Sonny Levi

Behind every successful fast boat is a successful designer. Behind a great number of the successful fast boats of the modern era is Sonny Levi

TEXT ALAN HARPER **PORTRAIT** SUZANNE GRALA

With his cosmopolitan charm this Indian-born, French-educated, RAF-trained Italian helped define the style and spirit of a decade. For home-grown talents he was both an influence and an inspiration. The mention of his name produces exclamations of respect and admiration from the boatyards of Cowes to the quaysides of Miami and Viareggio. Throughout the sixties and seventies, and into the eighties, Sonny Levi's boats pushed the boundaries further, and often went faster, than anyone else's. And they looked fantastic.

He is known as a powerboat designer, almost without peer. But a glance through his back catalogue reveals an astonishing variety of achievements: deep-vee raceboats, surface drives, boats with wings, raceboats with needle-like wave-piercing bows, futuristic experimental protoypes, record breakers, three-pointers, a sailing cruiser with twin diesels and planing hull. He has even designed aeroplanes – not idly sketching at the breakfast table but in order, of course, to build and fly them.

At heart he seems to be an engineer. "I do enjoy a problem," he pronounces. "To solve a problem is fascinating." Right on cue our photographer's tripod turned out to be a bit wobbly and the renowned designer was soon examining it, determined to cure the fault for her. "Ah! It's Italian!" he exclaimed. "Excellent. What a fine piece of engineering. There – that will last for years." The tripod was mended. The photographer was charmed. It is not an uncommon reaction.

"Sonny is a gentleman," says the writer and broadcaster Dick Johnson, who encountered Levi regularly during his time as technical editor of *MBY*. "Intelligent, articulate and charming – he's an absolutely delightful man.

"And as a designer he's up there with Ray Hunt. The early American deep-vees were pretty agricultural; I'd credit Sonny with refining the concept. The American boats were all about brute force, but Sonny's had a tremendous elegance. They were beautifully drawn."

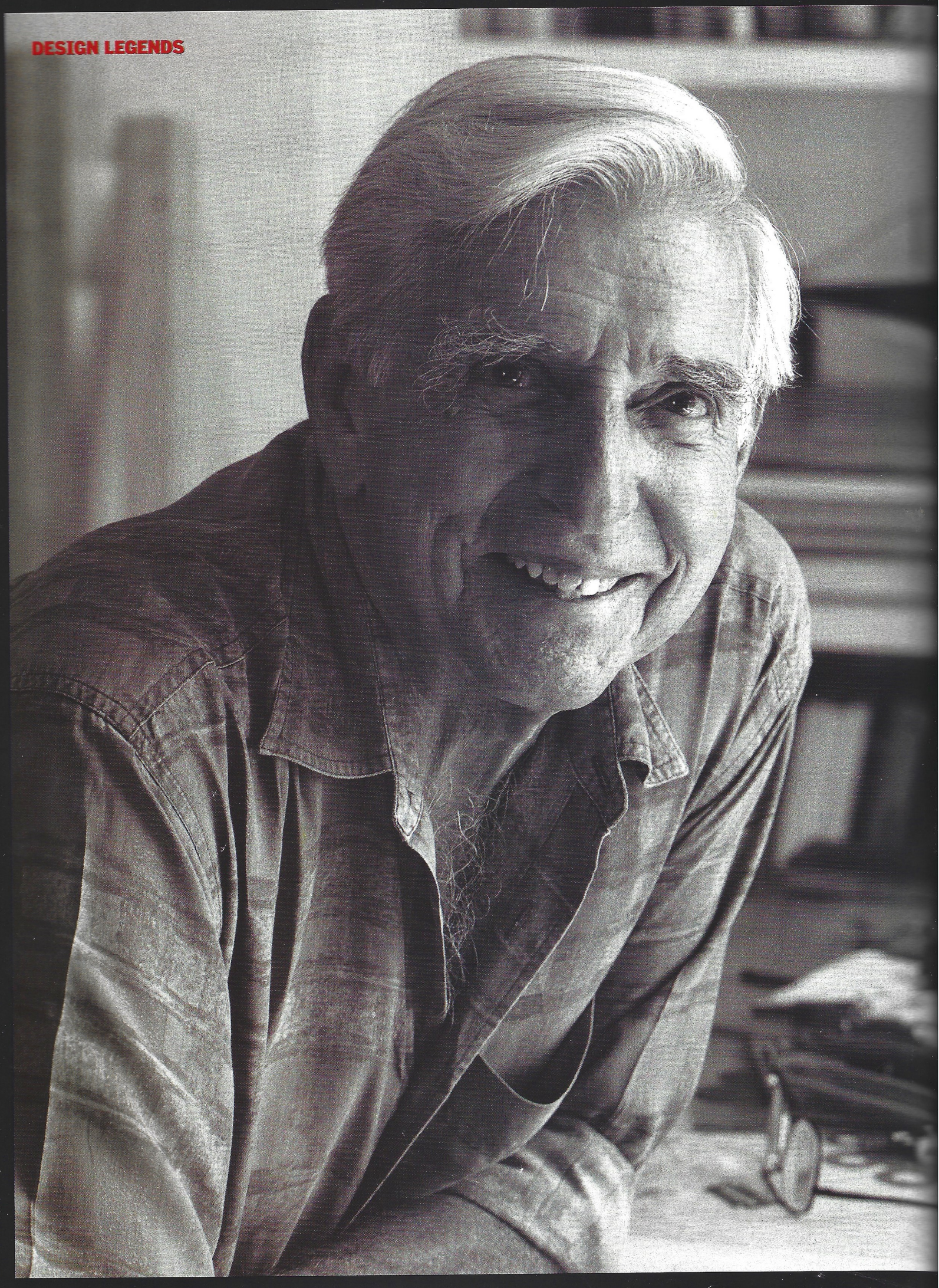
Born in Karachi 75 years ago, Sonny Levi was at school in Cannes when the war broke out. His father, an interior designer and manufacturer, and enthusiastic motor yachtsman, moved into Government contract boatbuilding at a shipyard in Bombay. From this early age the young Renato ('Sonny' was bestowed by an *ayah* who could not manage the letter 'r') designed boats, inspired by the multitude of local craft in that seafront city. He joined the RAF and trained in England, studied aircraft design on demobilisation and returned to Bombay, where by 1950 he was chief designer in his father's busy drawing office. In 1960 he moved to Italy to work for Navaltecnica in Anzio.

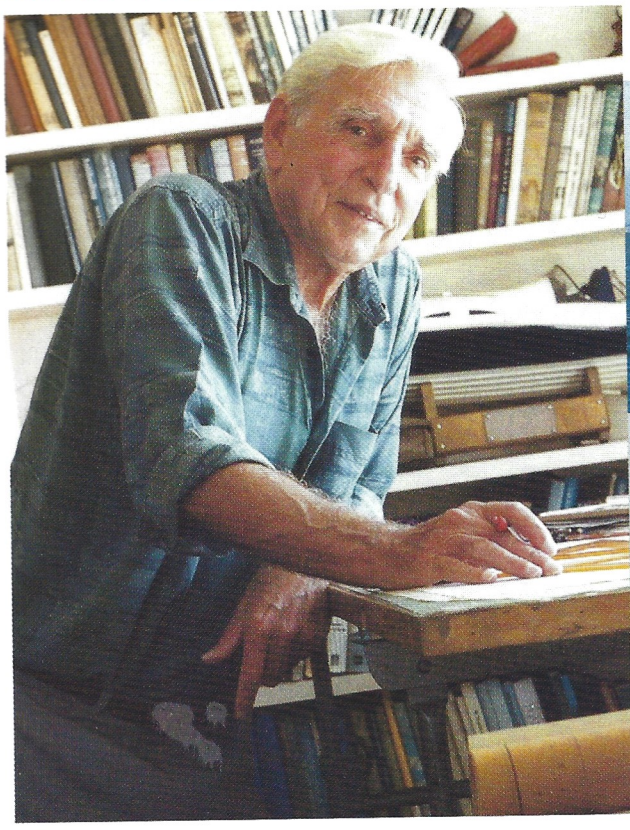
"I have been very fortunate to have clients who are prepared to take risks," he says today. "I always tried to be as honest with them as I could when we discussed their projects. And occasionally something didn't work. This is the problem with original design."

But for every failure there were a great many ground-breaking successes, and it seems typical of the man to ascribe these to luck and pass on credit to his customers – even if they were signing the cheques. But when you look at some of the projects he involved them in you begin to see what he means: so many of the designs were at the cutting edge of naval architecture, where success was by no means certain. Like an artist with wealthy patrons, whenever he had an idea for a new work he could usually find someone to pay for it. Rich playboy powerboat racers would find themselves enthusiastically funding outlandish and dramatic experimental prototypes. Commercial boatyards would be talked into daring new engineering solutions on the promise of more speed and efficiency. If Sonny Levi is a problem solver at heart, he is one who has never seemed inclined to solve the same problem twice.

"They loved him in the yard," recalls Emrhys Barrell, assistant manager at Groves & Guttridge, Cowes, in the early seventies. "He'd muck in with everyone. I seem to remember we had one sweeping outline drawing of the boat that was passed from department to department, and then dozens of incredibly detailed drawings of important places, like the join between the tanks and the bearers."

This was 1974, and the boat in question was the elegant





The elegant step-drive *Alto Volante* (38ft 6in/11.73m, 500hp/42kts), built for Shaun Normanton

38ft 6in (11.73m), 42-knot *Alto Volante*, which was being built as a cruiser-racer for Shaun Normanton (see p89). "Levi made great-looking boats, and they went great, too," continues Barrell. "He seemed to just know what was right – he was an intuitive, instinctive designer. The boat was entered in the Cowes-Torquay as soon as it was launched and I was trying to calculate its tank capacity on my slide rule when Sonny turned up and said, 'Put in 250 gallons, that will get it there and back.' Bear in mind this was a brand-new boat, and even Sabres couldn't tell us exactly how much power the engines were producing, because they'd been so heavily tweaked – but Sonny was right. The man was an absolute wizard."

Some years later Barrell encountered Levi again, at the Viareggio boat show. "We were doing a run out on one of his 35-footers," Barrell recalls, who by now was technical editor of *MBY*. "It was rough, and we were banging and crashing all over the place. Sonny said he'd drive and as soon as he took the helm it was like Concorde taking off: the boat just flew beautifully, straight, level and fast. He knew exactly what to do."

So far ahead of its time was *Alto Volante* that even today, nearly 30 years after its launch, the mainstream production boatbuilders haven't caught up – and they won't, Levi contends, until they embrace surface propulsion. A typical modern sportscruiser of the same size as *Alto Volante* requires 40% more horsepower to achieve 90% of the speed, hampered a little by the extra weight that modern market expectations load onto today's boats, but a lot by the 'appendage drag' of its shafts, props and rudders.

This aspect of naval architecture, crucial to the pursuit of pure speed, has long been an obsession of Levi's. The famous racer *Surfury* of 1965 had two engines driving just one shaft, and the search for even more propulsion efficiency led its designer inexorably towards the idea of no shafts at all: not in the water, at any rate.

"Kiekhaefer wouldn't sell me his racing outdrives, so I had to find my own solutions," he says. Exploratory sketches led to the awesome *Dart*, a 1,000hp winged Class 2 racer, which looks radical even today. Hidden beneath the stern the single propeller shaft emerged directly from the transom to run with just half its disc in the water at speed, a soon-to-be patented development that Levi calls his 'step drive'. The first production cruiser with surface drives soon followed. When the Italcraft Drago was introduced at Genoa in 1972, it was one of the fastest diesel boats ever built: 50 knots from two 370hp Cummins. It was soon built in large numbers for the Italian customs. Comparing the Drago with the 40-knot *Hidalgo* of a few years before, which had the same shape,

Design briefs

1961 *'A Speranziella*. 7th in Cowes-Torquay

1962 *Ultima Dea* (36ft 0in/10.79m, 1,290hp/46kts)

1963 First Cowes-Torquay win (*'A Speranziella*)

1965 *Surfury*. 3rd in Cowes-Torquay

1966 *Merry-Go-Round* (36ft 9in/11.20m, 1,100hp/52kts). World diesel record holder

1966 Delta 28 (28ft 0in/8.53m, 1,050hp/60kts). Later wave-piercer test bed (1968)

1966 *Fat Cat* (20ft 4in/6.20m/300hp). First offshore racing catamaran (Class III)

1967 *Surfury* and *Delta Synthesis* placed 1st and 2nd in Cowes-Torquay

1971 *Corsara*, Delta 48 cabin cruiser (48ft 6in/14.80m, 2,700hp/51kts)

1972 Italcraft Drago. First surface-drive cruiser

1972 *Dart*, first racing boat with surface propulsion

1974 *Alto Volante*

1975 Riva 2000 (37ft 0in/11.25m, 1,050hp, 53kts, step drive)

1975 *Arcidiavolo II* (34ft 6in/10.50m, 500hp/67kts). Three-point step-drive racer

1977 *Trifoglio* (59ft 0in/18.00m, 1,300hp/30kts)

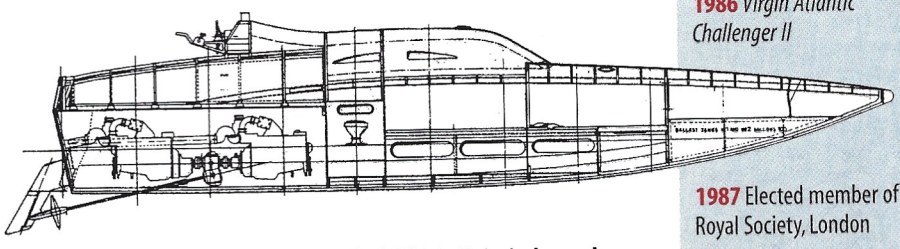
1986 *Virgin Atlantic Challenger II*

1987 Elected member of the Royal Society, London

1988 *G.Whiz*

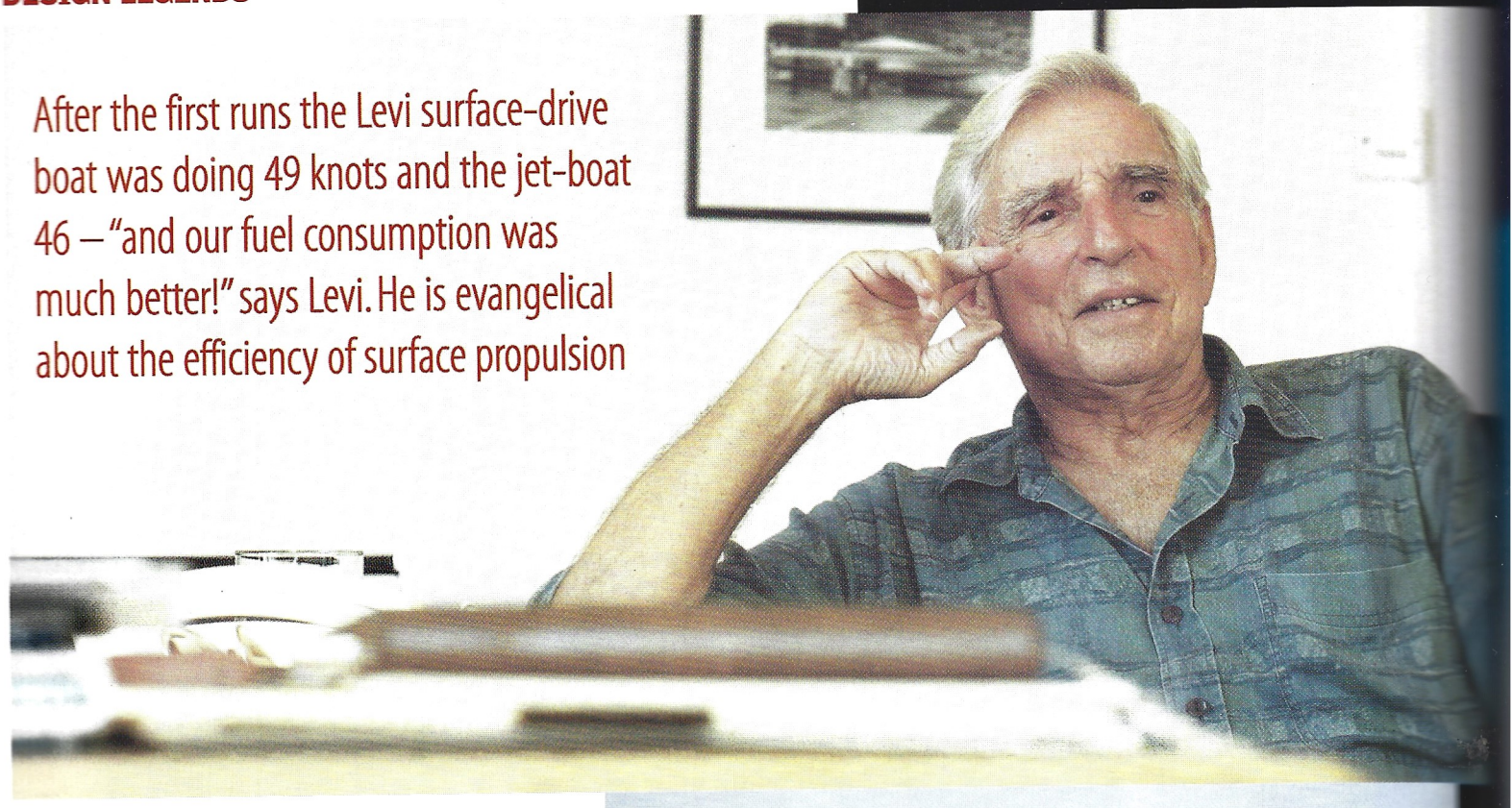
'A Speranziella (30ft/9.14m, 600hp/38kts – later 800hp/42kts)

Dart (37ft 9in/11.50m, 1,000hp/70kts). Note the 'step drive'.



***Surfury* (36ft/10.97m, 1050hp/57kts). Note twin-engine, single-shaft arrangement, an idea picked up in the US.**

After the first runs the Levi surface-drive boat was doing 49 knots and the jet-boat 46 – "and our fuel consumption was much better!" says Levi. He is evangelical about the efficiency of surface propulsion



engines and weight but conventional shafts and props, Levi calculated that the earlier boat was using 300hp just to drag its own sterngear through the water.

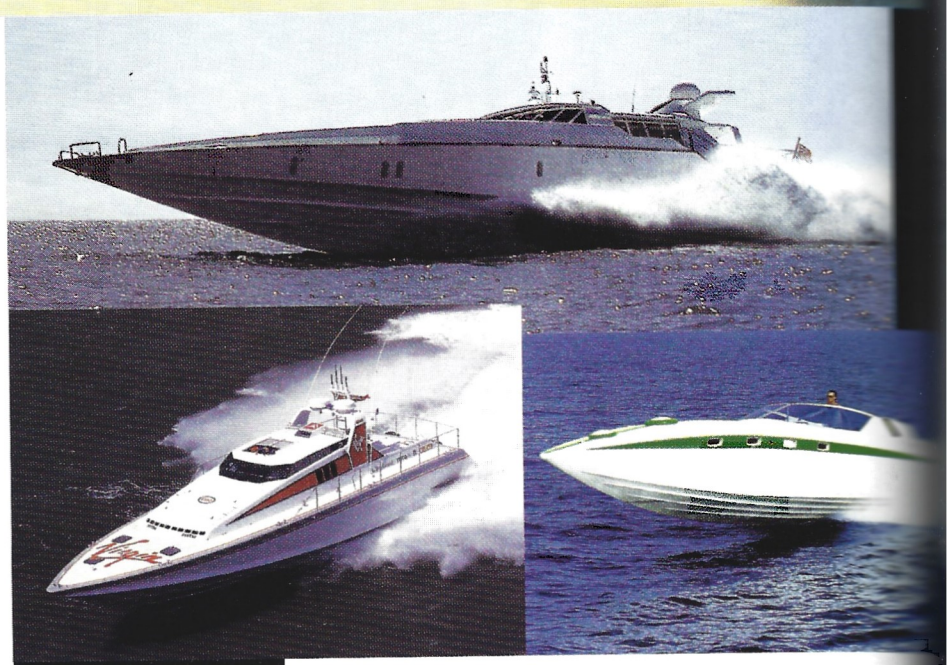
The 'step drive' led to the Levi Drive Unit, a bolt-on surface-drive system with distinctive tunnel rudders, of which thousands have been sold. Levi remains evangelical about the efficiency of surface propulsion. The rest of the world is catching up with his thinking, but only slowly. In trials for the Italian customs service two identical 54ft (16.5m) patrol boats were built by Intermarine, one with Levi Drives and one with Riva Calzoni waterjets. After the first runs the surface-drive boat was doing 49 knots, and the jet-boat 46. "And our cruising fuel consumption was much better!" says Levi. The Riva Calzoni engineers wanted to change impellers and try to improve their boat's speed. "I told them, very arrogantly, that they would never do it. The thrust pulls the stern down, the tunnels fill up with half a ton of water, then there is the drag of the shaft and bearings, bubbles in the tunnels... I said, 'Think of all this and how can you possibly beat a boat which has *no* appendage drag?' They stormed off."

Although it wasn't until the seventies that Sonny Levi and his family moved permanently from Italy to the Isle of Wight, Cowes has regarded him as one of its own since he first shipped *'A Speranziella* from Anzio for the Cowes-Torquay in 1961. Levi counts Vospers' legendary designer Peter du Cane as an early mentor. He is also an admirer of Ray Hunt's early deep-vees, especially for their downwind abilities, and found his friend James Beard's work at Cougar Marine particularly interesting.

Throughout the sixties every Cowes-Torquay race featured a clutch of Levi boats. Their rich and glamorous owners, and the association of powerful people and powerful boats continued throughout Levi's career. Dick Johnson remembers arranging to meet him at the Genoa boat show only to find a man in a mac and beret keeping the same appointment: King Baudouin of Belgium.

Levi's highest-profile design in the UK since the racing heyday was perhaps Richard Branson's *Virgin Atlantic Challenger II* in 1986. It looked for all the world like a scaled-up *Alto Volante*, but with its long range, immense power and surface drives it too was a radical design. And it made its record-breaking crossing less than eight months after the first sketches were roughed out on Levi's drawing board – a testament to the concept's soundness.

Today Sonny Levi divides his time between summers at home on the island and winters cruising aboard his elegant teak motor sailer in Malaysia. The boat, naturally, is his own design. It was built in India, naturally, under his supervision as the foreman of a largely untrained workforce. "I've built some lovely boats in my time," he explains, "but always in professional yards. I just wondered if I could do it by myself." Evidently he can: but he is a man who enjoys a problem. **MBY**



Top: the phenomenal *G.Whiz* (108ft 4in/33.00m, 7,000hp/50kts, Levi Drives), styled not entirely to Sonny Levi's satisfaction by Jon Bannenberg. Above: Richard Branson's *VAC II* (72ft 3in/22.02m, 4,000hp/50kts, Levi Drives), which set a trans-Atlantic record of 35.69 knots. Right: the amazing Italcraft Drago (42ft 8in/13.00m, 740hp/50kts) of 1971.

NEXT MONTH Bernard Olesinski