

BREMONT



CHRONOMETERS

LIMITED EDITION

COMET

DH-88

WATCH



TESTED BEYOND ENDURANCE

ISSUED FOR THE INFORMATION AND GUIDANCE
OF ALL CONCERNED

Nicholas

Giles

CELEBRATING THE GREATEST AIR RACE OF ALL TIME: THE BREMONT DH-88

“You have thrilled the world... Your epic flight has manifested the courage and endurance for which British airmen are justly famed. The world is indebted to you for demonstrating aviation’s ability to draw closer the peoples of the earth.”

SIR MACPHERSON ROBERTSON, 22 OCTOBER 1934

The Bremont 2016 Limited Edition celebrates the astonishing de Havilland DH-88 Comet, *Grosvenor House*, the aircraft that captured the world’s imagination with a phenomenal record-breaking flight in 1934. Fighting exhaustion and significant mechanical challenges, whilst barely stopping for over three days, two men in their pioneering British racing aircraft won the incredible air-race from England to Australia.

During the golden age of flight, the England to Australia record became the goal of many legendary aviators. The Smith brothers first completed the hazardous journey in 1919, taking 27 days and 20 hours. There would be many failures, but repeated attempts saw the time gradually reduced to just over seven days by 1934. The infamous MacRobertson Air Race aimed to, and succeeded in, shrinking that record further and in doing so, encourage the operation of a fast and safe commercial air route to Australia.

To commemorate this feat and to raise funds for the Shuttleworth Collection, Bremont introduces the ‘Limited Edition Bremont DH-88’ chronometer, a special timepiece which has been painstakingly handcrafted in the company’s workshops in England and in an elegant style reminiscent of that wonderful 1930s era. The 282 stainless

steel and 82 rose gold cases house the beautifully finished BE-54AE chronometer rated chronograph movement with GMT functionality. Constructed ensuring the durability and precision Bremont is renowned for, the timepieces also incorporate original spruce plywood from the undercarriage assembly of this winning aircraft.

Bremont Co-Founders Nick and Giles English, themselves pilots of de Havilland aircraft, feel a strong affinity for the Comet:

“That golden age of aviation is a period we have always loved. We were inspired by the great races of that time and the Comet, a true feat of engineering, is one of the most famous historic racing aircraft out there. The fact it’s still flying is amazing.” - Nick English.

“The Shuttleworth Trust is a unique museum with over 40 flying aircraft with some of the only flying examples of their type in the world. Founded by Dorothy Shuttleworth in 1944 in memory of her son who died in a flying accident, it was set up as a charity to keep these amazing aircraft flying. Both Nick and I, through our father, have always had close personal connections to the Trust and we are pleased to be supporting it with a percentage of all proceeds from the sales of the DH-88 watches going to the charity.” - Giles English.

The aircraft’s story perfectly encapsulates the core values that inspire Bremont. A tremendous engineering achievement, the Comet completed an adventurous journey that secured its rightful place in aviation history. Through its own example of fine British craftsmanship, the Limited Edition Bremont DH-88, Bremont pays tribute to the Comet.







TECHNICAL SPECIFICATION	
MOVEMENT	Calibre 13 ¼" BE-54AE automatic chronometer, 25 jewels, Glucydur balance, Anachron balance spring, Nivaflex 1 mainspring, 28,800 bph, 42-hour power reserve. Each Bremont DH-88 Limited Edition rotor features some of the spruce plywood used in the original 1934 de Havilland Comet 'Grosvenor House'.
FUNCTIONS	Hour, minute, second, date at 3H, chronograph small counters with seconds, 30 minutes and 12 hours, 24 hour GMT hand.
CASE	Available in hardened polished stainless steel or 18 carat rose gold. Bremont Trip-Tick® case construction with scratch-resistant DLC treated case barrel with vintage style crowns. Case diameter 43mm, height 16.2mm, lug width 22mm.
CASE BACK	Exhibition type with integrated flat crystal, secured with 5 polished headed screws. Engraved markings with specific limited edition serial number.
DIAL	Metal dial with fine opalin matt black base colour decorated with period Arabic numerals, opalin silver white sub-dials with DH-88 designation. Flat polished nickel (stainless steel version) and solid 18 carat rose gold (rose gold version) rounded hands with Super-LumiNova® centre fill.
CRYSTAL	Domed anti-reflective, scratch resistant sapphire crystal.
CERTIFICATION	C.O.S.C chronometer tested. Individually serial numbered with accompanying C.O.S.C certification.
WATER RESISTANCE	Water resistant to 10 ATM, 100 metres.
STRAP	Alligator strap with pin buckle to complement case material.

THE WORLD'S GREATEST AIR RACE

"You have been convened to make arrangements for an International Air Race from London to Melbourne in connection with the Centenary Celebrations. Make it the greatest race yet conducted in the world."

SIR MACPHERSON ROBERTSON'S CHARGE TO THE AIR RACE COMMITTEE,
DELIVERED AT ITS FIRST MEETING ON MONDAY 3 APRIL 1933

Excited voices and the roar of piston engines shattered the dawn at Mildenhall. Car headlights illuminated the darkness of the surrounding fields. On 20 October 1934, it seemed the world had descended upon this usually peaceful English airfield. An unprecedented crowd 60,000 strong came to witness the start of the MacRobertson Air Race. Even King George V and Queen Mary had visited to wish the participants good luck for their gruelling 11,300-mile journey.

Twenty aircraft waited to take off, with the greatest pilots of six nations ready in their cockpits, competing for fame, prestige and a £10,000 first prize. The participating types varied widely but one elegant design stood out. Great Britain's hopes for victory relied on the de Havilland DH-88 Comet, purpose built purely for the race. At 06:30 the flag dropped and at 45-second intervals the aeroplanes launched. The race was on. As the crowds drifted away, Mildenhall became quiet once more and their focus turned towards the finish line.

Sponsored by Australian businessman Sir Macpherson Robertson, the Royal Aero Club was engaged to oversee race proceedings. With no limit on aircraft size or power, competitors could compete for the speed race or best handicap performance. Along the route were five compulsory control points with the finish line at Flemington Race Course, Melbourne, where the victorious winner would fly low-level between two pylons.





DE HAVILLAND SAVES THE DAY

The race announcement generated great excitement in the aviation world, with enthusiastic pilots searching for generous backers to sponsor suitable aircraft. The press quickly realised that no British aircraft in production had the speed or range required to win the race. With modern American transport aircraft likely to scoop the prize and potential British embarrassment looming, Sir Geoffrey de Havilland proposed to design and build a new aircraft capable of victory, at a sale cost of £5,000. His company gambled on underwriting the production costs, hoping to gain considerable prestige if their design should win. Within weeks, three orders for the DH-88 Comet were submitted.

Using an updated version of the new Gypsy Six engine, they developed a streamlined twin-engine aircraft constructed of spruce plywood with a thin tapered cantilever high-speed wing. The aircraft had dual pitch propellers and a manually retractable undercarriage, state of the art features not seen before on British aircraft. To give adequate range, the long narrow fuselage would house three fuel tanks: two ahead of the cockpit and one behind. Sat in-line with dual controls, the pilots inconveniently shared just one set of instruments on the forward cockpit panel.

With time at a premium, de Havilland staff worked day and night to keep their promised delivery schedule. The aircraft were serious contenders, with a cruising speed of 220mph and a range of 2,900 miles. Painted an eye-catching racing red, Comet G-ACSS *Grosvenor House* made its first flight just eleven days before the race. Purchased by Albert O Edwards, Managing Director of London's prestigious Grosvenor House Hotel, it would be flown by pilots Charles W A Scott and Tom Campbell Black.

THE PILOTS

The two had met recently at the Royal Aero Club bar, quickly becoming firm friends. An ex-Royal Air Force pilot and current holder of the England-Australia record, Scott had flown for fledgling airline QANTAS, ferrying passengers and mail in Australia. Black learned to fly with the Royal Naval Air Service, later becoming a pioneer of East African aviation. After being selected to fly the Comet, Scott recalled, 'We had a look at the machine on paper, and both of us realised that if the real thing could be produced in the workshop, then we had the right aeroplane for the job'.

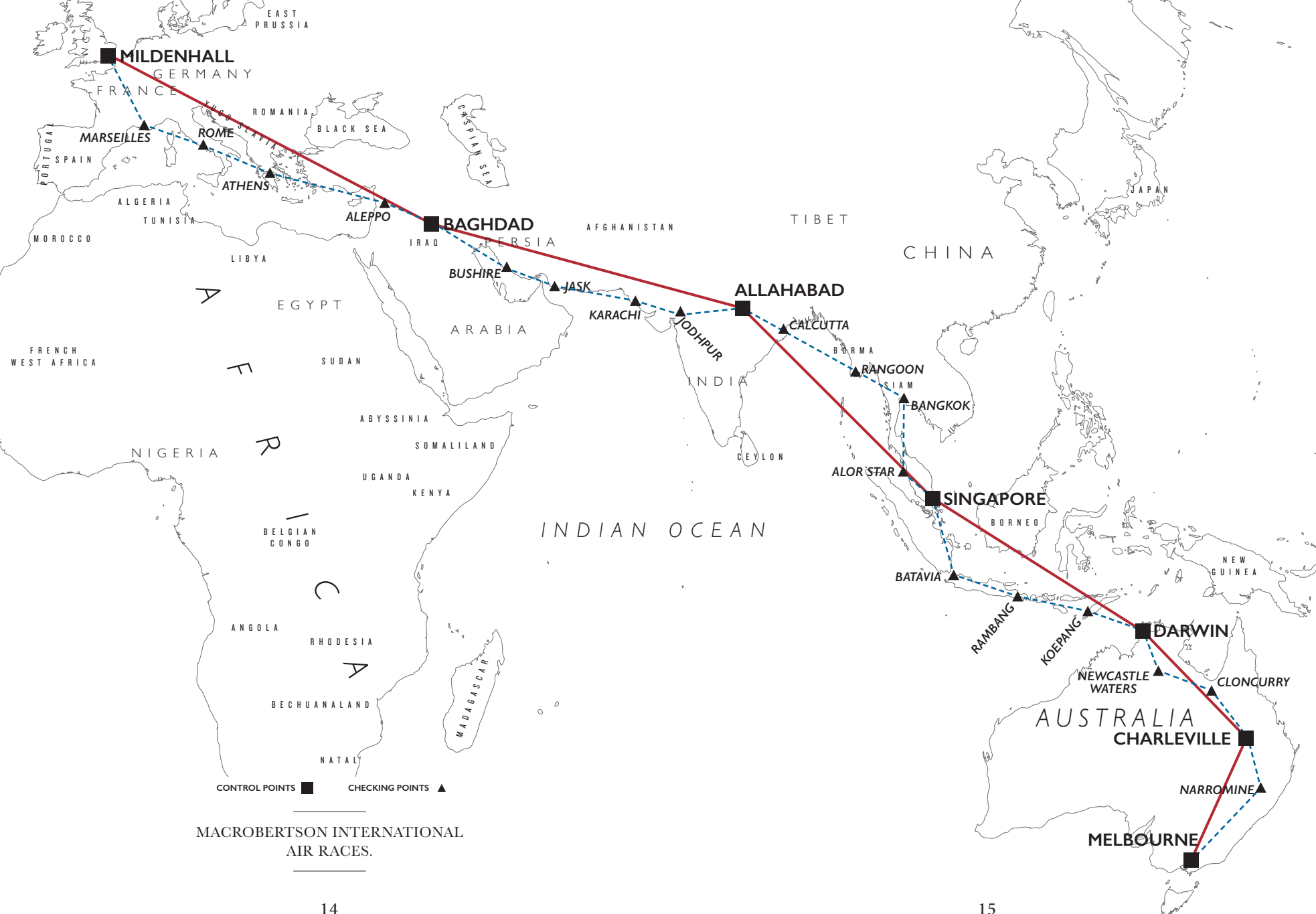
THE COMPETITION

Great Britain now stood a solid chance of winning, but victory was far from guaranteed. The race attracted aviation's most competent pilots, and participating aircraft types ranged from small single engine mono- and biplanes, competing primarily for the handicap prize, to larger state of the art transport aircraft.

Chief amongst the competition was the Dutch KLM entry, flying the very latest passenger aircraft, the Douglas DC2. KLM were keen to demonstrate the possibility of a fast, comfortable and safe air service to Australia. Their immaculately uniformed airline pilots would follow their regular air route for much of the race, and carry three passengers and a bag of mail for the Dutch East Indies.

An American entry came with the new Boeing 247D. A commercial competitor to the DC2, they hoped the race would prove the aircraft's pedigree. The other DH-88 Comets would also be a great threat to Scott and Black. Pilots Jim and Amy Mollison had purchased Comet *Black Magic*. A world famous aviatrix and first woman to fly solo to Australia, Amy was better known by her maiden name Johnson.





MACROBERTSON INTERNATIONAL AIR RACES.

CONTROL POINTS ■ CHECKING POINTS ▲

STAGE ONE – BAGHDAD

As many of the smaller aircraft struggled with bad weather over Europe, *Black Magic* forged ahead to reach Baghdad first at 7:10pm (all times GMT). The dust cloud from their take-off still lingered at 9:02pm when *Grosvenor House* arrived. Bad weather had forced an emergency landing at RAF Kirkuk, but by 9:33pm they left Baghdad to chase *Black Magic*. Next to arrive was the DC2, after seamless refuelling stops at Rome, Athens and Aleppo. After a spot of dinner, they departed Baghdad at midnight, closely followed by the Boeing that had narrowly escaped a close encounter with a mountain.

STAGE TWO – ALLAHABAD

Grosvenor House arrived first at 9:18am, 21 October, to be greeted by large crowds and blazing temperatures. The DC2 followed later with crew and passengers looking remarkably fresh. Departing at 3:15pm, they gained time on the Boeing, which landed at 10:26pm after struggling to find Allahabad. Their lead now well and truly lost, *Black Magic* arrived at 5:25am, 22 October.

After landing at Karachi in record-breaking time, their departure was twice aborted with an undercarriage problem followed by the loss of a vital map. Their situation worsened when a compass discrepancy left them hopelessly lost. Landing in a field with near empty tanks, they sourced cheap fuel from a bus station. Upon arrival at Allahabad, they discovered six engine cylinder heads and pistons burnt out. Their race was over.

STAGE THREE – SINGAPORE

Now utterly exhausted, the *Grosvenor House* pilots arrived at 10:31pm on 21 October, having battled through thunderstorms across the Bay of Bengal. Disaster was narrowly avoided when fatigue caused Scott to make a heavy downwind landing by mistake. Engineers pronounced the undercarriage unharmed and they proceeded at 11:42pm. The DC2 still held second place, arriving at 6:44am on 22 October, followed by the Boeing at 2:28pm.

STAGE FOUR – DARWIN

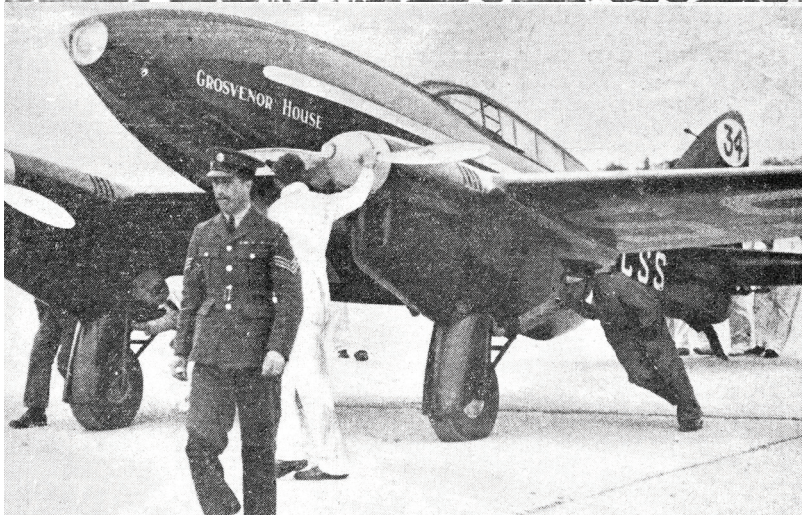
Grosvenor House headed to Darwin via Koepang. Scott recalled, 'I hate and loathe the Timor Sea. If anything happens to the motor there, that's the end of pilot and machine'. To their utter horror, halfway across, their port engine cut out. With only one engine to keep them safe, they were hugely relieved to sight land. Reaching Darwin at 11:08am 22 October, they were greeted by chaotic scenes. Vast crowds surged towards them and the press went wild at the incredible new record they had set. The pilots' concern was solely for their engines. Two hours later, although still running rough, their engine was pronounced serviceable and they departed. Hoping to gain from *Grosvenor House's* problems but now flying over unfamiliar territory, the DC2 landed at 11:00pm.

STAGE FIVE – CHARLEVILLE

After briefly losing their way and terrified their engines may fail, *Grosvenor House* arrived at 10:40pm on 22 October. Extremely fatigued but with victory in their sight, they waited impatiently whilst engineers installed two new cylinder heads. They took off but returned minutes later with low oil pressure. Scott began to lose hope, knowing the DC2 was catching up, but at 12:59am they got underway determined to complete the race.

SCOTT GETS THERE

£10,000 WON—ALL RECORDS BROKEN



VICTORY AT MELBOURNE!

Although the shortest leg, the final 787 miles to Melbourne felt never-ending for the exhausted *Grosvenor House* pilots. Still concerned for their engines, they struggled to stay awake and alert taking ten minute turns on the controls. When the city of Melbourne finally came into sight, Scott gratefully dived down towards Flemington Race Course, oblivious to the roar of ecstatic crowds.

Scott and Black had reached Melbourne in an outstanding time of 2 days and 23 hours. Utterly exhausted but jubilant, they were soon positioned on a podium in front of expectant public and eager press. Macpherson Robertson announced: 'You have thrilled the world... Your epic flight has manifested the courage and endurance for which British airmen are justly famed. The world is indebted to you for demonstrating aviation's ability to draw closer the peoples of the earth'.

After speeches and handshakes the pilots were allowed to take the rest they so desperately needed. Good wishes flooded in, including a cable from the King: 'The Queen and I warmly congratulate you both on your wonderful feat. We are very glad we saw you at Mildenhall before setting out on your great adventure, and trust that you are not unduly tired after the strain of the past three days'.

While Scott and Black were on the podium, others were still racing to the finish. After Charleville, the DC2 lost their way in darkness, and in desperation landed at Albury racecourse where the townspeople used car headlights to light an impromptu runway for them. Despite losing time, they secured second place on 24 October just a few hours ahead of the Boeing.



GROSVENOR HOUSE STILL THRILLING CROWDS

Alongside the determination and impeccable navigation skills of its pilots, the Comet had proved itself a winning design. The type continued setting records after the race. Only five Comets were manufactured and today *Grosvenor House* is the only remaining airworthy example, thanks to the care of the Shuttleworth Collection. Abandoned after the War, it was given to the Collection in 1965 and made its first flight post-restoration in 1987. Developed solely for the air race, the Comet's undercarriage proved to be a weak point under sustained use. After a failure in 2002 the Collection undertook approved modifications to strengthen it. The plywood used in the Bremont 2016 Limited Edition is taken from the original structure removed during this process.

By collaborating with the Shuttleworth Trust, Bremont is supporting their charitable works and proceeds from the Bremont 2016 Limited Edition will help keep the Comet airborne. Based at Old Warden, the sleek red racing machine regularly thrills crowds at summer air displays, reminding spectators of its victorious participation in the world's greatest air race.



Bremont is an award-winning British company producing beautifully engineered chronometers at our headquarters in Henley-on-Thames.

Time began for Bremont in 2002, when we embarked on a journey to make beautifully crafted pilot's watches of exceptional quality. Inspired by a love of flying historic aircraft, of watches and all things mechanical, our timepieces had to be tested beyond the normal call of duty. The watches in our core range are all COSC-certified and we are one of the few companies offering a 3-year warranty on every product. Immensely precise, reliable and durable, Bremont watches are hand built in limited numbers.

Each is designed to appeal to those who share our passion for - and appreciation of - the innovation and mastery behind a beautiful mechanical wristwatch. We hope you enjoy the same satisfaction when you try on a Bremont watch, as we do in creating one.

Nick & Giles English, Bremont Co-Founders

ACKNOWLEDGEMENTS

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All images and information correct at the time of printing



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