on sale  
January 16th**

**TRY THE  
FIRST BRUSHFUL  
FREE!**

**UNBELIEVABLE  
Brolite  
Z-SPAR**

**PAINT FOR BOATS**  
WON'T CHECK • WON'T CHALK  
23 COLORS • LIKE PORCELAIN

Test Z-Spar Enamel on your own boat. Apply this sample brushful where you can watch it. There is no enamel as fine, as durable, as Z-Spar. After you've tried your first brushful, buy it from any marine paint dealer. Brolite Z-Spar is the Salt Water Sailor's favorite enamel.

**FREE BRUSHFUL!  
MAIL COUPON**

ANDREW BROWN COMPANY, 5431-H So. District Blvd., Los Angeles, Calif.

☐ I am a boat-owner. ☐ I am a marine dealer.  
Rush me a brushful of Brolite Z-Spar.

Name \_\_\_\_\_  
Address \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_  
Type of boat \_\_\_\_\_

flexible hose to see that it is in a location where it will not be cut or crimped when the engine is turned or when the driver moves about the boat. Avoid loops and humps in laying out your fuel lines from tanks to the motor and, if possible, arrange it on a gradual incline upward to the engine. All shut-off valves should be installed so they may not be inadvertently kicked open or closed and should be of a type that won't shift position due to vibration. On any brass tubing leads and connections, be certain to use flared type fittings. Clamp as much of the tubing as is practical so that it will not shift position.

And finally, as a safety precaution, add an extra pound to your over-all load—carry a fire extinguisher. (End)

## How to Build A Plywood Planked Runabout

(Continued from Page 23)

a plane and a good wood file; carefully trim and fair so the plywood planking will lay on all structural members. Check the fair from time to time as you progress by springing battens around the structure. Remember that from Rib Two to the transom the bottom must be perfectly flat, and the plywood bottom cannot be flat unless the structural members are faired flat. The non-trip chines are fitted first. Cut the panels a bit oversize, clamp in place and mark outline of the boat on panels. Remove them and accurately saw to shape. Remember that the bottom goes over the edge of the chine except up toward the front where they butt each other at a slight angle. Put glue on the frame, clamp the panels back in place and start boring and fastening.

You will have to fair the non-trip chines again after the glue is dry. The bottom goes on much the same way and is all one piece with a V cut in front to allow the bottom to come to a V up in front. Up toward the front it will take a little careful fitting to make the bottom butt into the non-trip chine.

Glue is applied to all the structural members that the bottom will touch, and Anchorfast nails are put along the keel transom and chines, set about 1½" apart; Anchorfast nails are also used at 8" intervals to secure the bottom to all the battens from the transom to the point just in front of frame No. 2. After the bottom is dry, plane the edge at the same angle as the chine except towards the back where it is allowed to remain square. This gives you a little lip to help grip the water on turns. The side panel and all the decking are ¾"-thick plywood. The side overlaps the edge of the chine after the chine is beveled and the procedure is the same as for the chine; ¾" No. 16 Anchorfast nails are used to hold the sides in place. Remove the temporary bracing and turn the boat over on a couple of padded saw horses at a workable height to put on the decking, transom bracing and floor.

## BILL OF MATERIALS

### BRONZE, MONEL, or EVERDUR FASTENINGS

- 1 gross of ¾" no. 8 flathead wood screws
- 2 gross of 1¼" no. 8 flathead wood screws
- 4 dozen of 1½" no. 8 flathead wood screws
- 3 lbs. of 1" no. 12 Anchorfast nails 350 to lb.
- 2 lbs. of ¾" no. 16 Anchorfast nails 950 to lb.
- 8 carriage bolts ½" x 4" with nuts and washers

The above may be obtained from Whitehead Metal Products Co., Inc., 303 West 10th St., New York 14, N. Y.—C.O.D.

### PAINT PRODUCTS

- 5 lbs. of Weldwood glue
- 1 lb. of Wood Dough or similar surface filler
- 1 gal. of Spar varnish for interior, decking, and exterior

### HARDWARE

- 1 Steering wheel
- 1 Piece of steering rope 26'
- 1 Safety throttle
- 1 Bowden throttle cable 5' long
- 1 Racing fin for class B
- 4 Rope tiller blocks—with straps
- 1 Steering rope tightener—heavy spring
- 2 Tiller or wire rope clamps
- 2 Stern lifting handles
- 1 Bow handle
- 1 Stem cap ½" half round 3' aluminum
- 2 Steel 'S' hooks to hold rope block to steering bar

### PLYWOOD

Decking and sides 2 sheets of 3 ply waterproof plywood ½" x 4' x 12'. Bottom, non-trip chines, seat, and flooring 2 sheets of 5 ply waterproof plywood ¼" x 4' x 12'.

### SITKA SPRUCE

- Sheers.....2 pieces ¾" x 1" x 12'
- Chines.....2 pieces ¾" x 1¼" x 12'
- Side frames.....1 piece ¾" x 1¾" x 12'
- Bottom frames.....1 piece ¾" x 6" x 8'
- Bottom frame No. 3.....1 piece ¾" x 2½" x 4'
- Battens.....2 pieces ½" x 1½" x 9'
- Battens.....2 pieces ½" x 1½" x 7'
- Keel.....1 piece ½" x 1½" x 13'
- Bottom stringers.....2 pieces ½" x 2½" x 9'
- Bottom stringers.....2 pieces ½" x 2½" x 7'
- Middle deck beam.....1 piece ¾" x 4" x 3'
- Deck batten.....1 piece ¾" x 1" x 4'
- Cockpit coning.....2 pieces ½" x 2" x 8'

### HONDURAS MAHOGANY

- Inside of keel at bow.....1 piece ½" x 1½" x 7'
- Transom framing.....1 piece ¾" x 4" x 16'
- Transom.....1 piece ½" x 14" x 5'
- Dash and dash beam.....1 piece ½" x 7" x 7'
- Sheer guard.....2 pieces ¼" x ½" x 12'
- Transom and knee braces.....1 piece ¾" x 3" x 6'

### WHITE OAK

- Bottom chines.....2 pieces ¾" x 1¼" x 12'
- All Sitka Spruce, Mahogany and White Oak may be obtained from J. H. Monteath Co. 2500-08 Park Ave., New York, N. Y.

Fashion the deck beams and then fasten them to the frame and sheer using 1¼" No. 8 screws. Fit transom knees in place, using bolts and screws as indicated in drawings and photos. Next glue and screw deck and hood frame in place. Using ¾" No. 16 Anchorhead nails and glue, fasten all decking in place. Glue ¼" plywood on bottom stringers for flooring with Anchorfast nails. This forms a structural part of the bottom and will prevent it from warping or cupping.

The front seat offers no problem and if you prefer a back seat instead of kneeling, just screw a ¾"-thick mahogany board to the top stringers of the non-trip chines. Sand the entire boat down carefully, and varnish. Don't forget to varnish under the floor boards first.

The bottom of "Airborne" is fiberglassed up to the top of the non-trip chine at the expense of 10 extra lbs. Costs ran me a little less than 40 cents a foot. I used a medium weight glass-cloth, 50" wide, which left no seam on the bottom at all. A thin application of the plastic was applied to the bare wood with a brush. After it had hardened (the next day), I laid the cloth over the bottom and trimmed to fit. You need not cut out a V for the front as it drapes over the bow very well. A generous coat of plastic was applied to the bottom, the cloth laid over the bottom and smoothed out, and more plastic was applied with a squeegee to smooth. The cloth becomes almost invisible if applied correctly. The next day with a grinder I carefully ground down the surface so that it was smooth, flat, and even, and one more coat was applied with a brush, and carefully smoothed with a lot of elbow grease

and wet sandpaper. Then a lacquer compound was used to give a plate glass finish. Fiberglass is composed of a plastic and a hardener plus the glass cloth or mats. You have to work rather fast. It's a two man job as the "pot life" is short or long depending on how much hardener you use. By short "pot life" I mean that the mixture hardens in the pot before it hardens on the boat. One minute it is liquid, but then it starts turning into a jelly and proceeds to get very hard in a matter of seconds. I would like to say that for the beginner it is a dog job. But the results are very rewarding. It is literally as tough as glass and just as smooth.

Now screw the fin in place. The back of the fin should be about 32" from the transom. Finally comes the installation of the hardware and gear. Secure the bow handle with long screws driven into the deck batten and stem. Bolt the lifting handles in place on the transom to suit. Bolt steering wheel, pulleys, etc., in place. Locate the throttle control to suit your reach.

Building procedure is the same for "Airborne" as a "D" Runabout, only the bill of materials is changed. All fastenings remain the same but order about 20% more. Plywood: the bottom is ¾" thick, sides and non-trip chines are ¼" thick and the deck remains the same, ½" thick. You will not be able to get plywood in 14' lengths. 16' is the next larger size and that will probably be hard to get. You will have to glue up your lengths. Don't have your glue joints of the sides, non-trip chines, etc., in the same spot on the circumference of the boat. Have some in the back and some up front. The bottom glue joint should be up front.

The deck and glue blocks will be the



only things held together with  $\frac{3}{4}$ " No. 16 Anchorfast nails so you need not order more of them, but of the 1" No. 12 Anchorfast nails you will need about 6 lbs. All the framing remains the same size, only longer, and is replaced with white oak in every case, except the transom which is  $\frac{3}{4}$ " thick Honduras Mahogany. The transom height must remain  $13\frac{1}{2}$ " high for the Mercury "D" Quicksilver.

Further information regarding "Airborne" may be obtained by writing the author, Hal Kelly, 98 Anderson Ave., Bergenfield, N. J.

## Outdoors with the Outboards

(Continued from Page 17)

ing, Boat Safety and Emergencies Afloat. During the course, the students actually took several motors apart and put them together again, thus familiarizing themselves with the basic mechanics of outboards. Such a course, if it could be worked out with an outboard dealer and school officials in your area, would indeed be worthwhile.

ANOTHER EXAMPLE of cooperation between school officials and a local outboard dealer took place last summer in Kokomo, Ind., where, as a reward for their services on the McKinley School Safety Patrol, 21 boys were invited on a trip from Kokomo to the Oshkosh and Fond du Lac, Wis., plants of the Kiekhaefer Corp., manufacturers of Mercury outboard motors. During their visit, the boys followed an outboard motor from its assembly through to its final test and then enjoyed an afternoon of boat riding in all types and sizes of hulls. The trip was arranged by H. E. Adams, principal of the McKinley School, in cooperation with the Kokomo PTA. Accompanying the boys were Charles Hathaway, a member of the school board, and Joe Kuhn, the Mercury dealer in Kokomo.

LET'S TURN our attention for a moment to hulls. Since winter is traditionally the time when thousands of boats are built in basements all over the land, perhaps the best way to start chatting about hulls is to mention Glen L Marine Designs, Box 568, Compton, Calif. The proprietor of this unique business is Glen L. Witt, Naval Architect and Member of the Society of Small Craft Designers. Glen L. sells stock plans, full-size patterns and frame kits at reasonable prices. Available designs range all the way from an 11-foot outboard utility to a 22-foot inboard cruiser. All have been thoroughly tested. A catalog is available for 40 cents—and even if you aren't planning to build a boat immediately, you'll enjoy reading through it, for it is illustrated with drawings of all the boats and interesting photographs.

IF YOU HAVE no basic knowledge of woodworking, you should, of course,

buy a ready-built boat. One new model just announced is the King-Size "16," a rugged runabout for rough waters that is manufactured by Lawrence Plycraft, Inc., Lawrence, Mass. Its 66-inch beam provides exceptional stability and the 15-foot 11-inch length and 32-inch depth assure seaworthy performance with any outboard from 10 to 40 hp. The plywood hull is covered with fiberglass, so it is leakproof and amazingly resistant to scrapes and abuse.

OR PERHAPS you prefer the novel to the conventional? Then consider buying a Hydrofin kit for your boat. This install-it-yourself kit can be added to almost any outboard boat between 12 and 16 feet long. Like other hydrofoils, the Hydrofin will raise your boat above the waves and make it "fly." The manufacturers claim that speed is increased as much as 50 per cent and that you ride over rough water just as though you were riding in a well-sprung automobile over rough terrain. All working parts fold out of the way for trailer handling, launching and shallow-water operation. Manufacture and sales of the kit are handled by Atlantic Hydrofin Corp., Miami 36, Fla.; Midwest Hydrofin Co., Pittsburg, Kansas; and Pacific Hydrofin Corp., Newport Beach, Calif.

ALSO TO BE classed more or less as a novelty is the Water-Skeeter pontoon boat. We were quite surprised to learn that the pontoon boat has kept pace with the boating industry during its phenomenal growth during the past few years. The Water-Skeeter, manufactured by Dallas Engineers, Inc., Dallas, Penn., comes equipped to take any outboard motor developing up to 3 hp. The pontoons, which are 12 inches in diameter and 9 feet long, are molded from fiberglass. Each pontoon has three bulkheads, making four watertight sections; thus the craft is, we are told, practically unsinkable.

Transportation by car or trailer is no problem since the Water-Skeeter weighs but 125 pounds and measures but  $9\frac{1}{2}$  feet long by  $5\frac{1}{2}$  feet wide. Available are various attachments such as a fisherman's kit and a sunshade canopy. The low draft allows the Water-Skeeter to maneuver in marshes, ponds and other waters inaccessible to conventional boats, making it ideal for certain types of fishing.

THE WORD "fishing" reminds us, for no discernible reason, of the plight of some fish last winter in Oregon and how outboard motors saved their lives. It seems that at Delintment Lake a combination of 2 feet of ice on top and decomposing vegetation on the bottom depleted the oxygen supply and threatened to wipe out the local trout population.

A group of fast-thinking local sportsmen installed 500 feet of pipe under the ice and by pumping air through the line opened up an area about 500 feet long and 20 feet wide. They then took their

(See Over)

## CAN'T BE BEAT!



**BILL TENNEY** — MAY 15, 1955  
SET A NEW PROFESSIONAL CLASS B  
HYDRO STRAIGHTAWAY RECORD OF  
68.311 MPH WITH CHRIS-GO.



## RACING FUELS

### FOR INBOARDS AND OUTBOARDS

NITRO FUELS  
AVAILABLE ON  
REQUEST

SEE YOUR DEALER OR  
WRITE TO Dep't. 1-19



**CHRISTOPHER BROS.**  
**12800 EATON AVENUE**  
DETROIT 27, MICHIGAN

## ONE SOURCE - DIRECT TO YOU!



ORDER YOUR  
CATALOG TODAY  
25c POSTPAID

Fully Illustrated

**MAYPOLE**  
**BOATS & MOTORS, Inc.**  
5901-07 W. Madison St., Chicago 44, Ill.



outboard motors out of winter storage and used them to churn up the lake water and keep the area open. Officials of the State Game Department said the fish made a quick recovery in the opened area.

UNUSUAL AS this incident was, another event, this time in Dallas, proved equally odd and at the same time far from solemn. On the opening day of the Dallas Home Show, a group of businessmen known as the Boneheads, who are dedicated to harmless nonsense, armed themselves with fishing rods and climbed aboard a caravan made up of a station wagon and five Lone Star aluminum boats on trailers. A local beauty donned a mermaid's costume and perched fetchingly on the station-wagon roof. The Boneheads fished vainly for the pretty mermaid for several miles while the citizenry looked on in delighted amazement. What was accomplished by these dizzy doings? Well, both the Home Show and Lone Star boats got a lot of publicity and the Boneheads and their mermaid had a lot of fun. What more could anyone desire?

SUCH A STUNT creates interest in boating, which in turn helps to continue the growth of the sport. Along these lines, watch for a boom in the camp-boat business. More and more families are turning to large, open craft for boating-camping vacations. The reason: no wasted space. During the day, camping equipment is stuffed away under the seats and in the bow, so the entire craft can be used by the passengers. At night, out come air mattresses, stove, mosquito netting and canopy.

Several manufacturers, realizing the potential of the camping-boating combination, are producing craft specifically designed to fill the demand. A broad-beamed 16-foot open utility runabout is the most popular camp-boat for two persons. Larger runabouts, from 18 to 20 feet long and with 7 to 8-foot beams, are better for bigger families. A 25-hp motor will handle the heavier craft while a 10 will push the smaller camp-boat along in fine fashion.

IF THIS type of activity appeals to you, place high on your equipment list a waterproof suit. It's almost inevitable that into every vacation a little rain must fall—and nothing can make the light-hearted vacationer feel more miserable faster than being wet.

An especially good two-piece foul-weather suit is available from Crow's Nest, 475 Fifth Ave., New York City, for about \$28.50. It is made of rubberized nylon and the rubber coating is applied in such a manner that it permits perspiration vapor to escape while preventing external moisture such as spray or rain from penetrating the fabric. The ankles and waist of the trousers and the hood and waist of the jacket are secured with nylon cords. Elastic cuff bands secure the jacket at the wrists. A three-quarter-length zipper at the neck facilitates getting into

the jacket. The suit is roomy enough to allow freedom of motion and to permit wearing heavy clothing under it in cold weather.

CAMP BOATS and foul-weather gear bring to mind deeds of derring-do in outboard-powered craft — and there have been at least four of them in the news lately.

First come the exploits of Jacques Francine of New Hope, Pa. On June 28, he embarked on a 1,000-mile jaunt from Quebec City to Hudson Bay in an attempt to retrace the French fur traders' canoe route known as the original "Northwest Passage." His boat was an aluminum canoe driven by a 7½-hp Evinrude.

As we write this, "Jock," a member of the New York Explorers Club who knows Canada well as the result of several years spent fishing and fur trapping there, is in the middle of his trek. It will carry him over the St. Lawrence and Saguenay Rivers to Lake Saint John, where he will be joined by two Cree Indian guides. From there, he will voyage up the Ashuapmouchuan River to the Height-of-Land gold-mining region and into Lake Mistissini.

In this wild region, a Hudson Bay Company outpost on the 2,000-mile shore line of Mistissini will be the trio's only contact with the outside world. Rupert House, on Hudson Bay, approximately 380 miles beyond Mistissini, is Francine's final goal. He plans to return from Hudson Bay by bush plane.

Next is Todd Webb's river odyssey. Webb, a 49-year-old photographer from New York, is at this writing en route from Pittsburgh to Kansas City—1,400 miles—via the Ohio, Mississippi and Missouri Rivers. He's skippering a 16-foot skiff powered with an Evinrude Fleetwin. The purpose of the trip is to gather material—photos and text—to fill a section of a book he's doing on the route of the pioneers from the Atlantic to the Pacific.

Concerning his choice of conveyance, Webb says, "The historical lore of river life is best recorded by boat instead of from a vantage point ashore. Travel by outboard permits the opportunity to compare a part of vanished America with river life as it exists today. It was our river routes which contributed so much to the development of the Midwest and opened the way for travel to California."

The same waterways were covered last summer by three Cincinnati couples who took a 17-day, 1,400-mile cruise down the Ohio and Mississippi to New Orleans. The couples—Len and Georgia Osborne, Wilson and Ruth Crawford and Ken and Rea Lamb—traveled in three boats—two 18-foot Lyman's driven by 25-hp Johnsons and an 18-foot inboard-powered Lyman. The group began each day at 5 a.m. After breakfast, which was cooked on shore, the boats were loaded and on their way by seven. At noon, the couples didn't dock, but tied the boats together to eat lunch.

"About 3 p.m.," Osborne said, "we'd get out our maps and look for a place

to camp—an island out of the wash of river barges or a beach or cove near the mouth of a smaller stream feeding into the big river." They cooked dinner on shore and slept aboard the boats.

Equipment carried included camping tables and chairs, foam-rubber mattresses, cooking utensils, coolers and a radio. Each wardrobe was limited to shorts, swim suits, jeans, jackets and shirts. The only rough going was encountered when the vacationists ran into a storm above Paducah, Ky. Winds of 35 mph and waves six feet high gave them a few anxious hours, but the boats came through in fine shape.

TO HELP while away the long winter evenings, we recommend two free booklets that have crossed our desk recently. The first, *America's Growing Need . . . Outboard Marinas*, points up the fact that marinas are not increasing fast enough to keep pace with the tremendous surge in boating and then goes on to enumerate the advantages that accrue to communities having marinas. Members of boating clubs will be especially interested in the booklet since it shows how a club marina can be established and lists the advantages that accompany such expanded club activity. Copies are available from either the Outboard Boating Club of America, 307 N. Michigan Ave., Chicago 1, Ill., or the Socony-Vacuum Oil Co., Small Craft Division, 26 Broadway, New York 4, N. Y.

The other pamphlet, a 16-page publication titled *Family Boating Is Fun*, can be obtained from the National Association of Engine & Boat Manufacturers, Inc., 420 Lexington Ave., New York 17, N. Y. It stresses the all-age, all-family appeal of boating and is profusely illustrated with photos of inboard cruisers and runabouts, outboard craft, sailboats, boat trailers, water skiing, skin diving and family life afloat. The booklet points out ways of choosing the boat most suited to each individual taste and purse and gives tips on how to start having fun afloat. The costs of different types of craft are compared and recent developments in easy-to-operate boat trailers and plywood boat kits for amateur home assembly are accented.

Also available from the National Association of Engine & Boat Manufacturers is a 28-page catalog of boating films. This pamphlet will prove invaluable to your club's Entertainment Committee Chairman because it lists 135 films currently available to the public. All are 66mm size and most are available free of charge. (End)

## BOAT SPORT

NOW PUBLISHED

8 TIMES A YEAR

with issues dated

March — April — May — June  
July — August — September  
December

## Around the Buoys

(Continued from Page 3)

Ont., 46.693; B Stock Hydro, Ron Biggs, Ottawa, Ont., 57.052; D Stock Hydro, Bruce Elford, Toronto, Ont., 60.302; C Service Hydro, Stan McDonald, Ottawa, Ont., 62.284; C Service Runabout, Stan McDonald, 51.136; B Racing Hydro, Joe Carr, Ottawa, 56.782; C Racing Hydro, John Dertinger, Delhi, Ont., 58.728; AU, Keith Cavenagh, Perth, Ont., 40.000; BU Dawson Throop, Ottawa, 47.182 and DU, Monty Cranfield, Oshawa, Ont., 52.023. Since these records were set, the Canadian Boating Federation has adopted the same governing rules as those in the U.S.A. But the C.B.F. rules did vary at the time these records were established so comparisons are not in all instances possible between the records above and the U. S. records of the same classes.

This year the C.B.F. was extremely active with forty-four sanctioned outboard or stock outboard events in the provinces of Ontario and Quebec and eight outboard events scheduled for British Columbia. Since a considerable number of the over-all sanctioned events are for alky burners, any alcohol driver living within ready driving distance of the Canadian border would do well to contact the Canadian Boating Federation for its annual schedule. United States racers invariably meet with warm hospitality at any Canadian event.

\* \* \*

One of the most picturesque outboard race settings anywhere in the world is the Port of Monaco at the tiny Mediterranean Coast sovereign principality. Annually the Yacht Club de Monaco conducts its Grand Meeting Motonautique International de Monaco. This year contestants competed in hydroplane classes C and X and in CIU and DU Runabouts, with competitors represented from six European countries: France, Italy, Holland, Spain, Sweden and tiny, 20,000 population, Monaco.

The greatest competition was for the outboard tourisme CIU class for motors of 585 cubic centimeters. The bulk of the entrants raced either Johnson 25s or Evinrude Big Twins. The class compares to the United States "36," though all competitors' craft must carry a passenger as well as the driver rather than this being elective as it is in our country.

The Class C racing hydro event was won by veteran shingle pusher Klaesson of Sweden, with the Class X hydroplanes being taken by Mercier of France. CIU Tourisme class went to Millon, France, with Grassi of Italy winning the DU.

\* \* \*

It's usually true that any local outboard club is only as good as its key officials. A year ago Nick R. Kerns of Detroit didn't know the bow from the stern of any kind of boat. Nick had a successful hydraulics business and no real financial worries, but golf had be-



SID-CRAFTS driven by Ronald Zuback, Gene Hawthorne, and Bob Robbins placed 1st, 2nd, and 3rd in BU at the Winnebagoand Marathon. SID-CRAFTS were first in BU at the Sheboygan, Michigan marathon (driven by Jerry Van Ambers), and at the Thousand Islands Marathon (driven by Gene Hawthorne).

Ronald Zuback, driving a SID-CRAFT is high point winner in BU class, and Dickie O'Dea in SID-CRAFTS is overall high point champion.

YOU TOO CAN GET IN THE WINNER'S CIRCLE WHEN YOU OWN A SID-CRAFT!  
**SID-CRAFT BOATS** MAIL ADDRESS: ROUTE 43, PLAYER AVE., U.S. 1, NIXON, N. J.  
 SHOP ADDRESS: U.S. 1, NEW BRUNSWICK, N. J.

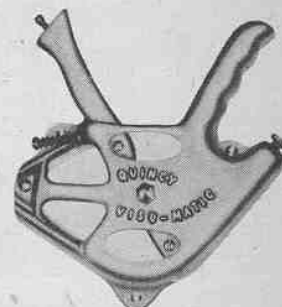
Jim Coulbourn of Burlington, N. J., driving a stock model SID-CRAFT drove his BU outboard to new, sizzling records in Florida of 49.793 m.p.h. for the mile straightaway and 46.512 m.p.h. for the five-mile competition at Lakeland, Fla. Join the record breakers by ordering your SID-CRAFT now.

## America's Finest Racing Safety Throttle

### THE QUINCY VISU-MATIC

Designed & Built by Racers for Racers

1. The first safety throttle with cast integral rack
2. Safer mounting — two top mounting holes
3. Much easier to hook up — stays put
4. A better made, better performing throttle in every respect at any price



QUINCY WELDING

5th & State

Quincy, Illinois

come a bore to him and he had no other sports hobby. Then he saw his first outboard race in Florida and enjoyed it. On his return to Detroit, he bumped into the father of a boy who was active in the stock motor racing phase of the sport. Nick and the father were on their way to a business conference and Nick's friend asked Nick if he would mind stopping off a few minutes at an outboard club meeting. The enthusiasm of the racing membership impressed Nick. He had a hunch that he might help the group and went back to their next meeting. November a year ago, the Belle Isle Outboard Club of Detroit elected Nick Kerns its Commodore. Nick's not only is proud of the title but he works hard at his new job and takes it seriously. He has built up the active racing membership of the club from less than 60 members to well over 100. He served as Chairman of the recently run annual Belle Isle Outboard Club's 50-mile Detroit River Marathon. With Nick's backing, the club was able for the first time to interest civic leaders in the sport. Detroit Councilman Blanche Parent Wise who acted as Honorary Starter for the event was so caught up by the enthusiasm shown by the participants that she is now pushing hard for more civic backing of general boating activities around the Detroit area.

Under Nick's direction, the winners of the various classes found more than \$5000 worth of merchandise prizes waiting to reward their efforts. Nick also got the backing of some of the leaders in the Gold Cup field who dug into their pockets and came up with some beautiful trophies for a group of drivers normally the Gold Cuppers don't even know exist.

Today the club, which is a member club of A.P.B.A., has its own monthly club bulletin. It recently sponsored a day's racing as a part of Detroit's week-long Riverama Days in August and its members have all season long been prominent in the winners' ranks of Great Lakes area events.

\* \* \*

Althea Maypole, wife of long-time prominent outboard racer Jack Maypole, presently Outboard Vice President of A.P.B.A., was forced to give up her volunteer racing secretarial work for Jack when she was sent to a sanatorium with a lung ailment early last spring. We are sure that Jack and Althea's friends will be glad to hear that she has sufficiently recovered so that she's back at their Chicago home to convalesce. During Althea's absence, Betty Seeger of the Outboard Club of Chicago pinch hit as Jack's racing steno.

H.W.B.



## Torque Talk

(Continued from page 19)

Joe Taggart in "Slo-mo-shun IV," Bud Saille in "Miss Cadillac" and Danny Foster in Guy Lombardo's "Tempo VII" next. The balance of the field was quickly strung out. At the end of the first two laps it was "Gale V," "Slo-mo IV" and "Miss Thriftway" with Bill Muncey at the wheel in third place, but during the third lap, Taggart passed Schoenith and from that point on the field remained the same until the sixth lap. At the beginning of the seventh 3¼-mile go-round the three leaders were followed by Bill Cantrell in "Gale IV," "Miss Cadillac," Russ Schlee in "Rebel Suh," and Jay Murphy in "Breathless." Danny Foster in "Tempo VII" withdrew from the race

at the end of ¾ of the first lap with gear box miseries.

With "Rebel Suh" out of the race during the seventh lap, Murphy moved into sixth spot and that's the way they finished the first heat. "Slo-mo IV," with 400 points, "Gale V" with 300, "Miss Thriftway" with 225, "Gale IV" with 169, "Miss Cadillac" with 127 and "Breathless" with 95 retired to the pits between the heats for servicing and checkups.

In winning the first heat, Taggart pushed "Slo-mo IV" to a new lap record of 107.91 mph and a new heat record of 103.159 mph. Schoenith's speed for the thirty miles was 102.469 mph which also broke the former heat mark of 101.024 set by "Miss Pepsi" in 1952. Taggart's two new marks brought up to three the Gold Cup records established by "Slo-mo IV" as his 117.391 mph qualifying time was the fastest ever recorded.

Seven boats left the pits for the start of the second heat, but only six crossed the starting line as "Rebel Suh" put a hole through her bottom before the start and sank. Muncey and Schoenith took off at the start and, on the back stretch, the Ted Jones-designed "Miss Thriftway" took over the lead and held it for the entire eight laps, with Schoenith hanging on in second spot all the way. Taggart in "Slo-mo IV" trailed Walter Kade in Jack Schaefer's "Such Crust III" for four laps and then took over third spot, holding it to the finish. Kade wound up in fourth place, with "Miss Cadillac" and "Breathless" finishing fifth and sixth, positions they held throughout the heat. Without question, Muncey drove a magnificent race, and apparently had been told to take the wraps off "Miss Thriftway," which seemed to handle beautifully on the turns and on the straightaways. Schoenith drove a fine steady race, and when "Gale IV" went out in the first lap with a rod through the side of the engine, he carried the full burden of possible victory for owner Joe Schoenith in the cockpit of the sleek "Gale V." Muncey's speed for the heat was 100.944 mph while Schoenith's was 99.103. Taggart, in placing third, averaged 97.631 mph.

When the scorers toted up the two-heat point total, it showed two Seattle boats, "Slo-mo IV" and "Miss Thriftway" with a first and a third apiece for a total of 625 markers each, and "Gale V" with 600 for its two seconds. Having had the fastest heat, "Slo-mo IV" also had a possibility of an additional 400 points, if it finished the entire 90 miles of the race, and if no other boat registered a faster heat.

Thusly, going into the third heat it looked as if the old golden mug was again destined to stay in Seattle for another year, either through the courtesy of "Slo-mo IV" or newcomer "Miss Thriftway." Needless to say, there was some small amount of gloom in the pits where the Detroit boats were based, and careful strategy was being worked out to see if it would be possible, by some means, to get "Gale V" in

front, and "Slo-mo IV" at least one additional place behind her.

The start of the third heat saw the carefully worked out plans knocked into a cocked hat when "Slo-mo IV" and "Miss Thriftway" both broke fast and came out in one-two position, with "Such Crust III" in hot pursuit. Kade wheeled the big job into a firm second place on the backstretch of the first lap and "Miss Thriftway" had to be content with a third-place spot for the next four laps, for not only was "Such Crust III" pushing Taggart for all it was worth, it was also throwing up the finest road block ever seen by these tired old eyes.

Meanwhile Schoenith, in "Gale V," pushed along in fourth place well ahead of Bill Braden, who had taken over as driver of "Miss Cadillac" and Jay Murphy in "Breathless." Finally, in the fifth lap, Muncey tromped down on "Miss Thriftway" and managed to pass "Such Crust III" and take off after "Slo-mo IV," which, after Muncey had come up to within one second of her, pulled off the course on the sixth lap, with a hole blown through her exhaust manifold which had set fire to the hull. Taggart quickly applied a fire extinguisher to the blaze and put it out, but he was definitely out of the race.

When "Slo-mo IV" dropped out of the final heat, Seattleites both large and small gave forth one tremendous groan, but quickly recovered when they realized the lead boat was also a Seattle entry. It looked for sure as though they had renewed their lease on the Gold Cup for another year. Muncey, definitely out in front and only two laps from supposed victory, dropped his speed from a 103.85-mph pace to a conservative 93.75 to make sure he finished. However, Schoenith in "Gale V" kept hammering around behind "Such Crust III" at a very respectable pace.

At the end of the third heat, with the estimated 500,000 spectators roaring over "Miss Thriftway's" second win of the day, it appeared certain that the newcomer had taken the measure of the best the East and West could offer and the cup would stay in Seattle. Muncey's two firsts at 400 points each, when added to his third in the first heat, came up to a very respectable 1025 points, definitely more than Schoenith's two second places at 300 each and a third at 225 for a total of 825 points.

While the crowds were whooping it up and Muncey was being given the accolades of the multitudes, being tossed into the drink and interviewed by radio and television commentators, (with the one exception of Bill O'Meara, a very savvy sportscaster), the scorers and timers were checking the totals of the entire three heats to see just who had managed to do the full ninety miles in the least time and thereby get the 400 bonus points for this feat. "Gale V" had been hoisted out of the water and put on its trailer for the long trip back to Detroit again without the cherished Gold Cup. Gloom

**"SKEEKIT"**  
**WATER SKI KIT**  
Just Assemble and Paint.  
All parts precision machined and  
formed from finest materials.  
**\$14.95**  
**Rainier Water Ski Co.**  
1101 So. Pine, Tacoma 6, Wn.

**LUTHY** **TRIPLE ELECTRODE** **SPARK PLUGS**

ENGINEERED FOR OUTBOARDS, AUTOS, TRUCKS, CYCLES. Set of 6 - \$5.34  
OUTLASTS ORDINARY PLUGS 3 TO 1... BETTER HIGH SPEED PERFORMANCE... FASTER STARTS... MORE MILES PER GALLON... PROVEN SUPERIORITY... 2 for \$1.75

LUTHY AERONAUTICAL SALES CO. - 305 COOPER - JACKSON, MISSISSIPPI

SEND ME \_\_\_\_\_ PLUGS. ENCLOSED FIND \$ \_\_\_\_\_ SEND C.O.D.

NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_

YEAR OF MOTOR \_\_\_\_\_ MAKE \_\_\_\_\_ MODEL \_\_\_\_\_

Distributors: Dealers Wanted

## Classified Advertising

Use this directory for prompt response. Rate 20c per word (\$3.00 minimum). CASH WITH ORDER. 5% discount for three or more insertions to direct advertiser. Copy should be on one side of the sheet and typewritten, if possible. Schedule of closing dates for classified advertising as follows:

Issue	Closing Date	Issue	Closing Date
March	Nov. 1	July	Mar. 20
April	Dec. 20	August	Apr. 20
May	Jan. 20	September	May 20
June	Feb. 20	December	Aug. 20

Make remittance payable to BOAT SPORT, Classified Advertising Dept., 215 Fourth Ave., New York 3, N. Y.

### FOR SALE

**FOR SALE**—Used and rebuilt marine motors, 2 to 550 H.P. gasoline and diesel. Complete stock list of popular models. Write for FREE Catalog 190 covering conversion equipment, propellers, reverse gears, fittings, and supplies of all kinds. STOKES MARINE SUPPLY, Dept. BS, Coldwater, Mich.

**CONVERSIONS** for all model Ford, Mercury, Lincoln and Jeep Engines. Free Catalog. Lehman Manufacturing Company, Dept. K, 972 Broad Street, Newark 2, N. J.

**BARGAINS** galore, marine hardware items. Factory imperfections, overruns bargains. Free folder. Marine, 3604 Stevens So., Minneapolis 9, Minnesota.

**FOR SALE**—1954 Switzer Craft DU Bullet; 1954 Mercury Mark 40 H. Ritchie's Garage, 1029 Main Street, Savanna, Illinois. Phone 2092.

**EVINRUDE** 460 conversion from P 500, Stearns "C" lower unit, complete battery ignition props assembled from new crank. Complete outfit ready to go, \$600.00. Engine only, \$350.00. Northern States Equipment, Inc., Box 309, Richland Center, Wisconsin.



hung heavy in the Detroit camp for quite a while, but, suddenly, an audit of Chief Timer Otto Crocker's electrically-recorded tape showed that "Gale V" had taken a total of 54 minutes 16.20 seconds for the ninety miles, while "Miss Thriftway" had taken a total of 54 minutes, 20.73 seconds for the distance, a difference of only 4.53 seconds, but a most important difference!

The Gold Cup scoring rules adds a bonus of 400 points for the fastest 90 miles. These four hundred points, when added to Schoenith's 825 heat points, gave him a total of 1225 to Muncey's 1025. Those precious seconds meant the Gold Cup to Schoenith, who belatedly was given the full treatment the winner deserves.

Needless to say, there was considerable confusion in the minds of the citizens of Seattle, who thought they had won the cup and then suddenly found out they hadn't. Actually it isn't too difficult to figure, if you look at the Gold Cup as a ninety-mile race with two compulsory stops. "Gale V's" average speed for the total ninety miles was 99.5520 mph, while "Miss Thriftway" averaged 99.3879 mph.

This 48th running of the Gold Cup will be discussed for quite some time, with all kinds of pros and cons about the scoring set-up and the bonus points. However, at the meeting of the Gold Cup Contest Board, the night after the race, the drivers and owners had a chance to make any changes they wanted in the scoring procedure, but they kept the rules the way they were and the bonus points are in for another year. We'll wager that from now on each entry will have a Mathematician (j.g.) on the crew to keep track of the total elapsed times of all the entries so they'll know just how fast to go to get those valuable markers.

There was no question at all that, despite the disappointment of losing the Gold Cup, all Seattle was most pleased that, if it had to leave Seattle, the nicest guy to take it away was Joe Schoenith, owner of "Gale V" and the "Gale IV," who has been one of the best competitors in Unlimited racing ever seen.

Lee Schoenith, son of Joe, not only won the Gold Cup, but also a wife-to-be. Lee told his gal that if he won the

Gold Cup they'd get married—well—he won, and it looks like early wedding bells for Lee and Shirley Harrington.

Mel Crook's decision to resign as referee for the Gold Cup, after his ruling on the "Fageol Flying Start Under the Bridge" brought pressure to bear from the citizenry of Seattle in all categories from top to bottom, was completely vindicated when the A.P.B.A. Gold Cup Committee voted to make his ruling stick, even though Stan Donough had taken over as Referee.

The Seattle Yacht Club's Gold Cup Committee, under the Chairmanship of Don Cooney, deserves the utmost in congratulations for the organization of the race and all of its facets, outboard, stock outboard, limited inboards, Gold Cuppers and Mile Trials. It was the best run affair we have ever had the good fortune to attend. Vice-chairman Ross Merrill, Tom Wheeler, Art Shorey, Andy Joy, Jack Colcock, Don Amick and Stan Donough all did magnificent jobs, along with Advisory Committee Chairman Howie Richmond.

The Seafair Trophy Race, run between the first and second heats of the Gold Cup was won with amazing ease by Ray Gassner of St. Petersburg, Florida, with his "Sunshine Baby III," the smoothest running 266 hydro we have ever seen. Gassner literally ran off and hid from the remaining 15 starters in the two-heat affair, chalk-

(See Over)

	DRIVER	OWNER	1st HEAT	2nd HEAT	3rd HEAT	Bonus Points	Total Points	90 Mile Average Speed
Gale V	Lee Schoenith	Joe Schoenith	300	300	225	400*	1225	99.5520**
Miss Thriftway	Bill Muncey	W. Rhodes	225	400	400	—	1025	99.3897
Slo-mo-shun IV	Joe Taggart	S. S. Sayres	400***	225	DNF	—	625	
Such Crust III	Walt Kade	J. Schaefer	DNF	169	300	—	429	
Miss Cadillac	Bud Saille	Bud Saille	127	127	169	—	423	89.925
Breathless	J. Murphy	P. Murphy	95	95	127	—	317	79.206
Gale IV	Bill Cantrell	Joe Schoenith	169	DNF	DNF	—	169	
Rebel-Suh	Russ Schleeh	T. Jones	DNF	DNF	Sank	—	—	
Scooter Too	Jack Rogas	H. Kaiser	DNF	DNF	Sank	—	—	
Miss U.S.	George Simon	George Simon	withdrawn	withdrawn	—	—	—	
Slo-mo-shun V	Lou Fageol	S. S. Sayres	DNF	DNF	DNF	—	—	
Tempo VII	Dan Foster	Guy Lombardo	withdrawn	—	—	—	—	
Zephyr-Fury	Ray Crawford	Ray Crawford	—	—	—	—	—	

\* Fastest 90 miles

\*\* New Gold Cup 90-mile record

\*\*\* New Gold Cup 30-mile heat record 103.159 mph (No bonus as boat did not finish 90 miles.)



**E. G. McCREA & CO.**

- RACING
- SPORT
- UTILITY

**Plans • Patterns • Instructions**

**EASY to use • Best for YOU**

Send 25c coin today for descriptive booklet.

NORTH HATLEY, QUE. CANADA

Dept. BS

**Read FUN**

**The newest humor magazine 25c at all newsstands**



**Wear a REAL CRASH HELMET**

Like Race Drivers and Jet Pilots Tough, rugged plastic helmet in red or white colors, cushioned with soft sponge-rubber. Is adjustable for perfect fit. Protects against hard bumps while riding Bicycles, Motor Bikes, Motorcycles, Motor Scooters, Motor Boats, Hot Rods, etc.

**Wear It for Safety!**

Sorry, No C.O.D. - Money Back Guarantee! only

WAL-MAR PRODUCTS COMPANY

10023 S. St. Lawrence Ave. Chicago 28, Illinois Dept. BS

**\$3.98**

**FREE BOAT KIT CATALOG**

8' to 14' Models from \$39.95 incl. freight

Assemble your own boat  
No experience necessary  
Save 1/3 to 1/2 on "factory built" prices



12 ft. Runabout pictured

Write:

Marine Hardware, Fiberglass and Trailers

DEPT. W

4432 NICOLLET AVE. MINNEAPOLIS 9 MINN.

Build it Yourself at 1/3 the cost with our

**BOAT PATTERNS**



Full size, cut-to-shape Boat patterns, Blueprints, 7 1/2-38 feet. NEW 1956 illustrated "Build A Boat" catalog of 50 naval architect-designed Cruisers, Runabouts, Sloops, Skiffs, Outboard Boats, Sailing, Racing, Houseboats, 50c. Small Boat Hardware Catalog, \$1.50. Bigger, better 1956 "How to Build Boats" book, \$2.50.

CLEVELAND BOAT BLUEPRINT CO.

Dept. BS, P.O. Box 1651

Cleveland 4, Ohio

**HENRY H. FULLER**

*Parts & Services*

for

**SR & PR RACING MOTORS**

"Better Than Ever For 1955"

WRITE FOR CATALOG

2317 STERLING AVENUE

INDEPENDENCE, MISSOURI

ing up a highly respectable 88.247 mph to take the trophy. Second was Bill Guasti of Los Angeles, with Bud Meyer of Hollywood third.

The Mile Trials, held on Monday August 8th, resulted in four new marks to be approved by the A.P.B.A. Racing Commissions. Bill Schumacher of Seattle, age 12, boosted the JU Stock outboard mile mark from 26.985 mph to 27.564. Ernie Rose of Patterson, Cal., moved the Class B Inboard Racing Runabout mark from 69.943 mph to 72.547. Bob Boehm of Hearldsburg, Cal., pushed the 136 inboard hydro record from 80.066 mph up to 81.271. The old Crackerbox mark of 75.286 mph was raised to 81.486 by Carl Maginn of Glendale, Cal.

Lots of other potential record breakers were on hand but considered the water conditions not just right for their rigs, even though the course looked excellent to us. However, we are used to the eastern-type mile trial courses, where lumpy water is standard equipment, and unless whitecaps are breaking we figure the water's fine. (End)

## It's News

(Continued from Page 24)

### MARINE PAINT SAMPLES

A new market approach in selling marine paint has been introduced by the Andrew Brown Company, 5431 South District Boulevard, Los Angeles 22, California, who offer a "Sample Brushful" of Brolite Z-Spar, a non-chalking Gloss White Enamel. Advertising of these free samples will be expanded through the year to cover distributors in 26 states.

### EVINRUDE 1956 NINE MOTOR LINE

Adapting its production to meet the power requirements of an ever-widening variety of outboard boats, Evinrude Motors, Milwaukee, has introduced a nine model line of outboard motors for 1956 ranging from three to 30-horsepower.

Three now 30 hp motors, the deluxe electric-starting Lark, and both electric-starting and manually-operated

Big Twins, replace the 25 hp units previously produced and fulfill the high demand for outboard motors suitable for larger runabouts and outboard cruisers. In 1955 the 25 hp unit, the most powerful in the line, outsold all other Evinrude models.

Three other new additions marketed by Evinrude for 1956 are an electric-starting 15 hp Fastwin, a 10 hp Sportwin, and a 5½ hp Fisherman. Evinrude's 15 hp manual-starting Fastwin, 7½ hp Fleetwin and 3 hp Lightwin are retained for 1956.

### NEW HYDRO HARDWARE

Blitz Racing Products, 14085 N. Bayshore Drive, Madeira Beach, Fla., blenders of nitro additives for outboard racing fuels, has introduced a new line of stainless steel hardware for hydros, including custom-made sponsons and transom fins, a new conception in air traps, and a transom tank for racing hydros. Also, a new additive has been developed that supercedes the old No. 2 Nitro Blitz.

### 1956 TROJAN LINE

Trojan Boat Co., Lancaster, Pa., will present its 1956 line of outboard and inboard cruisers and runabouts simultaneously at all dealer showrooms throughout the country, beginning November 4th.

### WATER SPEEDOMETER

Michigan Wheel Company manufactures a variety of water speedometers mounted in polished aluminum, corrosion resistant cases. The instruments are calibrated for accuracy with 1%. 0 to 35 m.p.h. models, complete with 14' of plastic tube and an adjustable pilot tube, lists at \$12. Four other models registering various speed ranges up to 70 m.p.h. are priced from \$10.50 to \$18.90. Additional information may be obtained from the retail outlet, Muskegon Outboard Specialties Company, Muskegon, Mich.

### RACING CRASH HELMET

One of the most sturdy crash helmets to be designed is the lightweight Gentex which in small sizes weighs 2 pounds 1 ounce and in large sizes 2 pounds 3 ounces. The helmet is a one-

piece molding with interior padding containing flotation material. Under testing, the helmet has been subjected to a piercing test of a 16 ounce steel plumb-bob from a height of 10'. No more than ⅛" protrusion of the pommel was measured. This helmet has generally been accepted by automobile racers as one of the finest designed. Further information can be obtained by writing to the manufacturer, General Textile Mills, Inc., New York 1, New York.

### RUBBER ADHESIVE PATCHING LIQUID

A new rubber adhesive, excellent for patching fabrics, leather, rubber, vinyl plastic and also for affixing fabric to wood or metal, wood to wood or metal to metal is announced by Marine Products Inc., Oshkosh, Wisconsin. The product, called Seal Patch 600, sells at 35c a tube.

### FIBERGLAS WATER SKIS

Kimball Manufacturing Corporation, 1270 Pennsylvania Ave., San Francisco, announces a line of molded fiberglass water skis, color impregnated for permanency so that there is no need for painting. The new lightweight splinter-proof skis present a glass-smooth surface to the water. The new skis are equipped with a flotation core. Bindings include an adjustable heel plate with polished aluminum fittings and a positive automatic ratcheting lock when heel plate is pushed forward. The three models are all 6½" wide and equipped with keels. The all-purpose set, 5'6" in length, which weighs 11½ pounds, lists at \$49.95 a pair. Other models are available at \$34.95 and \$59.95.

### PROPANE TORCH FOR PAINT STRIPPING

Otto Bernz Company, Inc., 280 Lyell Avenue, Rochester, New York, is now producing a lightweight propane gas torch as a time-saving tool for stripping old paint. The Bernz-O-Matic torch lights instantly, burns at 2300° F. and softens even the thickest paint layers so that a putty knife can easily strip away old paint. A flame spreading accessory spreads the heat over several inches for greatest efficiency. The item retails for \$6.95 with accessories. A cylinder of propane last approximately 10 hours. Replacement cylinders are available from most hardware and marine stores at \$1.95.

### MINNOW CONTAINER

The Minno Canteen using a natural scientific water revitalizing process has been announced by the Oberlin Canteen Company, Oberlin, Ohio. The Minno Canteen is made of heavy canvas sides and bottom and a metal top. Evaporation of the warm molecules of water through the canvas cools and aerates the water. The metal top has a hand hole for bait removal. Non-rigid bottom conforms to uneven boat surfaces to prevent slipping or sliding.

- Proven Trophy Winner
- Giant Tested Plans
- Full Size Ribs
- Step-by-Step Photographs
- Detailed Scale Drawings
- Complete Instructions



## Build WETBACK 9' 9" Class B & C Hydro A fast, safe, rough water Hydro

Build this fast, safe Hydro, a winning all-around competition boat. Designed for Class B and Class C stock motors. Simple to construct, 70 hours to build. You get full size ribs, over 12 construction photographs, step-by-step sketches, a full bill of materials, thorough building instructions plus finished action pictures. She meets 1956 A.P.B.A. specs. All for only \$8.00 postpaid. For further information write to:

HAL KELLY  
98 Anderson Avenue  
Bergenfield, N. J.



**ALL 8 ISSUES OF BOAT SPORT  
IN 1956 WILL BE RESERVED  
IN YOUR NAME IF YOU  
SEND US THE COUPON BELOW!**

**PLUS THE  
WINTER 1956  
BOAT SHOW  
ISSUE OF**

**How To Enjoy OUTBOARDING  
(On Sale January 13th)  
WITHOUT ADDITIONAL COST**



Many of our readers have written us that they have missed an issue of BOAT SPORT because their newsdealer was "already sold out." We regret that this condition will prevail, but because of the terrific expense involved, it is almost impossible for us to see that every newsdealer in the country is supplied with copies at all times. In order to avoid this difficulty, we urge you to place a subscription with your newsdealer NOW for 1956 — and, we will add the EXTRA Winter 1956 issue of How To Enjoy OUTBOARDING without charge. Tell your dealer to place your BOAT SPORT subscription order with his local American News branch. Or, if you prefer, use the coupon below. In this way you will be assured of receiving a fresh, clean, on-time copy of each issue hot off the press.

(Notice to club secretaries: Write Stan Dickey, BOAT SPORT, 215 Fourth Avenue, New York 3, N. Y., for special bulk club subscription rates.)

BOAT SPORT  
Dept. BS1255,  
215 Fourth Ave., New York 3, N. Y.

Herewith \$2.00 (or \$2.25 for Canada and foreign) for all 1956 issues plus the Winter 1956 issue of How To Enjoy Outboarding. Please send to:

NAME .....

ADDRESS .....

CITY ..... ZONE ..... STATE .....





**YOUR LAST CHANCE TO SUBSCRIBE TO**  
**How To Enjoy OUTBOARDING**  
**AT OUR INTRODUCTORY PRICE OF 5 ISSUES FOR \$1.00**

OUTBOARD  
BOATING

HOW TO ENJOY  
**outboarding**

WINTER 1956 - 25 CENTS



OUTBOARDS AT THE BOAT SHOWS  
HOW TO KNOW YOUR BOAT  
HOW TO KNOW YOUR MOTOR



Beginning with the Winter 1956 issue, How To Enjoy OUTBOARDING will be published four times a year, and the single copy price will be increased from 25c to 35c a copy. You can assure yourself of a clean, on-time copy delivered to your door if you take advantage of this money saving offer NOW.

How To Enjoy OUTBOARDING is the family outboard-ing magazine crammed with practical information to help you get all the fun possible from your outboard boat and motor. Articles in the next issue, dated Winter, will include:

"Boat Tests"

"Outboards at the Boat Shows"

"How To Service Your Outboard Motor"

"Inside the Outboard Cruisers"

"Know Your Boat—The Outboard Utility"

"Know Your Motor—It's Easy to Care for  
Your Outboard."

Act now and take advantage of this last chance offer. You'll save 75c over the single copy price—and what's more, if you're not completely satisfied with the first issue you receive, we'll be glad to refund your money in full.

Your local newsdealer will be glad to place this subscription order for you, or fill in the handy subscription coupon and make certain that your 1956 boating season starts with the Winter issue of How To Enjoy OUTBOARDING.

How To Enjoy OUTBOARDING  
Dept. BS1255  
215 Fourth Ave., New York 3, N. Y.

Herewith \$1.00 for the next 5 issues of How To Enjoy OUTBOARDING. Please send to:

NAME .....

ADDRESS .....

CITY ..... ZONE ..... STATE .....