

Record breakers

All magazines love a record attempt. Whether or not it succeeds, it is guaranteed to produce a story – a tale of drama and emotion, exotic hardware, elements of danger, and the eternal struggle between triumph and tragedy. And whether the attempt succeeds or not, there will always be a hero – however unpromising the material, the journalist can always make sure of that.

No journalist ever had to dig too deep into his bag of humbug and hyperbole when it came to Donald Campbell. He was made in the true Greek mould: an exceptional but flawed character, doomed to dazzle brightly and burn out, like a meteorite lighting up a winter sky. The magazine loved him for it. He was charming, superstitious, astonishingly courageous, and haunted by his father's memory – a complex, genuinely tragic hero.

Sir Malcolm Campbell, Donald's intimidating, domineering father, had lived in the golden age of record-breaking. A would-be pioneer aviator and a contemporary of Thomas Sopwith, he was born

"Bluebird" at Locarno

Preliminary Trials Yield Promising Results



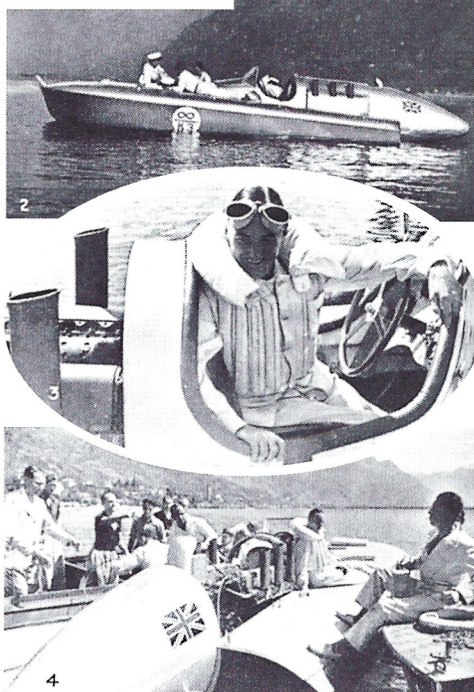
- (1) "Bluebird" on her preliminary trials on Lake Maggiore, Locarno.
- (2) Another view of the boat, showing the mountain scenery.
- (3) Sir Malcolm Campbell in a happy mood.
- (4) Working on the boat whilst she is hauled out on her slipway.

SIR MALCOLM CAMPBELL made an official attempt on the world water speed record (124.86 m.p.h.) on Saturday evening, August 21, on Lake Maggiore. His 2,350 h.p. Rolls-Royce-engined 23-ft. hydroplane "Bluebird" stopped a few yards from the finish of his first run over the measured mile, due to the motor becoming overheated. The novel thermostat-controlled closed water circuit cooling system is to be modified, and it is reported that Sir Malcolm will make a further attempt to beat Gar Wood's record shortly.

The trials of "Bluebird" have been proceeding for the past fortnight, and apart from her official attempt she has been seen out on the lake on several occasions, when she was tested at speeds stated to vary from 60 m.p.h. to 100 m.p.h. The 4½-mile course is laid diagonally across the lake from Mappo, near Locarno, to Gerra, and on one test run "Bluebird" apparently missed some fishing nets by a narrow margin.

Sir Malcolm Campbell and his staff are staying at Locarno as the guests of the town, and the local authorities have built a boathouse and slipway for the use of "Bluebird."

It may be recalled that the craft was constructed by Saunders-Roe, Ltd., to Fred Cooper's designs, and weighs about 2½ tons, giving a power weight ratio of 2.14 lb., which is a record for this type of boat.



The magazine followed Sir Malcolm's record attempts in Italy with close interest.

into a well-to-do family with the wealth to indulge in the gentlemanly playthings of the dawning mechanical age: aeroplanes, fast boats and faster cars. He had flown with the Royal Flying Corps, raced at Brooklands, and when he set his first world water speed record in 1937, he had already retired from land speed records after breaking the 300mph barrier.

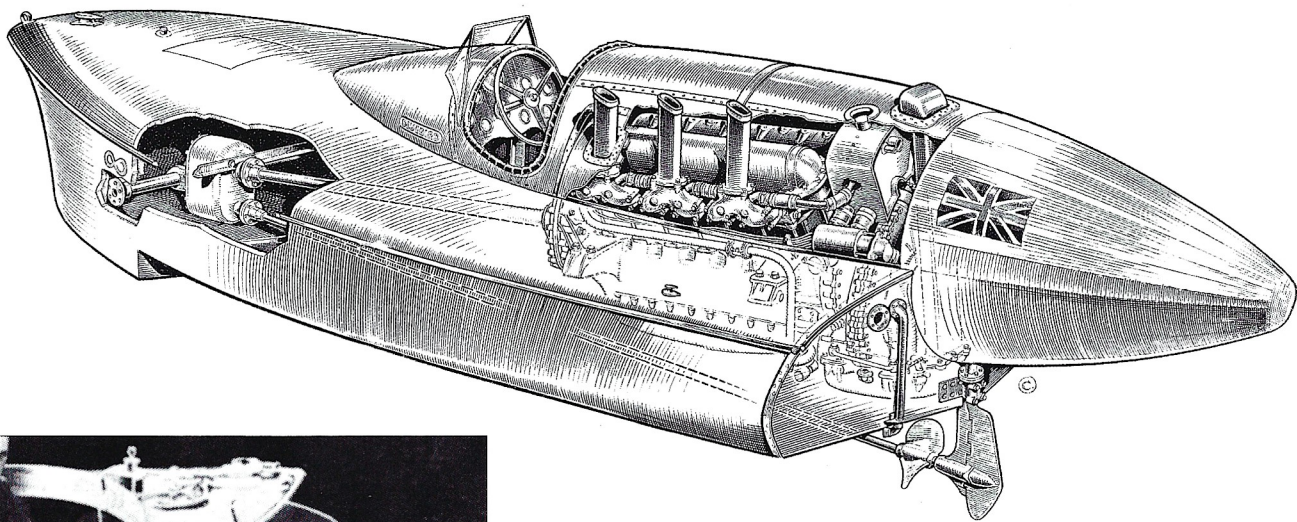
His first *Bluebird*, racing number K3 – although she never raced – was designed by Fred Cooper of British Power Boats fame, and powered by a 2,350hp Rolls-Royce R-series aero engine of the type that propelled the famous Supermarine S6 Schneider Trophy seaplanes, as well as Sir

Malcolm's record-breaking car. *The Motor Boat* marked the arrival of the boat at Loch Lomond for trials with a three-page feature in June 1937, complete with cutaway sketch, noting that she was housed "in the same boatshed as that occupied by *Miss England III* in 1932, when she attained a speed of 119.81mph."

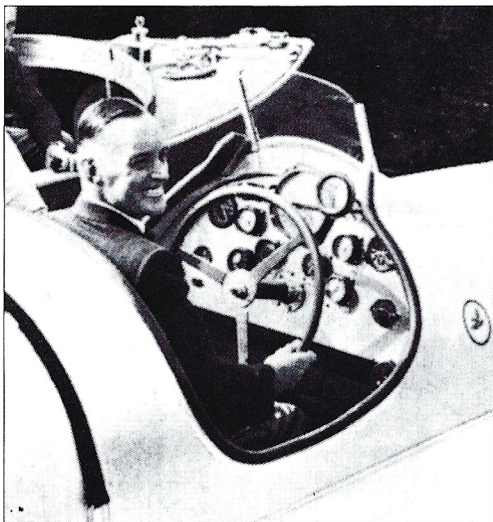
Kaye Don's last record in *Miss England III* had stood for barely two months – Sir Malcolm was tilting at the mark set by the redoubtable American racer Gar Wood, whose magnificent series of Liberty- and Packard-engined *Miss America* boats had rebuffed all challenges for the Harmworth Trophy, and reclaimed the world speed record whenever it was taken, since 1920. The duels between Wood, Don and Sir Henry Segrave had already become the stuff of legend. The young Sir Henry had been killed in *Miss England II* just after setting a new mark of 98.76mph on Lake Windermere in 1930. Wood broke the 100mph barrier the following year, and then raised the record again the following month. Ex-fighter pilot Kaye Don beat that in the repaired *Miss England II* in Argentina, but not by enough to set an official record, so later that summer in Italy he raised the mark again – this time to 110.28mph. Again Wood beat it. Then in the new *Miss England III* Don raised the bar twice in the summer of 1932 on Loch Lomond, only for Wood to take the record back again in his new boat, the four-engined *Miss America X*.

Wood's last record stood at 124.48mph. Seven years later, after trials on the loch, Sir Malcolm Campbell shipped *Bluebird K3* to Italy and in two attempts on consecutive days raised it to 129.56mph. He broke it again in 1938 in Switzerland, but became convinced that *Bluebird K3* was at her limits – any new attempts would require a new boat. Meanwhile, there was no riposte from across the water. For the first time in a generation, the record was incontestably British.

Bluebird K4, commissioned the following year, embodied all the latest thinking. Fred Cooper was involved with the initial drafting of the new shape, but got no credit for it once the project was transferred to the care of Peter du Cane at Vosper's. The newest thing in fast boats was the 'Ventnor three-pointer', pioneered by Ventnor Boat Works of Atlantic City, and *K4's* radical



A cutaway drawing of Bluebird K3 from the issue of June 25, 1937.



Sir Malcolm Campbell at the helm of K4.

print the existing record of 130.93mph may have been broken."

And so it was. In the next issue a jubilant magazine gave the new record a three-page splash. "Bluebird's wonderful achievement on Coniston water. An average speed of 141.74mph." This trouble-free record attempt took place "despite the stories of opposition by a few local residents who felt that their perpetual rural calm was being disturbed. Prior to the first trial, Sir Malcolm received an address of welcome from 485 local residents, who styled themselves 'Friends of Sir Malcolm Campbell' in contra-distinction to the 'Friends of Brantwood' – Ruskin's residence – who were supposed to be bitterly opposed to Coniston being used for record attempts."

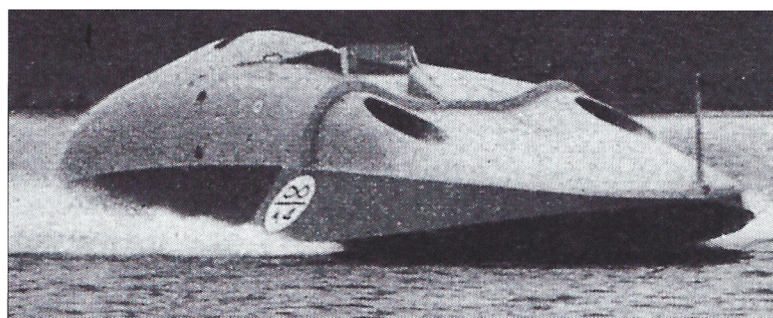
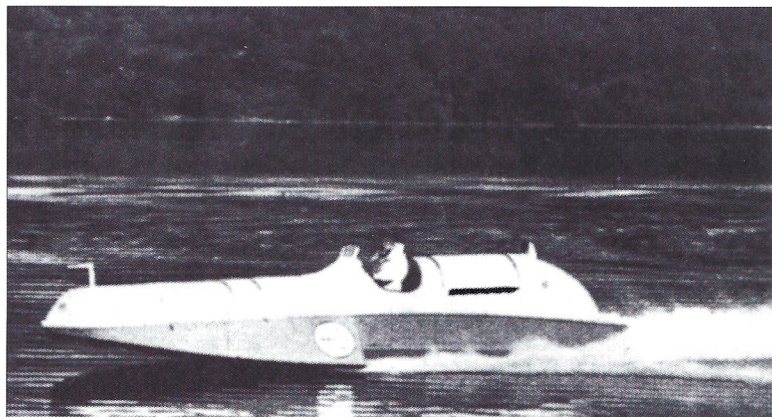
That was the end of Sir Malcolm's record-breaking, but not the end of his attempts. After WW2, at the age of 63, he re-engined *Bluebird K4* with a jet engine, a De Havilland 'Goblin' of 3,000lb thrust, giving the equivalent of about 3,000hp. The boat had to be substantially rebuilt, and emerged unrecognisable from the Vospers sheds. Britain still had its world lead in jet engine development, and nothing like this had been tried before. The Union Internationale Motonautique was persuaded to amend its rules for record-breakers to take account of the fact that *K4* no longer had a propeller – although the rudder had been enlarged to counter anticipated problems with directional stability.

It was all to no avail. The boat wouldn't steer.

shape was like a scaled-up Ventnor racing boat. Models were tested at the Admiralty's tank at Haslar, and in the Vickers wind tunnel in Weybridge. *The Motor Boat* was impressed.

"The boat makes contact with the water at three points," the magazine reported on 11 August 1939, "viz., the two stabilisers forward and the small after planing surface. The resistance from contact with the water when travelling at high speed should be considerably less than with a hydroplane of the usual design." This was cutting-edge boat design. The old *Bluebird K3* had been a direct descendant of the Edwardian stepped hydroplanes, but *K4* was something else. The engine, again, was a Rolls-Royce R-type V-12.

The following week *The Motor Boat* viewed *K4* and spoke again to Sir Malcolm about his prospects. "By the time these words appear in



Bluebird K4 pictured before (top) and after her post-war conversion to jet power.

Trials at Coniston in the summer of 1947 proved frustrating and inconclusive. *The Motor Boat's* man on the spot was future editor Frank Snoxell: "I arrived at Coniston to find hundreds of motorcars and a crowd of people gathered at the slipway (close to which eight telephone booths had been erected) and the boat on the slip awaiting favourable weather conditions." We know it was Snoxell because he signed the piece. He also wrote it in the first person, and did not

shrink from telling the story from his own point of view: very unusual at the time in a news feature, and a sign of the changes making themselves felt in every area of life since the end of the War.

Snoxell cadged a ride in one of the observers' launches, and narrowly escaped being run down as Campbell, his goggles misted over by spray, could barely see where he was going. At the end, the journalist was philosophical: "It would have been fortunate indeed had this first attempt been crowned with success. Even now it may be possible to modify *Bluebird* as to make her completely successful with the jet engine. But the most satisfactory way of tackling the problem would be to start with the installation and have the boat designed specially to suit it. I believe this is Sir Malcolm's ultimate intention."

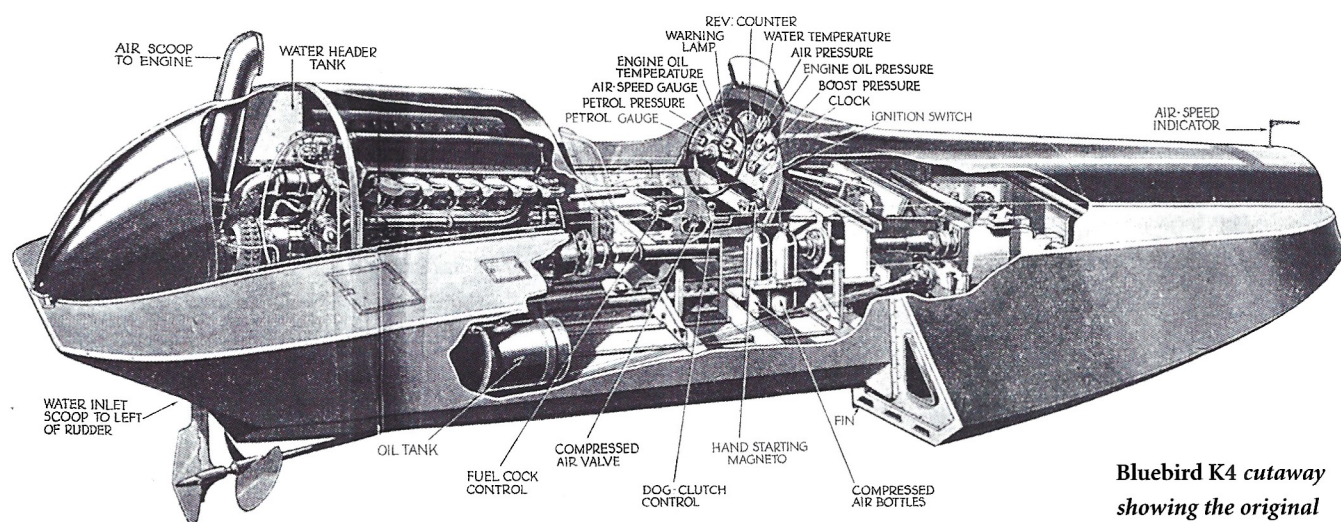
It may have been, but he died, aged 63, on the last day of 1948. The old man left some challenging, unfinished business for his son to do, but for his son life was more complicated than that. At 27, Donald had grown up in the shadow of this successful, arrogant and domineering father, watching world records from the sidelines in his school uniform and receiving, by all accounts, little in the way of support, encouragement or fatherly affection. He felt he had much to prove – to himself, to the world and, in his own mind, to his father.

He immediately set about re-engining *K4* with its old Rolls-Royce R, took it to Coniston in 1949 – and failed. "It was a great disappointment to Campbell and his staff and the many spectators

Transatlantic records

Records set on the traditional 2,948-nm liner route, from New York to Bishop Rock lighthouse in the Scilly Isles. Vessels marked* qualified for the Hales Trophy.

Date	Vessel	Loa	Builder	Time	Ave speed
1952	<i>SS United States*</i>	990ft 0in (301.83m)	Newport News	3d 10h 40m	35.59 knots
1986	<i>VAC II</i>	72ft 0in (21.95m)	Brooke	3d 8h 31m	36.61 knots
1989	<i>Gentry Eagle</i>	109ft 11in (33.50m)	Vosper Thornycroft	2d 14h 7m	47.46 knots
1990	<i>Hoverspeed GB*</i>	242ft 9in (74.00m)	Incat	3d 7h 54m	36.90 knots
1993	<i>Destriero</i>	219ft 10in (67.00m)	Intermarine	2d 6h 55m	53.68 knots
1998	<i>Catlink V*</i>	298ft 6in (91.00m)	Incat	2d 20h 9m	43.26 knots



Bluebird K4 cutaway showing the original R-type engine.

who had assembled,” noted *The Motor Boat* disapprovingly, “when the official figures revealed that his average speed was more than 6mph below the existing record.”

Meanwhile, the world water speed record fell once again to the Americans. Stanley Sayres’s *Slo-Mo-Shun IV*, a propeller-driven raceboat, lifted the record to 160mph in 1950, and again to 178.49mph in 1952. Things continued to hot up. The British driver John Cobb built his jet-powered *Crusader*, which received huge publicity in *The Motor Boat* in August 1952 – Peter du Cane, its designer, contributed a long technical article on the design and construction. It had a 5,000lb-thrust De Havilland ‘Ghost’ engine. “The *Crusader* venture has been carefully conceived and seriously carried out,” judged the magazine after viewing the boat at New Malden. “We wish it every success.” Cobb broke the 200mph barrier on Loch Ness, but the boat broke up on the return run and he was killed. Then the Italian racer Mario Verga was killed on Lake Iseo in 1954, having also unofficially bettered Sayres’s time. His *Laura III* was an Alfa Romeo-powered three-pointer.

At the end of that year *The Motor Boat* ran a thoughtful leader musing on the speed limits of waterborne propellers and the potential for jet-powered boats. For Campbell had been busy. A new boat was under construction, and the magazine had the story: *Bluebird K7* was a



three-pointer designed by the Norris brothers, with a 4,000lb thrust Metropolitan-Vickers ‘Beryl’ jet engine.

This was more like it. No more second-hand boats, no more half-cocked attempts – the magazine was happy to fall into line. “Donald Campbell merits all encouragement and support, especially as his is no reckless or slapdash venture,” it declared, “but a scientifically and methodically prepared enterprise, designed to avoid unnecessary risks – certain risk there must be – and so increase the likelihood of bringing back to Britain the honour of the water speed record, at present held by the USA.”

So began the *The Motor Boat*’s 12-year love affair with Donald Campbell. Every attempt on the world water speed record would be

Slo-Mo-Shun IV held the world water speed record for five years until Campbell reclaimed it for the family in 1955.



**Donald Campbell
pictured in 1955
with the new K7.**

exhaustively covered, and the man himself was frequently interviewed and profiled. His character, in all its complexity, was allowed to come through. His astonishing series of records between 1955 and 1964, which raised the world mark by almost 100mph, was unprecedented, and at one point he held both land and water speed records in the same year – a feat which is never likely to be matched.

In 1966 Campbell contributed an article that described the ‘water barrier’: the difficulties encountered on even the calmest water at speeds above 215mph. No-one else alive was qualified to write it: “At this point, vision starts to go; instrument panel, nose, water, horizon become one vibrating, merging blur. The right foot, however tightly wedged on the throttle, goes out of control. The engine revolution counter oscillates wildly, faster than the eye can follow the needle. In this situation a hand throttle is useless, since directional control is akin to running whilst carrying a shallow tray of water. Both hands are best kept on the wheel.”

Best of the rest

Since the golden age of record breaking few attempts, personalities or boats have excited the magazine’s interest in the same way as the *Miss Englands*, *Miss Americas* and *Bluebirds*. A spate of RIB-based round-Britain attempts in the 1980s were covered for their novelty value, but the magazine was not above joking that the real accolades in such ventures should go the poor technical teams, trying to keep up with the boats in minibuses. Subsequent attempts sometimes barely made the news pages, and even the Scorpion racing RIB *Hot Lemon*, the latest and most spectacularly successful round-Britain record breaker (under 38 hours in 2002, in the sub-50ft/15.24m class) only warranted a few column inches – even though the hull was based on a design by the magazine’s own technical editor, Dave Marsh. The outright record had been set the year before by Fabio Buzzi, who averaged over 50mph in an 80-footer (24.39m) – and made the front cover.

The Nigel Irens outrigger *Ilan Voyager*, which set a round-Britain record in May 1989, was noted for its technical interest, as was its successor, the somewhat larger *Cable & Wireless Adventurer*, which set a round-the-world record in 1998. More recently Alan Priddy’s ill-fated attempt to beat that in a 30ft (9.15m) RIB was documented in some detail, but the focus of the article was on the physical and psychological damage done to the crew, not on the boat or the record.

None of these projects seemed quite relevant to the magazine’s bread-and-butter business of motor boating, and the people behind them seemed to lack that vital spark – whether it was glamour, verve, courage or heroism – that in less cynical times had made Segrave, Wood, Don and the Campbells into such great copy. As for the ultimate story, the world water speed record, there has been nothing concrete to report since Ken Warby’s 317.18mph of 1978 – although as recently as May 2002 the magazine ran a detailed technical appraisal of the two projects, one British and one American, which were reckoned most likely to have a crack at it.

One record did excite the magazine’s passions, however. For a few mad years at the end of the 1980s, millionaires in Britain, the US and Italy engaged in a series of furious – and often futile – attempts at

breaking the record for crossing the Atlantic. Cougar Marine started it. No longer content to make a living from the precarious offshore racing market, the Hamble boatbuilder was keen to develop its military and commercial arm, and had a design for a long-range patrol catamaran of 65ft (19.81m). In Richard Branson they found the perfect sponsor – a popular, wealthy and adventurous individual desperate to publicise his new airline.

Virgin Atlantic Challenger sank, famously, on 15 August 1985, less than 150 miles from the Scillies, on track to break the liner *United States's* transatlantic record by three hours. It had either hit something or, after three days of relentless pounding, a weld in the aluminium hull had simply split – no-one knows. But Branson and the team were back the following year, with the Sonny Levi and Peter Birkett-designed *Virgin Atlantic Challenger II*, a 72ft (21.95m) monohull built by Brookes in Lowestoft. This time, after a difficult 80-hour passage, they shaved two hours off the record.

Both ventures were covered in depth by *Motor Boat & Yachting*, and Branson's spirit of adventure proved infectious. American powerboat racing millionaire Tom Gentry endeared himself to *MBY* by choosing a British designer (Birkett again) and a British shipyard (Vosper Thornycroft) to produce *Gentry Eagle*, a beautiful 110-footer (33.50m) with two 3,480hp MTUs, for the transatlantic record. Meanwhile Paolo Vitelli, owner of Italian boatbuilder Azimut, had recently acquired the Benetti shipyard and was looking for a high-profile publicity-generator. *Azimut Atlantic Challenger* was 88ft 7in (26.82m) long, with 7,400hp courtesy of four CRM engines. Both boats used waterjets, and both aimed to run in the summer of 1988.

They set off from New York within three hours of each other, but both ran into worse weather than they were expecting and gave up. The Italians called it a day, but Gentry came back in 1989 and set a new record of just over 62 hours. This lasted three years until it was beaten by the Aga Khan's yacht *Destriero*, a fast-ferry prototype.

Meanwhile the ferry companies had got in on the act, led by Hoverspeed, after realising that their commercial vessels were entitled to claim the famous

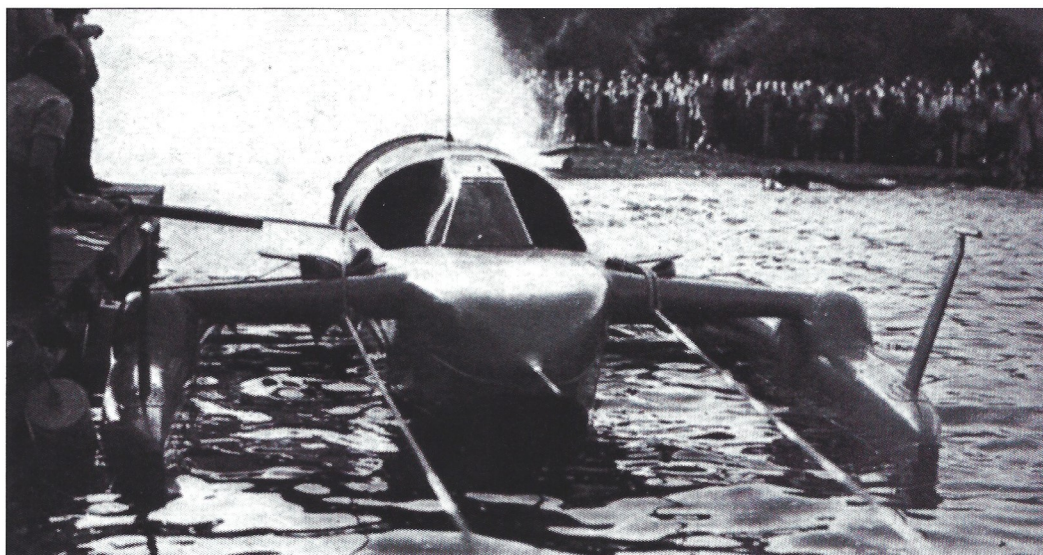


Hales Trophy, last awarded to the liner *SS United States* in 1952. They didn't even have to go out of their way: their fast Australian-built catamarans all crossed the Atlantic on their delivery trips to Europe. As far as *MBY* was concerned, this took the fun out of it.

Top: VAC II.
Above: Cable & Wireless.
Below: Azimut Atlantic Challenger.



A static engine test of Bluebird K7 prior to the 1955 record attempt.



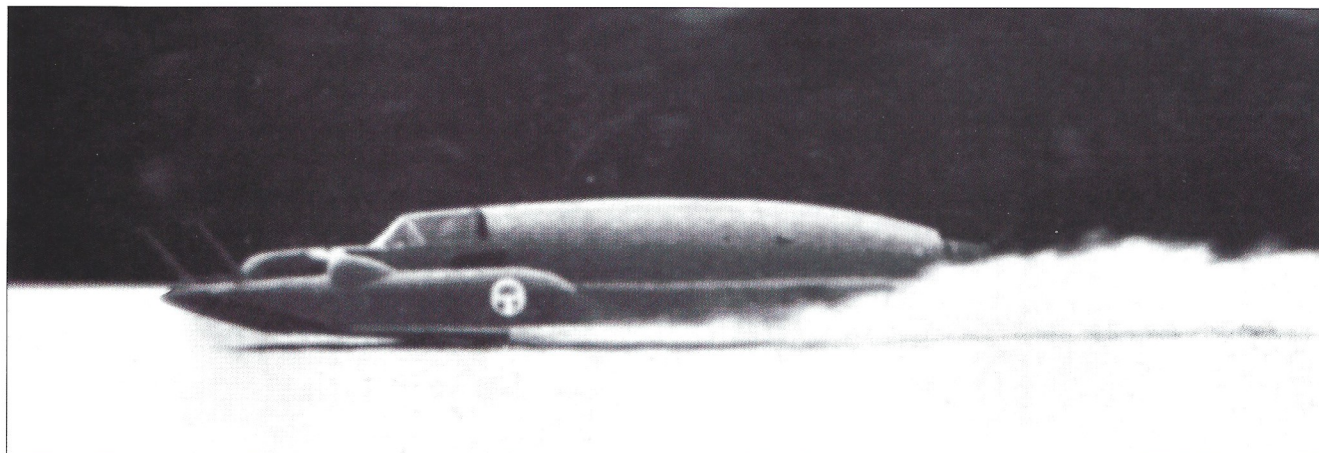
The world water speed record: famous duels

MISSIS ENGLAND vs MISSIS AMERICA: SEGRAVE, DON AND WOOD

Date	Boat	Driver	Location	MPH
23.3.29	Miss America VII	Garfield Wood (USA)	Miami Beach	93.12
13.6.30	Miss England II	Sir Henry Segrave (UK)	Windermere	98.76
20.3.31	Miss America IX	Garfield Wood (USA)	Miami Beach	102.25
16.4.31	Miss America IX	Garfield Wood (USA)	Miami Beach	103.07
24.4.31	Miss England II	Kaye Don (UK)	R. Parana	103.49
9.7.31	Miss England II	Kaye Don (UK)	Lake Garda	110.28
5.2.32	Miss America IX	Garfield Wood (USA)	Miami Beach	111.71
18.7.32	Miss England III	Kaye Don (UK)	Loch Lomond	117.43
18.7.32	Miss England III	Kaye Don (UK)	Loch Lomond	119.81
20.9.32	Miss America X	Garfield Wood (USA)	Lake St Clair	124.48

SON vs FATHER: DONALD AND MALCOLM CAMPBELL

1.9.37	Bluebird K3	Sir Malcolm Campbell (UK)	L. Maggiore	126.32
2.9.37	Bluebird K3	Sir Malcolm Campbell (UK)	L. Maggiore	129.56
17.9.38	Bluebird K3	Sir Malcolm Campbell (UK)	Hallwiler	130.86
19.8.39	Bluebird K4	Sir Malcolm Campbell (UK)	Coniston	141.74
26.6.50	Slo-Mo-Shun IV	Stanley Sayres (USA)	Seattle	160.32
7.7.52	Slo-Mo-Shun IV	Stanley Sayres (USA)	Seattle	178.49
23.7.55	Bluebird K7	Donald Campbell (UK)	Ullswater	202.32
16.11.55	Bluebird K7	Donald Campbell (UK)	Lake Mead	216.23
20.9.56	Bluebird K7	Donald Campbell (UK)	Coniston	225.63
7.11.57	Bluebird K7	Donald Campbell (UK)	Coniston	239.07
10.11.58	Bluebird K7	Donald Campbell (UK)	Coniston	248.62
14.5.59	Bluebird K7	Donald Campbell (UK)	Coniston	260.35
31.12.64	Bluebird K7	Donald Campbell (UK)	Dumblenyung	276.30



Bluebird K7 takes the world water speed record on Ullswater in 1955.

The editor, Erroll Bruce, wrote a sensitive obituary in the issue of January 13, 1967. Campbell had made one last, fast run at Coniston the week before, and then, without waiting for the water to settle, had immediately turned and set off back down the lake. He seemed impatient. It was a fatal error.

The editor and the record breaker had known each other. Campbell had been to the MBY offices, and Bruce had stayed at the Campbell bungalow in Coniston during the latest round of trials, writing approvingly of the spirit and professionalism in the team, led by Leo Villa, Sir Malcolm's old mechanic. Campbell sat Bruce in the boat's cockpit and clamped down the canopy, "so that he could explain to me better his feelings – not so much when he had started on a trial, as when he was strapped in and waiting for the

radioed 'OK' from Leo. 'I hate it then' – and he looked at me almost with anger; 'I really loathe it, Erroll. But I'd hate to be in Leo's place even more. If the chop comes, I'd rather be in it than watching it.' No-one was more aware of the danger than he, he had lived with it on his mind ever since in 1960 he crashed in the *Bluebird* car at 300mph on Bonneville Salt Flats.

"Just before I turned in on the bed he made up for me with cushions on the floor of his bungalow's sitting room, Donald came back from his room with a bundle of his clothes that he was lending me for next day's work afloat. 'If the chop comes, Erroll, I hope I'm going ruddy fast at the time.'"

For all the talk about Campbell's inner demons, there was another driving force behind that final, impatient and doomed attempt on his own record. The Peter Milne-designed 13ft and 17ft (3.96m and 5.18m) Jetstar speedboats, manufactured by Campbell's company Bluebird Marine, were making their public debut at the 1967 London boat show. The record attempt had to succeed. Campbell was beset by financial worries, as securing funding for these record attempts had proved to be a good deal more difficult for him than it had been for his father – in the jet age, with aeroplanes flying at twice the speed of sound, it seemed that the public just weren't that interested.

So the Jetstar was vital. If Campbell could set a new record, it would secure some timely and much-needed publicity. But he died on January 4 – the first day of the boat show.



Ken Warby's Spirit of Australia record, 317.18mph set in 1978, still stands.