The magazine for collectors of UK stamps

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Royal Mail

Philatelic Bulletin

Volume 57 No.1

Rocketman's launch



3 September
the Elton John
stamp issue

ROYAL NAVY SHIPS • PHOSPHORS EXPLAINED • WW2 NAVY POSTAL TRANSMISSIONS

Stampex special

Exclusive D-Day Miniature Sheet

Operation Overlord and Stampex overprint



To honour those who helped secure peace in Europe we are offering a very special, D-Day Miniature Sheet to those of you who visit our stand at this year's Autumn Stampex. It comprises five Special First Class Stamps featuring a special Operation Overlord and Stampex overprint. This will be a limited edition show exclusive of 7,500, that will be numbered and sold at the face value of £3.50 each. We aim to retain a small quantity for sale on each day of the show and these will be sold on a first come, first served basis. So arrive early to make sure you don't miss this remarkable and exclusive collectible.

Only £3.50

Autumn Stampex is being held at The Business Design Centre, Islington, London, N1 0QH. Opening times are Wednesday 11th September 11.00 to 7pm, Thursday 12th September 10.00 to 6pm, Friday 13th September 10.00 to 6pm and Saturday 14th September 10.00 to 5pm. Admission is free.

Royal Mail

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Editor Tim Noble, Royal Mail, 185 Farringdon Road, Floor MP-03, London EC1A 1AA ● **Design and content creation** Ian Boardman, Adesso Creative Ltd ● Price £2.15 from Post Office Ltd philatelic outlets or by order from Post Office branches ● **12 months' subscriptions** £20.95 UK and Europe; £26.95 rest of the world. Send subscriptions to Royal Mail Stamps and Collectibles, PO Box 1373, Sunderland SR5 9PG, UK or subscribe online at royalmail.com/bulletin ● **Binders** (to hold 24 issues) £8.68 and storage boxes (about 30 copies) £9.95, are also available by post or online ● Copyright and editorial rights are reserved by Royal Mail Group Ltd ● All rights reserved ● Reproduction in whole or parts is prohibited without prior permission of Royal Mail Group Ltd ● **Printed** in Great Britain by Zenith Print & Packaging Ltd ● **ISSN** 0953 8119 ● Royal Mail is a trading name and registered trade mark of Royal Mail Group Ltd. Registered in England and Wales, number 4138203. Registered office: 100 Victoria Embankment, London EC4Y 0HQ ● Stamp images © Royal Mail Group Ltd.

Still standing

Honky Château Recorded in the Château d'Hérouville near Paris, Honky Château was Elton John's breakthrough pop album, home to *'Rocket Man'* – one of three songs he composed on the morning of the first day of recording.
First Class



Goodbye Yellow Brick Road A double album that perhaps represents the artistic pinnacle of Elton's 1970s' career, a teeming, eclectic song-writing masterclass that features *'Candle In The Wind'*, *'Saturday Night's Alright For Fighting'* and *'Bennie and the Jets'*
First Class



Caribou His fourth consecutive US number one album, *Caribou*, is best-known for *'The Bitch Is Back'* and the epic *'Don't Let The Sun Go Down On Me'*, but its most striking moment might be *'Ticking'*, the eerie saga of an armed siege in a bar
First Class



Captain Fantastic And The Brown Dirt Cowboy Lyricist Bernie Taupin recounts the early days of his and Elton's career, complete with a vivid depiction of Elton's 1968 suicide attempt, *'Someone Saved My Life Tonight'*
First Class



His middle name is Hercules, and that proved to be prophetic of Elton John muscling in on the 70s rock and pop scene and becoming a music maestro colossus. Elton's extraordinary songwriting abilities are matched only by stage (and off-stage) outfits that would have made David Bowie blush even at the height of his Ziggy Stardust phase.

One can of course judge Elton's star quality simply on his songwriting talent and amazing stage performances, but the statistics are stunning too. The superstar has had 26 gold and 38 platinum albums, and even one diamond album, and he has sold more than 300 million records worldwide. Elton also holds the record for the biggest selling single of all time, the Princess Diana tribute *Candle in the Wind* in 1997 – the reprise of his famous 1973 song about Marilyn Monroe. In addition, he has had seven UK Number 1 singles and 31 in the Top 10, and his songs are legendary anthems: *Goodbye Yellow Brick Road, Daniel, Candle in the Wind, Don't Let the Sun Go Down on Me*, and all the rest. As if chart success wasn't enough, Elton has scooped one Oscar (with Tim Rice for Best Original Song – *Can You Feel*

Elton John – Stamp Specifications

Date of issue	3 September
Number of stamps	Eight (4 x 1st Class, 4 x £1.55)
Design	Royal Mail Group Ltd, based on an original design by Studio Dempsey
Stamp format	Landscape
Stamp size	38mm x 31mm
Number per sheet	24/48
Printer	International Security Printers
Print process	Lithography
Perforations	14 x 14
Phosphor	Bars as appropriate
Gum	PVA





and on Royal Mail stamps

the Love Tonight from *The Lion King*), a Tony Award, five Grammys, and 13 Ivor Novello Awards. No wonder this Royal Academy of Music-trained piano genius is now the star of a new Special Stamp issue and Miniature Sheet, out on 3 September, featuring some of his greatest albums, including *Goodbye Yellow Brick Road*, and his legendary live performances. In addition, a Presentation Pack chronicles the career of the biggest British pop star since The Beatles. And now, of course, as he plays his final, retirement tour, a film tribute to Elton, the biopic *Rocketman*, has been playing in cinemas over the summer.

Elton, 72, is probably one of the most connected stars in the world. He knows everyone in the music and theatre business. He is a friend of the Royal Family. In his own circle of celebrity chums are Rod Stewart, Michael Caine, the Beckhams and David Walliams. Yet the key name in Elton John's career must be his lyricist Bernie Taupin, who has penned the words of his greatest songs since they began working together in the late-1960s. They met quite by chance, after separately answering an advert placed by record company Liberty in the *New Musical Express* in 1967. Liberty got them together and the rest is chart-topping history. It is also rather eccentric, as the two friends have always shared a rather quirky professional relationship: they work incredibly fast, and their creative mantra is that if Elton hasn't worked out music to Bernie's lyrics within 40 minutes, the song is dropped. Yet the pair can't work in the same room together, and when they started in the 1960s, Bernie would often scribble lyrics in a bedroom at Elton's mother's flat, with Elton waiting to receive them at the piano in the sitting room. In 1969, Bernie wrote the words for Elton's breakthrough tune, *Your Song*, in just 15 minutes, at the kitchen table in the flat, his coffee staining the paper. ▶



Sleeping With The Past The last album Elton John made before going into rehab was intended as a homage to the soul and R 'n' B music that had inspired him in the 1960s: in *'Sacrifice'*, it produced his first UK solo number one single
£1.55



The One The cover designed by Gianni Versace, its lyrics haunted by the unfolding AIDS crisis and Elton's battle with drug addiction, *The One* re-established the now clean and sober Elton John
£1.55



Made In England Largely recorded live in the studio, *Made In England*'s upbeat title track – a hit single in 1995 – masks the rest of the album's mature mood, which features reflections on ageing both positive and negative
£1.55



Songs From The West Coast *'Going backwards to go forwards'*, as Elton put it, *Songs From The West Coast* returned to the warm sound of his early 1970s' albums
£1.55

Elton Live





Madison Square Garden
Elton is captured at his favourite venue on his Farewell Yellow Brick Road tour which is his swansong tour
First Class



Dodger Stadium
In October 1975, just days after a bid to take his own life, Elton performed in two career-defining sell-out concerts
First Class



Hammersmith Odeon
Elton was no passenger when glam-rock sparkled in the 70s. Here he's performing at the same venue where Bowie had buried Ziggy a few months before
£1.55



Buckingham Palace
Elton's association with the Royal Family was well established before the 2012 concert, having performed at Prince Andrew's 21st birthday and Princess Diana's funeral in 1997
£1.55



The now-legendary *Rocket Man* began in a dark country lane one starlit summer night in 1971, as Bernie drove to visit his parents in their Lincolnshire village. The opening lines tumbled into his head as he thought about a book by sci-fi writer Ray Bradbury. With no pen and paper to hand, he repeated the lines until he arrived at his parents' house, and frantically wrote them down. A few months later, Bernie gave them to Elton, whose music turned them into a classic. Just like so many from Bernie: *Bennie and the Jets, Crocodile Rock, Don't Let the Sun Go Down on Me, Sad Songs (Say So Much)* and *I'm Still Standing* among them – songs that have made Elton a star for five decades.

Elton Live In more than 4,000 shows in over 80 countries since his first tour in 1970, Elton has made glitz his trademark look (though much toned down in recent years), performing in a whirlwind of sequins and satin, platform boots and boas,

Elton John – Miniature Sheet Specifications

Date of issue	3 September
Number of stamps	Four (2 x 1st Class, 2 x £1.55)
Design	Royal Mail Group Ltd
Miniature Sheet size	146mm x 74mm
Stamp format	Landscape
Stamp Size	41(w) x 30(h)
Printer	International Security Printers
Print process	Lithography
Perforations	14.5 x 14
Phosphor	Bars
Gum	PVA





Opposite: Miniature Sheet and Miniature Sheet Carrier.
Left: First Day Cover and Miniature Sheet First Day Cover



FD1915-TH



FD1915-PL



FD1915-NP

crazy capes and totteringly tall wigs (his 1980s mohawk wigs were 18 inches high). Sometimes dressing as historical and fictional characters, including Mozart, Carmen Miranda, Donald Duck, Minnie Mouse and Captain Hook, he has wowed crowds with outfits that were as stunning as his songs. And those sunglasses! Gem-studded wonders adorned with fur, pianos, palm trees, heart-shaped, star-shaped, one pair even shaped like Battersea Power Station. As Elton once put it: 'I've never, ever been a minimalist or a beige kind of guy.' An iconic sartorial moment must be the LA Dodgers baseball costume – 'kit' doesn't even begin to describe it – that Elton wore for his famous Dodger Stadium concerts in 1975 when he was the biggest rock star on the planet. A dazzle of sequins, with 'Elton 1' emblazoned on the back, the outfit sparkled under the stage lights as John vaulted around his rhinestone-encrusted piano. Indeed, as was often the case with an Elton John ▶







Serviced Royal Mail First Day Covers are available by Mail Order from Tallents House. Due to the late announcement of the stamp issue, customers can place an order up until Friday 5 September. Postmarking facilities for covers submitted by customers are being extended to 29 November. Covers requiring a First Day of Issue or sponsored postmark must therefore reach Tallents House by close of business on this date.

Elton John – Prices

Set of 8 Special Stamps	£9.00
Miniature Sheet	£4.50
Presentation Pack	£14.30
First Day Cover Stamps	£11.40
Miniature Sheet First Day Cover	£6.00
Stamp Souvenir	£11.40
First Day Envelope	£0.30
Stamp Sheet Souvenir	£6.00
Retail Stamp Book	£4.20
Postcards (13 in set)	£5.85
Press Sheet (Limited edition of 300)	£74.25
Goodbye Yellow Brick Road Character Pack	£7.70
Captain Fantastic and The Brown Dirt Cowboy Character Pack	£7.70
Dodger Stadium Souvenir Pack	£25.99
Framed Set of Stamps	£29.99
Framed Stamp set and Miniature Sheet	£39.99
Framed Stamp set signed by Bernie Taupin	£199.99
Framed Goodbye Yellow Brick Road Print and Stamp	£79.99
Framed Goodbye Yellow Brick Road Print and Stamp signed by illustrator Ian Beck	£99.99
Framed Captain Fantastic and The Brown Dirt Cowboy Print and Stamp	£79.99
Framed Dodger Stadium Print and Stamp	£74.99
Goodbye Yellow Brick Road Fan Sheet	£7.50
Captain Fantastic and The Brown Dirt Cowboy Fan Sheet	£7.50
Album Collection Fan Sheet	£10.20
Collector's Set	£24.99
Stamp Mount	£21.99
The Rocket Man Collection	£46.50
Framed Elton John and David Bowie Album Cover Special Stamp sets	£51.50

show, his outrageous costume was also matched by totally out-there stage performances at those two career-defining gigs on 25 and 26 October 1975, seen by 110,000 people, with stars such as Cary Grant in the audience. (Elton had even chartered a jet to fly in his parents, relatives and neighbours from the UK.) With tennis star Billie Jean King as a guest backing singer, Elton sprang on top of his piano and at one point got so excited he flung a chair across the stage. He's repeated his athletic antics at gigs around the world, jumping on and off his piano, doing hand-stands on the keyboard, playing with one hand while standing on one leg. Despite his superstar status and 'look-at-me!' outfits, Elton has never been a prima donna, happily sharing the stage with dozens of



Presentation Pack and (below) Presentation Pack Inner. Opposite: Presentation Pack Outer

legendary performers over the years – including The Rolling Stones, John Lennon, Stevie Wonder, Rod Stewart, Kiki Dee, Prince, George Michael, Ed Sheeran and Lady Gaga, among many others.

To say that Elton's life and career have been glitzy and glamorous is something of an understatement. His epic shopping skills were the stuff of legend, and once upon a time in the 1990s he was spending around £1.5 million a month, which included an average spend of almost £15,000 just on flowers.

He has bought homes in Nice, London, Windsor and Atlanta, peppered with works by Warhol and Lichtenstein, furnished with Chippendale, Linley and Theo Fennell. He has enjoyed holidays on his multimillion-pound yacht on the French Riviera with his husband David Furnish, where guests have included David and Victoria Beckham (Elton is godfather to their two eldest sons).

His birthday celebrations have been as extravagant as his stage shows. Elton received a red Ferrari from his manager for his 40th. Elton hired Hammersmith Palais for his 50th birthday, where he appeared before 600 guests dressed as Louis XIV, wearing a three foot-tall wig, topped by a model Spanish galleon complete with smoking cannons.

Yet for all the pomp, there has always been a serious side to Elton. One of his most poignant public moments must be his performance of *Candle in the Wind* in 1997 in Westminster Abbey at the funeral of his dear friend Diana, Princess of Wales. The single sold 4.9 million copies, with Elton insisting that all proceeds went to Diana's charities. In fact, nothing gets more ►

Images: Photography of album covers by John Ross; all album covers © Mercury Records Limited. Miniature Sheet – Background image: Elton John performing in 1974 © Sam Emerson, courtesy of Rocket Entertainment; Christmas show at the Hammersmith Odeon, London, 1973 © Michael Putland/Getty Images; Dodger Stadium concert, Los Angeles, 1975 © Terry O'Neill/Iconic Images; Diamond Jubilee Concert at Buckingham Palace, London, 2012 © Dan Kitwood/Staff/Getty Images; Madison Square Garden concert, New York, 2018 by Ben Gibson







Dodger Stadium Souvenir Pack and handstamp.
Below: Retail Book and Goodbye Yellow Brick Road Character Pack

serious or committed than his campaigning and charity work. Elton is an advocate for LGBT rights, and his Elton John AIDS Foundation has raised over £300 million in a worldwide campaign to defeat the disease. He regularly fundraises for breast cancer research too.

Indeed, today much of his focus is on charity work and family. He has embarked on his final series of live shows, the Farewell Yellow Brick Road tour, before retiring from touring to spend more time with his family – husband David and their children Zachary and Elijah. Indeed, Elton's life is simpler, quieter, yet he remains the definitive rock superstar for millions of fans around the world ●





Rocketman Quiz

1 In which town was Elton John born?
a) Kenton
b) Queensbury
c) Pinner

2 What gift did Elton receive on his 40th birthday
a) Aston Martin
b) Ferrari
c) Lamborghini

3 What was Elton's first UK no.1 solo single?
a) *Candle in the wind*
b) *Sacrifice*
c) *Are you ready for love*

4 What song was written in 1969?
a) *Sad songs*
b) *Rocket man*
c) *Your song*

5 Who designed the cover of the album *The One*?
a) Giorgio Armani
b) Gianni Versace
c) Roberto Cavalli

6 How many UK no.1 singles has Elton had?
a) 7
b) 8
c) 10



How to enter Please send your answers, with your contact address or phone number, marked 'Rocketman Quiz', to: Tallents House, 21 South Gyle Crescent, Edinburgh EH12 9PB. Or by email to tim.noble@royalmail.com.

Prizes The first five correct entries drawn after the closing date win the Elton John Presentation Pack.

Closing Date 15 October 2019.

June solutions – D-Day Quiz 1)b 2)b 3)a 4)c 5)a
Winners Andrew Messer, London; Mr E Gilbert, Takeley; Mr P Jeffery, Teignmouth; Graham C Pegg, Westbury-on-Trym; Mr J Bowater, Kinver.

Terms and conditions Promotions are open to any reader aged 18 or over, except employees of Royal Mail Group Ltd, their business associates and immediate families. Responsibility cannot be accepted for entries which are incomplete, damaged or not received. Proof of posting is not proof of receipt. Prizes must be accepted as offered; they are not transferable and there are no cash alternatives. Winners are notified within 28 days of closing date stated. For prize draws where readers must answer a question, winners will be the senders of the first correct entries drawn at random by an independent person after the closing date. Royal Mail's decision is final. No correspondence will be entered into. Entry implies acceptance of these rules. Prizes are subject to availability. The promoter reserves the right to a) substitute a prize of equal or greater value if circumstances so demand and b) to suspend or cancel or hold void any of the competitions or prize draws at any time without notice. The winners' names are available 28 days after closing date. To receive this please send an SAE to The Editor.

owzat! Out soon – Cricket World Cup Winners Special Stamps





Royal Mail is proud to mark England's first ever victory in the ICC Cricket World Cup in 2019 with new stamps, along with a commemoration of England's win of the ICC Women's Cricket World Cup 2017. Both teams will be honoured with Miniature Sheets, each printed with four different stamps (2 x 1st Class, 2 x £1.60), which capture the teams' celebrations on winning the cups. England now proudly holds both trophies simultaneously. Both Miniature Sheets will be available in the Presentation Pack. The issue date is unconfirmed at the time of going to print. Visit www.royalmail.com/cricket to register your interest.



Memories of a well-urned victory

It's not of course the first time that jubilant England cricketers have featured on Royal Mail stamps. The Miniature Sheet issued on 6 October 2005 captured the elation of England regaining the Ashes, ending 16 years of Australian dominance. England captain Michael Vaughan was presented with the famous trophy at the end of the Fifth Test at the Oval, sparking a wave of celebration throughout the country. England triumphed 2–1 in a five-Test series which was one of the closest and most exciting since the two nations first clashed on the cricket field in the 19th century.







Royal Navy Mail WW2

Part three
Methods of Transmission

by Colin Tabeart

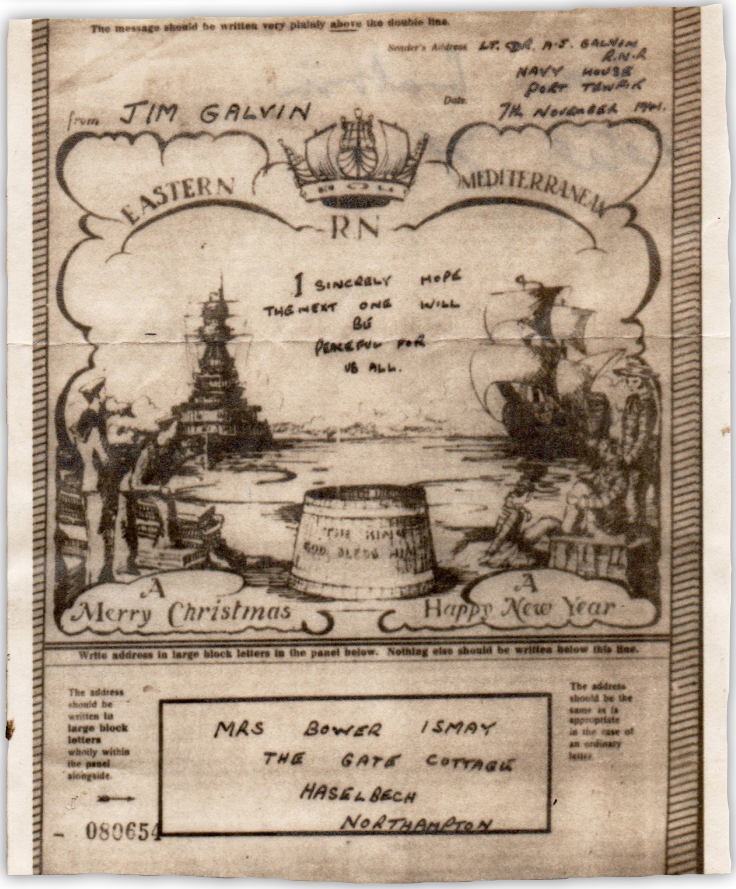
When war broke out, mail could be sent to or from HM Ships either by surface mail or air mail very much as in peacetime. I have not seen any official statement but it seems likely that radio messages to HM Ships, available pre-war, were no longer allowed, and almost certainly not from HM Ships due to the ship's position being pinpointed by DF. Initially postage had to be paid on all letters, but on 8 November 1939 Post Office Circular No 3574 announced free transmission of surface mail for HM Ships on active service at home or abroad. Additional fees, such as airmail, registration fees, express etc still had to be paid.

The volume of mail rapidly increased; in particular airmail from heavy troop and naval concentrations such as Egypt, swamping available air transport, especially after Italy entered the war and France surrendered, cutting air route options. The solution was the airgraph: the sender wrote the message on a special form, which was then microfilmed, and the film sent to the receiving country, where it was printed out and delivered. ►





A relatively early surface mail letter sent free of charge



November 1941. A decorative airgraph from Port Tewfik, Egypt, used as a form of Christmas card, saving much weight in the Christmas airmails

This occupied only about a fiftieth of the volume and weight of ordinary letters. The service began in Egypt in April 1941, where Kodak had the necessary facilities, spreading to other stations as soon as equipment became available. A good solution, though it was not a first; a similar method had been used by the French during the siege of Paris in 1870, the microdots being flown in by carrier pigeon.

More or less in parallel with the airgraph scheme, the Air Mail Letter Card was introduced. The pre-printed single sheet weighed one tenth of an ounce, and was folded in four then sealed after censoring. These went airmail



Airmail at the 5d rate, available from Malta and Gibraltar



Air Mail Letter Card of 1943 from the light cruiser *HMS Newfoundland* operating in the Mediterranean at that time

at a reduced rate of 3d and were very popular. A variation on the Air Mail Letter Card was the Blue Triangle Air Letter, an 'honour' variant, which did not have to be censored if the sender signed the declaration that it referred 'to nothing but private or family matters.' ►

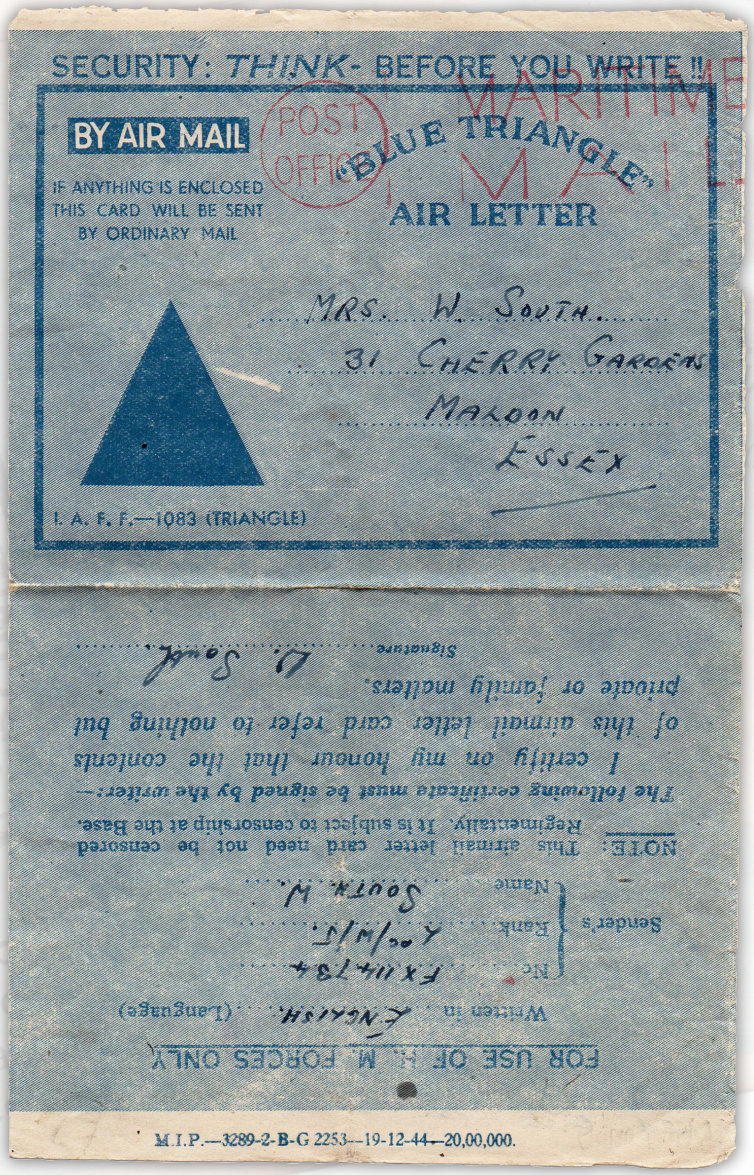


Aug 1941 to *HMS Dido* 'Insufficiently Paid for Transmission by Airmail'. She had been operating in the Mediterranean, where 5d was correct for Malta, but had been damaged on 29 May and was repairing at Brooklyn Navy Yard at the time of the letter, airmail to the USA being 1/3d



The 3d registration fee always had to be paid. The 'HM SHIPS' registration label is unusual

April 1945 Blue Triangle Air Letter from *HMS Bherunda*, the shore base at Colombo. Note lack of censorship





Rarer forms of transmission included cablegrams. The network does not appear to have been damaged by the enemy so could still be used for absolutely top priority messages albeit at mind-blowing cost. I have not seen one but have read a couple of letters that refer to individual servicemen sending cables. Finally there was the old standby, used since Robin Hood was a lad, the pigeon post. The example shown below is clearly philatelic, and the method was unlikely to be readily available for private correspondence, but pigeons were used by the military in both World Wars ●



1941 philatelic cover containing a message carried by pigeon



Rule Britannia!

Royal Mail proudly pays tribute to the oldest of Britain's armed forces, with the Royal Navy Ships stamp set to be issued on 19 September



FD1916-TH



FD1916-PL



FD1916-NP

The rich history of the 'senior service' spans centuries and was instrumental in launching Britain as a mighty world empire. Mastering maritime navigation with innovative ship design, it was the Navy that propelled Britain's mighty military prowess and commercial prosperity. The Navy's most significant period in history was the Tudor era with the crowning of King Henry VIII, who acted as catalyst for the bolstering and escalation of naval power. Henry's warships included the *Mary Rose*, and the even larger *Henry Grace à Dieu*, with its mounted bronze cannons and capacity to hold a crew of 800 – the largest and most powerful warship in Europe at the time. The next major naval developments were undertaken by King Charles I in the 17th century, when Britain's naval capacity expanded, its fund-raising however, contributed to the outbreak of the Civil War. Under the reign of Charles II the Navy became an independent national entity and was branded 'Royal Navy' and given a professional officer corps and dedicated state-owned warships.

In the 18th century, Britain's Navy emerged as the most powerful in the world. That position was magnified in 1805 when Admiral Lord Nelson aboard *HMS Victory*, led the Navy to defeat combined French and Spanish fleets at the Battle of Trafalgar. Nelson, however, was mortally wounded in the battle. Now though, with the backing of unparalleled financial support and ship-building resources, the way was paved for the British Empire's growth to gain momentum. Moving on into the Victorian era, wind gave way to steam and born out of the vulnerability of wooden warships, iron cladding was utilised to build ships for a diversity of roles. The Navy's fleets were further fortified in this age of rapidly developing technologies.



Royal Navy Ships – Stamp Specifications	
Date of issue	19 September
Number of stamps	Eight (2 x 1st Class, 2 x £1.35, 2 x £1.55, 2 x £1.60)
Design	Hat trick design
Stamp format	Landscape
Stamp size	37mm x 35mm
Number per sheet	30/60
Printer	International Security Printers
Print process	Lithography
Perforations	14 x 14.5
Phosphor	All over
Gum	PVA



The 20th century too, saw Britain leading the field of ship building innovation with the creation of *HMS Dreadnought*. Such was her impact, that her name came to be associated with an entire generation of battleships. Her launch also helped to escalate a naval arms race, as envious eyes of navies around the world, particularly the German Imperial Navy, hastened to match it in the build-up to the First World War. *HMS Dreadnought* didn't participate in the war's principal naval engagement at the Battle of Jutland as she was being refitted, but despite her absence, and heavy losses incurred, Britain's fleets prevailed, and confirmed dominance in the North Sea. Britain could now implement the blockade that would contribute to Germany's eventual defeat in 1918. Reflecting on the First World War usually evokes thoughts of the hellish ordeals of trench warfare, and sometimes it's easy to overlook the sacrifices that were made at sea. In fact, in the Battle of Jutland alone, 6,000 British and Commonwealth sailors died serving with 100,000 men on 250 ships.

At the dawn of the Second World War, the Royal Navy still possessed the world's largest shipping fleet with 1,400 vessels. However, in the war's early years the Navy suffered significant battleship losses. The vital Atlantic supply lines, critical to the war's success, were vulnerable to attacks from German U-boats. Tactics were gradually introduced to limit risks with purpose built escort carriers. The Royal Navy was central to the war effort – providing the bulk of the large vessels for Operation Dynamo, when trapped allied troops were rescued at the 'miracle of Dunkirk'. Four years later, the Royal Navy also made a weighty military contribution to the success of the D-Day invasion.

Following the war and the British Empire's decline, the Navy's capability was reduced. Further proposed cutbacks were reprieved after the Falklands War when the challenges of assembling a task force for military action 7,000 miles ▶

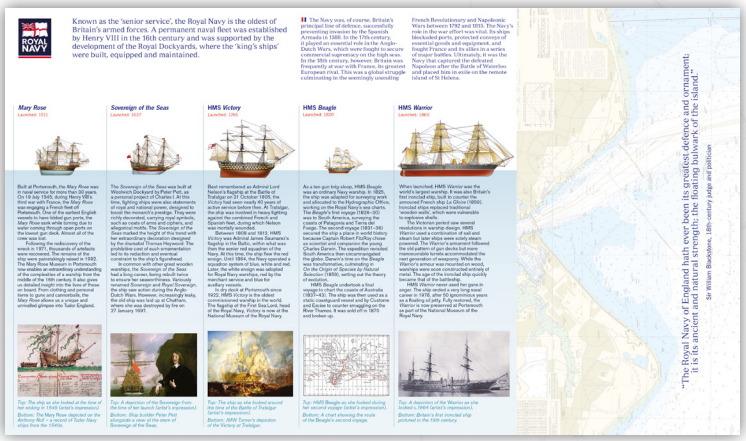
First Day Cover with the Tallents House handstamp which features the Royal Navy Crown

The location for the alternative handstamp and the non-pictorial handstamp is Portsmouth where the *Mary Rose*, *HMS Victory* and *HMS Warrior* are located. It was also selected because of the city's strong association with the Royal Navy and for the fact that this is where the Royal Naval Association Head Office is based. The handstamp design also contains a representation of a modern chart compass

Opposite: JMW Turner's painting *The Battle of Trafalgar*



Above: Presentation Pack. Right: Presentation Pack Inner. Opposite: Presentation Pack Outer. The pack contains all eight Royal Navy Ships Special Stamps and includes a brief history of the Royal Navy and descriptions of each ship. It also features a specially commissioned profile of each ship featured in the stamp set. Part of the design features an Admiralty Chart of Portsmouth Harbour which has a strong association with the Royal Navy and is where the *Mary Rose*, *HMS Victory* and *HMS Warrior* are located. It also bears an authentic Ministry of Defence security hologram



This Retail Stamp Book includes four First Class definitive stamps, plus the two First Class Special Stamps from the set – featuring the *Mary Rose* and *HMS Queen Elizabeth*. Printed in gravure, the stamps are self-adhesive (unlike the individual stamps from the set which are litho and gummed). Printed by International Security Printers



away were highlighted. In due course the Navy took part in the Gulf War, the Kosovo conflict, the Afghanistan Campaign and the 2003 Iraq War. Resourcing the Navy remains a controversial subject and the new Queen Elizabeth aircraft carriers are a significant investment in naval capability. These 65,000-tonne vessels are the largest Royal Navy ships ever produced and represent a new radical design in aircraft carriers. The Royal Navy have described them as 'four acres of sovereign territory deployable across the globe'. More recent tensions in the Gulf are sure to add fuel to the debate of naval funding.

The Royal Navy Ships issue comprises four se-tenant pairs with the values: First Class; £1.35; £1.55 and £1.60. The Presentation Pack features profile illustrations of all the ships to complement the beautiful paintings that appear on the stamps. The stamps will be shown in all their glory in next month's *Bulletin* along with detailed descriptions. Serviced (ie stamped and postmarked) Royal Mail First Day Covers are available by Mail Order from Royal Mail Tallents House. Orders for Serviced First Day Covers must reach Royal Mail by 19 September 2019. Customers may also send stamped envelopes on the day of issue to, Tallents House for the Tallents House, Edinburgh postmark – Royal Mail, Tallents House, 21 South Gyle Crescent, Edinburgh, EH12 9PB ●



Royal Navy Ships – Prices	
Set of 8 Special Stamps	£10.40
Presentation Pack	£11.20
First Day Cover Stamps	£13.10
Stamp Souvenir	£13.10
First Day Envelope	£0.30
Postcards (8 in set)	£3.60
Retail Stamp Book	£4.20
Framed Set of Stamps	£29.99
Framed Set of Stamps signed by the First Sea Lord	£89.99
Framed Mary Rose Print Enlargement and stamp	£39.99
Framed HMS Victory Print Enlargement and stamp	£39.99

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Stamp Scene Dane Garrod keeps you posted on events and activities in the philatelic world

Autumn STAMPEX 2019 is being held from 11 to 14 September at the Business Design Centre, Islington, London, only 10 minutes' walk from the Northern Line Underground station at Angel. The opening times are as usual, and are Wednesday 1am to 7pm, Thursday and Friday 10am to 6pm, and Saturday 10am to 5pm. A large range of exhibits, both competitive and non-competitive, will be on display. Additionally, a number of societies will hold meetings, especially on the Saturday, where collectors are welcome to attend, even if not members.

The 57th annual Stamp and Postcard Fair of the South West Scotland Philatelic Societies will be held at the Prestwick Community Centre, Caerlaverock, Prestwick KA9 1HR on Saturday 5 October from 10am to 4pm. The host society this year is the Ayrshire Philatelic Society. There will be a range of dealers from across Scotland as well as a Children's Corner. Parking and entry is free, and refreshments will be available.

1 September Oxford Stamp Fair, Botley W.I. Hall, North Hinksey Lane, off Botley Road, Oxford OX2 0LT, 10am to 1.30pm. Enquiries: Tristan Brittain, 07957 158299.

Taplow Stamp & Postcard Fair, Taplow & Hitcham W.I. Hall, Institute Road, Taplow SL6 0NS, 10am to 4.30pm. Enquiries: David Milton, 01895 637283, david.milton139@gmail.com.

Worthing Stamp & Postcard Fair, Heene Community Centre, 122 Heene Road, Worthing BN11 4PL, 9.30am to 3pm. Enquiries: Chris Rapley, 01795 478175.

6 September Strand Stamp Fair, The Galleon Suite, Royal National Hotel, Bedford Way, Russell Square, London WC1H 0DG, 9am to 4pm. Enquiries: Kate Puleston, 0208 946 4489.

7 September Wigginton Stamp Fair, Wigginton Recreation Hall, Wigginton, York YO32 2LL, 9am to 2pm. Enquiries: Mike Lewis, 07742 153669, mikeval9b@yahoo.co.uk.

Chester Stamp Fair, Hoole United Reformed Church, Hoole Road, Chester CH2 3AU, 10am to 3.30pm, 7 dealers. Enquiries: Terry Barnett, 01514 862610.

Leicester Stamp Fair, Derby Room, Holiday Inn, 129 St. Nicholas Circle, Leicester LE1 5LX, 9.30am to 3.30pm. Enquiries: John Suschitzky, 0116 235 0441.

Milton Keynes Philatelic Society Stamp Fair, Methodist Hall, Queensway, Bletchley, Milton Keynes MK2 2HB, 10am to 4pm, 6 dealers, tea, sandwiches and cakes available. Enquiries: Karen Goodger, 01908 521220, info@miltonkeynesphilatelics.

Rawreth Stamp Fair, Rawreth Parish Hall, Church Road, Rawreth SS11 8SH, 10am to 4pm, 10 dealers, refreshments available. Enquiries: Steve Search, 01702 323682, stevesearch@hotmail.com.

Ruislip Stamp & Postcard Fair, Methodist Church Hall, Ickenham Road, Ruislip HA4 7BZ, 10am to 4.30pm. Enquiries: David Milton, 01895 637283, david.milton139@gmail.com.

Upminster Stamp Fair, St. Lawrence Church Hall, Corbets Tey Road, Upminster RM14 2AJ, 10am to 4pm. Enquiries: Simon Shaw, 07534 496845, shawdunton@aol.com.

Charing Cross Market, 1 Embankment Place, Villiers Street, London WC2N 6RH, 7am to 3pm. Enquiries: Bridget Petticrew, 01252 842906, bridget@charingcrossmarket.com.

Weston-super-Mare - Michael Hale Collectors' Fair, Victoria Methodist Church Hall, Station Road, Weston-super-Mare BS23 1XU, 10am to 4pm. Enquiries: Michael Hale, 01749 677669.

Beckenham Stamp & Postcard Fair, Azelia Hall, 258 Croydon Road, Beckenham BR3 4DA, 9am to 3pm, 12 dealers, refreshments available. Enquiries: Ray McQuade, 0208 395 9285.

Margate Collectors' Fair, Union Church, Union Crescent, Margate CT9 1NR, 10am to 3pm, 20 dealers, refreshments available. Enquiries: Clive Baker, 01843 862707, info@clivebaker.co.uk.

8 September Chelmsford Stamp & Postcard Fair, Old Chelmsfordians Club, Roxwell Road, Chelmsford CM1 2LY, 9am to 3pm, 7 dealers, tea and coffee available. Enquiries: Steve Burnell, 01708 229763.

Milton Keynes Stamp Fair, The Irish Centre, Manor Fields, Watling Street, Fenny Stratford MK2 2HX, 10am to 4pm. Enquiries: Simon Shaw, 07534 496845, shawdunton@aol.com.

11 September Cheltenham Stamp & Cover Fair, St. Andrew's United Reformed Church, Montpellier Street, Cheltenham GL50 1SP, 10am to 4pm. Enquiries: Mark Grimsley, 01179 623203, mark_grimsley-stamps@hotmail.co.uk.

Ripley Stamp Club Fair, Village Hall, High Street, Ripley GU23 6AF, 12.30pm to 3.30pm, 10 dealers, refreshments available. Enquiries: Martin Mathewson, 01932 565814, martin.mathewson100@gmail.com.

Brighton Stamp Fair, Church of the Good Shepherd Hall, 272 Dyke Road, Brighton BN1 5AE, 10am to 4pm. Enquiries: John Perriman, 01903 244875.

11-14 September Autumn STAMPEX 2019, Business Design Centre, Islington, London N1 0QH, 50 dealers, full cafeteria all day. Opening times: Wednesday 1am to 7pm, Thursday and Friday 10am to 6pm, and Saturday 10am to 5pm.

12 September Clyst St. George Stamp & Postal History Fair, Clyst St. George Parish Hall, Woodbury Road, Exeter EX3 0RE, 10am to 3pm. Enquiries: Mark Grimsley, 0117 962 3203, mark_grimsley-stamps@hotmail.co.uk.

14 September Norton (Teesside) Stamp Fair, Norton Methodist Church Hall, High Street, Norton TS20 2QQ, 9.30am to 1.30pm. Enquiries: Mike Lewis, 07742 153669, mikeval9b@yahoo.co.uk.

North Wales Stamp & Postcard Fair, Ysgol Eirias, Eirias Road, Colwyn Bay LL29 7SP, 9.30am to 3pm, 12 dealers, refreshments available. Enquiries: Steve Chapman, 01745 826434, northwalesstampfairs@gmail.com.

Charing Cross Market, (as entry on page 22)

Hastings Stamp & Postcard Fair, Christ Church, London Road, St. Leonards-on-Sea TN37 6GL, 9.30am to 3pm. Enquiries: Chris Rapley, 01795 478175.

Bexhill Stamp Fair, St. Martha's Church Hall, Cooden Sea Road, Bexhill-on-Sea TN39 4SL, 10am to 4pm, 4 dealers, refreshments available. Enquiries: John Perriman, 01903 244875.

15 September Norwich Stamp Fair, Brook Hotel, Barnard Road, Bowthorpe, Norwich NR5 9JB, 10am to 3pm, 10 dealers, refreshments available. Enquiries: Tony Hender, 01328 829318.

Knowle Stamp Fair, Knowle Village Hall, St. Johns Close, Knowle, Solihull B93 0NH, 9.30am to 3pm, 10 dealers, tea, coffee and light refreshments available. Enquiries: Dave Burnett, 07765 792998

21 September Liverpool Stamp Fair, St. Columba Church Hall, Hillfoot Road, Hunts Cross, Liverpool L25 0NR, 10am to 3.30pm, 7 dealers. Enquiries: Terry Barnett, 01514 862610.

Sutton Coldfield Stamp Fair, Trinity Centre, Church Hill, off Mill Street, Sutton Coldfield B72 1TF, 10am to 4pm, 10 dealers, refreshments available. Enquiries: John & Jane Rice, 01785 259350, stamps@john-rice-stamps.co.uk.

Orpington Stamp & Postcard Fair, Christ Lutheran Church, 227 Poverest Road, Petts Wood, Orpington BR5 1RD, 10am to 4pm, 20 dealers, refreshments available. Enquiries: Keith Jupp, 01689 827086, kjstampspts@btconnect.com.

Charing Cross Market, (as entry on page 22)

East Malling Stamp Fair, East Malling Village Hall, New Road, East Malling ME19 6DD, 9.30am to 3.30pm, 14 dealers, refreshments available. Enquiries: Mike Thompson, 01474 325507.

Exeter Collectors' Fair, The America Hall, De La Rue Way, Pinhoe, Exeter EX4 8PX, 10am to 4pm, 12 stamp dealers, refreshments available. Enquiries: Michael Hale, 01749 677669.

22 September Maidstone Stamp Fair, Royal British Legion Hall, Hall Road, Aylesford ME20 7NL, 10am to 4pm, 6 dealers. Enquiries: John Perriman, 01903 244875.

A main event in the south in this period of review is HAMPEX 2019, which is the Hampshire Philatelic Federation convention and stamp fair to be held from 10am to 4pm on Saturday 28 September. The main competition award presentation will be at 11.45am. Easy road access is via the A32 and A334 to Wickham Centre, Mill Lane, Wickham, near Farnham PO17 5AL. There is a large amount of free parking, and over twenty dealers will be supplemented by cafeteria facilities. Speak to the organiser, Julian Jones on 01794 514902, if you have any queries.

The first meeting of the 2019/20 season for the Great Britain Philatelic Society will be at STAMPEX at 2.15pm on Saturday 14 September, where Tony Walker FRPSL and Max Melrose will show and display 'The RNAS Armoured Car Division in Russia in WW1 and RAF Airmail APO S40 & 1919 Railway Strike Airmail'. An intriguing long title for what will be a memorable display. Even if not a member of the society, you are welcome to attend, and may well find that membership is for you as well. The October meeting of the society is at 15 Abchurch Lane, London EC4N 7BW – the new home of the Royal Philatelic Society London – on Saturday 12 October. At 11am Richard Farman will speak on 'Napoleonic Prisoners of War', and at 2.15pm Ken Burr FRPSL will entertain with 'GB from late 16th Century to 1900'.

The Royal Philatelic Society London begins a new season within a new home, 15 Abchurch Street, London EC4N 7BW, the first meeting to which non-members can attend as guests being a Regional Display on Thursday 26 September by the society's north region. Two weeks later on Thursday 10 October, Edward Klempka FRPSL will give a PowerPoint display from 5pm entitled 'The Russian Civil War'. Should you wish to attend as a non-member, then a telephone call during weekday office hours prior to the meeting day to the Adminstration Manager, Jason Webber, on 0207 486 1044, will suffice.

25 September Plymouth Stamp Fair, St. Andrew's Abbey Hall, Catherine Street, Plymouth PL1 2AD, 10am to 2pm. Enquiries: Mark Grimsley, 0117 962 3203, mark_grimsley-stamps@hotmail.co.uk.

28 September Grampian Stamp & Postcard Fair, Queen's Cross Parish Church Hall, Albyn Place, Aberdeen AB10 1YN, 10am to 3pm. Enquiries: Chad Neighbor, 01674 832823, chad@cneighbor.plus.com.

Bilsborrow Stamp Fair, Village Hall, Bilsborrow PR3 0RE, 10am to 3.30pm, 12 dealers, hot and cold food all day. Enquiries: Terry Barnett, 01514 862610.

Great Barr Stamp Fair, Collingwood Centre, Collingwood Drive, Great Barr, Birmingham B43 7NF, 10am to 4pm, 14 dealers, refreshments available. Enquiries: Dave Burnett, 07765 792998.

Northampton Stamp Fair, The Abbey Centre, East Hunsbury NN4 0RZ, 10am to 4pm. Enquiries: Tristan Brittain, 07957 158299.

Wanstead Stamp Fair, Our Lady of Lourdes, 51 Cambridge Park, Wanstead E11 2PR, 10am to 3pm. Enquiries: Simon Shaw, 07534 496845, shawdunton@aol.com.

Ealing Stamp Fair, Ealing Parish Church, St. Mary's Road, Ealing W5 5EU, 9am to 1pm. Enquiries: Tristan Brittain, 07957 158299.

Charing Cross Market, (as entry on page 22)

Crawley Stamp Fair, St. Paul's Church Hall, Woodfield Road, Northgate, Crawley RH10 8ER, 10am to 4pm. Enquiries: John Perriman, 01903 244875.

HAMPEX 2019 Stamp Fair, Wickham Centre, Mill Lane, Wickham, near Farnham PO17 5AL, 10am to 4pm, 20 dealers, refreshments available. Enquiries: Julian Jones, 01794 514902.

Eastbourne Stamp & Postcard Fair, St. Mary's Church Hall, Decoy Drive, Eastbourne BN22 9PP, 9.30am to 3pm. Enquiries: Chris Rapley, 01795 478175.

29 September Peterborough Stamp Fair, Holiday Inn, Thorpe Wood, Peterborough PE3 6SG, 10am to 3pm, 10 dealers. Enquiries: Richard Lewis, 01945 700594, richard@lewis8571.plus.com.

Stevenage Stamp Fair, Novotel, Knebworth Park, Stevenage SG1 2AX, 10am to 4pm. Enquiries: Simon Shaw, 07534 496845, shawdunton@aol.com.

Bracknell Stamp Fair, Red Cross Centre, 21 Martins Lane, Bracknell RG12 9EN, 9am to 1pm. Enquiries: Tristan Brittain, 07957 158299.

4 October Strand Stamp Fair, The Galleon Suite, Royal National Hotel, Bedford Way, Russell Square, London WC1H 0DG, 9am to 4pm. Enquiries: Kate Puleston, 0208 946 4489.

5 October Lichfield Stamp Fair, Boley Park Community Hall, Ryknild Street, Lichfield WS14 9XU, 10am to 4pm, 6 dealers, refreshments available. Enquiries: John & Jane Rice, 01785 259350, stamps@john-rice-stamps.co.uk.

Leicester Stamp Fair, Derby Room, Holiday Inn, 129 St. Nicholas Circle, Leicester LE1 5LX, 9.30am to 3.30pm. Enquiries: John Suschitzky, 0116 235 0441.

Rawreth Stamp Fair, Rawreth Parish Hall, Church Road, Rawreth SS11 8SH, 10am to 4pm, 10 dealers, refreshments available. Enquiries: Steve Search, 01702 323682, stevesearch@hotmail.com.

Charing Cross Market, (as entry on page 22)

Beckenham Stamp & Postcard Fair, Azelia Hall, 258 Croydon Road, Beckenham BR3 4DA, 9am to 3pm, 12 dealers, refreshments available. Enquiries: Ray McQuade, 0208 395 9285.

Chichester Stamp & Postcard Fair, Donnington Parish Hall, Stockbridge Road, Chichester PO19 8QR, 9.30am to 3pm. Enquiries: Chris Rapley, 01795 478175.

Cornwall Postcard & Stamp Fair, Redruth Methodist Church, Wesley Street, Redruth TR15 2EG, 10am to 4pm. Enquiries: Doug Luxford, 01736 786284.

6 October Hopton Stamp Fair, Hopton Village Hall, Station Road, Hopton NR31 9BE, 9.30am to 2pm. Enquiries: Terry Allaker, 01502 563759.

Oxford Stamp Fair, Botley W.I. Hall, North Hinksey Lane, off Botley Road, Oxford OX2 0LT, 10am to 1.30pm. Enquiries: Tristan Brittain, 07957 158299.

9 October Ripley Stamp Club Fair, Village Hall, High Street, Ripley GU23 6AF, 12.30pm to 3.30pm, 10 dealers, refreshments available. Enquiries: Martin Mathewson, 01932 565814, martin.mathewson100@gmail.com.

12 October Norton (Teesside) Stamp Fair, Norton Methodist Church Hall, High Street, Norton TS20 2QQ, 9.30am to 1.30pm. Enquiries: Mike Lewis, 07742 153669, mikeval9b@yahoo.co.uk.

Middlewich Stamp Fair, Middlewich Community Centre, Civic Way, Middlewich CW10 9BX, 10am to 3.30pm, 7 dealers. Enquiries: Fred O'Reilly, 01226 765069.

King's Lynn Stamp Fair, Gaywood Church Rooms, Gayton Road, Gaywood, King's Lynn PE30 4DZ, 10am to 3pm. Enquiries: Tony Hender, 01328 829318.

Kenilworth Stamp Fair, Kenilworth School, Leyes Lane, Kenilworth CV8 2DA, 10am to 4pm, 8 dealers. Enquiries: John & Jane Rice, 01785 259350, info@john-rice-stamps.co.uk.

Telford Stamp & Card Fair, Belmont Community Hall, Tan Bank, Wellington, Telford TF1 1LT, 10am to 3pm, 15 dealers, home-made refreshments available. Enquiries: Richard Camp, 01952 405458, mail@richardcamp.co.uk.

Ruislip Stamp & Postcard Fair, Methodist Church Hall, Ickenham Road, Ruislip HA4 7BZ, 10am to 4.30pm. Enquiries: David Milton, 01895 637283, david.milton139@gmail.com.

Charing Cross Market, (as entry on page 22)

Cardiff Stamp, Postcard & Collectors' Fair, Cardiff City Hall, King Edward VII Avenue, Cardiff CF10 3ND, 10am to 4pm, 40 dealers. Enquiries: Malcolm Harrington, 01792 415293, malcolm.harrington1@hotmail.co.uk.

Canterbury Postcard & Collectors' Fair, Westgate Hall, Westgate Road, Canterbury CT1 2BT, 10am to 3.30pm, 60 dealers, refreshments available. Enquiries: Clive Baker, 01843 862707, info@clivebaker.co.uk.

South of England Stamp & Postcard Fair, South of England Centre, Ardingly RH17 6TL, 10am to 4pm. Enquiries: Jim Etherington, 01273 471897, sussexphilately@live.co.uk.

13 October Slip End Stamp Fair, Village Hall, Markyate Road, Slip End, Luton LU1 4BU, 10am to 4pm. Enquiries: Simon Shaw, 07534 496845, shawdunton@aol.com.

Chelmsford Stamp & Postcard Fair, Old Chelmsfordians Club, Roxwell Road, Chelmsford CM1 2LY, 9am to 3pm, 7 dealers, tea and coffee available. Enquiries: Steve Burnell, 01708 229763.

Bristol Stamp & Postal History Fair, Easter Compton Village Hall, Main Road, Easter Compton, Bristol BS35 5SJ, 10am to 3.30pm. Enquiries: Mark Grimsley, 01179 623203, mark_grimsley-stamps@hotmail.co.uk.

Machin phosphors

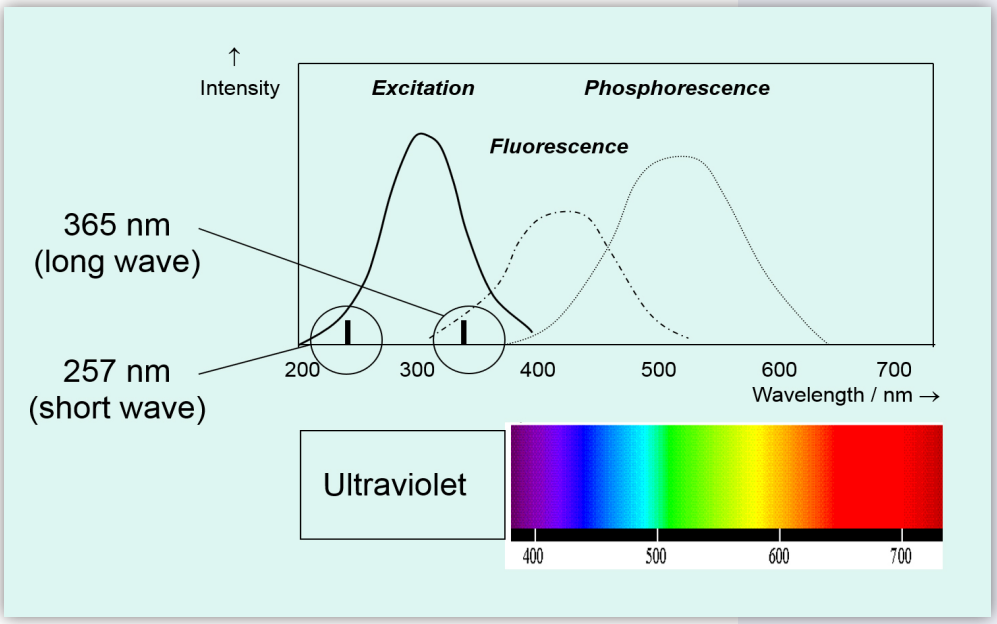
Some months ago when writing the first of these articles, I rather rashly implied in the closing paragraph that a later one would tell the story of Machin phosphors. Since this is a complicated subject to distil into a short article, I have to confess that I've been putting it off. But it's now nettle-grasping time, so here goes!

Background Manual 'facing' of letters – i.e. collating them so the address sides all face the same way, with the stamps in the top right corner ready to cancel – is a slow process. Speeding it up by mechanical means required a machine that could identify the stamp, which meant that stamps needed to generate some recognisable signal. The first live experiments with Automatic Letter Facing machines – generally shortened to ALF in accordance with the Rule of TLA[1] – in the 1950s used graphite lines on the backs to conduct an electric current, but this proved unreliable, especially in damp conditions (not exactly uncommon in the British climate). The second method tried was stamps that could generate a light signal, and proved much more effective.

The original idea was to use stamps treated with a *fluorescent* chemical compound or 'fluor' – i.e. one that glows when exposed to ultraviolet (UV) radiation. Physically, the effect results from molecules in the substance temporarily absorbing energy from the UV, then emitting some of it again as visible light. This usually happens almost immediately, so the effect stops when the UV stops. Unfortunately, envelopes were being produced with fluorescent brightening agents in the paper,[2] and these tended to interfere. The chosen solution was to use a *phosphorescent* compound – a 'phosphor' in philatelic jargon – with which the light emission happens more slowly, with an afterglow continuing for (typically) a few seconds after the UV is turned off. This is enough time to move the letter along to a detector. A similar method was used for the 'dots' used to represent the postcode in automatic sorting equipment.

The colour and strength of the afterglow depends on the particular compounds used, what other compounds are mixed in as an 'activator', and the wavelength of the UV – different mixes respond to different wavelengths, usually broadly classified into 'short' and 'long' wavebands. I'm not going to try to describe the chemicals used over the years in detail (which you're probably relieved to hear), but I will try to highlight their key features.

Since the gritty inorganic phosphors available in the 1950s were unsuitable for stamp inks, the Post Office research team had to come up with new ones. These were organic compounds produced as a resin, which could be ground into a suitably fine powder to make into inks. Several kinds were tried on Wildings during the experimental period – one with a green afterglow from shortwave UV, then one with a bright blue afterglow from longwave UV, and finally one with a violet afterglow from shortwave UV, which became the standard 'production' phosphor. (The 'blue' phosphor responding to longwave could not be used as it was earmarked for automatic sorting codemarks, so that the two systems would not interfere with each other.)



Spectra for a typical phosphor, which respond to some extent to a range of UV wavelengths. The output as fluorescence and phosphorescence is as visible light (which is also electromagnetic radiation, but of a longer wavelength than UV), usually different colours

Image: Austin Barnes

By the start of the Machin era the standard method for getting the phosphor ink onto the stamps was to use it in a photogravure cylinder, which printed bands on the front of the stamp as part of the regular print run. Two or more bands (or phosphor covering the whole area of the stamp) meant first class[3], one band meant second class. The bands approach has been by far the most common method used over the years, and is still pre-eminent, but it's not the only one that has been tried.



Phosphor Coated Paper (PCP) An alternative to printing two bands was to incorporate the phosphor into the stamp paper, resulting in one wide signal. Unfortunately, the violet phosphor of the 1960s was rendered ineffective when added directly to the paper coating mix used, and so the Post Office chemists came up with an ingenious alternative which involved adding the base ingredients to the mix and completing the synthesis of the phosphor by heat treatment in situ on the printing web. The early trials on the 1s 6d and large format 10p described in the first and third articles in this series used this paper, but it proved sensitive to moisture (sounds familiar). A new phosphor ink formula was devised and tried first on printings of the 4½p grey-blue in ►



[1] 'Three Letter Acronyms'. I'm afraid quite a number of these appear in the piece, but I'm only following the accepted nomenclature here, honest…

[2] Sunlight contains a certain amount of UV (responsible for tanning), so a substance that fluoresces will emit a small amount of light in response.

[3] Two bands were used on definitives, but some wider commemoratives had more. The system worked on the period over which a signal was detected as the stamp passed by, not by counting bands – in simple terms a 'blip' from one band meant 2nd class, a longer period meant 1st class.



Appearance under normal light



Fluorescence under shortwave UV



Phosphorescent afterglow from shortwave UV



Fluorescence from longwave UV

Phosphor changes from 1971 to date as shown by the 1p values
From left to right:
(1) The original 'classic' phosphor, two bands
(2) As (1) but with OBA in the paper
(3) PPP – pre-printed phosphor coating whole sheet, leading to a coarse coloured ink impression
(4) PCP – phosphor incorporated into the coating of the paper
(5) ACP – as PCP but 'advanced' phosphor, less obvious to the naked eye
(6) OBA free paper, phosphor shows under LW illumination
(7) With yellow fluor added – shows under both short and long wave UV
(8) With blue fluor added – current variant, shows under both short and long wave UV



1974 (although for operational use bets were hedged by also printing them with two phosphor bands!), then the 8½p yellowish-green of 1976, and finally the Racket Sports commemoratives of 1977.

The paper having been judged satisfactory, it was brought into general use in 1979, but as often happens going live revealed unsuspected problems. Quality control proved difficult once large quantities were needed, and this showed up as a difference in the appearance of the stamps, with the precise appearance depending on the ink colour and Machin head type. Collectors observing them as new issues began to refer to 'PCP1' (dull) and 'PCP2' (glossy) under the impression that they were different papers, but those are actually just the two extremes with no clear dividing line between them (rather like the 'shades' of early stamps where the proportions of ingredients in the ink mix could vary).

The solution involved '*altering the synthetic chemical route*', with a new process that no longer finished by heat-curing on the web. This paper was officially designated 'Advanced' Coated Paper (inevitably dubbed ACP). The phosphor and activator compounds used were exactly the same as PCP, although ACP also had a fluorescent optical brightening agent (OBA) added to the mix to prevent interference with automatic sorting marks, by 'soaking up' the longwave UV they responded to. It was first used experimentally for the 22p deep blue in 1982, with production printings commencing with the 16p olive drab in 1983. A version for litho stamps was first used later that year for the 16p Scottish regional.

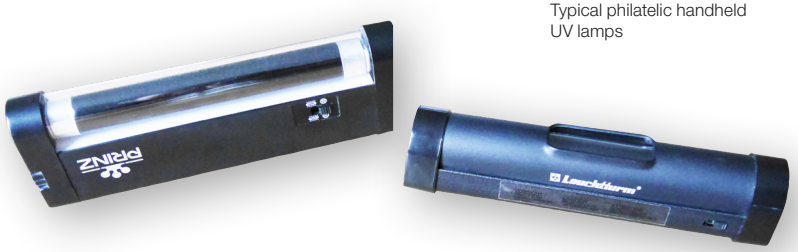
There were other variants. 'All-over phosphor' (AOP) meant that the whole surface of the stamp was printed with the phosphor ink. This was hardly ever used for Machins, although at the request of stamp designers it was used for many commemoratives from the 1972 Royal Silver Wedding onwards (as visible bands spoiled the aesthetics). One oddity was the so-called 'preprinted phosphor paper' (PPP) used for a printing of 1p, 2p and 10p Machins in October 1979. At the time Harrisons had only one spare gravure unit on their Jumelle press, when two were needed (one for the ink, one for the bands). Their solution was to first print AOP on the paper, then run it through the press a second time using the stamp image cylinder. On other occasions stamps were printed with phosphor bands under the ink (you guessed it, PUI) for similar reasons.

A different violet phosphor was introduced for the bands on second class photogravure stamps from 1987. It was used in a new phosphor ink developed by Harrisons, based on a different solvent to avoid the discolouration caused by some light coloured stamp inks. These bands are harder to see with the naked eye, but are still bands, not phosphorised paper.

The Move to Commercial Suppliers The developments described above were largely based on pioneering 'in-house' work by the Post Office's own research department, and so the machinery used had to be specially built. By the 1990s, the ALF machines were showing their age. However, postal automation was now sufficiently widespread worldwide that high-quality commercial products were available, and so the policy shifted to use these instead. Beginning from late 1991, the ALFs were replaced by much faster 'culler-facer-canceller' machines (CFC) manufactured by Toshiba, but ▶



Images: Ian Gill

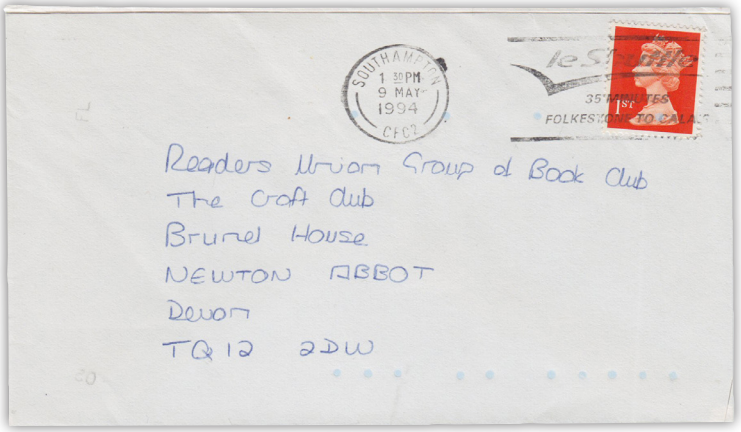


Typical philatelic handheld UV lamps

Images: Scott Kibby

the extra speed required changes to the stamps. Although letters reached the detector in about a sixth of the time while the afterglow was stronger, they received less UV energy in the first place due to passing the (smaller) lamp more quickly. The net effect was that the phosphor signal needed to be some 50% stronger. Not all stamps on ACP could meet this requirement, which resulted in a reversion to phosphor bands on the face of the stamps (still used today). The reduced quantities of the special phosphor required meant that the supplier lost interest in renewing the contract, which led in turn to a change to a commercial phosphor named 'Novaglo'. This also has a bright violet afterglow, but responds to both short and long wave UV (no longer a problem, as detectors in the new generation sorting machinery filter out violet). The first Novaglo stamp was the 38p rosine printed by Enschedé in August 1994.

Another development at this time was the addition of commercial fluors to the phosphor ink to aid detection of missing phosphor. The original type used had the trade name 'Cartax', and fluoresces yellow under longwave UV, with the Enschedé 18p light green (one band) of November 1991 the first stamp to use it. The OBA fluors were now omitted as the developments in sorting equipment meant they were no longer needed (not to mention environmentally suspect). However, the Cartax fluor itself was found to potentially interfere with sorting (such as when the upper row of coding dots fell across the stamp) and it was replaced by blue fluors from July 1995. The shade of blue emitted has varied considerably over the years, presumably because Royal Mail



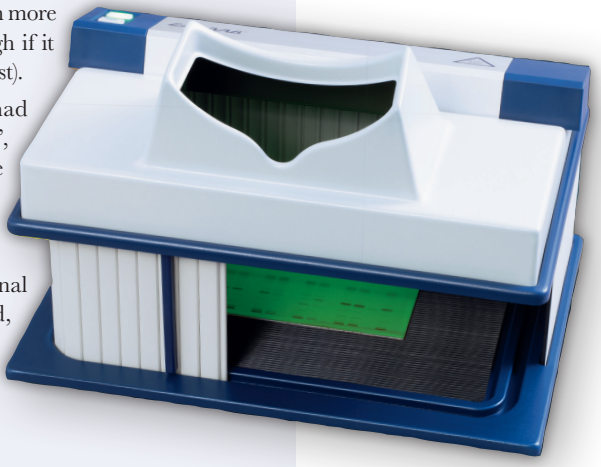
One of the revised 1st class NVI stamps with 2 bands, cancelled by a CFC machine in use at the Southampton office (where the first ALF machines had been used)

are generally indifferent to the exact colour as long as it does the job. One more recent development should be mentioned – the change from a 'bright' to a 'dull' phosphor afterglow beginning in September 2015. Royal Mail have confirmed that this was due to a change of supplier, as the performance of the previous phosphor ink was erratic, with too much ink needed to achieve the desired signal.

Viewing Phosphors A few phosphor variants can be identified with the naked eye from the appearance of the stamps, but if phosphor variations catch your interest, then to get anywhere you really need some hardware. The basic requirement is for short and long wave UV lamps – the short wave one is needed for Machins up to 1991, the long wave one for subsequent stamps. Fortunately, they're not too expensive these days – you can get basic lamps for £15-30 each from most of the usual philatelic equipment makers. There are both handheld battery powered lamps, and small desk mains powered versions. The former can be put in a pocket and taken to fairs etc, but this isn't as useful as you might hope as the afterglow tends to be hard to see in well-lit rooms. You'll probably find that you need to use them in a darkened room, or contrive some sort of hood arrangement, in order to block out as much external light as possible (in postal use, the light detectors are after all deep in the innards of the machine).

There's another very important piece of advice to offer here: BE CAREFUL. Prolonged exposure to UV (especially the higher energy shortwave UV) can damage your eyes, cause skin cancer etc – basically it's the equivalent of staring at the sun or not using sunblock, in other words definitely not a good idea. Keep the lamps shielded and/or pointed away from you (if you're looking at afterglows, you can shut your eyes while they're turned on) and don't let kids get hold of them! If you *really* get into this, then the way to go may be to use professional laboratory equipment, which will be higher powered and have useful features such as protective filters and viewing slots which make photography practical (the illustrations in this article were taken with such a piece of kit). The downside is that it will be much more expensive – probably north of £1,000 (although if it helps identify a few rare items it will cover its cost).

Conclusion Many details have of course had to be omitted in this 'view from 30,000 feet', but hopefully it will at least help to put the various changes (and mysterious acronyms) into context! For a more detailed view, the Deegam handbook on CD (www.deegam.com) is the most readily available source. The final article in this series will see me on home ground, with a look at Machin usages – as with phosphors, a Machin collecting topic that can be approached at many different levels of detail ●



The 'Camag' unit used to take the photographs on page 28

By Maurice Buxton a long-term collector, and webmaster for the Great Britain Philatelic Society – www.gbps.org.uk. Particular thanks to Austin Barnes and Scott Kibby for advice and assistance with this article.

New Issues and Withdrawals

3 September

Issue Elton John: Stamps (4 x 1st Class, 4 x £1.55 – 2 se-tenant strips of four). Presentation Pack. Miniature Sheet (2 x 1st Class, 2 x £1.55). Stamp Souvenir. Stamp Sheet Souvenir. Postcards (13 in set). First Day Cover. Miniature Sheet First Day Cover. First Day Envelope. Stamp Book (2 x 1st Class Special Stamps, 4 x 1st Class definitives). Character Pack (10 x 1st Class Yellow Brick Road Stamps). Character Pack (10 x 1st Class Captain Fantastic Stamps). Press Sheet. Captain Fantastic Fan Sheet. Goodbye Yellow Brick Road Fan Sheet. Album Collection Fan Sheet. Stamp Mount. Souvenir Pack. Framed Stamps. Framed Print and Stamps. The Rocket Man Collection (Stamp Souvenir, Presentation Pack and Dodger Stadium Souvenir Pack).



5 September

Issue Centenary of Remembrance: BU Coin Cover. Silver Coin Cover. Gold Coin Cover.



6 September

Withdrawal WW II – D-Day: Stamp Souvenir. Stamp Sheet Souvenir.



11 September

Issue WW II – D-Day: Miniature Sheet, Operation Overlord and Stampex overprint – only available at Stampex.



19 September

Issue Royal Navy Ships: Stamps (2 x 1st Class, 2 x £1.35, 2 x £1.55, 2 x £1.60 – 4 horizontal se-tenant pairs). Presentation Pack. Stamp Souvenir. Postcards (8 in set). First Day Cover. First Day Envelope. Stamp Book (4 x 1st Class Machin definitives, 2 x 1st Class Special Stamps). Framed Stamps (8 stamps). Framed Stamps (8 stamps – signed by the First Sea Lord, limited edition of 100). Framed Print and Stamp (Mary Rose and HMS Victory) – UK only.



You can order any of the Royal Mail stamp products listed above, by visiting **www.royalmail.com/stamps** or from Royal Mail Stamps and Collectibles PO Box 1373, Sunderland SR5 9PG, UK. (Overseas subscribers will need to use a stamp.) Or use the Royal Mail telephone order service on 03457 641 641 (08.30 – 17.00 Monday to Friday). For overseas customers: +44 3457 641 641. Minimum handling charge UK £1.45, Europe £1.55, rest of world (airmail) £2.15.

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