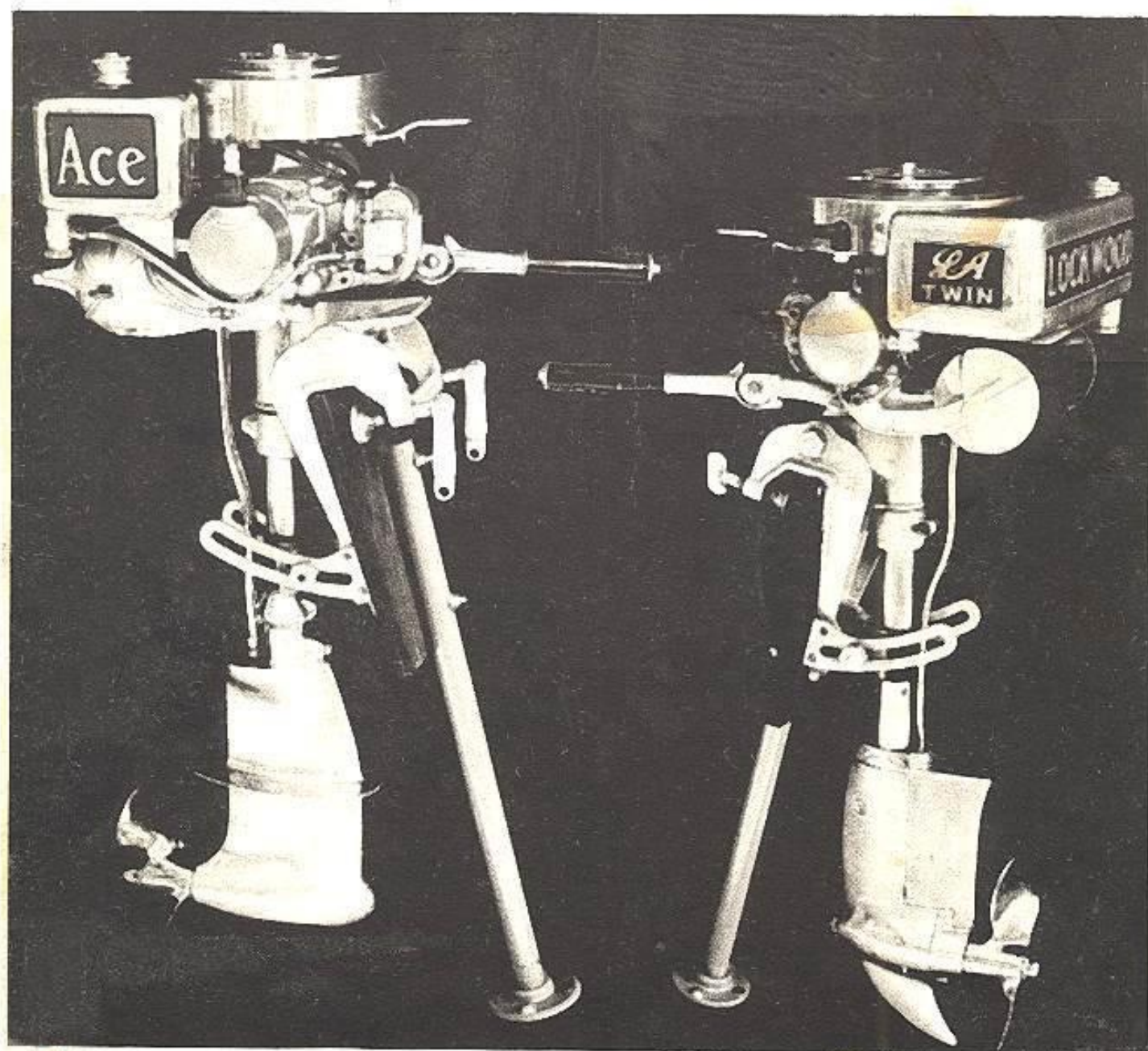
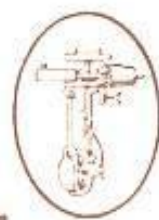


The **ANTIQUÉ OUTBOARDER**

The Pioneering Authority



January

1972

The Antique Outboard Motor Club Inc. is incorporated in the State of Texas as an Educational Institution. The Club is devoted to people all over the world who are interested in the search for, restoration and preservation of old time outboard motors. Regular membership dues are \$9.00 per year. Other membership information available on request. Address membership requests to A.O.M.C.I., Inc., 20505 NW 3rd Av., Miami, Florida 33169.

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The Antique Outboarder

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Change of address should be forwarded two weeks in advance and zip code numbers should be included.

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The Antique Outboard Motor Club Inc



CLUB BRIEFS

IMPORTANT IMPORTANT IMPORTANT IMPORTANT IMPORTANT IMPORTANT IMPORTANT

Members are urged to check your membership cards and renew your annual dues before receiving a notice. Your remittance early will save the Club time and money. All dues should be forwarded to Mr. Dick Jones, 20505 NW 3rd Av., Miami, Florida, 33169.

PLEASE SEND ALL ADVERTISEMENTS AND REQUESTS FOR SAME TO BOB ZIPPS (ADDRESS INSIDE FRONT cover), Classified Editor, instead of mailing direct to the Outboarder office. Bob will see to it that your ad is properly processed and sent along to the magazine.

RICHARD C. MICHEL IS OUR CLUB CARTOONIST. LET DICK KNOW OF ANY PUNCH LINES OR IDEAS for a cartoon you may have. Dick's address is: 494 Windsor Road, River Edge, N.J., Zip code 07761.

SPECIAL NOTICE TO ALL MEMBERS.....PLEASE NOTE \$9.00 DUES

As reported in the April, 1971 Antique Outboarder, the annual dues for membership in AOMCI have been increased to \$9.00. Any member providing out-of-date Club literature to prospective new members should first make the necessary correction to the application form. This will make Dick Jones' job a lot easier!



Meritorious Service Award, left, and new Spark Plug Award on right.

FIRST AWARDS FOR 1972 - AOMCI WISHES TO HONOR a select group of members who through their devotion of personal time, talent and resources have contributed significantly to the success of the Club and to the satisfaction of its other members.

These men deserve the thanks of all AOMCI. We sincerely hope that Club associations have enriched their lives, just as their work has enriched the lives of those touched by their inspirational service.

Our Club's highest commendation, "The Meritorious Service Award", is hereby presented to the following persons:

TO MR. DAVID R. REINHARTSEN, FOR HIS YEARS AS PRESIDENT OF AOMCI AND FOR THE COUNTLESS hours of personal contribution towards Club growth that probably only his wife, Carol, can ever properly assess.

TO MR. RICHARD A. HAWIE, FOR HIS YEARS OF TIME-CONSUMING RESEARCH ON BEHALF OF OUR CLUB members, requiring hundreds, perhaps thousands, of personal letters and for his many writings that help AOMCI to enjoy the reputation as "The Pioneering Authority".

TO MR. ROBERT H. ZIPPS, FOR HIS GIANT EFFORTS FOR THIS CLUB. MR. ZIPPS IS CURRENTLY Classified Editor and Head of the Johnson Light Twin Special Interest Group. Bob is a past Newsletter Editor and has otherwise contributed heavily by sponsoring of Club meets and by authoring numerous articles on Club activities.

TO MR. JOHN C. HARRISON, FOR HIS MOST IMPORTANT WORK AS CLUB TREASURER AND THE UNSELFISH contributions of his personal time and resources toward the success of our Club. Mr. Harrison, with his many years of experience in the boating and other professional fields has significantly improved our Club image to the outside world.

TO MR. RICHARD M. JONES, FOR HIS YEARS OF SERVICE AS CLUB MEMBERSHIP CHAIRMAN AND FOR his outgoing, personal interest in the welfare of AOMCI. Dick and his wife, Jean, have given most freely of their time and energies.

TO MR. MARCUS S. WRIGHT III, FOR HIS HIGHLY SUCCESSFUL FUND RAISING EFFORTS, HIS SERVICE as a parts source authority, as a past Head of the Elto Special Interest Group and as an ever-willing volunteer in Club projects.

A new commendation has been initiated this year, to recognize those persons who voluntarily have assumed key roles in assuring the growth and continuity of AOMCI. Their exemplary performance has earned them the AOMCI "Spark Plug Award", which is presented with pleasure, to:

William T. Salisbury
William G. Motley II
H. Thomas Luce

Donald Peterson
Sam Vance

William M. Kelly
James L. Smith

JOHNSON MOTORS' PUBLIC RELATIONS DEPARTMENT, MANAGED BY RON PEDDERSON, HAS TASTEFULLY combined Johnson outboarding history with an unveiling of its 1972, 50th anniversary outboard line in a delightful commemorative edition of Johnson Motors' *Jottings*. By all means, beg, borrow or steal a copy to read. Again in the same theme, the P.R. Department sent "An Old Fashioned Christmas Greeting" as part of the anniversary celebration. Here it is:



THE APRIL ISSUE OF THE ANTIQUE OUTBOARDER WILL CONTAIN A SPECIAL SECTION DEVOTED TO Johnson outboarding history. Bob Zipps has prepared this section with the help of Johnson Motors and AOMCI members. We hope that this special recognition and the enthusiasm of AOMCI for Johnson Motors will in some way contribute to Johnson's continued success as the Company starts its second fifty years.

From The President

January, 1972

As we begin our 7th year of Club work, I wish to personally thank all of you for participating in Club activities in the past, and extend my vigorous encouragement that you make even more of the opportunities offered you by membership in AOMCI. In this issue, I would like to write a little more about these opportunities.

I think you'll agree with me that a Club like ours needs an outgoing personality. For what good is a wealth of knowledge on a subject if there's no one to discuss it with? Or what good is a shiny collection of beautiful engines if no one ever sees them? Or what satisfaction can one receive from a good-running restoration if no one is there to appreciate it? The outgoing personality I speak of refers to our relationships with other Club members, the public and with the boating fraternity.

In many respects, much success has already been achieved in strengthening our personal relationships with other members and with the public. Think back to the many chapter activities, the increasing national and international interface our members have, the Club meets, the displays at boat shows and the willingness of members to help one another. With all this strong background and experience, we now have, in 1972, a wonderful opportunity to achieve a full measure of success with an outstanding member of the boating community.

I mean, of course, the opportunity of holding a national meet, jointly, with Johnson Motors. By now, you should have received my letter asking your cooperation. If you haven't returned it yet, please do so and give every consideration to your being at Waukegan in July. I don't need to tell you that a large attendance is a must if such a meet is to be a success. I believe such a meet will be a definite turning point in our Club growth and I wish to make sure that we round the "point" into a clear channel. To put it even stronger, there will be no first national meet if a large attendance seems unlikely.

I'm confident that 1972 offers significant rewards for all of us - if we simply continue working and laying the necessary groundwork. We have lofted the lines and put down the keel. Now, let's keep building!

I'll see you at the meet,



.....
ENGINES FOR SALE ? Parts Too? Use the Classified Ads Section of the AOMCI Newsletter. Write Bob Zipps

LETTERS TO THE EDITOR

WESTON FARMER AND THE CASE FOR OLD INBOARD ENGINES....

In the November 1971 issue of National Fisherman, Wes Farmer, Naval Architect, writes, "Where have all the old marine (inboard) engines gone?" As Wes says, "A wonderful bit of Americana - a whole romantic chapter of boating - is going down the drain unless somebody does something to smoke out these old engines".

And Wes is going to do something about it! He's asked everyone who has an old inboard to write to him in care of National Fisherman, 21 Elm St., Camden, Me., 04843. You out-boarders having inboards should write to Wes telling him what you have, and where. Wes plans to assemble a list of all the motors he hears about and provide copies to everyone who wrote in - plus copies to museums.

Incidentally, the National Fisherman is a mighty fine marine publication, issued monthly, and generally containing some good stories on antique boating. MARK WRIGHT

WORLD CHAMPION QUAD COLLECTOR AND PUBLIC FIGURE....

Sam Vance wouldn't say so himself but see for yourself in excerpts from his letter. "Here is one of the photos that were taken for an article being written for "Bendix Today", our monthly paper. This is the speedster lineup! Starting from front to back- 1930 Senior Speedster, 1931 Special Speedster, 1929 Hi Speed Speedster, 1929 Speedster, 1928 Speedster.



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Sidney, New York 13838

Club No. 4498 - Organized December 6, 1927 - District 717

DISTRICT GOVERNOR - Henry (Bud) Cooley

Meetings Friday, 12:10

Ken's Dining

Public Figure!
November 12, 1971

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Ex-Offi.
Den

THE ROMANCE OF OUTBOARD MOTORS

There are hobbies and hobbies--but few can match Sam Vance's. Sam is here today to tell us all about his collection of antique outboard motors. Today's high power, high precision outboard motor is a far cry from the spit and sputter contraptions of early days--but don't take our word for it. Let Sam tell it. He will be introduced by program chairman Bill Graham.



"Right now trying to restore two Junior Quads. One is 1931 Model 900, while the second is 1933 Model 926. Boy are they different!!

"Present project for Eltos is a lineup of 4 cyl. engines. Starting with Ole's first, the 1923 Quad. I am hoping to make one out of some old parts. A long term project but worth it. Jim Webb says I'm nuts, and I guess he's right. Next in the lineup are the more conventional Quads as follows (Ⓢ behind each indicates restored & running). 1928 Ⓢ, 1929 Ⓢ, 1930 #314, 1931 #800, 1931 #900 Ⓢ, 1933 #926 Ⓢ. Have my eye on a 700 series and a #828 460. More fun!! We also have a 1937 #9022 Sportfour and a 1941 #7031 Speedifour. We're making a new stand for 4 cylinder motors and will send in a picture of the lineup when the stand is done.

"We have been trying to gather the parts to put the 800 0015 Big Quad back to as close to original as possible. Somewhere along the life of this "ole girl", the flywheel battery ign. was replaced by a Johnson V-45 flywheel and mag plate. I found a #500 pumper flywheel and point plate. I am making an adapter for the flywheel toper and point plate. This is quite an engine, 40 hp - Wow!

"Now we are looking for a Senior Quad or Speedquad, #700 or 7000 series. Would appreciate any info on these that you might have." SAM VANCE

INDIANA'S BOB PURDY HAS A HANDLE ON THOSE HARD TO FIND MOTORS....

I am sending the pictures of that 1916 four cycle Evinrude AA motor. On page 13 of the July 1967 magazine is shown a four cycle Evinrude that looks a lot like mine. It says this one is opposed firing, the one I have is alternate firing.



I picked up a 1928 Elto Quad this summer. I gave the man \$30.00 for it and worked most of the summer getting it freed up. It had one bent rod and I broke one ring. I bought a rod and ring for \$13.50, one carb was cracked; I bought one for \$5.00. It doesn't take long to get a lot of money in a motor. This Elto was outside in this man's yard for about 4 years.

I have most of a 1916 Lockwood, and most of a 1913 Caille. And all but the flywheel and stator plate for a model 20 Caille. The best or maybe I should say the worst deal I got into was with a Caille Liberty Twin. I paid plenty to start with, then the magneto went dead and it cost \$60.00 to get it fixed.

I still have my PO Johnson motors, and a 4 cylinder Evinrude around 1951 in good shape. Will sell any one or all if I can break even on them. ROBERT D. PURDY

ANTIQUE OUTBOARD GETS LEADING ROLE,...

A motor of mine has been used by a New York City based movie company in their production of "A Change In The Wind". Evinrude Motors referred me to them when the movie company came to Evinrude looking for a motor. They used a completely restored 1926 model NS Evinrude Sportwin. The movie is about smuggling during prohibition off Fire Island.
BOB ZIPPS

NATIONWIDE COLLECTING MAKES FRIENDSHIPS - AND PROBLEMS,...

Note: Jim Murphy visited your editor and returned home with a Johnson rotary valve on a Wednesday evening.

As soon as I got into my office Thursday morning I found out I had to leave for Seattle, Wash. that evening. I got to see Bill Kelly, Bill Seibel & Don Peterson while out there. I had an interesting experience boarding the plane when returning from Minneapolis last Wednesday. The stewardess saw the rotary valve sticking out of a paper bag & questioned it. My statement that it was a rotary valve for a V70 Johnson did not assure her and I ended up explaining it to a passenger agent. Oh well, I'm glad they are as tight on security as that. I do a lot of flying and appreciate safety.

I ended up bringing back a Big Four and misc. parts for a P-30 Johnson and a Super C as part of my baggage from the coast. You can imagine the trouble I had convincing United Airlines to take the boxes as part of my baggage - but they did.

Thanks again for your hospitality the other evening. I was also warmly received on the coast. We have a real nice bunch of people in the club. JIM MURPHY, Illinois

GOOD TIP ON RESTORING GAS TANKS,...

I have a tip that seems to help in restoring aluminum gas tanks. I have been using procedures as mentioned in the tank articles in the April 1970 issue, including the opening of the tank to get out the dents. I find, however, that you just can't get all the small ones out and have been using auto body putty on them. The problem with this type of putty is that it is not made for use with aluminum. The result is that I have had very many problems in getting a feathered edge that does not show when you paint over the area. I mentioned this to a body man I know and he told me that he also has the problem when working on aluminum. He recommended that I try a putty material made by Ditzler Automotive Finishes called Alum-a-lead. I have since tried it and it works very well. It is no shortcut, but at least it does work if you are patient and do some experimenting. The reason I say this is that I had some problem in getting the right mix of the dry powder and the liquid. (My first try was made too thick and I mixed it up in a can.) The mixture should be made on a flat board, about 12 to 14 inches square - the catalytic action of the mix generates some heat and boy did the can get hot! It probably is this heat that helps bond this to the tank. The material is supposed to be corrosion resistant, able to withstand vibration and impervious to moisture. It sands fine and I have used a Stanley "plane file" and then various grades of sandpaper, wet or dry, for final finishing.

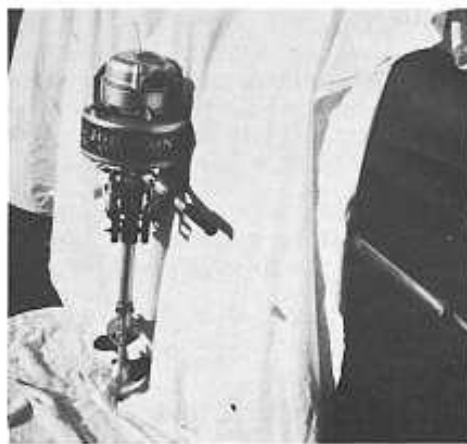
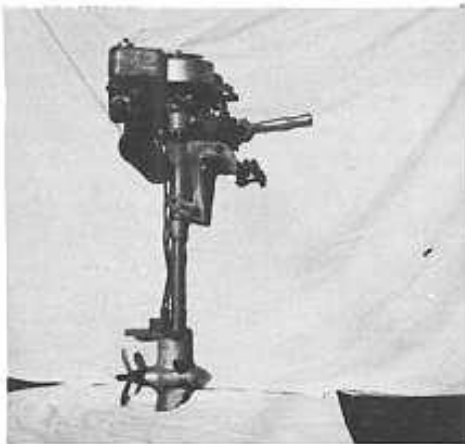
To get the product, check an auto parts store that handles Ditzler products. The powder is Alum-a-lead DX-701 and the liquid is Alum-a-lead DX-702. The pair sell for about \$5.00 plus, for a one pound can of powder and a pint can of the liquid. I also found that a putty knife is a bit awkward so I bought a package of 3 different sizes of plastic spreaders made for this type of work (\$1.25). Ditzler lists a couple of other products to use to clean the surface and to use prior to painting, but I just use normal cleaning procedures. All this is work but you can really get a good job with it if you have the patience.

Also, when working on gas tanks, particularly larger ones where you've open tank from the bottom to straighten dents, etc., I made a wooden handle (I used a section of a

hockey stick handle) and bolted it across the tank mounting brackets. This handle makes a good firm easily held grip while working. It also holds tank in a vise if needed. I actually wouldn't have thought of this except a tank I was working on was dented in on the surface where the mounting brackets were attached. If I straightened this surface my hole alignment would have been ruined, hence the "handle".

I'm sending a couple of unrestored motor snaps if you can use them. The HA-15 Johnson is very sharp. I got the motor from the original owner, who bought it from Staff Jennings Marina in Portland, Ore. in 1940. The motor is very well kept and the decal in unbelievable condition. It still has the marina's decal in it as well.

The other motor is a 1935 model "A" Champion, ser nbr 430 and should restore in fine shape.
RON DUCKWORTH, Washington



DIESEL OUTBOARDS AVAILABLE? MAYBE....

I read in the last magazine that somebody wanted to know about the Diesel outboard. I have one. Mine performs about like a five horse Johnson. Noisy as H--mostly gear noise. The two cranks are geared like the magazine said and the flywheel is not on the crankshaft but is on the next gear to it which is bad. The balance is good because everything cancels out, and the builder has weighted the cranks to take care of the side vibration. Plus, they don't turn too awfully fast. The motors go forever on a gallon of #1 fuel. I paid \$150.00 for mine in the crate + tax. Since then (Sept. 9, 1965), I've only had it in the water a couple times (heavy).

When I bought mine, the place had quite a few - like 90 in the crates. Newport Boat Sales, 1223 East Anaheim Street, Wilmington, California, phone TE 4-3066.

Since I bought the motor I moved out of the area. Maybe somebody that lives around Wilmington could check on the situation.

The factory put them on the market for a while and then pulled them all back and gave up. I believe the power head is now used for an electric generator where noise is no problem.

MAHION LAMOUREUX

.....
Continued from page 46. about requirements for ignition systems which would work reliably at higher RPM, stronger steels and aluminum which would not only permit higher RPM but would be strong enough to live comfortably in higher stressed conditions, bearings that would have less friction while handling vastly higher loads and engineering design which permitted long and reliable life.

We trust the foregoing commentary and sketches of the various breathing systems has provided you with a better insight into the breathing of Antique Outboards.

RICHARD A. HAWIE

NOTES FROM THE CURATOR

One of the interesting phenomena of collecting and identifying antique motors is that when I am asked to identify a motor for the first time, very often a second similar motor will turn up within a week or two. When I was starting my collection I was offered two 1928 Elto Quads in the same week! So don't despair because you haven't found a model you desire.

If you find one you think is overpriced, politely refuse; the odds are good that you'll find a second one sooner than you think. In several cases motors that I refused as being too highpriced were offered to me at my price a year later. Someone brings up this price problem every issue, but since we have new members reading each new issue, it bears repeating. Don't pay more than you think is a fair price no matter how rare the motor is; another motor will turn up.



Now the problem is which motors are rare and which aren't. In some cases rarity is in the eyes of the owner. I have two 1928 Elto Quads now. I don't have them on my rare list, but if you are still searching vainly for your first 1928 Quad, it's a rare motor to you.

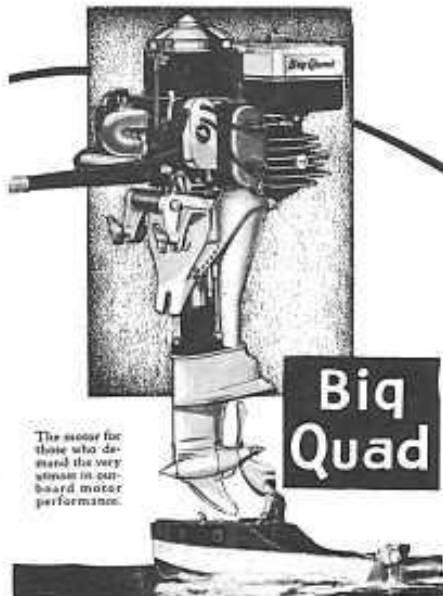
In fifteen years of collecting and identifying motors I have my own list of motors that I consider rare. Don Peterson, who has assumed the motor registration portfolio, plans to tabulate the motors registered by members; and when that monumental job is done, we'll have some concrete (cast iron?) figures to go by in determining motor rarity. This should help all members who are actively collecting motors.

If you found several old motors priced at \$20.00 a piece and your budget could stand only one \$20.00 motor that month, it would be nice to know which one was the rarest. If you equate rareness with desirability, age is not always the best criteria; for instance, a 1928 Elto Quad is not as rare as almost any 1931 model.

In 1931 and 1932 Elto produced a 60 cubic inch "Big Quad"; Evinrude's model was called "Big Four". Though I still consider this a rare motor, Sam Vance has turned up an Elto Model 800 Big Quad and Walter R. Ellis has what appears to be a second Big Quad. Both letters about the motors arrived in the same week!

The Big Quad and Big Four might be considered service versions of the racing 4-60. Though there are not many common parts, the bore and stroke were the same, 2 3/4 x 2 1/2, for all three motors. The Big Quad and Big Four were rated 40 hp in 1931 and 45 hp in 1932. This was the second highest horsepower rating of any service motor until 1946 when Evinrude produced a 50 hp version of the famed Army Storm Boat Motor.

The Elto Big Quad was a battery ignition model; an electric start model was also available at \$445.00, the rope start model cost \$375.00. Is there any wonder why they are rare? Compare those prices with a Ford or Chevy of 1931.



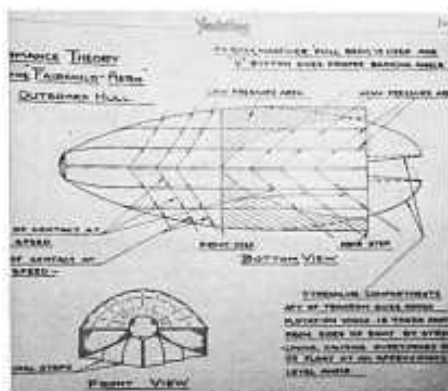
The motor for those who demand the very highest in outboard motor performance.

Big Quad

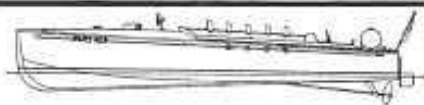
The Big Quad, 40 H. P.

THE pinnacle of outboard motor performance belongs to the owner of an Elto Big Quad. Ample power for largest outboard cruisers — flashing speed for big capacious runabouts. Rugged, sturdy construction and vibrationless operation mean long life. The Big Quad has all regular Quad features and refinements. Coed starting model, \$375.00 Electric starting model, \$445.00

The Big Quad does not look much different from a Speediquad.



Page 48, June, 1928 YACHTING
A sketch showing the performance theory of the Fairchild Aero.



Sam's Big Quad has a Johnson flywheel and magneto fitted to it; Walter's Big Quad has an Evinrude magneto fitted to it, yet it still has the battery coil ends on the crankcase. I think that both ignitions were changed because the rope start Big Quads of 1931, Model 800, and 1932, Model 820, had the same automatic spark advance as the 1931 Super C, Model 605. If you refer to the April, 1971 issue, page 16, and the October, 1971 issue, page 14, there are pictures of the automatic spark advance. Briefly again, it was a centrifugal device which advanced and retarded the point opening cam as the flywheel speed changed when the carburetor butterfly was operated. The device did not work well in the field, and the arms were clamped together as a field modification. The motor then operated like a standard model; you advanced and retarded the timer plate manually. I can't guess why Sam's and Walt's motors weren't modified this way.

Sam is one of our crack restorers and I expect that he's beating the snow drifts (the bushes are covered in upper New York state by now) for the correct flywheel and timer plate. Personally I'd leave the Johnson ignition on and have an even rarer Big Quad.

The horsepower rating of 45 for the 1932 Big Quad and Big Four is from the specifications of American Outboard Engines in Motorboating, page 330, February, 1932. G. M. C. service literature rates both 1931 and 1932 models at 40 hp. Since we are the "pioneering authority" it's well to point out that pioneers get confused occasionally.

The only pictures I have been able to find at this time are of the electric start Big Quad; since electric starting was a new feature I guess the G. M. C. advertising dollar was spent picturing this new feature. After all, one rope start flywheel looks pretty much like the next.

I've had occasion this fall to finally start indexing my magazine collection so that with luck I can find specific ads and articles without a month's searching. I hate to waste research, so I'd like to add some information I've gathered to the interesting articles on the Baby Olds and the Pigeon 3 Star boats in preceding issues.

To digress a minute, I think that antique outboard boats, sparkplugs, propellers, and accessories such as steering wheels, throttles, fins, etc., are potential and legitimate special interest groups. They are all part of the overall picture of antique outboarding. On the other hand, I wonder if we are not beginning to stray a little into the small inboard field unless we stay with the companies that produced both inboard and outboard motors of basically the same design. Where, I wonder, do we draw the line?



Page 104, August, 1928 RUDDER
Fairchild Aero used this view
in some of their ads.

Page 150, November 1930 MOTOR-
BOATING-Earl's brother Walter
Widegren & his record-setting
combo. Johnson fans note the
dual carburetor VR-50 & drool.



Page 44, September, 1929 MOTOR-
BOATING-Ned Lassone and his
Pigeon, first in Class E, Div. 2
at Newport, R. I., in 1929.



Page 27, July, 1947 RUDDER
Al Azalea and riding mech-
anic finishing the 1947
Albany to New York race.



Well - from opinion to information....The Baby Olds which Lillian Peterson wrote about in the October issue was an unusual design in a year of unusual racing boat designs. 1928 was really the first year of organized big time outboard racing; and as the year started, racing was an unexplored frontier. Motors of undreamed-of power and boats of varied designs with no weight restrictions were available to the racing men and women. The sixteen horsepower Speeditwin which drove Baby Olds had twice the power of the 1927 Speeditwin which was rated eight horsepower!

The bow of Baby Olds and subsequent Fairchild Aeros was padded leather like a large boxing glove. There were substantial cash prizes in many large races; Earl Widegren, driving Baby Olds, won \$500 for placing first in the 1928 Albany-New York race. The temptation to stick your bow inside the lead boat at a turning buoy was always present. A padded bow was a little more humane than some of the needle nose boats of the day.

Sadly enough Earl Widegren was killed in December of 1929 in an automobile accident. His brother Walter continued racing and set a competition record at the National Championship at Middletown, Conn., in 1930. At the time his speed of 46.153 MPH was the fastest speed anyone had traveled in competition. Walt's boat was a Flower's Falcon. By late 1928 the Fairchild Aero had ceased to be a factor in racing. I don't find it appearing in the race summaries for regattas held late in 1928. Fairchild claimed that its June production would be 20 hulls a week! I wonder if any have survived.

The Pigeon Three Star boats which Charles Woolley wrote about in the July issue did not burst on the scene as dramatically as the Fairchild Aero, but after minor success in racing came back to score surprising finishes 20 years after their introduction! The Pigeon was introduced in 1928 though testing on the boat was done late in 1927. It was actually a runabout, had no cross or transverse step as did most of the racing hulls of 1928. I don't think pictures can completely show the unusual shape of the Pigeon hull. Buddy Streat has a beautifully restored Pigeon and I think anyone who has seen it will agree pictures distort or foreshorten the pleasing lines of a Pigeon.

For some reason boating magazines are not always consistent in the spelling of names and I have found "Pidgeon" as well as Pigeon mentioned in articles and race summaries. I assume the authors spelled incorrectly and that they were referring to the same boat. The first mention of the Three Star boat was in a 1928 issue of Rudder Magazine, and the name was spelled "Pidgeon" despite the fact that Pigeon Hollow Spar Co. had an ad in that issue and had been advertising in Rudder at least as far back as 1907. Designer William J. Snadecki was referred to as Captain William J. Snadicki formerly of Bridgeport, Conn. I found the following spellings which I assume to be of Snadecki:

Captain Snedecks, W. Snedichi, Capt. Snadecki and W. J. Snakicki. Just a little insight into reasons why researchers get gray. I assume that Mr. Woolley's spelling is correct.

In May of 1932 announcement was made of the establishment of the Pigeon Boat Corporation, a new Massachusetts corporation whose plant was located in East Greenwich, R. I. Samuel B. Dunsford of Concord, N. H., was President; he was a well-known Gold Cup and 151 class owner and driver. Ross Maddocks, Commodore of the New England Outboard Motor Boat Assoc., was Vice President; Roy W. Pigeon was Treasurer. Fred L. Pigeon was Secretary, and Capt. W. J. Snadecki was Designer and Chief Engineer. Their advertising was directed mostly to inboard runabouts with stern drive and patented bottom design. Stern drive is not new, nor is the term inboard/outboard. A Herbst tractor outdrive was pictured in March of 1929 and O. C. Linthwaite used the term inboardoutboard in an ad in Nov., 1929. But that's not outboarding, is it? The patent number for Pigeon's bottom design was 1811981.

The racing record of the Pigeon Three Star hulls (and they were racing boats) was good considering that they were runabouts competing against step hydroplanes. Races in the East in those early days were often held on salt water, and that means rough water. The Pigeons were able to hold their own under those conditions.

The Pigeons' record in marathons included 6th and 7th place finishes in the Boston to New York Marathon in 1928. Only nine boats finished the 250 mile race, an outstanding feat in itself. The Boston-N. Y. Marathon was never run again. I guess man and machine can only take so much punishment once. Pigeons' Albany to New York Marathon record is unusual in that it included a poor finish in 1929 and 8th and 12th place finishes in 1930. Then in 1947, when the Marathon was restricted to runabouts and service motors, Al Azalea of Peekskill, N. Y., finished first in Class III using a 33 hp Evinrude; Ike Hale, Washington, D. C., finished, but not as a prize winner, in a smaller class. This was an outstanding feat for boats which were 15 to 20 years old. Finishing the Albany to New York Marathon is tough enough for a new boat.

In closed course racing the Pigeons' record includes a second place finish by F. L. Collier of Hampton, Va., in the Sir Thomas Lipton trophy race at Philadelphia in 1930. This was an unlimited free-for-all three heat race of six miles each for a \$6000 Trophy donated by the "tea" Sir Thomas Lipton. It was almost a closed course marathon as 32 boats started the first heat! Mulford Scull of Ventnor, N. J., in a homemade boat won two heats, Collier won the third heat, and W. J. Snadecki finished fourth in a Pigeon also.

At the National Championships at Middletown, Conn., in 1930 Robert Snadecki of Westover, Va., in a Pigeon hull won the Eastern and A. P. B. A. Championships and finished second to record-setting Walt Widgren in the National Championship in Class D, Division I & II.

The Pigeon would fill a treasured place in anyone's collection if you're lucky enough to find one.

ouch!

JIM WEBB SPENT THE PAST SUMMER WITH A SORE ARM AND THE FALL SEASON RECOVERING FROM AN operation. In late May, Jim tore the muscle of his right arm - loose from the bone, just above the elbow. Quite painful and slow to heal. Some good to everything, though, as Jim says: "Strangely, it helped my golf game. I have always fancied myself as a long hitter and I do belt 'em out, or did. The direction wasn't there but the ball flew. Now with this hurt arm, I can only swing and let the club head do the work. So I am out of trouble, the ball goes a respectable distance and strangest of all, stays in the fairway a good bit of the time. For a 170 par 3 hole, I take a #3 wood and get on where I used to take a 4 iron and miss the green, either to right or left or sometimes over". Then in November, Jim went into the hospital for 5 days to have a double hernia repaired. Now he's taking it easy for several weeks. Our best wishes for a speedy and full recovery.



OF HISTORICAL INTEREST

..... *W J Webb*

THE PICTORIAL HISTORY OF OUTBOARD MOTOR WOMEN, or, "You've come a long way, Baby!".....

In the July, 1971 issue of the magazine, I briefly touched on the subject of ladies and boating advertising. Now, this is a very broad (ahem!) subject and one I thought could use some further research. So I began digging through the old files and came across several pics that must have sold quite a few outboard motors.

This first series, which I'll call Part I, carries thru to 1931. Part II will cover from then to 1942, which should be enough for you to get the idea.



Come "Evinrude" With Us

The above ad is from 1914. Bathing suits were not yet in vogue, but it didn't take long!

The picture at the right is from a 1916 advertising brochure and has a little more zap. Rare canoe motor tool!

I'm red-faced for the future historian who presents today's ladies' influence on boating advertising. Can you imagine the Antique Outboarder being sold at the counter only? Here they are, and I'll comment just enough to keep your mind on the motors.

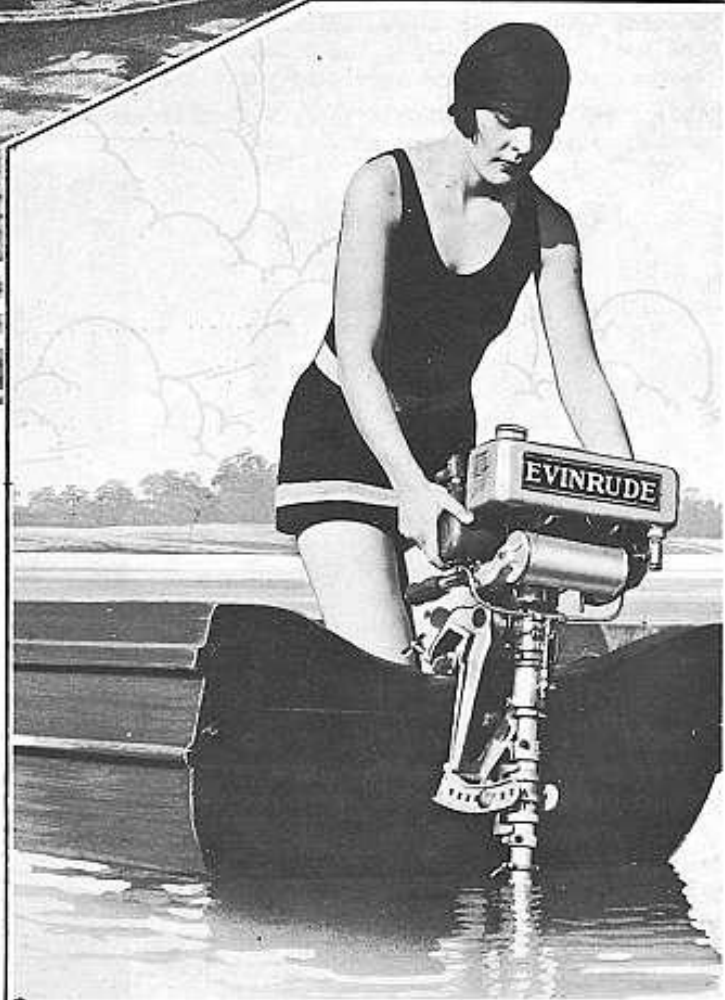


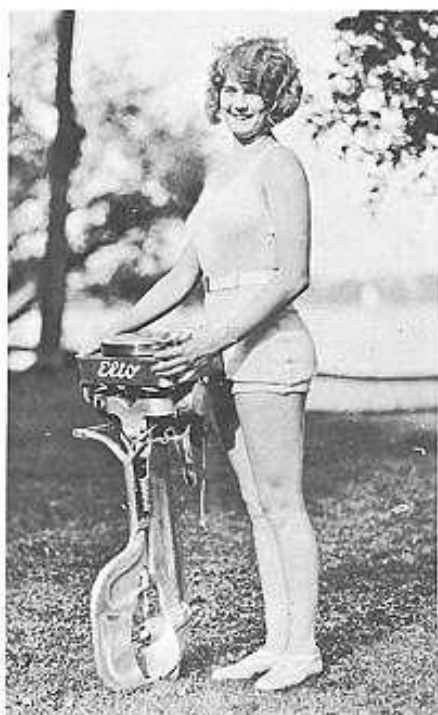


What could be sweeter than four pretty girls motor boating around the lake, seeking the clearest water for their daily dip. We hesitate to think what happens to the boat when they all dive at once

If you look closely, you can see the Liberty Single motor on the above Caille publicity shot, for 1923. The picture was used in an article for the 1923 "Motor Boating".

Photograph at right was taken in 1922 for the Evinrude 1923 advertising program. Motor is the model N Sportwin.





Top and right: 1926 was a healthy and vintage year - for Eliot - The motor is nice too!

Left: Those Ruddertwins had a lot of pulling power in 1924.



1924



Left: A 19289 bathing beauty turns over a '29 Speeditwin. She looks like she can start it OK. Boat is a nice example of a lightweight runabout and probably was mighty fast.

Photo on next page is from 1930 and shows a more modern trend. The Gals are a lot trimmer, more of the boats are brought into the picture and the scene has shifted away from the lake cabin or blah river to a more appealing tropical setting. Motors are Fold-Lights and at 29 lbs apiece, are quite a armful.

Photo below was taken in 1930 for 1931 advertising. Motor is a brand-new Super C Elto.





MODEL 375 SEA KING 1941

15.2 HP @ 4000 RPM

Eric Gunderson

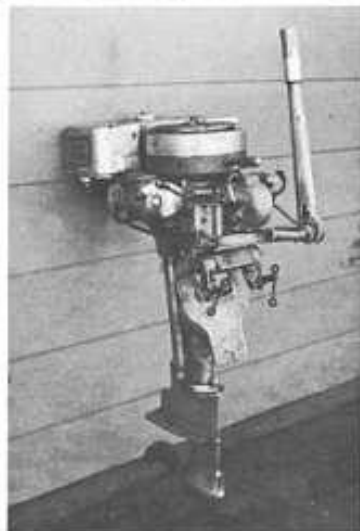
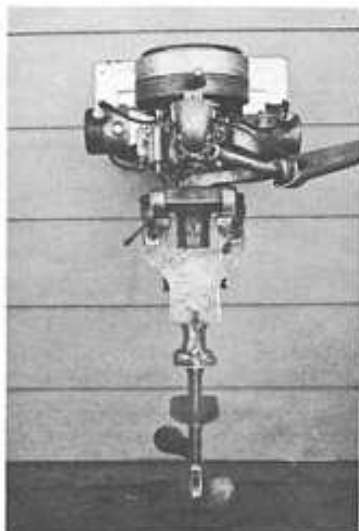
The local Flea Market is quite often a good place to find old outboards reasonably priced and early Sunday morning is the best time to get in on the bargains. On this particular Sunday my wife and I were trying to raise money for a friend with cancer. I took along an old Sea King (1937 5 HP) that I had fixed up as a trader. The motor brought in customers like a magnet and our sale was very successful. One old gentleman looked over the motor carefully and said that he too had an old Sea King. He said that it ran great, but it was too big for him to handle and he needed a fishing motor. He said that it had a decal and it was about 15 horsepower, and he wouldn't mind trading it for mine if I was interested.

I got his name and address and the next Tuesday night I finally found the address through the wind and rain. The old gentleman invited me in for a cup of coffee and soon we adjourned to his workshop. Way back in the corner, mounted on a barrel, was a very strange opposed twin with a decal that said Sea King. I examined it closely, and except for a missing carburetor intake it was all there. I had promised that my engine would start on the first pull and when it did we had a deal.

This engine is somewhat unique. First because it is 25 cu in displacement, and secondly because it seems to be a combination of parts from other Evinrude models assembled into a light, well thought out package for Montgomery Ward. The magneto flywheel and carburetor are from a Speeditwin. The cylinders are Elto Sr Speedster, pistons and rods are Speedifour, and the lower unit and clamp bracket are Sportfour. The crank has bushing type main bearings and the rod big ends have rollers. Induction is by a crankshaft rotary valve, through windows in the piston skirt, and very generous bypass ports. The bore and stroke are 2½" x 2½". It has a twist grip throttle, and a crankcase primer for easy starting. Cooling is by a centrifugal water pump in the driveshaft housing.

The performance of this engine is amazing. On my 13' Whirlwind family runabout it does 28 mph, which is as fast as an average PO on the same boat. The 10 x 10 2 blade prop is a bit too light as the engine turns 4400 RPM at full throttle. I am going to have the prop repitched to keep the RPM's down. The performance may improve after the restoration is complete and the Marcus Wright balance/setup rules are applied.

According to the Evinrude Year/Model guide the engine was only made between 1940 and '42.



CENTRAL OHIO september meet



Nine o'clock on the morning of Sunday, September 19, three AOMCI members, including myself, sat in a parking lot next to Delaware Reservoir listening to the sound of rain-drops on the car roof. Shucky-darn!, I thought to myself, this really finishes off our meet. Earlier in the month Ohio's frugal governor had closed the Delaware Reservoir State Park along with the marina in which we had planned to hold our meet. Fortunately, the east shore of the reservoir is controlled by the U. S. Division of Wildlife and it was unaffected by the governor's order. AOMCI member Lowell Hetzner came up with a place on that side of the lake to hold our meet and also obtained several boats for our use. We had survived politics only to be apparently zapped by rain. At ten o'clock, however, the rain miraculously ceased and by noontime we had eleven members on hand doing their "thing" - talking about, showing, and running those wonderful old outboard motors. Forty-three motors were brought to the meet for all to see and enjoy.

When it came to exquisite restorations it looked as though Fred Lucas wouldn't be beaten with his array of motors, including a Cross Radial, but he was equaled by Bob Watkins who brought a pair of magnificently restored Wisconsin and Lockwood-Ask singles. Bob also became "Mr. Swell Guy of the Year" when word got out that he had brought several large boxes of parts for free distribution to any members in need of any of the parts contained therein. Just about everybody found something to brighten his day. I came across badly needed cylinders for my model 156 Evinrude and parts for my basket-case Elto Pal.



Gene Cahall and his WW II Japanese Shoda Military Motor



Ed Diederick's son holding a Circa 1930 German Konig Single



Bob Watkins & Chief Mechanic with nicely restored Wisconsin & Lockwood Ash Singles



Ed Diederick with his 1907 Waterman Single



Bruce Kennedy proudly holding his Elto Fleetwin

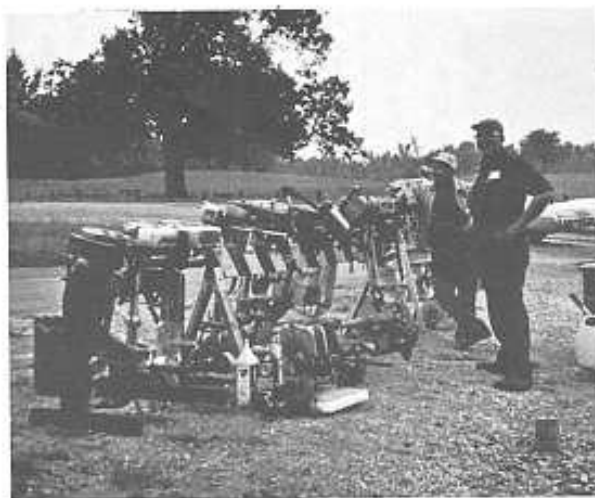
Emmett Walls set up his trailer tent to be used as shelter in case of more rain and before long had run all of his motors on the lake. His 1928 Johnson K-40, which he uses regularly as a fishing motor, ran better than most of today's new motors. I tried to give him some competition with my balky K-40, but soon gave up and ran my Caille 30 tractor racer instead. This helped to keep me from looking too ignorant. Check out those motors before the meet, friends, it does save embarrassment! Fred Lucas' Elto Cub showed surprising moxie for its size and it started regularly with a flip of the wrist - no starting rope, just a flip of the wrist. Fred also brought a Clarke Troller and

was therefore responsible for bringing both the smallest and the largest (Cross Radial) motors to the meet. Lowell Hetzner hadn't found time to tune his Caille Liberty single for running, but he did run one of the nicest sounding Evinrudes I have ever heard, a 1929 model F.

A couple of trusty Johnson A's were run by Ed Diederick and Bruce Kennedy. Bruce was especially proud of his recently restored Elto Fleetwin which was complete with a new original decal. Paul Saeger also brought a Fleetwin. Gene Cahall showed a WW II four-cycle Japanese Shoda military motor, and from the other side of the world came a

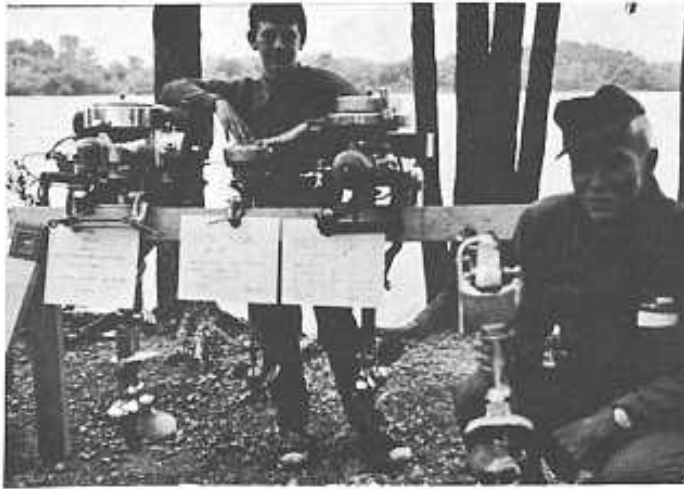


Top: Emmett Walls & his K-40
Center: O. B. Coomer with A-65



Above: Fred Lucas' Cross Radial
Below Left: Lowell Hetzner, Front
Below: Mystery "Motor"





Fred Lucas and his Clarke Troller. The other motors are his too!

Circa 1930 German forward-pointing single-cylinder Konig brought by Ed Diederick. Ed, by the way, displayed the oldest motor at the meet, a 1907 Waterman. Ed says that he paid \$4 for the Waterman at an auction - how's that grab all you frustrated motor hunters?

Most polished motor present was brought by O. B. "Met-all" Coomer whose Johnson A-65 looked to be chrome-plated. O. B. was the most "way-out" participant as he had travelled 250 miles to attend. Skip Hight, an old-time outboard racer, recalled pleasant memories associated with some of the motors shown and he contributed much information from his stock of outboard knowledge.

Some parts and motors exchanged hands in various trading sessions,

and to show that we outboard buffs have other collecting interests, exchanging hands in one trade were a 1911 Ohio automobile license plate and an old toy steam engine!

Notice the photograph of the mystery "motor" which may be of interest to the club membership. The present owner of this hand-powered unit says he obtained it in Kentucky and that it was supposedly built around 1870. I found no name on it and it appears to have been quite well-constructed. It may be a one-of-a-kind or it could be part of a small production run. I operated the lever in an up-and-down motion and it worked fairly well, although it had a tendency to stick at either end of the lever travel when changing from the "up" spiral to the "down" spiral. Maybe someone in the club can identify it.

This first gathering of club members in the Ohio-Indiana-Kentucky-Michigan area appeared to have been well received by those present and we hope that this event will become an annual affair. Those of you living within easy travelling distance of Central Ohio who want to join in the fun should plan to attend next September.

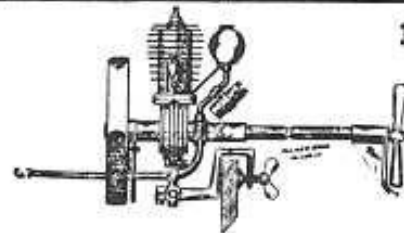
Attending Members

Gene Cahall - Dayton, Ohio
 Edmund Diederick - Elyria, Ohio
 Lowell Hetzner - Prospect, Ohio
 Skip Hight - Neapolis, Ohio
 Bruce Kennedy - Columbus, Ohio
 Milt Moos - Westerville, Ohio

Paul Saeger - Louisville, Ohio
 Fred Lucas - Winchester, Indiana
 Emmett Walls - Speedway, Indiana
 Robert Watkins - Ann Arbor, Michigan
 O. B. Coomer - Louisville, Kentucky

REMEMBER

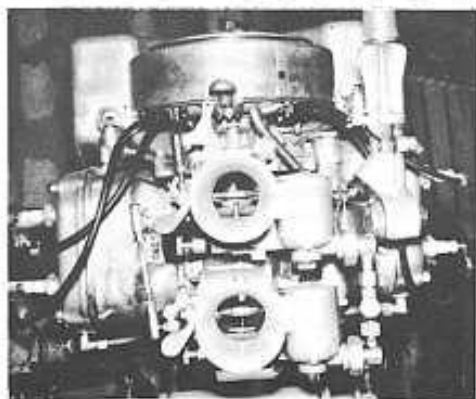
Richard M. Jones is handling all new & re-newed AOMCI Memberships and records. All applications, dues and address corrections should be sent to him at 20505 N.W. 3rd Avenue, Miami, Florida 33169
 PLEASE CHECK YOUR OWN MEMBERSHIP DUE DATE AND RENEW EARLY. SAVE THE CLUB \$\$



1921

The Palmer outboard is an air-cooled outfit and the weight is only about 40 pounds.

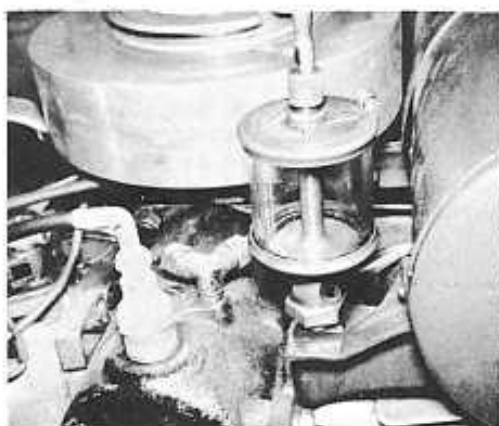
OLD MOTOR QUIZ ?? :BOB ZIPPS



MOTOR 1

Here is a good chance for all of you out there to test yourselves to find out how good you are in identifying motors from a snapshot. Give it a try without peeking at the answers. Besides being fun it is also educational. Sharpen your pencils. OK! ready, GO!

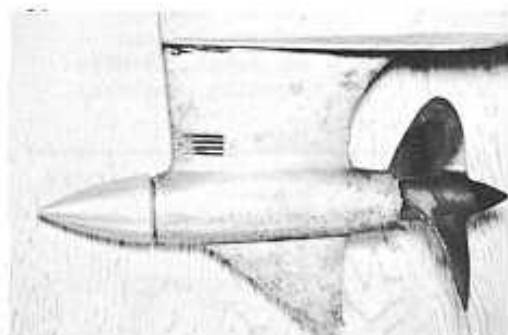
Motor #1 is a dead give away because I don't like to see anyone going home without knowing at least one. Now what is the: a) Make, b) model, c) year, d) horsepower, e) model name.



MOTOR 2

Motor #2 may be a little tricky for those of you who are not familiar with the rarer motors. Name the: a) make, b) model, c) year, d) horsepower, e) model name.

Motor #3 is going to fool a lot of people unless you examine the motor very, very carefully. Now remember, no peeking at the answers. Tell me: a) make, b) model, c) year, d) horsepower, e) model name.



MOTOR 3

After you made an honest try and checked your answers, find out where you stand as an old motor identifier as follows: None right- You're a stamp collector who looked at this magazine out of curiosity; 1 right- you are a land lubber neighbor of a member who has a motor like you identified; 2 right- you are on your way to being a pro; 3 right- you're wife or girlfriend has a crystal ball.

If you have a motor or motor feature that you would like printed to stump experts. Send it to me (address inside front cover). Give complete info on motor as above and also include serial number. Photo must be of an actual motor and not a photo cut out of magazines etc.

FOR ANSWERS SEE PAGE 55

JOHNSON LIGHT TWIN 1921 - 1927

WATER - BUG

BY BOB ZIPPS

Before jumping into this month's article, I want to make a little sales pitch for the Johnson Waterbug. If you are relatively new in the Club or are a seasoned restorer, and are trying to decide on a motor to buy and restore, by all means get a Water Bug. There isn't a better choice for your first or hundredth motor. They are relatively easy to get a hold of because so many have lasted to this day. They are inexpensive to buy because of their smaller size. Spare parts are usually not a problem which helps tremendously during the restoration. They are fantastically dependable because of their simple construction. They are light which makes it easy on your back. They do not take up much room in the trunk so they can be easily taken on vacations etc. I'm convinced that the Johnson Waterbug will become as popular as the Ford Model "A" of the auto field. If you like brass, there are the models EN or AB-25 to choose from. The Waterbug has everything you could ever want in a small antique Outboard motor. Why not pick one up now and restore it



Les Stevenson's Beautiful Model A

EARLY WATERBUG LITERATURE:

Basic Johnson Waterbug models are not what you would call rare. The Waterbug models made for special uses are almost non-existent, but the basic models are relatively plentiful. However, what is rare is the Johnson Published Literature published before 1930. You are more likely to come across a New Guinea pigmy playing right tackle for the Green Bay Packers than you would finding these older parts catalogs. What I would like to find is Johnson Published literature printed while the Water Bug was in production. If any of you out there has some material on the Waterbug from the twenties, or knows where some can be found, I would appreciate hearing from you.



Fig. 1: 1930 Water Bug Parts Book center, surrounded by similar books printed during the same era.

The earliest Johnson Parts Manual was printed in 1930 (see Fig. 1). The Johnson Manuals at that time had covers made of very heavy paper, about as thick as the covers on the antique Outboarder. There were two colored bands across the front and back covers of these parts catalogs. The top colored band was wide and went through the name "Johnson Outboard Motors". The other colored band was narrower and was near the bottom of the cover just above the name Johnson Motor Company. The

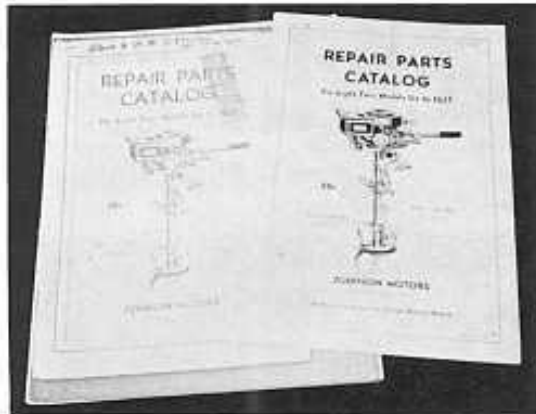


Fig. 2: 1938 Lightwin Catalog left, and 1939 Lightwin Catalog.

almost identical, and are very similar to the 1930 catalog but lack many photos and other information that was included in the 1930 version. All three catalogs are the same size 6 3/4 by 10, but the latter two do not have a hard cover. These late thirties Lightwin catalogs are the most common, although they are much rarer than the motors they describe.

My latest Lightwin catalog was printed in 1953. This catalog is larger measuring 8 1/2 by 11, (See Figure 3). This catalog includes a great many early models in addition to the Lightwin. They are: J-25, J-65, A-35, A-45, K-35, K-40, K-45, P-35, P-40, P-45, OA-55, OA-60, OA-65, OK-55, OK-60, OB-65 and OB-70. That's a lot of models to squeeze into one book. Unfortunately, the way they did it was to eliminate all the pictures. So all the pages look like a telephone book. But, it is better than nothing.

Another excellent source of information is a Johnson Service Manual that I was lucky to get a hold of. It was printed about 1935, but it gives detailed service information all the way back to 1922. Figure 4 shows a page of the book concerning the external rotary valves for the models S, P, and V Johnsons. The service manual has a very heavy paper cover and measures 8 1/2 by 11.

Weell I hope that this gives you a good idea of what Johnson Literature on the Lightwin is available in case you have been hunting for some. Now you know what to look for. Happy hunting!!!!!!!!!!!!



Left- Fig. 3: 1953 manual which includes many early models including the Lightwin.

Right- Fig. 4: 1935 Johnson Service Manual. This is a good find.



The bands are the same color on each catalog but are different from model to model, forming a whole rainbow of colors. For instance the Lightwin bands are a dark green, the A-50 bands are light blue, the S-45 are bright orange, the P-35 are medium blue, the P-50 are a medium green, the K-35 are a light amber, the P-35 thru P-45 are an orchid, and the K-50 are a light orange. My Lightwin catalog is labeled as Catalog Edition "D". Does anyone have A thru G???????????

My next Lightwin catalog is a copy of one that was printed in 1938 and the next was printed in 1939 (See Figure 2). The two catalogs are



Amarc 10, a one-cylinder, two-piston opposed diesel outboard rated 9 1/4 hp. at 3,500 r.p.m. With a piston displacement of 21.5 cu. in., it has a maximum fuel consumption of .75 gal. per hr.; cruises on less than .5 g.p.h., reports AMERICAN MARC INC., 1601 W. Florence Ave., Inglewood, Cal.

THE DIESEL OUTBOARD

By Mark Wright, with many thanks to Morton Daller, E. Walton Ball, N. Wyeth, Mahlon Lamoureux, Tom Luce and Philip Ekern for supplying helpful information.

While diesel outboards are not antiques as we think of them this article is offered to acquaint those Collectors who might like to know more about them.

According to Jim Webb in his book, "The Pictorial History of Outboard Motors", pp 74 and 75, three American builders have offered diesel outboards: American Marc, McCulloch and Murray & Tregurtha. The latter, called the Harbormaster, is the only one remaining on the market today.

For many years, Murray and Tregurtha have built enormous propulsion units using large diesel engines of hundreds and even, I understand, in the low thousands of horsepower. These outboards are for moving large commercial barges. They are more of a semi-outboard as the engine proper is on the deck rather than outboard, with the lower unit over the stern as with small boat outboards.

The McCulloch unit, called the Scott OX 150D, developed 15 hp with 3 in-line cylinders. The details of its service career are unknown at this writing.

A good deal more is known about the Amarc diesel in terms of construction and performance. Since its operation is unique compared to conventional outboards, the Amarc is discussed at length herein.

In the late fifties, American Marc of California, a builder of small one and two cylinder diesel engines for commercial use announced a line of small diesel outboard motors in several sizes to 22 hp. An example of these engines was the Amarc 10 model rated 9-1/4 hp @ 3,500 rpm.

To reduce vibration to a minimum, this engine was two cycle O.P. (opposed piston) design similar to the Fairbanks Morse submarine diesels of World War II. Two pistons operated in one cylinder. The powerhead schematic illustration herewith is an original cut from one of their brochures. Intake and exhaust porting isn't shown but was much the same as a gasoline two cycle engine. You will note on the left crankshaft a large piston with two connecting rods - this was the air scavenging pump which supplied fresh air for combustion.

This outboard was fueled by a high pressure (probably 2,000 psi) timed fuel, or injection, pump mounted by the injector cam. The injector valve, mounted in the cylinder at the combustion chamber received fuel from the injection pump and stayed closed until the pressure from the pump built up to about 2,000 lbs. It then released, spraying the fuel into the combustion chamber. The ignition was automatic as the extremely high compression ratio of about 20 to 1 caused the air to heat up to about 1,000°F. on the compression stroke. The fuel injection began about 25° BTC and was complete by TDC.

Speed control was from a lever which controlled the quantity of fuel injected into the combustion chamber. Full speed used 3/4 GPH of diesel fuel which is very similar to household heating oil. Displacement was 21.5 cubes. Anti-friction bearings were employed throughout.

While the writer has no experience with any diesel outboards, commercial and automotive



Extend your boating pleasure... you'll more than double your mileage with this completely new concept in outboard engines... and you'll thrill to your diesel's quiet, smooth flow of power, hour after hour.

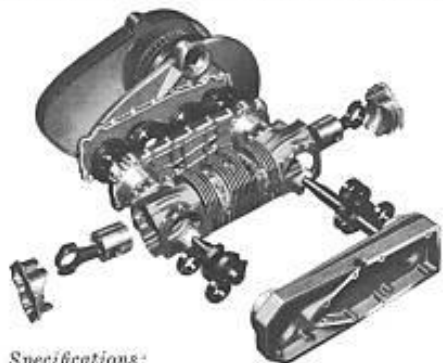
most dependable outboard motor ever made!

28

Here is the most revolutionary development in outboard motor design in the last 50 years! It's the world's first diesel outboard engine—the AMERICAN MARC 10—a 1 cylinder, two piston opposed, air- or water-cooled motor that completely eliminates the biggest problems of outboard motor operation. This compact, light-weight diesel uses no magneto, no spark plugs, no carburetors and there is no gasoline fire hazard. Here is the ultimate in outboard motor dependability—safety, low-cost operation, trouble-free long life. The AMERICAN MARC 10 is available in 7½, 15, and 22 hp models. The unique design embodied throughout the full line greatly reduces the weight and size factor heretofore present in diesel engines.

Low cost, easily available diesel fuel is all you need for operation of the AMERICAN MARC 10. No more mixing highly volatile gasoline with expensive lubricating oils. The standard outboard fuel tank holds sufficient Diesel fuel to carry you twice as far as with a gasoline engine of comparable size... at a fraction of the cost-per-gallon.

Simplicity in design is coupled with high precision engineering in the AMERICAN MARC 10.



Specifications:

1 cylinder, two-piston opposed, self-scavenging, air- or water-cooled motor—Stroke: 2 x 1¾" — Displacement: 18½ cubic inches—Crankcase scavenged—Metered fuel injection system—Anti-friction bearings throughout, including piston, connecting rod and crankshaft—Compression ratio: 20 to 1.



Lighter weight is obtained by the use of aluminum. Sturdy mounting clamps completely adjustable

AMERICAN MARC INC.



1601 West Florence Ave., Inglewood, Calif.

**HERE IS
HEAVY DUTY POWER
... AND ECONOMY!**

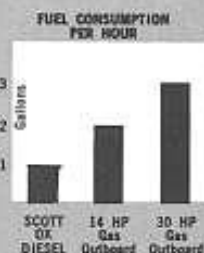
THE SCOTT OX DIESEL 150D
OUTBOARD WORK MOTOR ...

**PAYS FOR
ITSELF! YOU
SAVE 2 WAYS**

HERE'S HOW ...

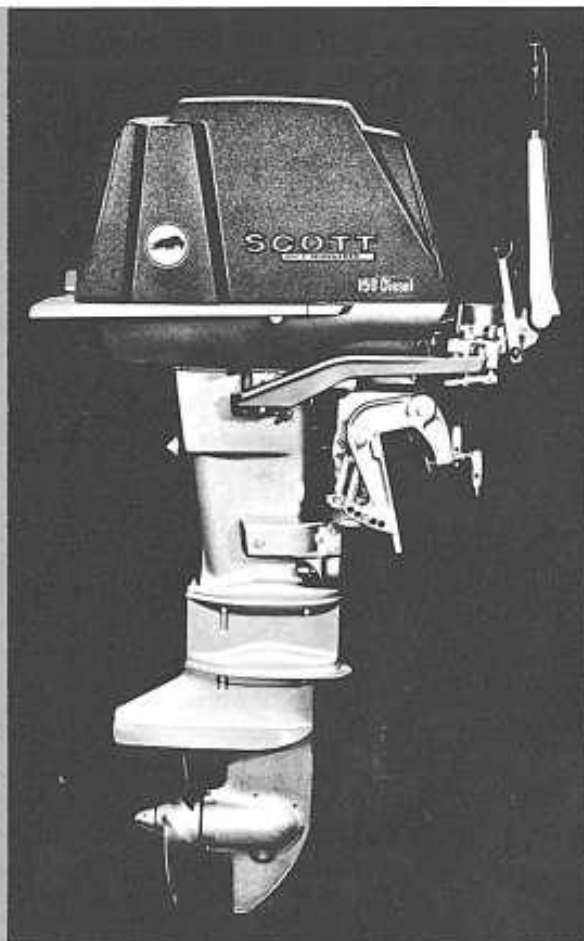
**1 LOWER FUEL
CONSUMPTION**

One-third the fuel consumption of conventional 30 horsepower gasoline outboards, but the same heavy-load, low-speed power-thrust. Uses 1/2 the fuel of 15 horsepower gasoline outboards doing the same work.

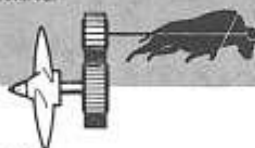


**2 LOWER
FUEL COST**

Diesel fuel is usually 1/3 to 1/2 the price of gasoline in most areas of the world. No gasoline/oil mix is required with the SCOTT OX DIESEL.



Long Shaft version pictured.



**SCOTT OX
DIESEL 150D**

SPECIFICATIONS

- * **Horsepower** 15hp. Thrust may equal outboard twice its horsepower.
- * **Engine** 2-cycle, 3-cylinder in-line.
- * **Bore** 2-5/16" 58,73 mm
- * **Stroke** 2-3/4" 69,85 mm
- * **Displacement** 34.61 cu. in. 567,26 cc
- * **Compression Ratio** 23:1
- * **Brake Specific Fuel Consumption** 50 lbs/hp/hour .23 kg/hp/hour
- * **Idle Speed** 1,000 RPM
- * **Maximum Unloaded Speed** 4,400 RPM (governed speed)
- * **Injection Nozzle Opening Pressure** 1,700 PSI 119,53 kg/cm²
- * **Injection Nozzle Hole Diameter** .013 inch .330 mm
- * **Injection Timing (mechanical)** 20° BTC
- * **Propeller** 13 x 7 inches 330,2 x 178 mm
- * **Gear Ratio** 2:1
- * **Transom Height** 15 or 20 inches 381,0 or 508,0 mm (with optional shafts)
- * **Starter** 12-volt, heavy duty
- * **Ignition** Alternator, 12-volt
- * **Controls** Twist grip throttle Full gear-shift with neutral
- * **Bailing (automatic)** Bails 300 gallons/hour 1135,2 liters/hour
- * **Oil** SAE 30 (MIL-L-2104A or API-DG).
- * **Fuel** Diesel or kerosene SAE HD Series No. 1 recommended
- * **Weight** 207 lbs. 93,90 kg

McCulloch Corporation reserves the right to change the specifications of its products at any time without notice and without obligation as to products already shipped.

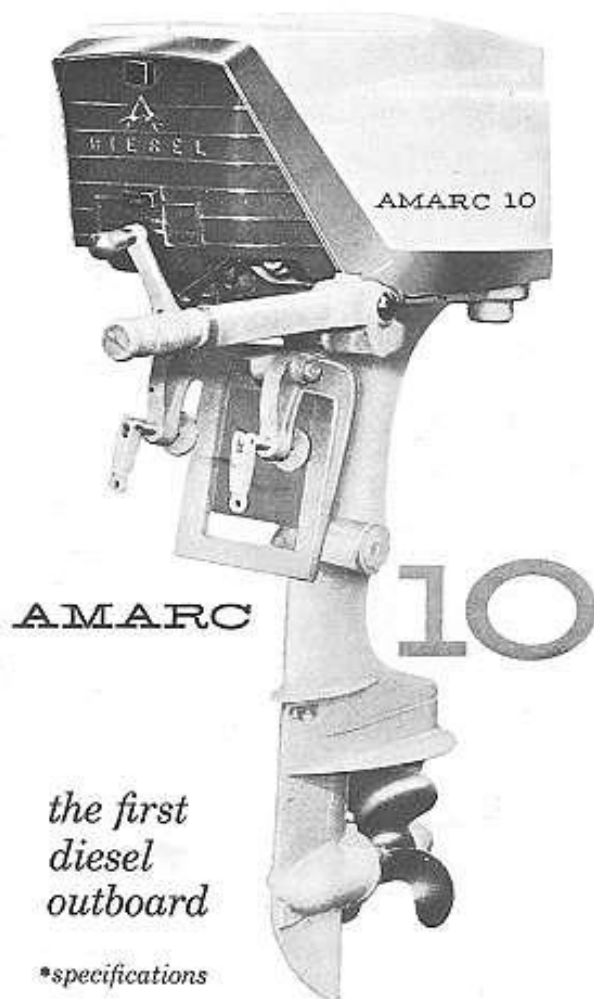
FIGURE YOUR OWN SAVINGS

Here is a typical example of average savings possible with the SCOTT OX DIESEL. Substitute the cost of fuels in your area, hours you use motor, and fuel consumption of your present motor. You may have even bigger savings!

	SCOTT OX DIESEL	GASOLINE OUTBOARD
PER GALLON (LITER) COST	\$.20	\$.50
COST PER HOUR	.20	1.00
COST PER WEEK (25 hours)	5.00	25.00
COST PER YEAR (40 weeks)	200.00	1,000.00
YOUR TOTAL SAVINGS PER YEAR WITH SCOTT OX DIESEL		\$800.00

DESCRIPTION The SCOTT OX DIESEL powerplant is a 2-stroke cycle, 3-cylinder in-line, loop scavenged engine. The full gear-shift with neutral, and the self-contained, battery operated starter make it a completely functional, easy-to-operate diesel outboard motor. **HEAVY-DUTY LOWER UNIT WITH SPECIAL GEARING AND OVERSIZE PROPELLER ENABLES THE SCOTT OX DIESEL TO PROPEL HEAVY LOADS AT THE SAME SPEED AS CONVENTIONAL 30 HP GASOLINE OUTBOARDS.**

PURPOSE The SCOTT OX DIESEL is primarily intended for outboard motor work where heavy loads, low speeds, and extended periods of operation are encountered. Typical applications include all commercial work applications such as fishing dories, barges, water taxis, transport and hauling boats, etc. — and wherever the fire hazard of gasoline or excessive fuel costs rule out the use of conventional outboards. It is the first completely reliable, fully operational outboard combining diesel power and economy within a functional weight range.



*the first
diesel
outboard*

***specifications**

Two-cycle, water cooled, opposed piston engine
 9¼ Horsepower at 3500 rpm
 Maximum operating speed 3500 rpm
 2½" bore; 2 + 2 stroke; 21.5 cu.in. displacement
 ¾ gal./hr. maximum fuel consumption
 Cruising fuel consumption less than ½ gal./hr.
 1 qt./4 hrs. maximum oil consumption
 Crankcase-scavenged with auxiliary charging piston
 Metered throw-away lubrication system with separate tank
 Propeller 9 in. dia., 3 blade, pitch to 8½,
 depending on size of boat

* supersedes all other specs.

PRINTED IN U.S.A.

diesel experience suggests any diesel would be a third or more heavier than an equivalent gasoline outboard, also much noisier with heavy vibration. The diesel theoretically should run more hours between overhauls. Ignition maintenance and repair problems would be non-existent. Purchase cost due to heavy parts with much machining and the expensive fuel injection system would be higher than gasoline outboards.

Since few diesel outboards have been built, any of them would be a most interesting and unusual addition to a Collection and a real Competitor in a Bang and Go Back Event when it becomes an Antique. Start looking around!

—the first diesel outboard

Men have dreamed of this engine...few thought it could be built...now it's here—the FIRST outboard DIESEL engine, the AMARC 10—a compact, dependable marine power unit. Here are some advantages of the AMARC 10 DIESEL outboard:

FIRST IN SAFETY...the AMARC 10 requires no engine spark and uses low-volatile DIESEL fuel, therefore danger of gasoline fires and explosions is eliminated.

FIRST IN ECONOMY...more efficient DIESEL performance means more miles per gallon ... DIESEL fuel costs less, too.

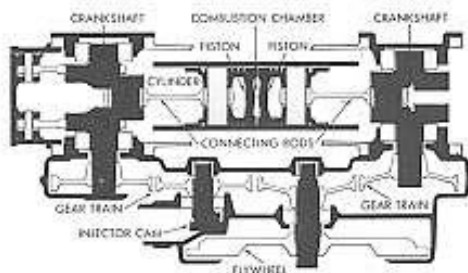
FIRST IN DEPENDABILITY...simplicity of engine design coupled with American MARC precision engineering assures AMARC 10 owners the ultimate in trouble-free service. Neither heavy seas nor increased load conditions reduce the steady flow of horse power from this high torque engine.

FIRST IN LONG SERVICE...no spark plugs, no magneto, no carburetors, no valves, no valve springs, no rocker arms, no push rods to maintain...built for long operating life without frequent overhauls.

FIRST IN CRUISING RANGE...goes twice as far as a gasoline engine of comparable size on the same amount of fuel. Greatly reduces the danger of running out of fuel because of sudden changes in cruising conditions.

FIRST LIGHTWEIGHT DIESEL OUTBOARD...new aluminum alloys plus American MARC diesel engineering skill made possible this unique, handleable diesel outboard motor.

here's how it works!



Horizontal Cross Section of the AMARC 10

THE *New* "DETROITER" OUTBOARD

MODERN

As your car!



Designed for 5 to 18 H.P. Sizes

The motor illustrated on the front cover of this announcement is the 18 HP "Detroit", a practical power plant for all boats, now in production. Designs for 5 and 10 HP sizes are complete and production on these will follow shortly.

Economy and Flexibility

Continuous forced oil lubrication from reservoir to crankcase and return reduces oil consumption to a minimum, for outstanding ECONOMY. Starting is easy, operation so flexible that the engine may be idled smoothly and indefinitely at low speeds.

More Detroit information
can be found on page 33 .



See the inside pages, please!

**DETROIT OUTBOARD
PRODUCTS CORP.**

St. Clair Shores, Michigan

31

1940'S OUTBOARD SENSATION

THE ANTIQUE OUTBOARDER

Presents

The

COLLECTOR'S

By Don Peterson

GALLERY

THE WALNUT AND BURTRAY MOTORS, 1907-1909

Walnut and Burtray are so very much alike in physical appearance, that one would believe that they were one and the same; the Burtray simply being the deluxe model of the Walnut. Apparently they aren't though, being manufactured by two different engine builders in different towns. Jim Webb in his book, "The Pictorial History of Outboard Motors", relates on page 26 that the Burtray, Walnut and also the Water Sprite were very similar in design. As we know from other makes and sources, there was private labeling and just plain "copying" even back then.

Here is a description - from our Curator, Dick Hawie - of the Walnut: "This engine is unrestored, but the pictures show basically what it looks like. There was no gas tank when I got it - it is battery ignition with the coil mounted in an oak box on which is a nameplate marked 'Dayton, Quincy, Illinois'." The bore is 2½", stroke 2½" and both the piston and cylinder are cast iron.

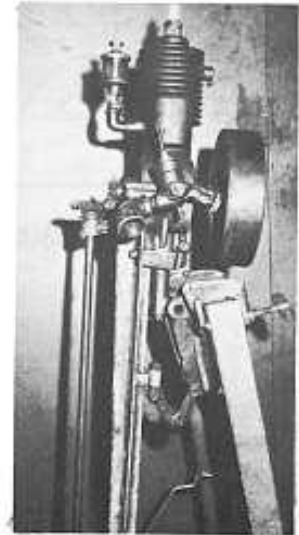
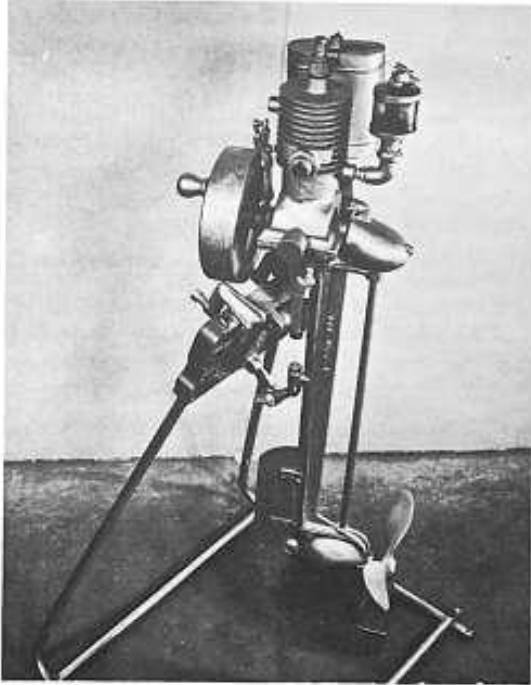
There are three wipe-rings on the piston and a transfer port cut in like a Johnson S-45 or P-50. The carburetor is a Lunkenheimer valve-lift type, similar to the carburetors on the early Lockwood and Evinrude singles. The connecting rod is brass or bronze, and the rod end-cap is a "U" shaped strap held on with flat head screws. The crankcase is split at the center line; the top half containing the cylinder being of cast iron. The bottom half and entire lower unit is cast aluminum, all in one piece. The double set of bevel gears are exposed, but there is a ball thrust-bearing on the prop shaft. Although primitive in appearance and design, there are some advanced features on the engine, such as pivot steering and transom angle adjustment. Although unknown, the gas tank mounting probably was based in-part on the collar where the spark plug is screwed in and the steering handle probably mounted in the casting boss within the cooling fins, above the flywheel and front facing. Does anyone know for sure? The Walnut photos were supplied by Dick Hawie.

The Burtray engine is of identical configuration but has the additional features of protective covers over both upper and lower bevel gears, as well as a sheet metal rudder/propeller guard. The Burtray photo was supplied by Jerry Keermans and Jim Webb.

The Walnut was built by the Walnut Machine and Brass Foundry Company, Toledo, Ohio. The Burtray, by the Burtray Engine Works, Chicago, Illinois. Both were made for three years only - 1907, 1908 and 1909.



Walnut with lower unit gear set-up & unique construction.



Left - Burtray with gear covers and rudder in plain view. Note steering pivots and tilt adjustment.
Above: Walnut. Note similarity. Transfer port just above carburetor.

Continued from page 31.

Some Facts You Will Want To Know about the modern 4-cycle outboard "DETROITER":

18 H.P. @ 3750 R.P.M. Bore 2 3/4", Stroke 2 1/2", Piston Displacement 29.7 cu. in.

Full steering range. Throttle control in steering handle. Twist grip. Handle hinged to allow tilting of motor. Full tilting to clear obstructions. Tilt is automatic when obstruction is encountered. Shear pins readily accessible.

Weight, 98 pounds. Two-gallon fuel capacity. Two-quart oil capacity. Develops over 18 horse power.

Two-cylinder opposed, alternate-firing.

Double oil pump. Rotary action. One oil pump feeds the oil to the motor and the other returns oil to the oil tank. Screens are provided to strain dirt and grit from oil.

Crank shaft and cam shaft are forged chrome nickel-steel, carburized and hardened for long bearing life and high torque resistance.

Aluminum pistons. Three piston rings; two compression and one oil control.

Valves of heat resistant steel and oversize for maximum performance and fuel economy.

Inserts (plate covering cylinder block face) are nickel-iron of a special alloy.



THE SCRAPBOOK of ANTIQUE ADS

By Don Peterson

Here is an Outboard Motor

that is not only *Wright* but *Right* in every respect, and the agent's price, with Full Battery Equipment, is—

\$42.00

Motor with magneto in flywheel complete at \$52.00

And here is a description of our Imperial Special 16 foot Launch—equipped with 2 1/2 H. P. engine and clutch, guaranteed self-starting engine, wheelless wheel and rudder. Result of 20 years' experience.

Only \$93.50 Money back if not as represented.

Equipped with Magneto in Flywheel \$103.50

Illustrated literature giving full information, mailed free. Do not think of buying a Launch or Engine until you see our illustrations.

Be Sure and Write Today for Our Proposition and Full Description

C. T. WRIGHT ENGINE CO.

300 STATE STREET GREENVILLE, MICH.

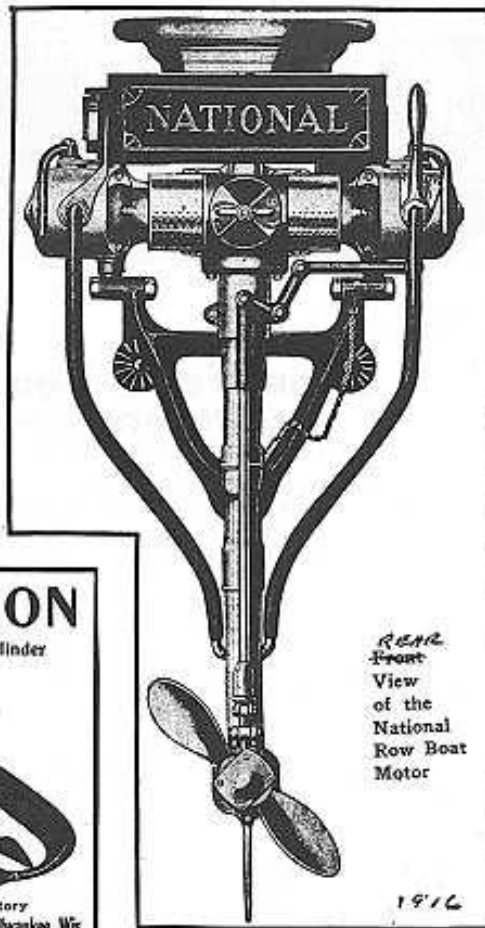


1915



Kingston Spark Plug

1916



Rear Front View of the National Row Boat Motor

1916



AMPHION

Twin Vertical Cylinder
Outboard Motor
Bosch Magneto
"Tip-Up" Clutch

\$88.00

Dealers, write for Territory
A. J. Machek & Co., 305 24th St., Milwaukee, Wis.

PLEASE REMEMBER



Check your date of membership renewal and forward your dues before a notice has to be sent; you'll save the Club time & money

Send to..

Mr Richard M. Jones
20505 N.W. 3rd Av.
Miami, Florida 33169

No Bolts—No Tools Fits Any Boat Like An Old Shoe

The one detachable Rowboat Motor that is easy for anyone to handle and start. Take it anywhere, attached in two minutes and be off at ten miles per hour.

ADMIRAL
DETACHABLE
ROWBOAT MOTOR.

Ready for fresh or salt water.

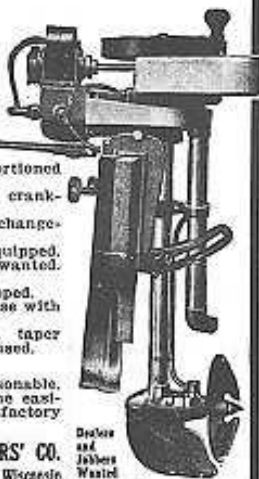
Note these features:

Large, properly proportioned motor, 3-in. bore.
Extra large, drop-forged crank-shaft.
Phosphor bronze interchangeable bearings.
All motors salt water equipped. Under-water exhaust, if wanted. (No extra charge.)
Battery or Magneto equipped.
Small stream-line gear case with internal pump.
Standard hub propeller, taper fitted, no key or pin used.
Large skug rudder.

Guaranteed. Prices reasonable. Write for circulars on the east-coast starting, most satisfactory of all Rowboat Motors.

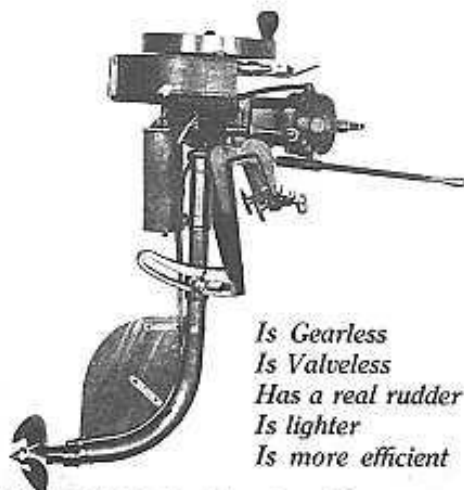
AFFILIATED MANUFACTURERS' CO.
Dept. C, Main Office: Milwaukee, Wisconsin

BRANCHES—Cincinnati, Los Angeles.



1916

THE BLAKELY DETACHABLE ROWBOAT MOTOR



*Is Gearless
Is Valveless
Has a real rudder
Is lighter
Is more efficient*

The Blakely Engine Company

Muskegon, Michigan, U. S. A.

1916

Reversible

MOTOROW

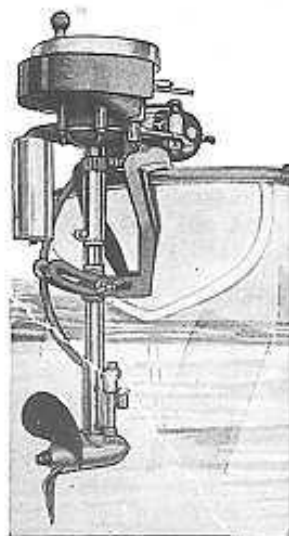
1916

Second Successful Season

The only row-boat motor made that REVERSES INSTANTLY AND WITHOUT STOPPING OR CHANGING THE DIRECTION THE ENGINE IS RUNNING by swinging the propeller bodily to reverse position—See picture. This POSITIVE MECHANICALLY REVERSING DEVICE is EXCLUSIVE with "MOTOROW," as we own the basic patents. Perfect control. Can turn your boat in its own length. Our patent covers other valuable, exclusive features. "MOTOROW" has fewer parts than any other motor on the market. A pinion at the top of shaft housing meshes into a segment gear at the end of the handle, enabling you to steer perfectly and reverse instantly. By this simple, patented device which consists of only one part and a cotter's pin, you are able to dispense with the heavy, cumbersome rudder which adds parts and weight and catches weeds and is in other ways annoying.

Those who advertise the rudder as a virtue are simply attempting to make a virtue of necessity, as our patent is so broad they are forced to resort to the rudder makeshift or stay out of the market entirely. Every piece of machinery in our factory is of the latest design. All parts are made in the most perfect jigs that can be designed and are all interchangeable. We make nothing but "MOTOROW" engines and with our trained force of men devoting all their time and skill to this one article, we are enabled to turn it out with the highest degree of excellency. One engine, one size, one color, one quality and that the best.

VIBRATIONLESS. Runs with velvety smoothness by the use of our vibration absorber, which is another exclusive feature of "MOTOROW." Purchased for coast work by the United States government. The POSITIVE MECHANICAL REVERSE alone is worth the price of any other motor and puts "MOTOROW" in a class by itself. Quality guaranteed. Prices reasonable. Attractive prices for agents. Write us.



MOTOROW ENGINE CO.

1475 FOSTER AVENUE CHICAGO, U. S. A.

Special Interest Group News

Here's a list of the different Interest Groups intended to help focus on your needs for literature, information, parts and fellowship regarding your favorite motor or subject. Notice that not all of the Groups have leaders - volunteers are needed! Write to the Antique Outboarder magazine publishing office.

Giant Twin - Don Peterson

Mercury - Bill Kelly
Unusual and rare motors
Inboards - P.S. Brooke Jr.

Clarke - Phil Kranz
History - W. J. Webb
Eltos - Sam Vance
Cailles - W. Weidmann
Lockwood - R. Anderson
Martin - Glen Ollila

Johnson PG - Bill Salisbury
Johnson V Series - J. Harrison
Johnson A Series - Bob Zipps
Antique Boats and equipment

Watermans - Dick A. Hawie
Research - Dick A. Hawie

ELTO, THE UNDERWATER EXHAUST

By Sam Vance

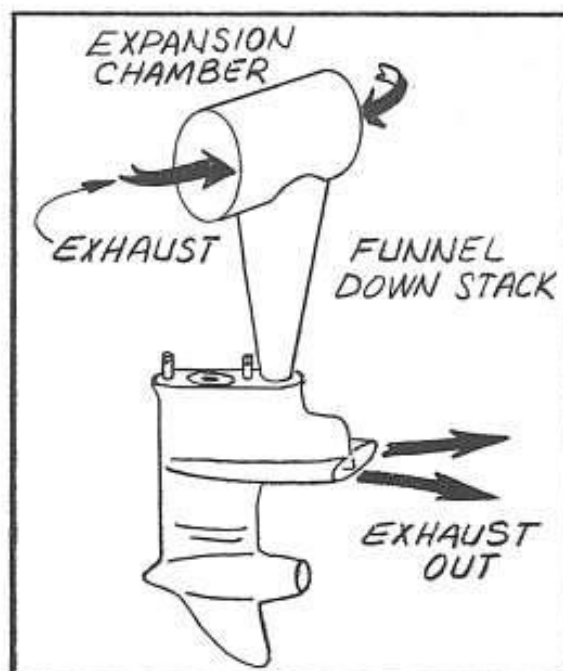
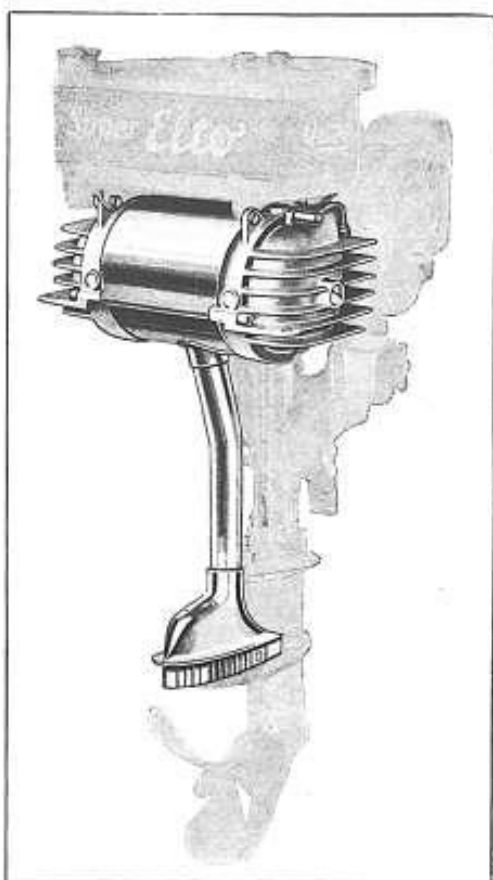
POLLUTION! A word that is really on everyone's lips these days. We all hear about dumping unending amounts of "junk" into our air, water and etc. But did you know that "noise" pollution is not a new subject? That's right --- as far back as 1930 Elto offered an accessory underwater exhaust. This photo at right shows the 1928 Elto Speedster with the underwater exhaust housing. Jim Webb says the following: "The underwater exhaust housing did not see the light of day until 1930, and neither did the down spout from the muffler. I think we offered an underwater exhaust as an accessory for a Speedster in the summer of 1930, or maybe it was as late as 1931. Sorry I can't be as definite as I would like to be, as our files of Service Bulletins is incomplete. Anyway, it was an accessory offered in the early thirties. We never sold many of them. I seem to remember telling the stock room boys to throw away several barrels of accessory underwater parts for various of the early muffler equipped motors sometime after WW II. We threw away a fortune in old parts. But it was costing us valuable storage room and we were bursting the walls with current stuff. I am a string saver myself, and it has always killed me to throw anything away. But there comes a time when you have to balance the cost of a new warehouse for obsolete parts against the income and profit from sales of said old parts and it works out that it is much cheaper to throw them away".



The caption under the picture of Ole Evinrude in the 1929 Elto catalog reads: "Ole Evinrude, President Outboard Motors Corp., Inventor of the first successful Outboard Motor, Founder of the Elto Outboard Motor Co., Designer and Builder of the first successful twin outboard and first 4 cylinder outboard ... Pioneer in the development of underwater exhaust, automatic tilting, pressure cooling, and innumerable other outboard features".

The catalog goes on with the following words describing a solution for the noise problem of 1929: "ELTO, PIONEER WITH UNDERWATER EXHAUST, now offers the choice of new type quiet mufflers (standard on all models) or Elto Duplex Underwater Silencer (on Speedsters and Quads at small extra cost). Striking advances have been made in the silencing of ourboard motors. The truly modern outboard is adequately, acceptably quiet.

"And you can confidently choose any Super Elto model with knowledge that, horsepower for horsepower, it is as quiet as, or quieter than, any other outboard. You are urged to compare them with others on this basis. Elto has achieved this quiet operation in 2 ways. First, by devoting unlimited engineering effort and experiment to the develop-



Left: "Fish Gill" exhaust for 1929 Quad. The finned muffer ends were water cooled and the water inlet tube is visible at the top, just under the gas tank. Water outlet is at the bottom of each muffer end.
Above: Drawing of familiar, integral system brought out in 1930.

ment of new, more scientific muffer design for each distinct type of motor. And second, by creating a new departure in underwater silencing, based on practical knowledge gained by years of actual experience with the latter method.

"Each Super Elto model has, as standard equipment, a new-type muffer, liberally over-size, satisfactorily quiet.

"For those who wish exceptionally quiet outboard performance, the Elto Duplex Underwater Silencer is available on Quads and Speedsters at moderate extra cost.

"The Duplex Silencer is a radical departure from the ordinary system of underwater exhaust. Basically, it is a double quieting system. The muffer is not simply a shell for collecting and transferring the exhaust, but is in itself an efficient muffer.

"Final expulsion of the exhaust into the water is through a 'Fish Gill' outlet, a principle perfected during three years of earlier Elto production on which underwater exhaust was used.

"The Fish Gill Outlet disperses the pressure of the gases over a wide area of water. Thus the supporting column of water that follows the propeller remains undisturbed. A propeller stream broken by exhaust pressure is disastrous to propeller efficiency -- a motor so affected immediately 'speeds up' and seems faster, but actually has lost the leverage needed to drive the boat at top speed.

"An Elto equipped with the Duplex Underwater Silencer is not only quiet and free from exhaust odors, but maintains the identical revolutions and power as when muffer equipped."

In my experience with Eltos, I have seen only two of these accessories. One on a 1928 Speedster and the other on a 1929 Quad, similar to that pictured here. It wasn't until

1930 that the OMC offered underwater exhaust as standard equipment on some Evinrude and Elto models. Lockwood was being phased out due to the depression and no attempt was made to change the exhaust system; but that can be a subject for Lockwood Special Interest Editor, Dick Anderson. By 1930, Elto underwater exhaust was perfected and standard equipment on the new Quad and Senior Speedster. These were not only the quietest of exhaust systems, but also the most efficient.

With the new Elto underwater silencer there was absolutely no difference in performance between the motor stripped entirely of any muffling device and the motor equipped with the underwater silencer.

This was due partly to the design of the wide-lipped, streamlined exhaust outlet shown in the drawing. This outlet, moving at speed through the water created an area of vacuum behind it. A suction was developed that literally drew the exhaust gases from the motor.

The large size of the expansion chambers and funnel shaped down-stacks gave liberal room for the initial escape of the exhaust, and effectively aided in the silencing. The finned muffler ends were cooled by water passages through which the cooling water from the motor was forced.

The underwater silencers were immensely popular with Elto owners. At top speed there was little bothersome noise from the motor; and when loafing along, few annoying exhaust fumes coming back at the passengers from every following breeze.

That is all on Eltos for this time, there is more in the works. Remember, be sure you wear gloves when grasping the knobs to light-off these old war horses into action.

JOHNSON PO-GEAR CASE

By Bill Salisbury

The lower unit gear case housing is one part of outboard engines that is often neglected. Many of the old engines that we are now interested in often show signs of this maltreatment. Generally, the PO lower unit has a reputation of being fairly leak-free and thus does not often become ruined by lack of lubrication. I strongly recommend that you occasionally check the PO lower unit internally. This applies to any of the other large Johnson lower units as well.

After disassembly and cleaning, an inspection of the gears, ball bearings, shafts, and bushings should indicate whether or not any replacement is required. Since the bronze bushings and shafts are reasonably tolerant of poor lubrication, it is seldom that you will have to replace these. It is more probable that the gears and ball bearings will suffer due to lack of grease.

The gears are not readily available so it will be necessary to find a used pair. The bearings, however, are available brand new in most bearing specialty houses. Replace these if there is the slightest doubt in your mind. Poor bearings will cause premature wear in the gears.

If the shafts and bushings are worn or excessively scored, replacement is advisable. If new parts cannot be found, they can be machined, using the old ones as patterns. Another alternative is to undercut each shaft slightly in the bushing area and then fit new undersize bushings, reaming and honing them to provide a .0025" clearance between the shaft and bushing. If this method is used on the prop shaft, care should be taken not to undercut too far as prop shaft gear is located by a shoulder on the shaft which undercutting would remove if excessive. Also, be sure not to undercut in the propeller area of the shaft -- outboard of the shear pin hole as shaft would then be too small for the bore in the propeller.

When you have satisfied all the requirements of shafts, bushings, and ball bearings, re-assemble unit. Adjust gear clearance by tightening bearing adjusting nut firmly so that no clearance exists, then back off nut $\frac{1}{2}$ turn. Now strike prop shaft with a soft mallet in order to drive prop shaft gear away from pinion gear. This should provide now a slight backlash between the gears and no binding should be felt as the prop shaft is rotated. Replace gear case head and bolt, using a new gasket, and fill unit with grease.

Just before installing the gear case housing on the drive shaft housing, be sure to re-install the thrust washer over spline of pinion shaft. My advice at this point is to squirt about a teaspoon of SAE 30 oil into the recess where the thrust washer rides before securing. This will provide initial lubrication during the first few minutes of operation prior to the grease working its way into the pinion shaft bushing.

I am sorry that I did not have a PO report for you in the October 1971 issue. I was so busy working on my hydroplane refinishing project that the deadline time came and went before I realized that I hadn't written anything! The hydro is nearly finished now.

Another interesting bit of PO news is that Dale Denning's first PO -- the one I lost off the back of his boat into the bottom of Lexington Lake -- has been found. The lake was drained dry this year -- and someone else found it. Perhaps we will get a new member that way. That is a rather poor way of recruiting new members, don't you agree?

See you next issue! Keep your flywheels tight!

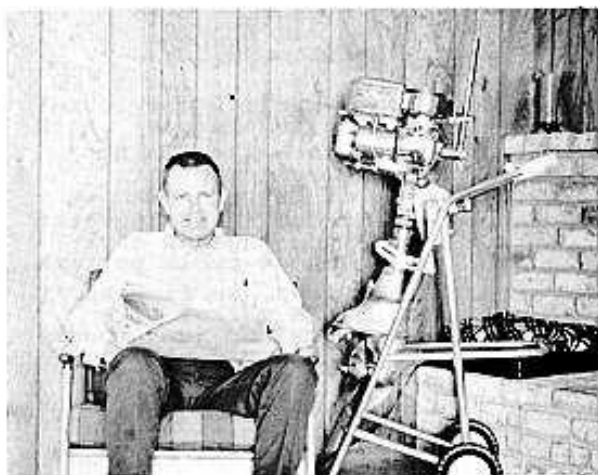


Photo above shows Bill Salisbury busy working on his hydroplane refinishing project (planning stage). Just kidding, Bill-- Look at Bill's beautiful KA-39 decorating his family room.

Right: Here's the Baby Whale boat that Don talks about below.

Baby Whale....

SEPTEMBER, 1928

the consistent winner!



Baby Whale—the boat that wins! The boat that smashes record after record! The one boat that crosses the finish line far ahead of all competitors—*every time!*

This marvelous speed is due to Baby Whale design. To that—and 60 years of boat building experience, perfect workmanship and the use of only the best materials.

There's one sure way you can rank with the winners—that's with a Baby Whale. Make it your choice!

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FAIRHAVEN, MASS.

GIANT TWIN OWNERS ASSOCIATION

By Don Peterson

Received an interesting letter from Dick Hawie, and according to the 1928 boating mage, our monster is capable of at least 35 miles per hour?

Quote from Dick's letter: "Sept. 1928 - at Wash., D. C. - W. B. Childs, Jr. wins free for all.

"Aug. 12, 1928 - Boyd Martin wins Horace Dodge Trophy.

"May 29, 1928 - Worcester, Mass. - the mile record for amateurs was set at 35.022 by Ross Maddox driving a 'Baby Whale'." Hey, that's a boat now!

In this race the record was set on a hull which didn't have to meet any minimum weight.

Dick believes, as I do, that this engine can do about 5 mph better with current better oil and gas mix plus the right setup.

This year we hope to have one of our guys win the "Giant Twin Trophy". Whoever gets his running, take plenty of pictures. I've heard some rumblings that the others in the Club don't give us much chance! Good hunting!

- end -

SMALL INBOARDS REVISITED

By P. S. Brooke, Jr.

The big news in the boating industry in 1908 was the fact that the National Association of Engine and Boat Manufacturers, the American Association of Engine and Boat Manufacturers and the New England Engine and Boat Association agreed to pool their respective talents and hold exhibitions during that year.

Engine exhibitors at the Chicago Show of the 2-cycle variety under 6 h.p. included Ferro, Termaat & Monahan, Pierce, Truscott, Detroit, Cushman, Goshen Sterling, Ralaco, Vim, Sterling Standard, Gray, Waterman and Racine. Four-cycle models were shown by Doman, Buffalo, Comet, Milwaukee Auto Engine Works and Truscott.

At the Boston show, many of the same makers displayed their latest engineering triumphs, and in addition we find Grant-Ferris, Thrall-Fishback, Hartford, Bunker Hill, Cooley, Simplicity, Lackawanna, Essex (no kin to the Hudson-built car introduced in 1918), Stanley, Atlantic, Eagle, Mianus, Bridgeport and Royal among the 2 cycles. Other 2 cycles shown in the "Hub City" that year were Tuttle, De Mooy, Caille, Powell, Rochester, Palmer, Fairbanks and Leader. The selection of 4 cycles included Regal, Pearl, Trebert, Harvard, Globe, Murray & Tregurtha, Ideal and Toppan.

Out in Toledo, Ohio, there was an announcement of a new 2-cycle 2 h.p. air-cooled outboard and also a line of inboards from one to six cylinders over which the boating public could probably get a lot of mileage joke-wise--the "Walnut" produced by the Walnut Machine and Brass Company. Another announcement of interest that would bring to mind visions of ivy-clad halls of higher learning was that of the Harvard Marine & Auto Engine Company of Cambridge, Massachusetts who stated that they were in the business of constructing marine engines of 2, 4 and 6 cylinders with horsepower ratings of 6 to 60, all on the 4-cycle pattern.

With the announcement of the "Harvard" line of marine engines, we find an enterprising firm in Detroit--Baird and Henselwood--invading the market with the new "Yale." This engine came equipped with either mechanical or jump spark and its makers claimed it would run on kerosene or gasoline and would not under any circumstances base fire.

For the "do-it-yourself" fan, the May 1908 issue of Rudder carried an article on how to build an 18-foot launch to be powered with an INBOARD engine not to exceed 5 h.p. for the sum of \$100. It is interesting to note that the extreme breadth of this hull was 4 ft. 9 inches.

An unorthodox design claiming the public's attention at this time was the Twice-Two Cycle Engine put on display at the Chicago Show. Little information is found on this make after 1908 so apparently its life was brief. An old-line manufacturer of scales, Howe Scale Company of Philadelphia, announced that they were coming out with a slow speed 2-cycle engine designed and built for hard work.

News of consolidations, take-overs and probably just plain failures appeared in the various boating publications of 1908. With so many in the field, casualties were a natural result. The S. M. Jones Company stated that they had purchased the assets of the Rathbun-Lacy Company which had gone out of business and the Demorest Manufacturing Company of Williamsport, Pa., had taken over the manufacture of the Early Marine Motor.

The Bruno-Knapp Co. of Saginaw, Michigan advertised that they were bringing out two new engines--one a 2 h.p. 3 port 2-cycle model and the other one a 6 h.p. 2-cycle 2 cylinder.

Another Michigan firm, Dubrie, announced a single-cylinder, 2-cycle engine for 1908. Later this concern hit upon a novel idea in the construction of marine engines. With the ready availability of parts of Mr. Ford's famous Model T, an engine employing as many Model T components as possible had great appeal. Dubrie designed an engine using stock "T" pistons, valves, etc., and continued the manufacture of this model up through the thirties. Specifications on this motor are as follows, to-wit: bore 3 3/4" stroke 4", h.p. 5, speed range 160 to 920 revolutions per minute. The factory stated that the engine would run for ten hours on three gallons of gasoline. Along with claims of economy, Dubrie bragged that a 28-foot fishing boat with a beam of seven feet and loaded with three tons of fish was propelled at seven miles per hour with their 5 h.p. engine.

Motor Boat magazine of April 1909 carried an ad with the heading "Got 'Em All Skinned." The copy catalogued the merits of the "Knock Down Motor." For a price the manufacturer would send the customer the necessary machined engine parts together with instructions on assembly so that presumably he could put it all together. The ad also stated that this engine was "No Waterbury watch, but a synchronized chronometer proposition." Thus, the determined boater could now not only build his own boat from "knock down parts," but could go a step further and secure a "knock down engine." It would be interesting to know how many went this route and how the final product performed.

An ad of the Lockwood-Ash Motor Company of this time put forth some rather pertinent observations after stating that their engines "were not designed in a day, or built in a week" by adding "a balky motor will spoil YOUR pleasure, YOUR disposition and make TROUBLE for the manufacturer. Trouble for you means trouble and expense for us." And all this before Ralph Nader!

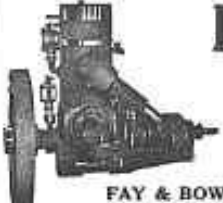




The Vim Motor Manufacturing Company of Sandusky, Ohio, stated in their ads of the period that their engine was designed by George Holloway who designed and built the only satisfactory two-cycle automobile--the "Elmore." The ad further elaborated on this theme by stating that "Most all makers of two cycle motors have tried their motors in automobiles, hoping that they might be satisfactory, but in this only one man succeeded and he, the man who builds Vim Motors." pretty strong stuff--and all the time it seemed that the shade tree mechanics were trying to make automobile engines work in boats.

Up in Geneva, New York, Fay & Bowen were making the claim that in 1904 the Royal National Lifeboat Association of England had made an exhaustive test under the most severe conditions of one of their engines installed in a lifeboat. Four years later the Association found their engine was still giving the best of satisfaction. During this period other engines had been tried, but none had given equally good results. Perhaps some of the other manufacturers involved should have been given equal time!

Fairbanks-Morse ran an ad in April 1909 with the caption, "Why Take Chances," laying great stress on reliability and containing some other prophetic and timeless verbage as follows: "Few people realize how many firms go out of business every year, and how nearly impossible it is to get repairs for the very engines that need repairs most." The potential customer was admonished to do business with an old firm known throughout the world who at this time claimed to have over 70,000 engines in use. This bit of puffing probably should have been taken seriously since, despite panics, depressions, wars (declared and undeclared) and foreign competition, this firm is still in business today.

Across the Atlantic in March of 1909, the London Motorboat Show was held in conjunction with the Aero show. Engines of 6 h.p. or less exhibited at that time were the Dixon-Hutchinson of 3 h.p., Fafnir, Belliss & Morcom, a Day of 2 h.p., a Forth of 3 h.p. and a Brooke single cylinder 4 h.p. model. The Brooke concern is still in business today and is known as Brooke Marine Limited and is currently turning out metal hulled cruisers and custom built office furniture.

The lowest priced motorboat on display was a 15-foot wood hull equipped with a 3 h.p. Forth engine and priced at \$162. This was considerably higher than comparable outfits available in the Eastern part of the United States, but the difference was probably due to the limited production in England at that time. Limited production or not, Britannia still ruled the waves at this time and the Channel engine of 6 to 8 h.p. displayed at the show gave a hint of things to come for it was of V-type configuration with both rods working on the same crank.

DUNN			GRAY	
				
FAY & BOWEN 2-Cycle Engine	2 H. P.--\$35.00	Honest Clay	2-cycle, 3 to 6 H.P., single and double cylinder, \$74 and up. Immediate Delivery.	J. H. P. Mianus

AOMCI CHAPTER NEWS

SAN FRANCISCO CHAPTER - Bill Salisbury

The San Francisco Chapter is going to have a meet on April 30, 1972. We are planning to hold it at Cayote Reservoir near Gilroy, California. Starting time will be 10 AM. This is going to be a very significant meet as Sea and Pacific Motor Boat Magazine wants to do an article on the club. A good turnout is a must!

Our outboarding activities have slowed down somewhat out here. Haven't been out with the boat since Oct. 10 when the San Francisco Chapter had a cruise meet at Anderson Lake arranged by Eric Gunderson. We had only 3 members show and with co-operation like that it doesn't take long to get discouraged. Nevertheless, Eric Gunderson, Rich Kretchmar and the Salisburys showed up. It was a gorgeous day, the engines ran well and we all enjoyed the cruise around the lake. Rich Kretchmar was using his 1940 Evinrude Sportfour which ran like new and was quite fast. (The first time I'd ever seen one on a boat!) Eric was using his Speedifour which ran beautifully and fast - as usual (36 MPH!) and I was using "old reliable", my PO-38 which pushes our family of 4 at 25+ MPH!

I am still working on my hydro, putting on the finish coats now. Hope to have it finished soon and when it's done, I'll send in some photos, although it may be a while yet as I still have to put the engine together. It should be a real screamer as I'm going to set up the engine on alky. I ran it on gas before and got up to 60 MPH out of it with the engine not set up right. Now, with the help of Mr. Hubbell, I have the engine ready. I had a bent con-rod which is now straight. I expect 65-70 out of it!

KNUCKLE BUSTERS CHAPTER - Tom Luce

The next Knuckle Busters Chapter meeting will be held at Tony Caglione's home, 140 Elm, Dover, N.J., at 1:00 PM, Saturday, February 5, 1972. Professor Mark Wright has volunteered to present a short symposium on an outboard subject to be announced at a later date. We will have ignition testing equipment at the meeting in case there are any ignition problems, and this is another good opportunity for AOMC members to bring sick motors for group therapy. Also, we anticipate time for the buying, selling and swapping of parts, literature and motors. We hope there will be a good turnout and that those planning to attend will let Tony know.

FLORIDA CHAPTER - John Harrison & Dick Jones

John Harrison was in Virginia during mid-October visiting his daughter who is at Sweet Briar College and visiting all the historical sights throughout Richmond, Appamatox, Williamsburg, Harrison Plantation at Berkley on the James River, etc. "Really fabulous" says John who had his wife and German foreign student for the year, Niki Lohmeyer, along

Niki and John took a side-trip on the way home to "Wings and Wheels" at Santee, South Carolina, which is a must for all who can get there. Most unbelievable collection and set up John has ever seen. Really plush with movies, lunch room, snack bars, landing strip, antique railroad, etc., etc. The owner, Ovington, has got to have between \$2,000,000.00 and \$3,000,000.00 in this set up.

Just to show you that the Florida Chapter is a diversified bunch, John Harrison has a newly restored Rolls Royce in which he plans to take the Chapter members out for hamburgers. Dick Jones and his wife Jean went to a Steam Meet in Fort Lauderdale and had a ride in Harold Culp's 1911 Stanley Steamer. Dick himself is restoring a 2 HP Fairbanks Morse farm engine, a fine 200 lb. machine.



Dick Jones' Evinrude "M" Racer from 1939. The pros got over 40 mph from a rig like this - the motor is built up from a six horse size machine.



Here's John's 1929 Rolls Royce with John himself behind the wheel and Harold Culp polishing the hood ornament. Finish is green with a dark top.

Haven't completely lost touch with the outboards, though, witness Dick's beautifully restored 1939 Evinrude Midget Racer, mounted on a 7' hydro also restored by Dick. The engine snarls just like the big racers, only at a higher pitch. Dick says he needs a small boy or girl for a driver since a normal sized man is way too big for the boat. I think he plans to mention to his wife Jean that she try it!

Club Briefs, continued from page 3 .

THE CHALLENGE OF REPRESENTING AOMCI IN ALL MATTERS RELATING TO POLLUTION HAS BEEN ASSUMED by Mark Wright. Mark has made Senator Gaylord Nelson aware of AOMCI's view regarding Nelson's Bill S.2096 amending the Federal Water Pollution Control Act. In return, Nelson has suggested that the committee hearings to be held prior to any passage of his Bill would offer a good opportunity for AOMCI to present its views. Mark has willingly accepted the responsibility for testifying on the Club's behalf, should the need arise. So that AOMCI can provide the proper focus on our future pollution oriented relationships with the boating industry and governmental agencies, Mark is named Chief, AOMCI Pollution Control Affairs. Any facts known to be of influence to the Club's position on pollution matters should be brought to Mark's attention.

AOMCI HAS A FELLOW OUTBOARD ENTHUSIAST IN THE SOVIET UNION. HIS NAME IS LEONID E. Tregubenko Engineer, P.O. Box 78, Leningrad Centre, U.S.S.R. Mr. Tregubenko, we understand, authors boating articles and appears a most able correspondent. He has asked what he can do for the Club, so if you have a suggestion, write him.

BEGINNING WITH THE APRIL ISSUE OF THE ANTIQUE OUTBOARDER, ERIC GUNDERSON OF CALIFORNIA will take over as Racing Editor. Eric has a collection of racing engines that includes examples of the great Johnson & Evinrude great racers. In addition, Eric has a very real interest in racing history, boats and mechanics. AOMCI will benefit from his strong interest in this most important part of antique outboarding.

A WORD OF SADNESS - FRANK NUNES, A WELL KNOWN MEMBER BOTH IN THE ANTIQUE OUTBOARD CLUB and in the APBA died in September of a heart attack while getting ready to go to a race. He was 73 years old. He raced his 1938 Evinrude Racing Speeditwin (which he bought new) right to the end, as well as several Johnson PR's that he owned. In 1970, Frank was 1st place, high point man in Class C in the California region. He was one of the nicest men one could know and our members always looked forward to seeing him at meets. Frank actively raced since 1932.



Service Clinic



ENGINE BREATHING - 1907 TO 1935

by Mark Wright

Part 2

(5) 1929 Elto Hi Speed Quad and Speedster Here is a design that is so ingeniously simple it can be difficult to initially understand, so let's look at it slowly. First, study the first half of the upstroke. Note that it's the same as the 1921 Elto. Air/fuel mix is forced by atmospheric pressure into the crankcase.

Secondly, as the second half of the upstroke is entered into, the bottoms of the pistons uncover the auxiliary air ports. Remembering these engines would turn close to 5000 RPM the breathing process was so fast that there still was vacuum under the pistons. Those pistons were traveling so fast they literally ran away from the air/fuel mix that entered the crankcase. So when the pistons uncovered the auxiliary air ports, a second dose of air was pushed into the crankcase. Remember - air only!

Recalling that the more air/fuel mix you get into an engine, the more power you will get out of it.

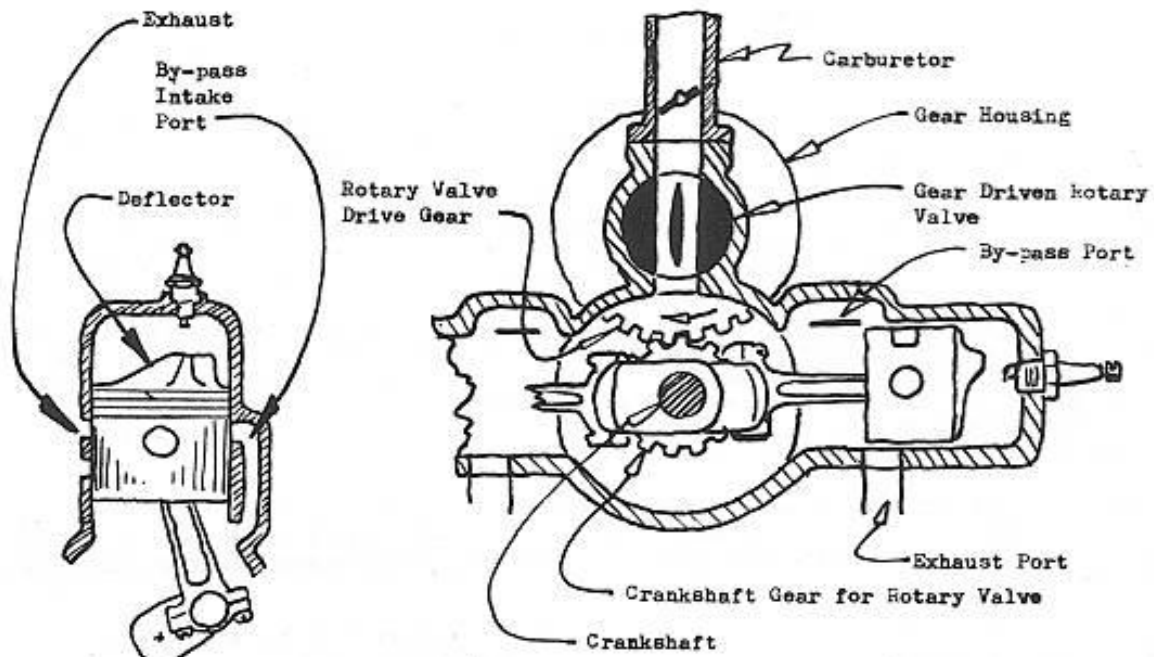
Beginning around 2500 RPM this auxiliary breathing system started to operate. It was so pronounced that one had to enrich the carburetor needle $\frac{1}{2}$ to $\frac{1}{2}$ turn as the engine was speeded up beyond 2500 RPM. What happened was the extra air that was breathed in the auxiliary ports needed gasoline in it to have the correct air/fuel ratio.

Jim Webb refers to the Hi-Speed series as an "engineers' engine for engineers". They did require a fine and knowing touch to properly run them. Very responsive and a delight to operate for the Antique Outboarder who has the communicative fine touch of a dyed-in-the-wool engine man.

(6) 1929 Johnson Gear Driven Rotary Valve This simple design was a big help in the quest for more horsepower per cubic inch of displacement. Like the gear driven camshaft of the 4 cycle engine, the rotary valve was gear driven by the crankshaft and timed to open and close the carburetor breathing to the pistons. Idling, mid range and high speed ranges became more flexible. More air/fuel mix could be breathed into the crankcase as this design allowed "straight in" crankcase charging - no corners, no bends, nothing to restrict or hamper the entry of the air/fuel mix. You can realize how important this is when you visualize that at 4000 RPM the engine swallowed a new air/fuel charge about 67 times per second. Specific power output was so high one could see these engines being very competitive on the race courses until just a few years ago. These rotary valve Johnsons are among the best breathing stock antique outboards ever built.

(7) 1930 Evinrude Crankshaft Rotary Valve This rotary valve was produced to make Evinrude engines competitive with the Johnson rotary valve at less cost, as the Depression was really in effect. While not quite as efficient as the "straight through" breathing of the Johnson rotary valve it did work very well. Engines built with the crankshaft rotary valve were also very flexible through the various speed ranges.

Looking at the sketch, this rotary valve was simply a section absent in the flange on the bottom of the crankshaft. This open section of the crankshaft merely uncovered the carburetor induction tract when the pistons went up and closed it when they came down. The design eliminated the cost and extra weight of a separate gear driven rotary valve.



Here's a typical two - cycle cylinder with the piston just starting the downstroke. Notice the exhaust and by-pass intake ports will be uncovered at about the same time. The deflector on top of the piston is shaped so that the incoming fresh charge rises to the top of the cylinder.

Figure 6. Sketch of 1929 Johnson Gear Driven Rotary Valve. On the upstroke, shown, the valve position is straight through so that the engine can breathe in. On the downstroke, the rotation of the crankshaft rotates the valve thereby blocking the intake port and permitting crankcase compression.

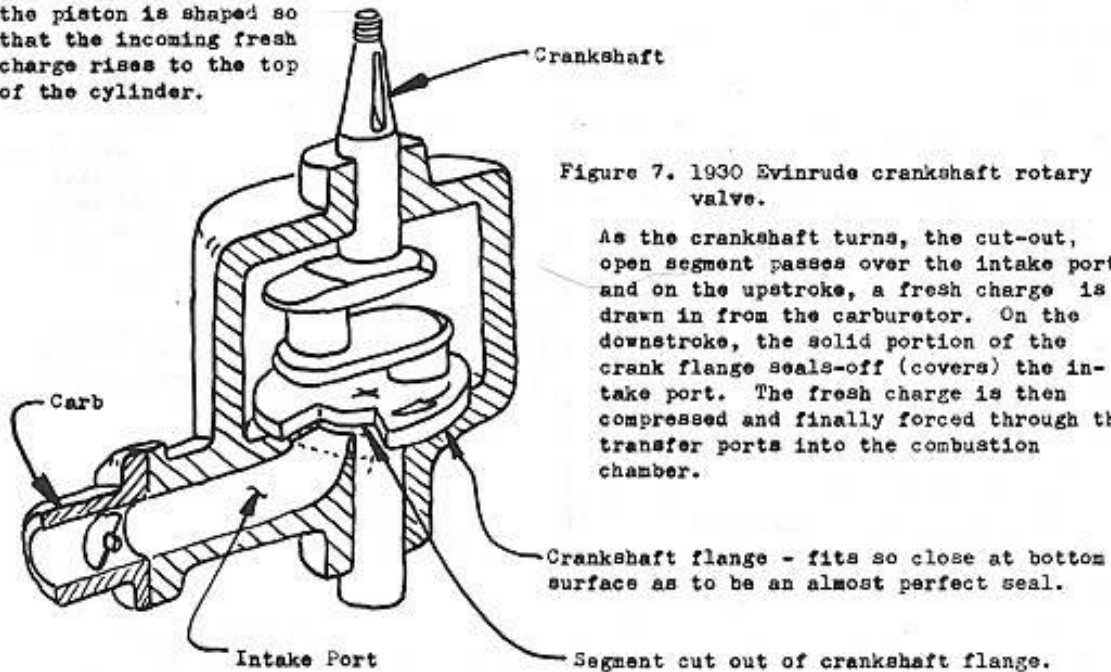


Figure 7. 1930 Evinrude crankshaft rotary valve.

As the crankshaft turns, the cut-out, open segment passes over the intake port and on the upstroke, a fresh charge is drawn in from the carburetor. On the downstroke, the solid portion of the crank flange seals-off (covers) the intake port. The fresh charge is then compressed and finally forced through the transfer ports into the combustion chamber.

(8) 1935 Evinrude Reed Crankcase Valve The reed valve first employed by Evinrude on outboard motors had a dramatic impact on the State of the Art. Most 2 cycle engines built today employ this device.

Reed valves permit "straight through" breathing from the carburetor to the crankcase. Opening and closing is entirely automatic, with opening and closing timing automatically adjusting itself to the RPM.

These valves are simple in theory as they are spring steel blades which bend with the breeze when the engine is intaking and spring closed when that cycle is finished aided by their own springiness plus the crankcase pressure build up when the piston comes down.

The reed valve has been around for many years now. In one way or another, better ways to use them have been developed by engine builders to refine them to their highly developed state in the most modern engines. Special steels, spring rates, shapes and the very locations in the engine proper have all contributed to the 35 pound engine package of today that will do 2 or 3 times more actual work than the fifty or sixty year old outboard package weighing double that would do in its day.

Improvements in outboards since the early days, you will agree, have not been restricted to better breathing. Were one to go to the trouble of modifying a grandfather engine to use the most modern breathing principles the engine would simply run itself to immediate self destruction.

During the long term of getting outboards to be lighter, more reliable and develop more power, each improvement brought

Continued on page 8 .

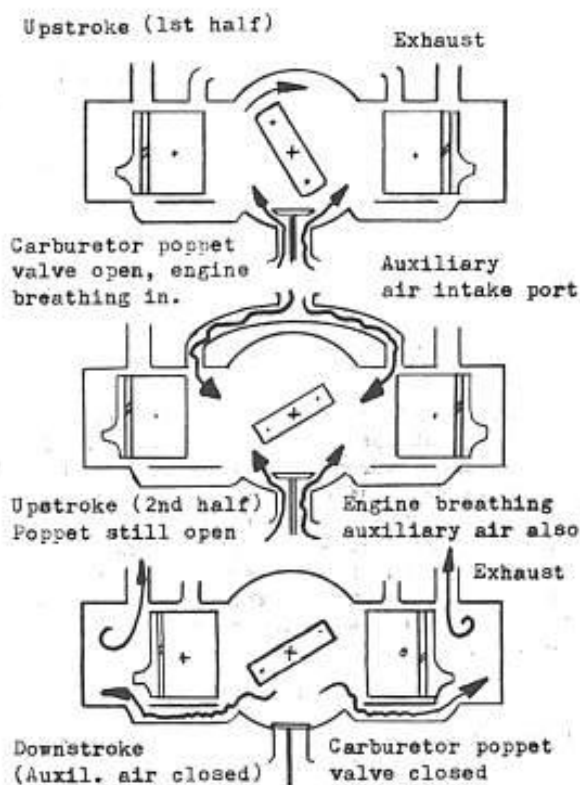


Figure 5. 1929 Elco Hi Speed Quad and Speedster

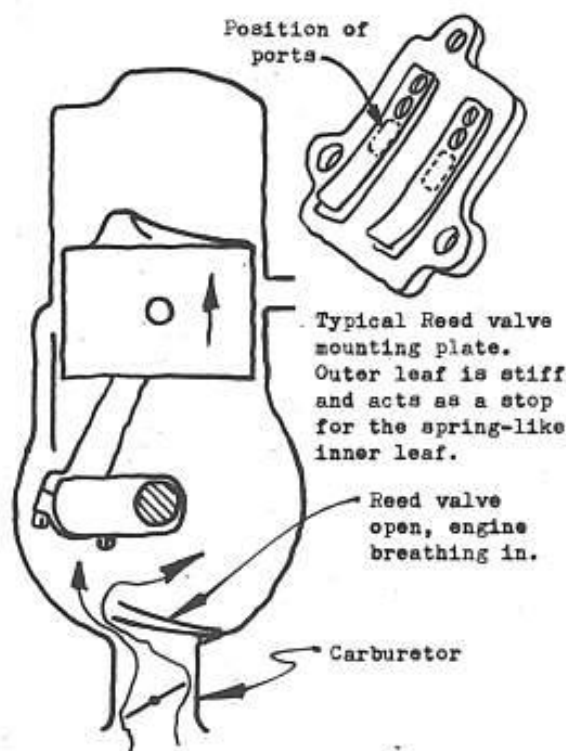


Figure 6. 1935 Evinrude Reed Valve. Sketch shows piston on up-stroke

TRADER'S COVE

by R. H. ZIPPS

GENERAL REQUIREMENTS APPLICABLE TO CLASSIFIED ADVERTISING

1. a) Members - Complete AOMCI Form 101 or include: Make, Year, Model, Serial Number, Number of cylinders, runs or not, condition of compression and spark, list parts missing, overall condition, features, prices, state if member.
b) Non-members must complete AOMCI Form 101. Obtain forms from writer.
2. Advertising rates: Members - free except parts and literature for sale type ads. Should be neatly typewritten. Non-members \$1.00 per 3 line, 1 column ad. Other non-member advertising space is available at \$5.00 per quarter page, \$10.00 per half page, \$20.00 per full page of camera-ready repro ad copy.
3. Closing Dates: All ads must be received not later than the 1st of the month preceding the date of issue.
4. Transactions based on good faith: Deliberate misrepresentation, or violation of the code of business ethics and good sportsmanship, will constitute grounds for refusal of advertising, and may result in disbarment from this club.
5. Warning to purchasers: The AOMCI will accept no responsibility for any unsatisfactory transaction involving articles which either have or have not been described in accordance with the provisions of paragraph one.

"MOTORS SEEN"

CAILLE: Var Pitch Prop W. Lambert; 2720 E 7th Ave.; Hibbing, Minn.	CHAMPION: Single; G. Barrett; 606 Grand Av; St. Paul, Minn.	ELTO: Mod C w/rudder; L. Newton; 227 Richard; Falcomer, N.Y. 14733
ELTO: Ruddertwin; W. Okkonen; 3312 Mount View; Schoerfeld, Wis.	ELTO: Speedster; W. Okkonen; 3312 Mount View; Schoerfeld, Wis.	ELTO: Mod J; W. Lebbber; Rt. 4 Box 43b; Hayward, Wisconsin
ELTO: Mod 4203; B. Dick; 311 Mosher Ave.; St. Francis, Ontario, Can.	EVINRUDE: Mod A; Fred Mummelthie; Frederika, Iowa 50631	JOHNSON: Mod A; Keene Waire; 229 W Inkster; Kalamazoo, Mich.
JOHNSON: 1932 Twin; J. White; 4629 W Dunbar; Monroe, Michigan	JOHNSON: Mod A-50; R. Elliott; 6031 Boulton Houston, Texas	Johnson: Lightwin; Wilho Okkonen; 3312 Mount View; Schoerfeld, Wisconsin
NEPTUNE: 16 HP; O. Combs; 2928 1/2 Potomau; Bakersfield, Calif.	QMC: Lighttrour Imp; B. Love; RFD 2, Box 155; Knickerott, New York	WARDE: Old twin; E. Minn. 56575
EVINRUDE: Mod 7031; 33HP R. Puray; 2320 Hickory; Portage, Indiana	EVINRUDE BOAT????????? R. Puray; 2320 Hickory Portage, Indiana	DIPPY BOAT: Retrac Prop; Howard Langdon; Tomifobia, Quebec, Canada

"MOTORS FOR SALE"

Continued on page 52.

Collection of Marcus Wright: 1929 Caille/Motorge Commodore, Mod 32; enough parts for 1 1/2 engines or will assemble; 1930 Elto Senior Speedster, needs existing coil to be installed to run, overhauled with new prop; 1936 Neptune Mod OB-64A, 6 HP, running plus spare parts; 1938 EVINRUDE Speeditwin Racer, running set up for fuel, Hubbel stacks and lower unit, no prop; 1938 WATERWITCH 4 HP, twin, running plus spare power head; 1949 Mercury Mod KR-5, lower unit disassembled, all parts present; Mark Wright, 30 Crest Drive, Little Silver, New Jersey, Ph:201-741-5120

About half the collection of Bill Kelly: 1921 Spinaway; 1921 Lockwood Sing 1918 Evinrude B; 1923 Elto Ruddertwin; 1930 Elto Sr Speedster; 1937 Elto Pal; 1937 Elto Handitwin; 1931 Elto C Racer; 1946 Evinrude Speedifour; 1934 Evinrude Lightwin Imperial; 1949 Mercury KR9; 1931 Mercury KR9; 1940 Mercury/Sea King; 1937 Thor; 1928 Evinrude Sportwin; 1922 Johnson A; 1937 Johnson 200; 1937 Johnson 300; 1931 Johnson OK-33; 1939 Johnson PO-39; Johnson KR; 1927 Johnson A-25; 1928 Johnson A-35; 2 Champions about 1937; 1939 Neptune "A1" Single; Will sell separately or as a lot. Will deliver lot within 1000 miles; Bill Kelly; 10201 114th Pl NE; Kirkland, Wash.

2ND CONNECTICUT MEET

BY BOB ZIPPS



Above: Wiliara Linkorum signs in to registrar Ericsa Zipps. Bill Lyman center, & Dave Zipps on Table look on.



L to R: Wayne Mockenfield, Emily Caglione, Doc Craver and Tony Caglione.



L to R: Dick Hawie ropes over a BIG Elto Racing "C". His son Dick Jr. & Matt Kowalski look on.

The Second Annual Connecticut Regatta was held September 11, on the Connecticut River at East Hartford. The weather was disappointing being overcast and with rain threatening. But on the other hand, the member turnout was truly fantastic with 28 members, their families and their motors present. That adds up to close to 60 people not including spectators. This was the largest gathering in AOMCI history.

Just about everyone had good words for the site, that had a four car launching ramp, more than adequate parking facilities, picnic tables, but best of all was the perfectly straight course that went parallel to the straight shore line.

On the way to the meet early that morning, I picked up an empty cooler the wrong way and that was the end of my back for the day. Doc Craver worked on it a couple of times during the day which helped tremendously, but looked like I was getting artificial respiration to some spectators who thought I was pulled from the river.

The schedule of events was the largest anywhere, ever in the AOMCI with first and second place trophies in all categories. What worked out great was splitting up the Bang & Go Back Races into non-planing and Big Iron races. The majority of the members brought their own boats which worked out fine.

The most exciting event of the day was the Le Manns start First Quarter Century Race which was run for the first time. The event is limited to motors made from 1900 to 1925. Members had to run to their boats, start them, and run a pure "speed" race. It was great to see them trying to start their motors, under stress. The event is here to stay.



L to R: Indispensable Rod Clarke next to Clarke Troller. Tony Caglione reruels 1917 Caille. Bob Grubb helps.



L to R: Foreground, John Hopkins, Frea Hopkins holding PO cylinder, and Dave Reinhartsen.



L to R: John Gustarisen, Bob Zippis and Dave Reinhartsen



L to R: Buddy's wife, Buddy Street and Stan Dubois



L TO R: Tony Caglione, Bill Lyman, Don Hinds, Son of Perry Stanley, Perry Stanley, and Peter Humn in the foreground with his first motor.



L to R: Rhil Kranz with his Caille Liberty, Dick Schaber, Bill Andrulitus. Boy in foreground is Dick Schaber Jr.

Everyone at the meet was glad to see Doc Craver get the Sportsmanship Trophy. He was given an ovation on accepting the award and it was heart warming to see how happy it made him. Doc has been in the Club for many years and has really extended himself for all of those years especially at meets. The Sportsmanship Trophy is not won, it is awarded; therefore it is the most valuable trophy a member can get at a meet. Since this is so, the sportsmanship trophy is completely different from the rest, because it has to stand above the rest.

I want to thank Rod Clarke and Dave Reinhartsen who did such a great job helping me thw day of the meet. Rod was in the patrol boat acting as judge and Dave was great being what he called a gopher- "gopher" this and "gopher" that.

The day started at six AM and ended a little after midnight, but passed in an instant. I had a ball. It seems almost everyone else did too. I'm still getting good words about it.

Organization & Credits:

Organizer- Bob Zipps
 Meet Helpers- Rod Clarke
 Dave Reinhartsen
 Photographer- Steve Patterson
 Patrol Boat- Bruce Cronin
 Registrar- Tricia Zipps
 Jean Hopkins

Sponsors: To whom we are truly
 indebted.
 Chrysler Marine Products
 Evinrude Motors
 Glastron Boat Company
 Johnson Motors
 Kiekhaefer Mercury
 Stantial-McCulloch (New England Dist.
 for Aeroceanic Motors)
 Thompson Boat Company

Judging Results:

First Quarter Century Race:	1st) Tom Luce- 1922 Evinrude Mod K 2nd) Buddy Street- 1917 Caille
Oldest Running Motor: (Trophy by Evinrude)	1st) Bob Grubb- 1913 Evinrude Mod A 2nd) Peter Hunn- 1928 Johnson Mod A3b
Bang & Go Back- Non Planing: (Trophy by Chrysler)	1st) Jean Luce- 1916 Motor-Go 2nd) Phil Kranz- 1930 Johnson Mod Kb0
Big Iron: (Trophy by Mercury)	1st) Sam Vance- 1928 Elto Quad 2nd) John Gustafson- 1932 OMC Sport4
Mint Condition: (Trophy by Johnson)	1st) Tony Caglione- 1917 Caille 2nd) Doc Craver- 1930 OMC Foldlight
Most Unusual: (Trophy by Aeroceanic)	1st) Tony Caglione- 1933 Johnson OA6b 2nd) Willard Linkorus- 1923 Johnson
Antique Boat: (Trophy by Thompson Boat Co.)	1st) Buddy Street- 1931 Pigeon 2nd) Ed Fredericks- 1932 All Steel
Sportsmanship: (Trophy by Glastron Boat Co.)	Doctor Lloyd C. Craver



This is the line up of trophies that members looked forward too. The First place cups are in the front line and the Second place are in the rear. The Sportsmanship trophy is at right.



This is the LeManns start of the First Quarter Century Race which was the most exciting event of the afternoon. This event is here to stay.



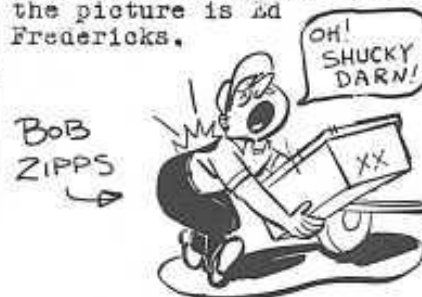
Taking in a commanding view of the afternoon's proceedings is Al Hunter, left. In the background Bob Zipps and Dave Reinhartsen Discuss an upcoming event.



Teamwork is a trade mark of AOMCI meets. Shown here are two members of the Long Island Team, John Gustaffsen left, and Frank Shimer.



Proud trophy winners are from left to right: Buddy Street, Bob Grubb, Phil Kranz, Tony Caglione, Will Linkorum, Doc Craver, Tom Luce, Peter Hunn, Jean Luce Sam Vance and John Gustaffsen, Missing from the picture is Ed Fredericks.



Those who attended the meet are:

Bill Andrulitus, West Hartford, Conn.; Tony Caglione, Dover, New Jersey; Rod Clarke, East Hartford, Conn.; Doc Craver, Lake Hopatcong, New Jersey; Stan Dubois, New York, N.Y.; Ed Fredericks, Naugatuck, Conn.; Bob Grubb, Pottstown, Pa.; John Gustaffson, Amityville, New York; Dick Hawie, Easton Conn.; Dick C. Hawie, Easton, Conn.; Lon Hinds, Stoughton, Mass.; Tommy Hines, New Haven, Conn.; Fred Hopkins, Vernon, Conn.; Al Hunter, Clinton, Conn.; Peter Hunn, Simsbury, Conn.; Phil Kranz, Slingerlands, New York; Willard Linkorum, Windsor, New York; Vinny Loss, Levittown, New York; Jean Luce, Westfield, New Jersey; Tom Luce, Westfield, New Jersey; Bill Lyman, South Hadley, Mass.; Wayne Mockenfield, Lake Hopatcong, New Jersey; Frank Shimer, Bellmore, New York; Perry Stanley, Wallingford, Conn.; Buddy Street, Richmond, Virginia; Dave Reinhartsen, Richardson, Texas; Sam Vance, Unadilla, New York; Bob Zipps, East Hartford, Conn.



Continuation of "Trader's Cove"

Bob Purdy of 2320 Hickory St., Portage, Ind. 46368 needs the gas line for a 1928 Quad - or at least the Y fitting. Also has many motors to sell

Frank Schlacter, 1615 Cleveland Av., Racine, Wis. 53405 needs the intake manifold and complete carburetor for a 1929 model 11H Evinrude 14hp.

Don Peterson, 2884 S.E. Francis, Portland Oregon, needs a timer, carb and boat clamp bracket for an 800 series Big Quad.

Charles Woolley, 45 Jacqueline Road, Waltham, Mass., 02154, has an old "Sea Sled" boat that he would like to sell.



THE FACTS ARE

■ ■ ■ ■ A collection of significant truths about the subjects of outboards, outboarding & motor-minded people. If you have information that you think would be of interest to our readers, send it in!

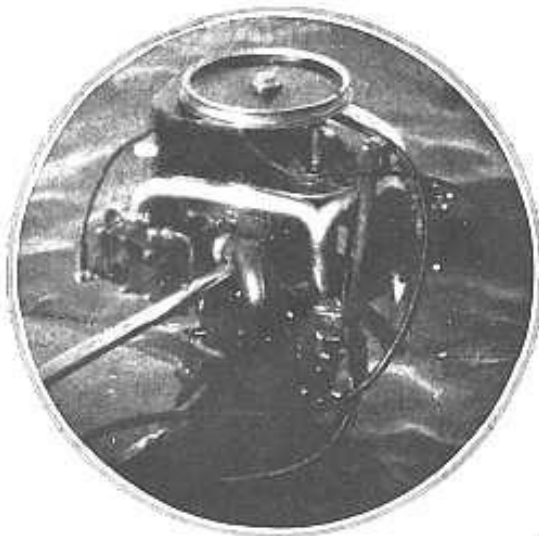
The Whirlpool Outboard Motor

The ghost of an old, dusty, long-forgotten motor recently came back to the surface of the never-ending whirlpool of time - in fact, that's what it was - the "Whirlpool".

When scanning pages in odd, old and musty volumes, I came across an article in the March 28 issue of 1928 Motor Boating. The article is entitled, "Outboards furnish thrills at San Diego". Quote: "On Sunday, February 12, 1928 - a Speed Regatta was held at San Diego. In the Class C event, interest was increased by the entry of the 'Whirlpool' outboard motor, an experimental engine built by Whirlpool, of Los Angeles."

The engine was described as a three cylinder, four cycle, radial engine. The machine was fitted with a clutch which disengaged by raising the tiller. According to the article, the motor ran smoothly, was competitive in speed - but not quite enough to take top honors in her class.

The article further states, quote: "For an



experimental power plant, the performance of the outfit was nothing short of remarkable". Driven in this San Diego race by Dana Wiley, the Whirlpool finished in a tie for first place in Class "C". However, the other boat, "Mimi" (powered by an Evinrude Speeditwin) had faster overall times and was awarded the trophy. The only other record I've found on this engine is that it raced previously in the January Marathon to Catalina, but dropped out due to damage to the boat.

On page 5 of the October, 1970 issue of the "Antique Outboarder", there is a photo of a mystery radial engine submitted by Phil Kranz. I'm sure it's the Whirlpool! Don Peterson.

Four Cylinder Lockwood?

In early 1929, a new Lockwood engine called the "Flying Four" was announced. However, it never appeared in the showrooms. Jim Webb tells why from information received from the horse's mouth, F. T. Irgens, the guy who designed it.

"The Flying Four was a flat, 4 cylinder, opposed 4 cycle motor which developed about 15 hp. The motor, which really was two opposed twins, was laid flat with the crankshaft horizontal, in front of the gear housing. In front, meaning the powerhead overhung the transom. It was a beautiful running job, but by the time it was ready for production, it was out of date as far as power and speed performance was concerned." So, while it was announced to the public, it never went into production. Pat Tanner, who was the Lockwood Sales Manager at the time had great hopes for it, but when he saw what the 1928 Quad, Evinrude Speeditwin, and Johnson Model P were doing, he had to agree that the Flying Four wouldn't compete. So he told me. Jim Webb.

A President Liked His Evinrude!

Back in 1912, ex-President Theodore Roosevelt undertook an expedition to explore the middle reaches of the Amazon and try to locate the famous "River of Doubt". At least old Teddy's PR men built the "River of Doubt" expedition up that way. They found it and for a time it carried the name of Rio Teodoro. Now it is called Roosevelt and flows into the Aripuana which flows into the Madeira which flows into the Amazon. The Roosevelt River is situated about 7½ degrees south and 61 to 62 west in Brazil. Anthony Fiala, a well-known explorer, guided the expedition.

T. R. wrote up the whole expedition and in the following excerpt from page 356 of the "Appendix B" we see what good things he had to say about the 1912 Evinrude which he took along. The Evinrude company was very proud of this testimonial.

"MOTORS.- We had with us a three and one half horse-power motor which could be attached to stern or gunwale of canoe or boat. It was made by the Evinrude Motor Company, who had a magneto placed in the fly-wheel of the engine so that we never had to resort to the battery to run the motor. Though the motor was left out in the rain and sun, often without a cover, by careless native help, it never failed us. We found it particularly valuable in going against the strong current of the Sepotuba River where several all-night trips were made up-stream, the motor attached to a heavy boat. For exploration up-stream it would be valuable, particularly as it is easily portable, weighing for the two horse-power motor fifty pounds, for three and one half horse-power one hundred pounds. If a carburetor could be attached so that kerosene could be used it would add to its value many times, for kerosene can be purchased almost anywhere in South America."

Model K Evinrude Not In The Record Books!

Ever wondered why you can't find any spec data on your "K" Evinrude? An Evinrude booklet printed in 1922 read:

"After seven years of designing and redesigning, improving and testing, Evinrude engineers have perfected the first really practical rowboat motor of low weight - the Evinrude "Lightweight". This new sport model, which offers boat power in its most portable form, tips the scales at just under 50 pounds - 2½ pounds less than the standard model.

"In practically every essential detail of design the Evinrude "Lightweight" is the same as the Standard 2 hp model. It has the identical power plant proper - the same sturdy 2 hp reversible engine of 2½" x 2 5/8" bore and stroke - the same dependable built-in-flywheel magneto - the same speed control and automatic lubrication. Even the gear housing with removable bearings is like the standard motor.

"However, its weight has been reduced 2½ pounds by using light, strong, manganese aluminum alloys in place of malleable castings, brass and bronze, in the following parts: propeller, propeller sleeve, gear housing, bracket (bronze bushed), muffler, crankcase, tiller, carburetor body."

From the above you can appreciate that truth in advertising hadn't hit Evinrude yet in 1922. That seven year bit was more like seven weeks, or less, the exact length of time being what it took to get some patterns altered to take aluminum and get castings made. In 1920, Chris Meyer told Ole Evinrude flatly that the Evinrude Company wanted no part of Ole's aluminum idea, that they had done OK for years with the old bronze model and would keep on. But after the New York Boat Show in early 1922, Chris saw how popular the new Elto and Johnson had become and hurried up to change his ideas. Chris Meyer was Ole's one time partner who had bought out Ole back in 1914.

I now remember that only a few hundred of these first aluminum singles were made. The aluminum parts were not strong enough for rough service since pattern equipment and gating that is OK for bronze is not right for aluminum. Later on some aluminum singles

were made with better pattern equipment, but by that time Evinrude's reputation was well down hill and instead of light singles, Evinrude was making light twins, such as the Model "N" Sportwin. For whatever reason, the Model K aluminum single has never appeared on any of the old bulletins, probably because it was such a cluck. Jim Webb.

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32, e) Sea Horse 32.
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Oiler from, a) Lockwood, b) 92-BR
c) 1929, d) 14, e) Racing Chief
#3: This a lower unit with racing
nose cap from a. a) Martin, b)
200, c) 1954, d) 17, e) Silver
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Red Face Department.....

The below "letter to the editor" was received from Bill Salisbury.

"....This past weekend I took the family down to Dave's in Los Angeles. Then Saturday morning Dave, Bill Motley and I with all of our families, ventured down to San Diego to dig in Von Heitman's "gold mine". We found lots of goodies - many new parts, gaskets, etc. We left Von's with five outboards in the trunk of two cars headed for John Toprahanian's. We visited with John for several hours, drooling over his variety of 460s and modified XR-55s.

Yesterday, Dale, Eric and I made a trip to the lake. Dale ran his PR-65 and on his final run was turning 6800 rpm on his electronic tach and that boat was literally flying! Eric's 13' Whirlwind powered with his Speedifour is doing an unbelievable 38 mph. I drove it for a while and saw it with my own eyes. I've never seen a Speedifour go like that before.

"This paragraph deals with a subject that has really gotten under my skin lately. I would appreciate a note in the "letters to the editor" column in the next issue if you can find space. What is bugging me is the fact that parts request letters to other members, as well as establishments listed in the part source manual, don't get answered promptly and sometimes not at all. I'm damn glad I'm not holding my breath waiting for replies from some of our well known members. Some of them I have written to as far back as eighteen months and have still not heard from them.

Continued on back cover



Up - Dale Denning with his PO powered Rockholt B-C runabout.
Left - My PO-38.
Below - Our Johnson PR "find".



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A cordial welcome is extended to all newcomers. Other members are encouraged to make contact either by writing or visiting. Let's show these new members how to really participate in the Club activities such as Meets, Chapters and Special Interest Groups.

Continued from page 56 .

That sort of treatment is more than just annoying when you are hunting parts and anxiously awaiting a reply before canvassing some other source. Enough said".

Your point is well taken, Bill, and that's the embarrassing part for your Editor - Bill wrote this letter one year ago - I misplaced it!!!

Plan to attend ... July 14, 15, 16 - 1972

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More info later -

SEE YOU
AT THE
MEET!

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See you at the meet !

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