GB Meter Franking

Part 8—The Story to Date

Jack Peach concludes his history of meter franking in the UK with details of recent and current developments and a look at some prospects for the future.

The last article ended with a mention of a major step in meter franking machine development which occurred in 1992—this was the ability to store data for printing electronically on a memory chip. Other data, such as postage rates, item weight from electronic scales, postage cost, money credited, and departmental accounting, were already capable of digital storage and processing. This article will trace the further development and the increasing part played by computers.

Slightly aside from this mainstream there were developments and uses of franking machines which were no less important and will now be considered.

Large capacity fast machines

Following the introduction of electronic meters and their increased capabilities, the use of franking machines increased. Many companies needed to process large numbers of mail items each day. Mailroom equipment changed out of all proportions with the introduction of automatic folding, inserting/feeding/sorting devices and their counterparts slitting/extraction/contents separation/stacking. Between these two groups in the processing chain came meter franking and postage accounting.

With the increase in direct mailing for advertising purposes there could be large quantities of similar items requiring the same value frank. Operational speed was an essential factor. Typical machines to meet this need was the Neopost 9700 and 9900 Series launched in 1988. The 9700 had a processing speed of up to 10,000 items per hour and the 9900 up to 12,000 items per hour. The model numbers followed the Neopost practice of indicating the means of resetting. Models with numbers ending '40' were manually reset, those ending '30' used an electronic module and those ending '60' were recredited by telephone. All models used the prefix '2NB' in the frank numbers.

Often, though, businesses had large volumes of mail but of a mixed nature of weight, size, shape and thickness. In 1992 Pitney Bowes introduced their 'Paragon' model aimed at just that market. The machine was an integrated system which accepted mixed mail and weighed, sealed, metered and stacked the items in a continuous operation. Fig 162 is an illustration of the machine, indicating the various components. Sealing is by jet spray, the exact position of the glued edge on envelopes being automatically sensed. Each item is weighed up to 500g at a rate of up to 5400 items per hour.

Using postal rates stored in memory, the required postage is calculated and the requisite value frank printed on the envelope/packet. A wide range of accounting procedures, including reports, is available. Power stacking of up to 600 items is an option. A thickness range from 1mm to 10mm can be accommodated. Uniform items can be processed at 14,400 items per hour.

Model numbers and machine frank numbers follow the Pitney Bowes practice and indicate the means of recrediting.

Model E120 Manual resetting Frank Prefix PBQ
Model E121 Telephone resetting Frank Prefix PDF
Model E122 Demonstration Model Frank Prefix PBE

In frank numbers the prefix was followed by four digits.

The prefix 'PBE' had previously been used from 1982, on Model 6520. Fig 163 shows both uses; Model 6520 and Model E122.
Printed Postage Impressions

As mail volumes became increasingly large, the Post Office looked for ways of reducing processing costs. A scheme was devised whereby customers could themselves add a unique mark to their mail items in return for a discount. These were termed Printed Postage Impressions (PPI), and the scheme began in April 1965. The benefit to the Post Office was that mail carried a PPI did not have to be cancelled and, being undated, could be sorted at off-peak times.

When credit cards such as Access and Visa were introduced, the quantity of monthly statements which had to be sent to customers was very large and the companies quickly adopted PPIs. Fig. 165A shows the one used by Access. Unfortunately, the absence of a date caused problems to customers who, to avoid interest charges, had to pay their bills within so many days of an unknown date! Access (and others) then arranged to add a date themselves by using what might be termed ‘frankless meter machines’ (Fig. 164B). So why not dispense with cost of printing PPIs and use meter franking machines to apply non-value franks? Pitney Bowes supplied such machines (Fig. 164C). The marks were printed in black and there were several prefixes and numbers. Some noted by the writer were APC 01 to 12 and ATV 01 to 08, used at the Access Southend office; also AB 01 to 07 and DB 01 to 15, used at their office in Balsdon. There must have been more, but the writer only noted these before changing to Visa!

Since those days, many meter franking machines have been used to print PPIs and mailbox marks. One of the earliest was used by Phillips the Auctioneers (Fig. 165).

Incorrectly dated

It would seem that there might be a temptation for a tardy business to date some items of their mail ‘in the past’ so that customers would blame the Post Office for late delivery. Of course, some incorrectly dated mail may arise purely by an innocent oversight. The Post Office redates any offending items if they notice them. There is a very wide variety of handstamps used for this purpose—of all shapes, sizes and colours. Fig. 166 shows a typical triangular mark in red ink.

At some of the larger post offices the use of cancelling machines with special dies is warranted. The wording on dies varies, a common type is illustrated (Fig. 167), along with a less common ‘chequer-board’ design used at Bradford (Fig. 168).

Modern electronic meters have the facility to automatically change the date daily. Today, too, the sophisticated equipment in automated processing centres number and date each item which passes through. These ‘Linear Quality Marks’ generally appear on the back of envelopes (Fig. 169).
BRITISH STAMPS

Pitney Bowes—PostPerfect

Described by the manufacturer as a new generation of mailing machines, the Pitney Bowes Model B721 (Demonstration Models B722) or ‘PostPerfect’ was launched in the Summer of 1995. The machine is fully electronic, rechargeable by the use of an internal modem, can allocate expenditure to 10 accounts as standard (100 as an option) which can be password-protected and four stigmas can be stored digitally in a programmable, exchangeable cartridge. The printing is by the thermal transfer process (described in Part 7), the plastic liner being carried in a ‘snap in’ cassette. The machine is relatively small with a ‘foot print’ 300mm x 250mm, not much larger than an A4 sheet of paper. Most-used postage rates can be remembered and quickly recalled. The machine is illustrated in Fig 170 and the ribbon cassette in Fig 171. A typical mark is illustrated in Fig 172. The prefix in the frank number is PB7, followed by a five-digit number.

To the left of the town mark will be seen two vertical columns of figures. These are related to the particular machine and its state at the time of printing, so providing an effective security check against unauthorised use. Calling the left-hand column ‘A’ and the right-hand ‘B’; and the numbers in each column top to bottom ‘a’ to ‘t’; their significance is as follows (as far as is known).

Aa is blank, Ab to Af is an item count, Ba is a manufacturer’s code, ‘T’ being Pitney Bowes UK. The interpretation of Bb, Bc and Bf is still unknown but may be related to date, frank value or machine credit remaining, Bd and Be relate to the machine model and number in the manner now described.

If the five-figure serial number is ‘abce’ the digit Bb is the remainder of (M+a+Bb)/11. Similarly, digit Be is the remainder of (4M+Bb+6c+7d+8e+9e+2)/11. A remainder of 10 is also counted as 0. M’ is the digit in the prefix following ‘PB’: ‘T’ in the case of PostPerfect. For demonstration machines with the prefix ‘DEA’, M=0. For the later machine, PersonalPost, with Prefix ‘PB2’, M=2. (Acknowledgment to P G Awcock who first managed the decoding).

Integrated Mail Processor

In March 1996 the Post Office set into operation the first production Integrated Mail Processor. This machine combines the functions of culling, facing, cancelling, optical character recognition of addresses, video coding and letter sorting. All these functions being fully under computer control with a processing speed of up to 36,000 items/h.

The IMP is able to recognise meter-franked mail. In a trial basis, in co-operation with the six meter machine manufacturers, special ‘barcoded’ frankings were designed and introduced on about 100 machines in the Watford area. The object of the trial was to ascertain how the facilities available with the IMP could assist Royal Mail Meter Management System. After a number of suggested arrangements, a universal meter frank number system was agreed. An example is illustrated in Fig 173. The number comprised eight characters and a mandatory space. In the example, the number FAE 3001J has the following interpretation:

Manufacturer’s identity, two alpha characters (FA = FRAMA)
Model identity, one alpha-numeric character (F = Model EPS)
Mandatory space
Frank number, four alpha-numeric characters (3001)
Check digit (calculated) (J)

For numbering purposes each manufacturer was issued with a Band Number (the first digit in the frank number) in this case FRAMA, Band Number 3.

The four character frank number was printed on a 4-state bar code at each side of the frank. The four-state code uses four lengths of bar, each group of four bars represents a character 0 to 9 and A to Z, a
total of 56. On the left-hand side, the frank number runs from bottom to top and on the right, top to bottom. This was to assist the IMP machine to read part-printed francs. The number validity was also checked.

The frank value was also read for each frank and the values totalled for each machine. It could then be checked that each customer was paying its dues!

The Woburn trial continued for about a year and it was expected to be extended to other parts of the country by 1998/99. As far as is known, this has not yet happened. One machine (and no doubt these are others) carried on in use and can still be found (Fig 174).

**Text messages**

If normal slogan data could be stored digitally on a chip, then why not DIY slogans? Neopost introduced their SM26 model in April 1996 which took full advantage of the facility.

The mark, an example is illustrated in Fig 175, can comprise up to five parts: frank; town mark (set only 1mm to the left of the frank to allow extra space for slogan sized 45mm x 25mm and six being stored in an exchangeable pack); mini-tie (printing small standard messages such as mail class—up to eight stored) and text slogan (keyed in from keypad—up to eight can again be stored).

The text slogan (or message) was an innovation; it could comprise two lines, each of 15 characters, typed in as required using the machine's keypad. It is possible to print a text message on its own without frank or town mark, this can be useful on internal mail and the message can, of course, be just the date. The frank number comprises the prefix 4NE, followed by five digits.

**Touch sensitive**

In the last article brief mention was made of the FRAMA Model EPS, introduced in 1994. (EPS derives from Electronic Postal System). The frank numbers began with the Prefix FSC, followed by six figures. The EPS had all the attributes associated with electronic machines. The printing mechanism (conventional wet-inked die) was driven by an electronically controlled impulse motor which only ran when a letter was introduced and switched on when the frank had been printed, thus reducing servicing and replacement costs. A demonstration mark is shown in Fig 176. In 1996 FRAMA replaced the keypad on the model EPS by a touch-screen system and gave it the name ‘Servasonic’. The machine operation was menu driven. No change was made to the method of printing or to the meter, so marks are indistinguishable from those made by model EPS. Fig 177 shows the machine with the touch screen indicated. Fig 178 illustrates the screen with typical information.

**Loan machines**

In 1997, 75 years after the introduction of meter franking into the UK, the Royal Mail changed its approval standards and licensing arrangements. Rules were laid down concerning the type of machine which would be accepted. The main change was that from 1 October 1997 Royal Mail did not grant licenses to machines which had to be manually reset at a named post office or by a Royal Mail resetter on site. The target is that all machines will be remotely reset by 31st September 2002. Nearly 200,000 machines which were in use in 1997 would be affected. Each licensed user was informed how the changes would affect them. It meant, of course, that over the ensuing few years many newer electronic postage meters would be installed as replacements. To assist with this transition Pitney Bowes lent prospective customers new machines if their old one failed prematurely.

The new machines were Models B721 (PostPerfect) and B911 (their general electric meter). These loan machines had the figure ‘9’ as the first digit in the frank number, following the Prefix PB7 or PB9, respectively. Fig 179 illustrates examples.

The initial loan period was for one month, to allow the customer to evaluate the options available.

It is not known whether other manufacturers offered similar arrangements, presumably they did, but marks from such machines cannot be distinguished from normal models.

**SOHO**

The latter half of the 1990s saw a considerable increase in small businesses and people working from home. Meter franking machine manufacturers appreciated...
that a large market existed in that area if they could produce a low-priced, small-sized, easily-operated machine. This market became known as Small Office, Home Office or SOHO.

The conventional means of printing by an engraved die, wet-inked by a roller or pad required extra motive power and tended to be messy, particularly when changing ink supplies. Cassettes tended to be more expensive. Marks were often over-inked after an ink-change or virtually invisible if left too long without replenishment. Thermal printing was a considerable improvement and generally provided uniform clear marks. However, the special coloured plastic ribbon was relatively expensive, particularly when slogans were used, a feature which customers wanted.

By the mid-1990s printing by ink-jet was expanding rapidly. Printers for home computers, Post Office cancelling, self-by dates on groceries and many, many more applications. The more it was used, the cheaper became the printers.

On 18 May 1998 Pitney Bowes launched the first meter machine in the UK to use ink-jet printing (JP). This machine, called 'PersonalPost', was aimed at the SOHO market.

The big advantage with JJP is that there is no contact between the ink nozzles and the envelope surface, ensuring uniformly clear franks, even though envelopes could vary up to 8mm in thickness. The operational speed is 360 items/h. Recrediting is by telephone using an internal modem. Electronic scales (up to 2kg) are supplied with each machine and are included in the price (£399 in July 1998).

It is estimated that the use of this machine can be justified for 20 items posted daily, or even less.

Eight slogans can be held electronically, seven supplied as standard and one of customer's choice. Additionally, an operational slogan reading 'NOT VALID POSTAGE' appears if a frank value of zero is entered (Fig 180). An enlargement is shown in Fig 181, from which it will be noticed that constant components of the mark, such as town die, outline of frank and slogan, print with a higher density than the variable items of encrypted data, date, frank value and serial number, which have wider strokes and may be more easily read by OCR.

The machine is small, dimensions 286mm wide, 356mm deep, 139mm high (Fig 187) shows the meter machine, scales and a mug for comparison. When not in use the power automatically switches off.

The encrypted data follows the pattern already described for the 'PostPerfect' machine. For added security, a PIN number has to be used to gain access. The frank number comprises the prefix PB2, followed by five digits.

**The Millennium approaches**

As the Millennium got nearer it seemed to act as an incentive for manufacturers to launch new models. Towards the middle of 1999 Framas introduced the Sensonic 2000.

This was a re-styled Sensonic machine incorporating thermal transfer printing and aimed at the smaller end of the market. Fig 183 illustrates the machine and Fig 184, the mark. The frank remained 12c but the six-digit number which follows in the frank number begins with 25****

The first Neopost machine to incorporate JJP was their Model JI65, introduced in January 2000. It is aimed at middle-volume users and has a printing speed of 8100 items/h. It can handle envelopes up to size C4 and 16mm thick. It incorporates a 'key-in' test facility, nine 'mini dies' and up to eight customised and interchangeable slogans. 50 user codes can be allocated to departments and postage accounting records can be printed on to franking labels (Fig 185). Recrediting is by modem.

Pre-production models used the prefix NE, followed by a five-digit serial number (Fig 186). Later production models have the prefix N12, followed by a five-digit number (Fig 187).

In April 2000 Neopost introduced their smallest machine aimed at the SOHO market. The Model Number is J23 and has been given the name 'AutoStamp'. The frank number comprises the prefix N11, followed by a five-digit number.

The maximum franking speed (JJP) is 20 items/min up to 8mm thick. It has the usual digital features such as automatic electronic scales which set the frank value, customised slogans, telephone receding controlled by a PIN number and automatic date change.

The customised slogans can include photographs, as was demonstrated on the Neopost Stand at The Stamp Show 2000. Digital cameras were linked to AutoStamp machines via lap-top computers. Visitors to the stand could have their photograph instantly reproduced as a slogan (Fig 188).

Fig 189 shows the machine and associated electronic scales.

More recently, the Model JI75 has been added to the series. This model has the same meter as the JI65 but can run at the increased speed of 10,000 items per hour. The accounting system can deal with up to 200 cost centres.
There is a label dispenser holding 70 self-adhesive labels. The frank number comprises the same prefix, N12, as the IJ65, followed by a five-digit number.

In May 2000 came the Pitney Bowes Digital Mailing System. Within this there were two meters, F821 and F921, and two bases, F8MM and F9MM. These combined to make four systems; DM200, DM225, DM250 and DM500.

The F821 meter has a two-line display and can deal with ten accounting departments. The frank number comprises prefix PB3, followed by a five-digit number, initially beginning with '0'.

The F921 meter has an eight-line display and can deal with 100 accounting departments. The frank number again uses the prefix PB3, but followed by a five-digit number, initially beginning with '7' (Fig 190). Both meters can accommodate ten slogs.

Base F8MM has a maximum (IJP) printing speed of 40 items/min and does not have a tape dispenser.

Base F9MM has a maximum (IJP) printing speed of 65 items/min and has an automatic tape dispenser (up to 10 tapes).

Model DM200 uses F8MM base and F821 meter.

Model DM225 uses F8MM base and F921 meter.

Model DM250 uses F9MM base and F891 meter.

Model DM500 uses F9MM base and F921 meter.

All models have automatic date change and can accommodate mail up to 8mm thick.

G.S.M. December 2001
At about the time this article will appear in print, two new machines are due to be launched by Ascom Hasler. The two models, using IPR, will be Intellipost 36 and Intellipost 54. The former operating at 2000 items/h and the latter 3000 items/h. Various attachments, such as electronic scales, will be available and Intellipost 54 can be arranged for automatic feed/feeding and label printing. Operation is menu driven using a combination of touch-screen and keypad. Fig 197 shows the basic machine and Fig 192 the touch-screen and keypad. Online meter resetting will be by modem.

Fig 193 illustrates a specimen mark which contains a block of encrypted data to the left of the town mark. The frank number comprises the prefix followed by a six-digit number.

**The end, or a new beginning?**

This series of historical articles is drawing to a close.

Those who have read so far may have many other philatelic interests but perhaps some have been looking for a fresh area to collect. How about giving meter franking a go?

Meter-franked mail is a major section of postal communication with a vast selection of collectables. Items from the past await discovery even today. The collector may like to concentrate on machine makes and their franks, or perhaps town marks and where the machines were used, or perhaps the slogan and themes. Or specimens, or experiments, or errors, or leaflets and catalogues—and any or all of these can be repeated for most countries of the world.

We have looked at things past but what is to come? Meter franking is continually developing. Today’s franking machines combine a computer to calculate and set values, a display, a keypad or touch screen to enter data, a modem for telephone recredit and a printer to print the frank on to a mail item.

During the past decade many have made room in their home for a PC with its processor, monitor, keyboard, modem and printer. Just what is needed for a franking machine? ‘Mouse Mail’ is here!

On 31 March 1989 E-Stamp Corporation launched its E-Stamp Internet Postage System in Washington, USA. By the end of that year there were five companies preparing or producing systems for personal computer-generated postage stamps.

In August 1999 the US Postal Service approved systems from E-Stamp and Stamps.com for use in the USA. Fig 194 shows the mark made by the latter system. Although the USA was the first to approve PC franks, those marks did not comply with the relevant UPU Standard published in 2000. European countries, including the UK, waited for this Standard before approving any system. By early 2001 a system by Neopost was approved and it is understood that it should be seen in use by the end of the year. This is similar to ‘Simply Postage’, used in the USA since March 1989. It comprises a thermal printer, printing on to self-adhesive labels, together with ‘built-in’ electronic scales. The assembly is plugged into a PC serial port. The computer program information is provided from a CD ROM. Postage credit is downloaded via a modem. A specimen mark as it is likely to appear, except for the frank prefix and number, is shown in Fig 195.

If you’ve never collected meter franks why not start now? These are the early days of PC generated franks, get in at the beginning!

Happy hunting.
Acknowledgments

To the Heritage Collections of the Post Office for their help with the early history and for permission to illustrate numerous items.

To the staff of the machine manufacturers, listed below, for providing information, brochures and specimen marks and not least for their patience when answering the multitude of queries posed to them over many years:

Addressing Systems International
Ascom Hasler
FRAMA
Franotest-Poštalia
Neopost
Pitney Bowes

To fellow meter frank collectors who have kindly helped with illustrations of marks which they use on their franking machines:

To many others who have helped by providing material from their wastepaper baskets.

My grateful thanks to you all.

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Post Office Heritage Collections

Much historical correspondence between the Post Office and machine suppliers, together with many unique franking marks, are held in the Heritage Collections of the Post Office.

There is still great scope for researching and identifying marks which would be of interest to collectors or museum visitors.

Curator, Philately, Heritage Services, Freeport House, Phoenix Place, London WC1X 9DL.

GB LETTERS

Influence?

It's the old complaint—PO cancels used in an indiscriminate manner by Bradbury's d.c. catalogue arrived—I asked him to use uncommon stamps for postage—and what was the result—messy, thick cancels covering the stamps—can't you use your influence to ask the Post Office to instruct their employees to take care.

J D Mackinnon, Scotland

It seems even the postman is not having a lot of joy in such matters. See the Barry Robinson interview in this issue, Ed.

GB Meter Franking

You are to be congratulated on allocating considerable space to the above article. With the October issue we are up to Part 6. I understand from Jack that there are likely to be a total of eight. This means that about 50 pages will have been devoted to one specific topic. This level of detail is just about perfect and, I think, unsurpassable for a magazine, even though it may not suit all tastes.

Jack is to be congratulated for taking the trouble to collect together so much material and present it in such a coherent way.

I am a comparative newcomer to the story of meter franking. It is a sadly underrated subject, any single cover has the double interest in the 'stamp' design and the postal history aspect. Further, many of the older covers are likely to have a social story to tell.

Jack's article brings out all of these aspects.

Bill Fincham, London

Political corruption

In his article 'The People Behind the Cover Brands' (October 2001 G.S.M.), Tony Buckingham is surely wrong when he writes 'In 1962/3 when the then PM, Anthony Warmwood Benn, realised that there was money to be made out of stamps'. Mr Benn did not become PM until the advent of the Labour Government in October 1964. It is true that he revamped GB's stamp issuing policy but it had begun the previous year under the then Conservative administrations of Harold Macmillan and Sir Alec Douglas-Home.

Anthony H Lewis, Essex

Brain-teaser

Just a line to say thank you for the GB Concise Catalogue that I received recently as a prize.

The competition is a real brain-teaser, and I enjoy the hunting for answers. Such a shame that stamps are becoming rare on envelopes. Can you bring out a ban on franking machines please?

I enjoy your magazine!

W R Wolkom, Essex

Christmas Robins

Although some might be disappointed that Robins, the theme of the forthcoming Christmas stamps, is a repeat, I have especially written a new carol text, 'Robins At Christmas', to compliment the issue.

A robin on a stamp arrives
With news of Jesus Christ at birth.
A robin from the hope that thrives
In the nature countryside on Earth.
A promised land in which to dwell
In peace afar from this city hell.

Each robin on a stamp will bring
A spirit in ascent from town.
Released en-route to Christ the King
In Whom to mould a natural crown;
A promised land of harmony
With God and Christ eternally.

And robins in a host convey
Our spirits rising to restore
A rural landscape in which to stay
Like blooms to flower forevermore;
And rooted in the Lord at birth
Together here to save the Earth.

Robert Duncan Martin, Kent

More landscapes

I very much enjoyed David R Wright's article 'Images of the UK on Postage Stamps' and totally agree with him that there is a dearth of UK land and seascape images on stamps. I suppose that I had known it all along, but I had forgotten. I was particularly pleased that he had included the London 1980 50p stamp because that is one of my favourites.

Perhaps if he sets himself a similar project in the future he should select New Zealand (and Ross Dependency) whose series of photographic images of that country should provide him with the greater challenge of what to leave out. Australia would also be a good choice with recent images of Ayers Rock and Sydney Harbour.

Royal Mail could well imitate the output of these two countries (among others) and have one issue of four or five stamps each year, based only on the images available and ignoring the recent trend of ensuring that each set of this type has to have an image from England, Scotland, Wales and Northern Ireland. They could well be justified as encouraging tourism.

Tim Escombe, Derbyshire