BREMONT WATCH COMPANY

Bremont is an award-winning British watch company manufacturing beautifully engineered chronometers at our Headquarters in Henley-on-Thames, England.

Time began for Bremont when we embarked on a journey to make beautifully crafted pilot's watches of exceptional quality. Flying historic aircraft has been in our blood from an early age, as has our love for watches, history, and all things mechanical. The timepieces had to be tested beyond any normal call of duty (and not just in the workshop), and of course be immensely precise and durable.

Bletchley Park has such an amazing place in world history and has not only inspired us to create the beautiful 'Codebreaker' watch, but enabled us to help raise funds and profile for the preservation of this important heritage site of which we are so proud.

Nick & Giles English, Co-founders

"Probably the most significant single war effort the British made and it (Bletchley Park) was conclusively and convincingly triumphant."

— Stephen Fry, British Actor & Author

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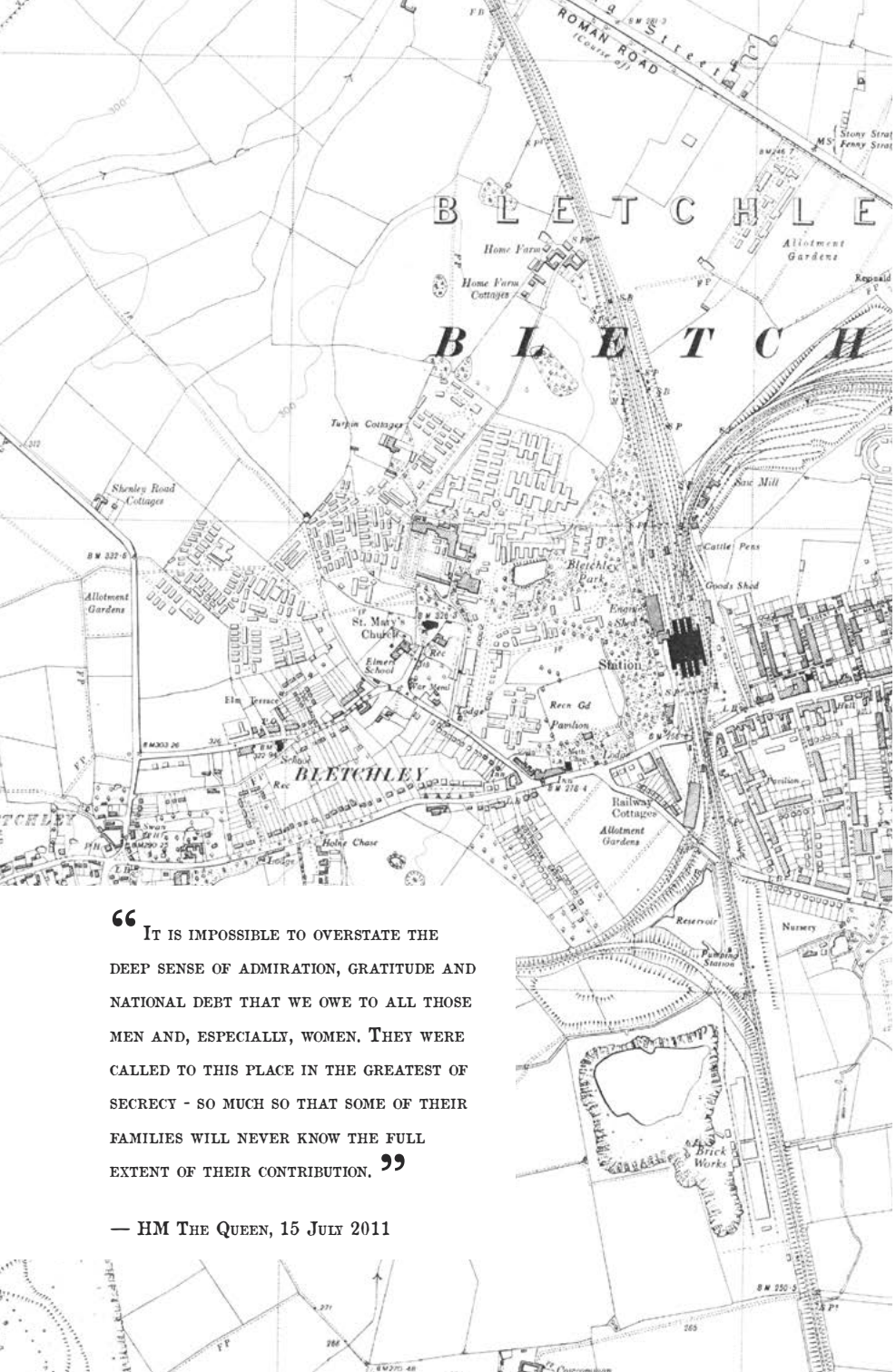

> “It is impossible to overstate the deep sense of admiration, gratitude and national debt that we owe to all those men and, especially, women. They were called to this place in the greatest of secrecy - so much so that some of their families will never know the full extent of their contribution.”
>
> — HM The Queen, 15 July 2011

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Section One

BLETCHLEY PARK

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Bletchley Park housed the British Codebreaking operation during World War Two and was the birthplace of modern computing. Historians estimate that the Codebreakers' efforts shortened the war by up to two years, saving countless lives. At its peak, around ten thousand people worked at Bletchley Park and its associated out-stations. The exact number is not known, even today. They tackled the complex task of intercepting, deciphering, analysing and distributing the intelligence derived from enemy radio signals, while their work remained shrouded in the highest levels of secrecy.

HM The Queen visited Bletchley Park on 15th July 2011. She said “It is impossible to overstate the deep sense of admiration, gratitude and national debt that we owe to all those men and, especially, women. They were called to this place in the greatest of secrecy - so much so that some of their families will never know the full extent of their contribution”.

The intelligence produced here contributed to all theatres of World War Two. Bletchley Park pioneered co-operation with other intelligence services including France, Poland and the United States. The techniques developed here played a major role in the Cold War and, in many cases, remain highly relevant today.

– Breaking Enigma –

The Polish had broken Enigma in 1932, when the encoding machine was undergoing trials with the German Army. But when the Polish broke Enigma, the cipher altered only once every few months. With the advent of war, it changed at least once a day, giving 159 million million million

possible settings to choose from. The Polish decided to inform the British in July 1939 once they needed help to break Enigma and with invasion of Poland imminent.

As more and more people arrived to join the codebreaking operations, the various sections began to move into large pre-fabricated wooden huts set up on the lawns of the Park. For security reasons, the various sections were known only by their hut numbers.

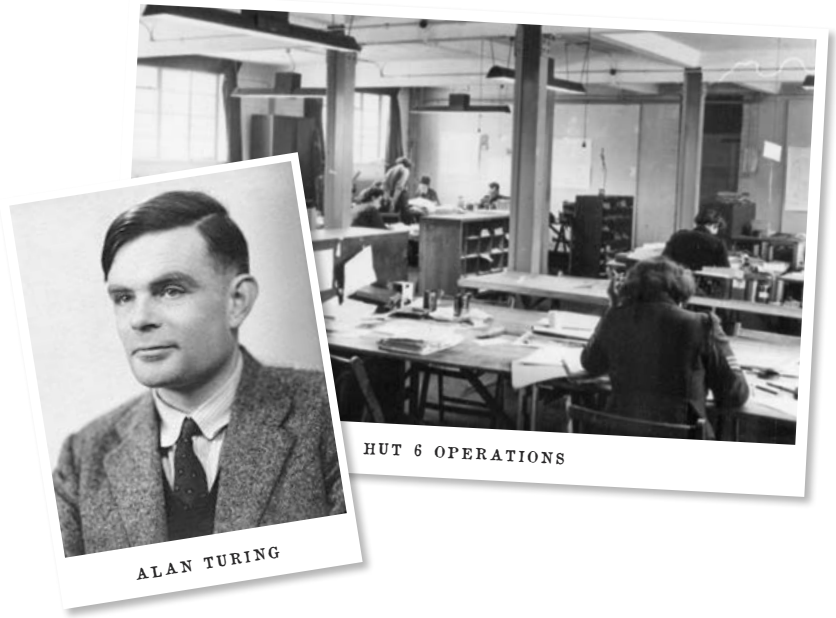
The first operational break into Enigma came around the 23rd January 1940, when the team working under Dilly Knox, with the mathematicians John Jeffreys, Peter Twinn and Alan Turing, unravelled the German Army administrative key that became known at Bletchley Park as 'The Green'. Encouraged by this success, the Codebreakers managed to crack the 'Red' key used by the Luftwaffe liaison officers co-ordinating air support for army units. Gordon Welchman, soon to become head of the Army and Air Force section, devised a system whereby his Codebreakers were supported by other staff based in a neighbouring hut, who turned the deciphered messages into intelligence reports.

– Intercept to Action –

Secrecy shrouded the fact that Enigma had been broken. To hide this information, the reports were given the appearance of coming from an MI6 spy, codenamed Boniface, with a network of imaginary agents inside Germany.

While this was pure fiction, there was a real network monitoring the Germans' every move. The 'Y' Service, a chain of wireless intercept stations across Britain and in a number of countries overseas, listened in to the enemy's radio messages. Thousands of wireless operators, many of them civilians but also Wrens (Women's Royal Naval Service), WAAF personnel and members of the ATS, tracked the enemy radio nets up and down the dial, carefully logging every letter or figure. The messages were then sent back to Bletchley Park (Station X) to be deciphered, translated and fitted together like a gigantic jigsaw puzzle to produce as complete a picture as possible of what the enemy was doing.

The Codebreakers began working around the clock to send the intelligence they were producing to London. Special Liaison Units and their associated communications specialists, the Special Communication Units, were set up to feed the Bletchley Park intelligence to commanders



ALAN TURING

HUT 6 OPERATIONS

in the field, first briefly in France in May 1940 and then in North Africa and elsewhere from March 1941 onwards.

– Industrialisation of Codebreaking –

The process of breaking Enigma was aided considerably by a complex electro-mechanical device, designed by Alan Turing and Gordon Welchman. The Bombe, as it was called, ran through all the possible Enigma wheel configurations in order to reduce the possible number of settings in use to a manageable number for further hand testing. The Bombes were operated by Wrens, many of whom lived in requisitioned country houses such as Woburn Abbey. The work they did in speeding up the codebreaking process was indispensable.

In October 1941 after receiving a letter from some of the senior codebreakers declaring the lack of resources being afforded to them, Prime Minister Winston Churchill directed: 'Make sure they have all they want extreme priority and report to me that this has been done.'

From that moment on Bletchley Park began receiving a huge influx of resources and a major building programme ensued to create the space necessary to house the ever increasing workforce.

– Codebreaking Successes –

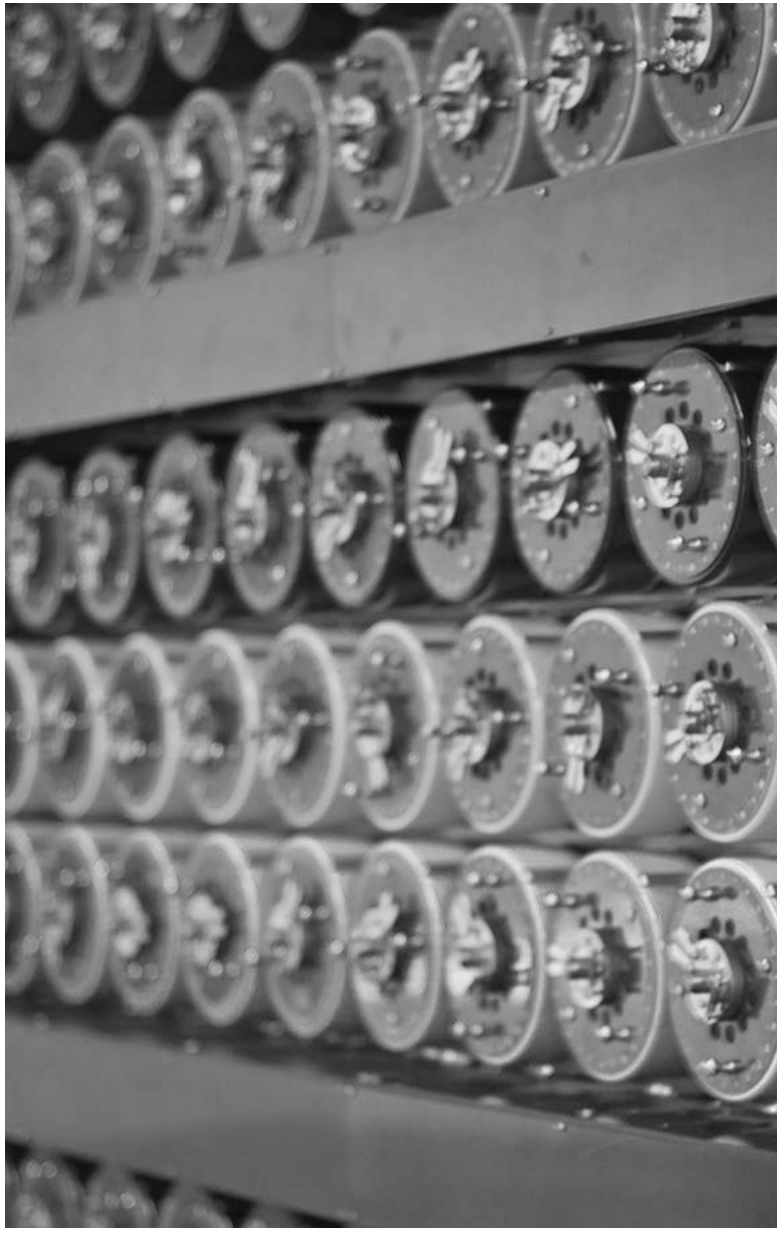
The intelligence produced by deciphering the Naval Enigma was passed to the Admiralty via the Z Watch in the Naval Section. However, in the early days, they struggled to get the naval commanders to take it seriously but a series of spectacular successes turned things around for the Codebreakers. Throughout the First Battle of the Atlantic, they helped the Admiralty to track the U-Boat wolf packs, considerably reducing the German Navy's ability to sink the merchant navy ships bringing vital supplies to Britain from America.

Nor were the Germans the only targets for Station X - by breaking Japanese ciphers, the Codebreakers were able to monitor the Japanese preparations for war. The suggestion that they knew of the imminent attack on Pearl Harbour but kept quiet in order to ensure America joined the war is nonsense. But their expertise undoubtedly gave great assistance to the American codebreakers.

In 1942, the Codebreakers' many successes also included the North Africa Campaign, when they enabled the Royal Navy to cut Rommel's supply lines and kept Montgomery informed of the Desert Fox's every move. Early 1942 brought serious difficulties with the German Navy's introduction of a more complex Enigma cipher. But by the end of 1942 they had mastered it as well.

– Strategic Ciphers –

Perhaps Bletchley Park's greatest success was still to come with the breaking of the Germans' strategic ciphers. These complex ciphers were used to secure communications between Hitler in Berlin and his army commanders in the field. The intelligence value of breaking into these was immense. Initial efforts were manual and successful, but could not keep up with the volume of intercepts. Under Professor Max Newman the 'Newmanry' started to devise machines to mechanise the process. This ultimately led to the design and construction by the brilliant General Post Office (GPO) engineer Tommy Flowers of 'Colossus', the world's first



semi-programmable electronic computer. Breaking into these ciphers allowed the Allied staff planning for the invasion of Europe to obtain unprecedented detail of the German defences.

The Codebreakers made a vital contribution to D-Day in other ways. The breaking of the ciphers of the German Secret Intelligence Service allowed the British to confuse Hitler over where the Allies were to land. His decision to divert troops away from the Normandy beaches undoubtedly ensured the invasion's success. But even as the Allied troops waded ashore, a new threat was looming and attention was being given to the role of the Codebreakers in the post-war era.

ENIGMA MACHINE ROTORS

> “The intelligence... from you (Bletchley Park)... has been of priceless value. It has saved thousands of British and American lives and, in no small way, contributed to the speed with which the enemy was routed and eventually forced to surrender... (It was a) very decisive contribution to the allied war effort.”
>
> — General D. Eisenhower

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Section Two

THE BREMONT CODEBREAKER

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Your Bremont Codebreaker shows you the time in hours, minutes and seconds as well as the date. With the chronograph you can measure up to 30 minutes in seconds and minutes. The mechanical Flyback movement with automatic winding has a free-swinging rotor that keeps the mainspring wound via the motion of your wrist.

The Codebreaker watch houses a completely unique and recently developed movement. The BE-83AR chronograph movement with Flyback function and date has 39 jewels, runs at 28,800 bph and has a 46-hour power reserve. The watch is water resistant to 10ATM (100 metres) and the etched metal dial is protected by a dual anti-reflective sapphire crystal that is retained securely.

Both the rose gold and hardened stainless steel Trip-Tick® case constructions feature a DLC treated barrel containing original punch cards used at Bletchley Park to display the watches' serial number. Additionally, the crown is inlaid with original pinewood from Hut 6 and the rotor contains parts of an original Enigma machine, both materials originating from Bletchley Park.

PRODUCTION & MATERIALS

Inspired by a classic 1940's officers watch, the Codebreaker is made with a beautiful and rare Flyback Chronograph GMT automatic movement and incorporates some relevant historical artefacts from Bletchley Park:

BARREL — When GCHQ left Bletchley for Eastcote in 1946 the British Tabulating Machine Company (BTM) cards were boxed up and were later moved to Cheltenham when GCHQ moved again in 1952. The BTM system was essentially an early form of computer processing. The system managed the BP Punch-Card Intelligence Index and was thus key to the success of the Codebreaking work, specifically recording Enigma decryption information. The cards were discovered when GCHQ was preparing to release records to The National Archives, GCHQ allowed them to go to the Bletchley Park Trust along with other records. With over 2 million created every week there is only half a box remaining, 5 of the cards are being incorporated into the barrel of the Bremont Codebreaker to display the watches individual serial number.

BTM PUNCH CARDS

CASE BACK — The rotor of the Bremont Codebreaker will contain materials from the wheel of an original Enigma machine and the design itself is based upon the Bombe machine used to break the Enigma codes.

The Enigma used rotors to scramble messages into unintelligible cyphertext. The German military adapted an early commercial version, marketed to the banking industry, and believed it to be impenetrable. Each one of the machine's billions of possible combinations generated completely different cyphertext. Finding those settings, which were reset at midnight every day, was the challenge faced by the Codebreakers.

The Bombe machine's purpose was to speed up the breaking of Enigma, so that messages were still operationally relevant. The Bombe helped to deduce the day's Enigma settings, of both the rotors and the plug board, by eliminating the many incorrect possibilities.

Before World War Two, work was being undertaken in a number of countries to break Enigma. In July 1939, aware that Poland would soon be invaded, Polish mathematicians who had worked on Enigma shared their work with the British and the French. By this time the Germans were changing the Enigma settings daily and the first British wartime breaks into the daily-changing Enigma code took place at Bletchley Park in January 1940.

BOMBE MACHINE

CROWN — Original pieces of the Hut 6 pine floorboards will be inlaid into the crown of the Bremont Codebreaker. Hut 6 was built in January 1940 for the decryption of Enigma messages from the German Army and Air Force, with help from the punch cards and then the Bombe machines. The cards were used to help deduce the Enigma keys and wheel orders.

Once the day's Enigma settings had been partially established with help from the Bombe, the information was sent back to Hut 6 where it was used to complete the discovery of the Enigma settings. Decrypted messages were then passed to Hut 3 for translation and analysis.

ENTRANCE TO HUT 6


BREMONT
Flyback
LONDON

TECHNICAL DETAILS

MOVEMENT — BE-83AR Flyback chronograph. Diameter 13 1/4", height 7.90mm, 31 Jewels, three-legged Glucydur balance with Nivarox 1 mainspring 28,800 bph. Incabloc shock protection and 42-hour power reserve. Perlage and blued screwed decoration with hand crafted stainless steel and Bombe inspired rotor.

FUNCTIONS — Sweep hours, minutes, sweep Flyback chronograph seconds, 30-minute chronograph counter and 60 second hand counter, GMT second time zone, date.

CASE — Hardened stainless steel or 18 carat rose gold Bremont Trip-Tick® case construction with treated inner barrel and punch card limited edition number (material from Bletchley Park). Case diameter 43mm, lug width 22mm and case thickness 16.3mm.

CROWN — Crown inlaid with pinewood from Hut 6, Bletchley Park.

CASE BACK — Hardened stainless steel or 18 carat rose gold case back with integrated sapphire crystal. Automatic rotor inspired by the Bombe machine incorporating parts of an original German Enigma rotor.

DIAL — Etched metal dial and treated nickel hands.

CRYSTAL — Domed anti-reflective, scratch resistant sapphire crystal.

WATER RESISTANCE — Water resistant to 10ATM, 100 metres.

STRAPS — Classic style crocodile strap with accompanying NATO style calf leather strap.

HUT 6, BLETCHLEY PARK

> “The work here at Bletchley Park... was utterly fundamental to the survival of Britain and to the triumph of the West. I'm not actually sure that I can think of very many other places where I could say something as unequivocal as that. This is sacred ground. If this isn't worth preserving, what is?”
>
> — Prof. Richard Holmes, Military Historian

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Section Three

OPERATING INSTRUCTIONS

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Bremont Watch Company would like to congratulate you most sincerely on your purchase of a Bremont timepiece. We have developed our timepieces over several years to cater for those that demand more out of their mechanical watch. Bremont's aim has always been to produce a watch of exceptional quality that will last several lifetimes, and one that feels particularly special when placed on the wrist. Please observe the following operating instructions for your Bremont Codebreaker.

FUNCTIONS (SEE fig 1)

1. Hour hand
2. Minute hand
3. Chronograph second hand
4. 24 hour GMT hand
5. Second hand
6. Chronograph minute hand
7. Setting crown — 3 positions (I, II, III)
   Position I allows the normal running of the watch and hand winding.
   Position II allows the rapid correction of the date with clockwise rotation and the adjustment of the 24 hour GMT hand with anti-clockwise rotation.
   Position III allows the setting of the time with stop second and correction of the date at every passing of midnight.
8. Push button A
   Functions: Starts and stops the chronograph second hand.
9. Push button B
   Function 1: If chronograph second hand is running it will 'flyback' the second hand to zero and immediately re-start the stopwatch.
   Function 2: If chronograph second hand has already been stopped with button A then it will reset the chronograph second hand back to zero and remain there.
10. Date window

fig 1

TECHNICAL NOTES (SEE fig 2)

Your Bremont watch shows you the time in hours, minutes and seconds, and the date. The mechanical movement with automatic winding has a free-swinging rotor that keeps the mainspring wound via the motion of your wrist. The movement in your watch has 31 jewels, runs at 28,800 bph and has a 42-hour power reserve once fully wound. The watch is water resistant to 10ATM (100 metres) and the dial is protected by a dual anti-reflective sapphire crystal that is retained securely. To ensure that this rather special watch continues to run beautifully for years to come you must follow a few important operating instructions:

WINDING THE WATCH (I) — The crown rests in position I, the winding position for the watch, and you can manually wind the watch by hand. The movement will automatically start with around 30 revolutions of the crown. By doing this you will achieve maximum accuracy and have a power reserve of about 42-hours, even when the watch is not on your wrist. When the watch is on your wrist, the automatic revolution of the rotor will keep the watch wound.

SETTING THE DATE (II)—You can adjust the date by pulling the crown out to position II. You will now be able to change the date by rotating the crown clockwise. Do not use the rapid date and day correction between 20:00 and 03:00 as this may damage the date change mechanism.

SETTING THE GMT HAND (II)—You can adjust the position of the 24 hour GMT hand by rotating the crown anti-clockwise.

SETTING THE TIME (III) —Pull the crown out to position III, this will stop the movement, you can now position the minute hand exactly. To start the second hand, push the crown back to position I. When setting the time, it is worth noting that the date change always takes place at mid-night (00:00). If this change has already taken place at 12:00 noon, you must move the hands forward by 12 hours.

fig 2

"So, if I may say so, you (the Bletchley Park Trust) are the keepers of one of the greatest British success stories."

— HRH The Prince of Wales

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Section Four

WATCH CARE & INTERNATIONAL WARRANTY

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The testing that Bremont Watch Company puts all of its watches through may appear excessive, whether it is for time-keeping precision for every chronometer, temperature, shock and scratch resistance, or the pressure testing in all of our models. Although Bremont watches have more than proved their resilience before they are released from our workshop, we want to ensure that the enjoyment that comes from wearing a Bremont watch lasts generations. We therefore recommend that, where possible, the following tips for watch care are observed.

WATCH CARE

CLEANING — Use soapy water followed by a microfibre cloth to clean metal and sapphire.

CROWN — Ensure that the crown is pushed in to prevent entry of water into the mechanism.

SEA WATER — Wash with fresh water following exposure to saline water.

MOVEMENT — Avoid any heavy shocks to the watch.

MAGNETIC FIELDS — Avoid contact with electrical equipment and strong magnets such as speakers, magnetic tablet case covers and radio alarm clocks.

TEMPERATURE — Keeping the watch in contact with your wrist will help minimise any exposure to extremes.

CHEMICALS — Wash with warm fresh water if it is exposed to solvents etc. to avoid damage to seals and watch straps.

SERVICING

Every part of your watch has been carefully chosen from the best selection of materials available. In spite of this, a number of parts will always be subject to natural wear. It is therefore important that these points of wear are always kept lubricated. We recommend that you have a maintenance service carried out every 3 to 5 years. Only a certified Bremont agent should carry out the servicing of a Bremont watch.

To find your nearest repair and service centre please contact:
Bremont Servicing on +44 (0) 845 0940 690 or email codebreaker@bremont.com

INTERNATIONAL WARRANTY

We would like to take the opportunity to congratulate you on your new Bremont Codebreaker and we sincerely hope that the bond you form with your watch is a long-lasting one. Each Bremont watch has undergone strict quality control measures by the time it reaches you.

Your Bremont Codebreaker has an individual serial number that can be traced to Bremont's securely held records in order to establish its origin and authenticity. The International Warranty Certificate guarantees your watch against defects for 3 years from the date of purchase.

To validate your warranty please complete the Warranty Certificate and return back to us at the address provided on the following page. Alternatively, email your details to us at codebreaker@bremont.com

RETURNING YOUR WATCH

Should you need to return your Bremont Codebreaker for a service or repair in the first instance please contact the Authorised Dealer you purchased the watch from. When sending your watch please ensure that it is packaged carefully, you are also advised to insure the watch in transit, and send the original Warranty Certificate along with an explanation of the problem to the address provided on the next page.

“Bletchley Park is a national treasure: the home of the best-kept secret in history, where a group of peculiarly brilliant people made a huge contribution to winning the war.”

— Ben Macintyre, British author, historian and journalist

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Section Five

CONTACT INFORMATION

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BLETCHLEYPARK

A special thanks to Bletchley Park for access to their archives and literature.

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