

## British Discovery and Invention

Date of issue: 19 SEPTEMBER 1967



In July 1966 Edward Short took over from Anthony Wedgwood Benn as Postmaster General; soon he requested a briefing from the Deputy Director General (Posts), A Wolstencroft, on requirements pertaining to postage stamps. In his reply dated 1 August the DDG (P) referred to Wedgwood Benn's stipulations of December 1964 that special stamp issues should, amongst other criteria, 'reflect the British contribution to world affairs, including the arts and sciences'. For the 1967 stamp programme, which it was urgent to finalise, the total number of special issues should be reduced to six maximum (as against eight for 1966) but should include three pictorial issues on British themes as urged by Wedgwood Benn (the same number as for 1966). On 5 August a discussion took place on suitable subjects, involving the PMG, Mr Wolstencroft and the Director of Postal Services (G R Downes). It was decided to include a set on 'historic forms of transportation'; under the heading 'British Transport - road, rail, sea and air' this suggestion was part of a list submitted to the Queen for her approval on 12 August and provisionally agreed two days later.

On reflection, however, the PMG felt dissatisfied with the idea of a 'British' set confined to transport, and discussed this again with Wolstencroft on 7 September. His preference was either for another 'landscapes' issue, or for a general celebration of British achievements, although he had no fixed ideas as to what this should cover. On the first point the DDG (P) was able to inform him that the possibility was already under review, while the second could be taken to refer to technical achievements, and it was agreed that unused British Technology designs might be examined for possibilities. It was decided to favour the theme of British technical achievement, and the 'landscapes' proposal held over for future consideration (which ultimately resulted in the 'British Architecture' sets of succeeding years). On 29 September the PMG and Downes met to discuss stamp designs for the coming year with James Fitton, Chairman of the Stamp Advisory Committee (SAC), and Mr White, Deputy Director of the Council for Industrial Design (CoID). The GPO representatives had a list of potential subjects in the 'achievement' category including shipbuilding, the railway

engine, Whittle's jet engine, the VTOL jet, electronics, the conquest of Mount Everest, pure science (represented by Faraday, Newton, Fleming, etc) and Captain Cook's last voyage of exploration (1776-79) in HMS 'Discovery'. The idea that the set be titled 'British Discovery' was adopted by those present. Mr Fitton agreed to submit refined ideas for the set, so that the 1967 stamp programme could be announced.

At the next SAC meeting on 20 October these ideas were put forward as 'recent contributions by this country to international science, medicine, etc, eg, radar, penicillin, television'. The 1967 programme was announced in Parliament on 26 October, and again in further detail on 30 November, when it was stated that the issue would include the 4d, 1s and 1s 6d denominations.

---

## INSTRUCTIONS TO ARTISTS DRAFTED

Draft instructions to artists and research into background material for briefing purposes were prepared with the aid of such bodies as the Atomic Energy Authority and Central Office of Information. Following a query from the DDG (P) Downes examined coinciding the issue in with the launch of the new Cunard ocean liner, the 'QE2', scheduled for the coming September; the reply was that, apart from the questionable appropriateness of the occasion to the theme of discovery and invention, there was the fact that Sir John Wall OBE, the Deputy Chairman of the Post Office Board, was also connected to the board of Cunard. 'Since there are so many frustrated sponsors of special issues ... ought we not to lean over backwards to avoid any suggestion of influence being brought to bear? ... In view of the Deputy Chairman's position I would think it most important that we should not include the Cunarder stamp in the programme' (Downes to Wolstencroft, 24 January 1967).

In a minute to the PMG dated 10 February 1967 accompanying a draft set of instructions, Mr Downes explained how an attempt had been made to strike a balance between the open brief given to artists for the EFTA issue, which had resulted in mostly unacceptable designs, and an overly 'restrictive' brief such as that for the 1966 Technology series which had also produced designs of inadequate quality. Geographical achievements had been ruled out, as it was felt this might be misunderstood abroad - a design celebrating the ascent of Everest might be interpreted by the Nepalese as a British claim to have 'discovered' their mountain. The PMG had earlier indicated that 'discoveries' should mean 'modern scientific discoveries and inventions made by people from Britain'; Downes proposed in addition that the 'modern' period should extend back to 1900 to maximise opportunities for attractive designs, but also include those discoveries which were not yet fully developed, such as jet propulsion and nuclear fission, 'to avoid giving the impression that this country is living on its past glory'.

The invitations and instructions to artists went out on 15 February, incorporating Downes' final suggestions to the PMG. Further specifications were that designs might be symbolic or pictorial, preferably the latter; fine detail should be avoided where it would be lost in stamp size; a profile head of the Queen must be included in white or black; no more than four colours should be used in each design, the background to be in white or no colours deeper than medium tone. A set of three designs was required, although alternative designs or extra sets could be submitted; artists were as usual urged to liaise with Harrison & Sons Ltd, who would be printing the stamps, over any technical problems. The standard fee of 60 guineas for each design up to a maximum of 180 guineas for three was payable, plus 190 guineas for each design accepted, so that 250 guineas would be paid in total for a design actually issued. Artists were asked to avoid subjects previously treated in stamp issues - a set of the 1966 Technology stamps was supplied with the instructions to make particularly sure that ground would not be covered a second time. Also supplied as an aid to artists was a Central Office of Information booklet, 'Some British Achievements in Science, Industry and Technology'.

---

## RESPONSE FROM ARTISTS

The artists invited to submit designs were George Him, Margaret Calvert of Kinneir Associates, and the design team of Richard Negus and Philip Sharland; invitations also went to the two stamp printing firms Harrison & Sons Ltd and Bradbury Wilkinson & Co Ltd. Bradbury Wilkinson declined due to pressure of work, and George Him because of foreign travel commitments. The deadline for the return of designs, originally 5 March, was postponed to 13 March, as Harrison's other commitments rendered essaying impossible until after that date. A week prior to the revised deadline, an additional invitation was extended to the amateur artist William Hardman. Hardman, an architectural designer by profession, had first offered stamp designs to the GPO the previous October at the suggestion of his local philatelic society; as his work was of professional standard, he was encouraged to submit fresh designs, first for the British Wild Flower series and again on the present occasion. Hardman was able to complete a set of three designs by 11 March, while Calvert and the Negus/Sharland team also met the deadline; Harrisons commissioned the freelance artists Peter Gauld and Clive Abbott, and supplied artwork on 17 March. The designs submitted were as follows.

Negus/Sharland (received 13 March):

4d (later 1s 9d) – Baird and television (design 1)

1s – Rutherford and atom (design 2)

1s 6d – Whittle and jet engine (design 3)

Calvert (received 17 March):

4d – Radar (design 4)  
1s – Microcircuitry (design 5)  
1s 6d – Nuclear fission (design 6)

Abbott (Harrisons) (received 17 March)

4d – Radar (design 7)  
1s – Fleming and penicillin (design 8)  
1s 6d (later 1s) – Penicillin (design 9)  
4d (later 1s) – Jet engine (design 10)  
1s – Nuclear fission (design 11)  
1s 6d – Rutherford and atom (design 12)

Gauld (Harrisons) (received 17 March):

4d – VTOL fighter (design 13)  
1s – Steel-making (design 14)  
1s 6d – British ships (design 15)

Hardman (received 13 March):

4d – Jet engine (design A)  
1s – Penicillin (design B)  
1s 6d – Cockroft, Walton and nuclear generator (design C)

None of the artwork can be traced in the British Postal Museum & Archive albums, but the unaccepted designs nos 2, 4 to 6, 8 and 10 to 15 are reproduced in the 'British Philatelic Bulletin', vol. 5, no. 2, pp. 11-13. The albums contain essays of nos 1, 7, 9, B and a later version of 10 with the value altered. In a brief to the PMG dated 30 March Downes explained some of the difficulties that the artists and the PSD had encountered:

Modern technical and scientific achievements ... appear more and more often to be a combination of several discoveries by individuals ... in different countries, or by teams sometimes of more than one nationality. It is thus more than difficult to determine with certainty whether Britain was, indeed, the 'first' in a number of projects.

The four modern discoveries to which Britain had the best claim were penicillin, nuclear fission, radar and the nuclear 'generator' (in an appendix to the brief it was reported that Sir John Cockcroft, who shared credit for the latter with Dr E T S Walton, had seen the design and recommended the modern term 'nuclear accelerator'). However, Lord Rutherford, who had demonstrated 'natural' nuclear fission in 1919, was a New Zealander, although he had worked with a British team. In 1932 Cockcroft and his partner Walton had produced fission by 'artificial' means, ie, protons artificially generated by high energy as opposed to Rutherford's use of naturally occurring alpha particles; Walton was a citizen of

the Irish Republic. While both men had indicated their willingness to be credited by name on a stamp, in the context of a series marking 'British' discoveries this raised matters of protocol with the Republic. The Central Office of Information had additionally pointed out that as all four discoveries had been made by teams of scientists it would be preferable to omit the names of individuals, even where these had become customarily associated with a particular discovery.

---

## CHOSEN DESIGNS ESSAYED

With regard to particular designs Downes felt that no. 6 by Margaret Calvert and no. 11 by Clive Abbott should be ruled out, on advice by the UK Atomic Energy Authority that any claims to pioneer work in the general field of nuclear fission (as opposed to the particular projects of Rutherford and Cockcroft) properly belonged to the United States. Microcircuitry was also generally credited to the USA so no. 5 by Margaret Calvert was excluded. All Peter Gauld's designs for Harrisons (nos. 13, 14 and 15) was felt to be more appropriate to a celebration of technology rather than scientific discovery. Downes' final recommendation was that, while none of the designs was particularly outstanding, 'we consider designs 3 and 7 quite good, B reasonably good and 1 and 10 acceptable'. These respectively featured Whittle's jet engine (Negus/Sharland), radar (Clive Abbott's design for Harrisons), penicillin (Hardman), television (Negus/Sharland) and a second design featuring Whittle's jet engine (by Clive Abbott). Thus the achievements of Rutherford and Cockcroft were also excluded, partly because they were felt to be too similar to each other. It was felt that television could be reasonably claimed as a British invention while conceding that Baird had not been the first to demonstrate a television transmission apparatus and that the BBC had not adopted his system after its first experiments. As for the jet engine, Whittle had successfully tested it in 1937, although Germany could claim the first jet flight in 1939, two years before the Whittle jet was finally proved in the air.

The PMG agreed that the five recommended designs should be essayed, plus no. 9, Clive Abbott's penicillin design, modified so that the portrayal of a penicillin mould was further to the left of the Queen's head. The following day Don Beaumont of PSD sent the artwork of the six designs to Harrison's Works Director, R F York, with the instruction that the names 'Baird', 'Whittle' and 'Sir Alexander Fleming' be removed from designs 1, 3 and B respectively. The value on Abbott's jet engine design was to be altered from 4d to 1s. York was also told in general terms about the changes needed to no. 9 and informed that Abbott had been asked to liaise with him directly. Essays were returned on 2 May.

The essays supplied of Abbott's design no. 7 differed in the profile of the Queen's head, namely a grey silhouette, a grey portrait and a white portrait. There is no evidence whether essays of the other designs varied in the same way, but there are indications that all the

Negus/Sharland designs used the same small-sized silhouettes in colour for the Queen's head. Later essays of Abbott's designs nos 7 and 9 used a similar medium-size silhouette in white.

---

## ESSAYS SUBMITTED TO PMG

On 9 May Downes submitted essays to the PMG in two sets of three, Set A comprising designs 7, B and 3 (radar, penicillin and the jet engine) being the preferred choice, and an alternative Set B of designs 1, 10 and 9 (television, the jet engine and penicillin). The PMG replied on 11 May suggesting that Set A be expanded to four by the inclusion of design no. 1 from Set B depicting television, and that penicillin should be represented by design no. 9 from Set B rather than Hardman's design 'B'; he also queried the omission of the names of individuals such as Whittle with whom the various discoveries were usually linked. J R Baxter of PSD replied on 15 May in Downes' absence abroad, proposing the 1s 9d value (Zone C airmail letter base rate) for the extra stamp in the issue, as its relatively small usage would mean that the current printing programme need not be inconvenienced. On the subject of the rival penicillin designs, he had consulted Mr Savage of the Public Relations Department, who agreed with the PMG's view that no. 9 by Abbott was the more attractive of the two; Baxter himself concurred with this, explaining PSD's preference for design B by Hardman as on the grounds that the depiction of the penicillin mould was more clearly recognisable as such (opinion within PSD had in fact been almost equally divided between the two, hence their final resort to the advice of Mr Savage). Finally he reminded the PMG of the Central Office of Information's advice that individual's names should be excluded from stamps depicting their discoveries - the PMG conceded this point, albeit reluctantly. On 24 May the following essays were submitted to the Queen as the revised Set A for her approval:

- 4d (Abbott) – Radar
- 1s 6d (Abbott) – Penicillin
- 1s 6d (Negus/Sharland) – Jet engine
- 4d (Negus/Sharland) – Television.

The PMG explained in his covering letter that the 'penicillin' design was proposed as the 1s stamp, and the 1s 6d value shown would be amended accordingly; the value on the 'television' design would likewise be amended from 4d to 1s 9d. Essays of Hardman's penicillin design and Abbott's jet engine design formed Set B, which was submitted in case alternatives were required. Finally it was proposed to use the figure '1' as drawn by the Negus/Sharland team for all three of the higher values, rather than that used on the Hardman and Abbott essays enclosed. The Queen's approval of Set A with the proposed changes was notified on the same day, and the instructions relayed to Harrison's on 26 May. The printers had already been informally asked to start preparing cylinders for the 4d radar

and 1s 6d jet engine stamps about two weeks previously - an unsigned and undated memorandum reporting this states 'We have a number of precedents for this action since the days of Mr Benn. It has been the only way to survive.'

---

## FINAL ESSAYS RECEIVED

On 13 July Beaumont of PSD received final essays from Harrisons.

Harrisons and the Negus/Sharland team were each paid 560 guineas (£588) on the basis of payment for a maximum of three designs, two successful (250 guineas each) and one unaccepted (60 guineas). Margaret Calvert was paid 180 guineas (£189) for her three unaccepted designs (60 guineas each). William Hardman did not qualify for any payment as his work was volunteered rather than solicited; however, he was pleased to accept Beaumont's invitation to submit future designs for the 1968 Bridges and Anniversary issues. Meanwhile the designer David Gentleman was commissioned on 14 July to design a first day cover and a presentation pack, each for a fee of 50 guineas (£52.50). Gentleman's cover design featured colour photographs of John Logie Baird, Sir Alexander Fleming, Sir Frank Whittle and Sir Robert Watson-Watt. A total of 300,000 covers was printed in lithography in four colours by HM Stationery Office. The packs, also in lithography in three colours, were ordered from Harrisons: 70,500 packs were printed and 59,117 sold; the text of the presentation pack was supplied by Sir David Follett, Director of the Science Museum.

The stamp issue was announced at a press launch on 8 August, where the original artwork was shown; the Press made much of the fact that it had been decided to omit inventors' and scientists' names from the issued stamps where these had been included in the original designs, and some conversational remarks made by Clive Abbott at the launch were also seized on. Abbott found some of the ensuing criticism sufficiently distressing for him to ring the GPO in protest; in an memorandum of 14 August, however, J R Baxter told the DPS that Abbott had clearly been indulging in rash confidences with reporters and had now learnt his lesson. In any case, although 'this may seem at first sight to have been an unfortunate incident ... the press come to our showings in the hope of getting a story. If they are not given one ... we will not get so much publicity for the stamps as we did on this occasion.'

---

## STAMPS ISSUED

On 19 September the stamps were issued; this was a Tuesday, which seems to have had an extremely confusing effect on counter staff, as in 40 offices premature release occurred under the impression that Monday, 18 September as the first working weekday had been

the official day of issue; these involved over 1,600 of the 4d stamps and smaller but significant quantities of the rest. As usual local offices reported interceptions of several attempts by known collectors to post letters with the premature stamps to themselves. An official first day cover with all four stamps and the Edinburgh Philatelic Bureau postmark dated 8 August is known to exist; as the deadline for bulk delivery of the covers was not until 15 August, the probability is that this was a unique specimen deliberately prepared in connection with the press launch on that date.

The issue was in the following colours:

4d, greenish-yellow / black / vermilion;

1s, blue-green / light greenish-blue / slate-purple / bluish-violet;

1s 6d, black / grey / Royal blue / ochre / turquoise-blue;

1s 9d, black / grey-blue / pale olive-grey / violet / orange.

The 4d had three phosphor bands and the other values two bands. All the stamps were printed on paper with multiple crown watermark (sideways on the 1s 9d) and there was in fact a conscious decision to use up the remaining watermarked stocks on this occasion, all subsequent special issues being on unwatermarked paper. The stamps were 120 to a sheet and 1.6 inches by 0.95 inches; actual design size was 1.5 inches by 0.82 inches, the gutter including the words 'Sharland' and 'Harrison' on the 1s 6d and 1s 9d, and 'Harrison' only on the lower values. The work of the Negus/Sharland team was thus attributed to Philip Sharland alone, while Clive Abbott's name was omitted due to the anomaly of Harrisons having commissioned him directly rather than the GPO.

By the time the stamps were finally withdrawn on 18 September 1968, total sales figures for the issue were as follows.

4d

'Good' stamps delivered to Supplies - 108,962,040

Net issues (sales) - 104,165,625

Unsold - 4,796,415

1s

'Good' stamps delivered to Supplies - 14,042,040

Net issues (sales) - 10,718,389

Unsold - 3,323,651

1s 6d

'Good' stamps delivered to Supplies - 12,602,040

Net issues (sales) - 10,380,413

Unsold - 2,221,627



1s 9d

'Good' stamps delivered to Supplies - 13,262,040

Net issues (sales) - 7,469,585

Unsold - 5,792,455

Overall sales thus represented about 89.2% of the usable stamps received from the printers.

---

## FIRST DAY POSTMARKS AND HANDSTAMPS

The normal facilities were provided for first day cover postings, including Coventry, the birthplace of the jet pioneer Frank Whittle, and Hounslow for its association with jets. The Plymouth handstamp included a Westward TV logo to mark the commemoration of television. There was particular interest in Fleming's 1928 discovery of penicillin in a hospital in Paddington with the ordinary FDI handstamp for Paddington W2, plus a London SW handstamp, an FDI slogan postmark available from Paddington D0, and (also at Paddington) a special handstamp 'Penicillin Discovered 1928 Sir Alexander Fleming St Mary's Hospital Paddington W2'. Other special handstamps in use on 19 September were 'Grant Exhibition of First Day Covers aboard HMS Discovery London WC' from WCDO, and the BFPS 1000 handstamp at the Stamp Exhibition, RAF Bruggen (16-20 September). Some ordinary circular datestamp cancellations were especially interesting - with the penicillin connection in mind, these included the circular datestamps for Benenden Chest Hospital, Cranbrook, Kent, and for Darvel, Ayrshire, the birthplace of Sir Alexander Fleming. Two other cds postmarks were from Scottish birthplaces: Brechin, in Angus (Sir Robert Watson-Watt, the pioneer of radar) and Helensburgh, Dunbartonshire (John Logie Baird).

---

## THE ARTISTS

PHILIP SHARLAND, FSIA, was born in 1923 and studied at Camberwell School of Arts & Crafts, where he met Richard Negus, with whom he formed a partnership in 1952. The team produced graphic designs for a wide range of advertising and promotional uses; their work for the GPO included an award-winning poster and one of the 1965 Christmas air letters, plus unsuccessful designs for the 1966 World Cup Football issue. In 1967 Sharland formed his own design group, Philip Sharland Associates, although he continued his association with Richard Negus until 1969. Sharland's many subsequent postage stamp designs include those issued in the 1969 Anniversaries set, the 1975 Charities stamp, the 1976 issues for the anniversaries of the telephone and American Revolution, and the 1981 Duke of Edinburgh Awards series, as well as work on stamp booklets and air letters.

CLIVE ABBOTT was born in 1933 and attended Wimbledon Art School. In 1967 he was the art director of a London advertising agency. Between 1965 and 1972 he produced a number of successful designs for stamp issues in addition to much other work including air letter and greetings telegram designs.

GILES ALLEN

7 June 1994

---

## REFERENCES

British Postal Museum & Archive files:

- P52/71 (Special stamps 1967)
- MKD/BS/2426 (Special series - 1967 Discovery)

Press & Broadcast Notices

PB196, 8 August 1967; PB205, 23 August 1967

British Philatelic Bulletin

- vol. 4, no. 12, pp. 11-12;
- vol. 5, no. 2, pp. 11-13;
- vol. 16, no. 9, pp. 10-11;
- vol. 29, pp. 200-203

Books

- Parsons, Peachey & Pearson, 'Collecting Slogan Postmarks'
- George R Pearson, 'Special Event Postmarks of the UK'
- N C Porter, 'Collecting British First Day Covers'
- 'Stanley Gibbons Great Britain Specialised Stamp Catalogue, Vol. 3 - QEII Pre-decimal Issues', Stanley Gibbons Ltd