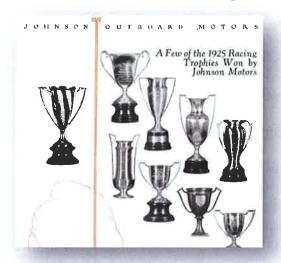
Outboard Racing Motors-Schedule of FIRSTS

By: Ken Kirk

1925 The FIRST Official Outboard Speed Record:

Established on July 5, 1925 by L. F. Helton driving a small planning hull boat powered by Johnson "Big Twin" 6 hp outboard. This was the first outboard speed record officially recorded by the American Power Boat Association. The achievement was proclaimed in Johnson Outboard advertising as, "The World Outboard Straightaway Record".





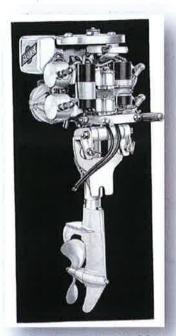
1928 - The FIRST Factory Built Racing Outboards:

Recognizing that racing success meant sales success, three major outboard manufacturers produced purpose built racing outboards in significant numbers in 1928. Johnson produced the model "KR" for "A" class racing and streamlined to reduce underwater "drag". Also...the gear the "SR" for "B" class. Elto built the "HI Speed" Speedster, and Caille, the Model 30 Racer.

Most racing engines differed from fishing outboards in four ways. They had larger carburetors, no exhaust silencing device, and the lower unit was more ratio and the propeller were designed to generate higher rev's, less pushing power but more speed.







1928 - The FIRST Opposed Firing 4-cylinder Outboard:

The Elto "Quad". This motor developed 18 hp and could reach speeds in excess of 45 mph. The most powerful outboard in 1927 had been only 8 hp. The "Quad" was a major breakthrough in horsepower and speed. It was the result of six years of experimentation and development by Ole Evinrude, his son Ralph and by engineer Jim Webb. By the end of 1928 Elto held most of the top time trial speed records in outboard racing.

The Elto brand was created by Ole Evinrude and his wife Bess, in 1921. They had sold their Evinrude outboard company in 1916 and now had to come up with a

different brand name for the new outboard motor Ole had developed. Bess conceived the name Elto which was an acronym for "Evinrude Light Twin Outboard". Now Elto had a four cylinder motor platform as well.



Engineer Jim Webb testing the powerful 1928 Elto "Quad" >>>

1928 – The FIRST 50 hp Outboard:

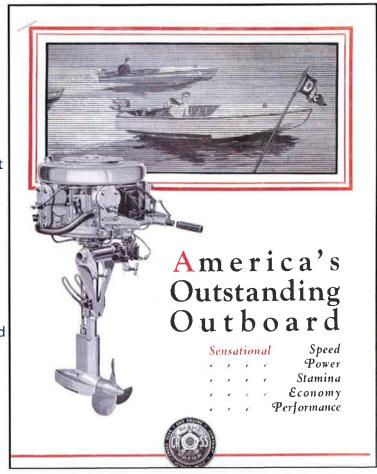
The Cross-Radial was essentially an aircraft type radial piston engine laying on its side. The engine was 4-cycle, had 5 cylinders and weighed about 150 lbs. These large outboards were rated at 50 hp, twice the horsepower of any other outboard produced in 1928.

The Cross also offered the option of an innovative "tractor" type lower unit which positioned the propeller at the leading edge of the gear case. The propeller pulled rather than pushed the boat through the water. Very few Cross-Radial outboards were built and fewer still, if any, were produced with the "tractor" lower unit.

The Radial was built by the Cross Gear & Engine Company of Detroit, Mich. Cross had been building gasoline engines of many types since 1898. However the Cross-Radial outboard was ahead of its time. It was to heavy and had to much horsepower for the race boats of the day. It never achieved any real racing success.

Although promoted in advertising as a motor for racing....the same motor was also promoted as being suitable for Cabin Cruisers and Workboats.

The last Cross-Radials were built in 1933.



1928 Cross-Radial, 5-cylinders, 50 h.p

The Racing Chief ... For Speed ...

1929 Lockwood "Racing Chief", duel carburetors, external oiling system and streamlined lower unit.

<u>1929 – FIRST Duel Carburetor Outboard:</u> <u>The Lockwood "Racing Chief".</u>

The Lockwood Motor Co. of Jackson, Mich. had been producing outboards since 1914 under the Lockwood-Ash brand name. In 1927 and 28 their two cylinder "Ace" & "Chief" models achieved considerable racing success primarily due to their "streamlined" underwater gear case. Encouraged by this success Lockwood built the "Racing Chief" specifically for "B" class racing in 1929.

This advanced racing outboard with streamlined lower unit, synchronized duel carburetors and an external oiling system for the main bearings had been designed and developed by Lockwood's Chief Engineer, Finn T. Irgens.

When Lockwood merged with Evinrude and Elto in 1929, to form the Outboard Motors Corporation, Irgens was appointed Chief Engineer for OMC. He would skillfully guide new product research & development as well as manufacturing processes at OMC for the next 40 years.

The Lockwood outboard brand was dropped from the OMC lineup at he end of the 1930 model year.

1929-FIRST with Both "Tractor" lower unit & Duel Carbs:

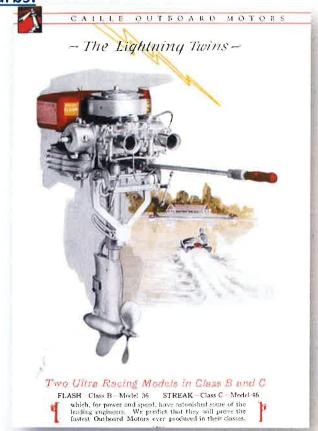
Caille Model 36 "Flash" and 46 "Streak".

Adolf and Arthur Caille of Detroit were successful manufacturers of all types of gambling devices and slot machines. They invented the penny arcade concept and most of the coin operated machines that inhabited them.

The Caille brothers also enjoyed going fast on water. They introduced their first outboard in 1912 and when outboard racing became popular they were at the forefront of technological development to produce faster motors.

In 1928 Caille were among the first to produce a factory built racing outboard. In 1929 they expanded their racing presence offering four different racing engines. All had "tractor" type lower units with the propeller on the front of the gear case pulling the boat rather than on the rear of the gear case, pushing. The theory was that the propeller would be biting into an undisturbed wall of water and there would be less cavitation thus more efficiency.

The very successful "B" class "Flash" and "C' class "Streak" had duel carburetors and "tractor" lower units. The only racing motors of the day to offer this effective combination.



1930-FIRST 6, 12 & 24 hour Outboard Endurance World Records.



Jimmy Oates

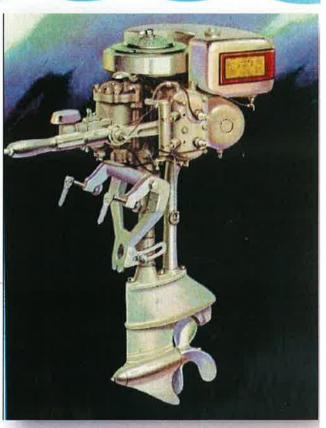
The very first 6, 12 and 24 hour Outboard Endurance World Records were set in Canada with a Canadian built boat and a Canadian assembled outboard motor.

June 1930, on Clear Lake just north of Peterborough, Jimmy Oates, driving a Johnson "Imperial" boat with concave bottom, powered by a Johnson Sea Horse "32", 4-cyl. outboard, set the first ever 12 hour outboard World Record.

averaging 21.75 mph running for 12 hours non stop. The boat had been designed by Lou Johnson.

On July 18, Oates, with the same outfit, covered 492 miles in 24 hours at an average speed of 20.48 mph setting up the first ever 24 hour Endurance World Record for outboards.

The boat was built in Peterborough by the Canadian Johnson Motor Company and the Sea Horse "32" was also assembled and prepared at the Peterborough plant.



Johnson 4cyl. Sea Horse "32".



Record setting Johnson "Imperial" boat, built in Peterborough.

1930 - The First Outboards to Exceed 50 mph:

Within 63 days, Oct. 19 to Dec. 20, 1930, three boat racers in three different countries exceeded the magic 50 mph mark.

Italian Aldo Dacco was officially timed, on Lake Garde, Italy, at 50.77 mph in his Laros powered boat, "Mariella IV."

According to the American Power Boat Association, Ray Pregenzer had pushed his Century Hurricane race boat, powered by an Elto "460" outboard, to 51.60 mph in time trials at Fox Lake, Illinois.

In England, Charles Harrison put in an official speed of 51.98 mph at Cowes on the Medina River. Harrisons' record had been officially recognized by the British Marine Motoring Association.

His boat, "Non Sequitur III", was a Rytecraft Demon built by the British Motor Boat Manufacturing Co. and was also powered by an Elto "460".

The Elto "460" had 4-cylinders and a 60 cu. in. displacement. Hence the name "460". They were rated at 40 hp.



American Ray Pregenzer exceeds 50 mph in his Century "Hurricane" powered by an Elto "460".



The Legendary Elto "460".



Englishman Charles Harrison exceeded the magic 50mph mark in Elto "460" powered "Non Sequitur III".

1934 - FIRST 6-cylinder (opposed) Outboard- Soriano



The very first Soriano outboards were built in Barcelona, Spain in 1932. Ricardo Soriano was a wealthy Spanish nobleman who commissioned French engineer Paul Bonnemaison to design and build a racing outboard that would challenge the Americans for outboard racing supremacy.

The original Soriano's were 4-cylinder, 4-cycle motors. Only 12 of these motors were ever built.

With the outbreak of civil unrest in Spain, Ricardo Soriano was unable to continue with outboard racing.

In early 1934 the Soriano project was taken over by a wealthy French sportsman, Jean Dupuy. Together with Paul Bonnemaison they redesigned the Soriano.

They created the first 6-cylinder opposed firing outboard. It was extremely sophisticated, 4-cycle with dual overhead cam shafts. Fitted with a blower – supercharger, the Soriano developed 85 hp.

These motors were built at Courbevoie, just outside Paris. Between 1934 and 1939, Jean Dupuy set the World Outboard Speed Record three times with a Soriano powered boat. During the 1930's the Soriano was the most powerful and most sought after racing outboard in Europe.



<u>1934 – FIRST Counter Rotating Twin Prop Outboard</u> **Again...this was the Soriano**

These sophisticated racing outboards were designed by Paul Bonnemaison and built just outside Paris, France. They had dual overhead cam shafts and were fitted with a blower- supercharger.

Perhaps the most revolutionary of the Soriano's many design innovations was the lower unit and gear case. The streamlined gear case had two counter rotating propellers, one at the leading edge of the gear case which was pulling and a second propeller at the trailing edge of the gear case which was pushing.

The lower unit was very short, positioning the propellers close to the surface of the water so that, at speed, only the lower half of the propeller was in the water allowing for higher rpm and hence more speed.

1954 - FIRST Outboard to Exceed 100 mph:

On a December morning on an artificial lake in Milan, Italy, Massimo di Prioli became the first person to surpass the 100 mph mark with an outboard motor setting a two way average record of 100.38 mph. The boat, "Eduardo II" was a 3-point hydroplane, only 12' long, built by Molinari at Lake Como.

The outboard was designed and engineered by Massimo and built by the di Prioli families machine tool manufacturing company, Lesco.

It was an opposed 4-cylinder, 4-cycle outboard, with overhead cam shafts. It was supercharged. The prototype was certified as 162 hp at 6,800 rpm.

Lesco produced a limited number of these exotic racing outboards identified as the "X4", for affluent European sportsmen.

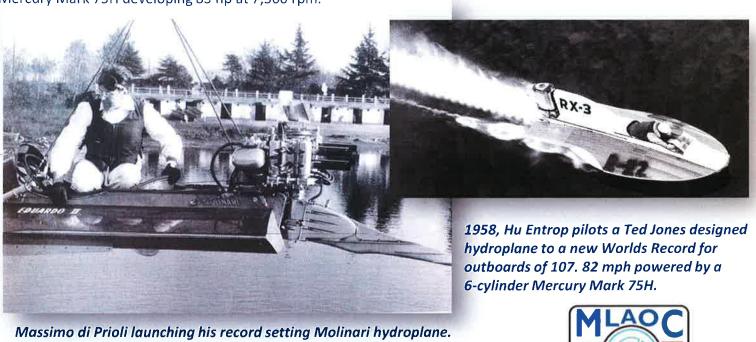
Carl Kiekhaefer, the aggressive President of Mercury Outboards, on hearing of di Prioli's success, offered to buy the record breaking boat and motor. He asked that it be shipped immediately to the United States. Di Prioli respectfully declined.

It would be June 7, 1958 before Mercury could break the 100 mph barrier. Hu Entrop drove the Ted Jones designed cab-over hydroplane "RX-3" to a new outboard world speed record of 107.82 mph at Lake Washington. The motor was a specially prepared Mercury Mark 75H developing 83 hp at 7,500 rpm.

The 4-cyl, supercharged Lesco outboard developed 162 h.p.



Lesco outboard on a Molinari hydroplane, the first outboard boat and motor to exceed 100 mph, as it appears today in a museum on Lake Como, Italy..



and exceeded 100 mph in 1954.