Phase 8: 1992-2016

Advanced technology sorting equipment

This section covers the period from 1995 and includes the major investment made by Royal Mail in various new sorting equipment technologies. It also covers the new 'Automated Processing Centres', and the re-naming of all sorting offices to 'Mail Centres'.

The following key events and developments took place during this period

1990	The creation of the Postal Address File (PAF)
1992	The Automated Processing Centre (APC)
1995	The MTT Mail Transport System
1995	The Royal Mail 'Internal 4-State Code'
1996	The Integrated Mail Processor (IMP/IMPEX)
1996	The 4-state meter franking IMP trial at Watford
2001	The introduction of 'Address Interpretation' (AI)
2001	The Manual Data Entry Centres (MDEC)
2004	The TOPS 2000 Flat Sorting Machine
2009	The Integrated Letter Sorting Machine (iLSM)
2010	The Compact Sequence Sorting Machine (CSSM)
2015	The Banbury Stamp Cancelling Trial

The Postal Address File (PAF)

The Postcode Address File (PAF) is a database held by Royal Mail which contains all known 'Delivery Points' (see below) and postcodes in the United Kingdom. The PAF is a collection of over 29 million postal addresses and 1.8 million postcodes.

Below shows the information that Royal Mail holds on us in the PAF:

Address:			
Organisation:		Address Type Description:	Numbered
Property:		UDPRN:	20065670
Street:	7 Bramblegate	Just Built:	
Locality:		Geographical:	
Town:	Crowthorne		
Postcode:	RG45 6JA	Grid East:	483198
Country:	United Kingdom	Grid North:	164686
Country ISO:	GBR	Miles:	
DPS:	2A	Km:	F1 2752
Area/STD Code:	01344	Latitude:	51.3752 -0.8061
		Longitude: SOA Lower:	-0.8061 E01016709
Censation:		SOA Lower: SOA Middle:	E01016709
Censation Code:	AX02	SOA MIGUIC.	E02003436
Affluence:	Wealthy	Administrative:	
Lifestage:	Older families	Urban Rural Code:	C1
Lindstager		Urban Rural Name:	Urban City a
General:		Ward Code:	E05002396
Postal County:	Berkshire	Ward Name:	Wokingham
Abbreviated Postal County:	Berks	Constituency:	Bracknell
Optional County:	Berkshire	EER Code:	E15000008
Abbreviated Optional County:	Berks	EER Name:	South East
Traditional County:	Berkshire	Authority Code:	E06000041
Administrative County:	Wokingham	Authority:	Wokingham
Postcode From:	WORINGHAM	LEA Code:	872
	C	LEA Name:	Wokingham
Postcode Type:	S	NHS Code:	E18000009
Mailsort Code:	39913	NHS Name:	South Centr
TV Region:	London	NHS Region Code:	Y24
Occupancy:	6	NHS Region Name:	South
Occupancy Description:	Residential	PCT Code:	E38000209
Address Type:	1	PCT Name:	Wokingham

The Postal Address File – some facts and figures

The Postal Address File currently (in 2016) contains . . .

124 Postcode Areas

2,983 Outward Codes

11,192 Postcode Sectors

1,749,748 Postcodes

29,776,100 Delivery Points

112,298 Large Users

56,877 PO Box addresses

1,500 Post towns

30,441 Localities

379871 Thoroughfares

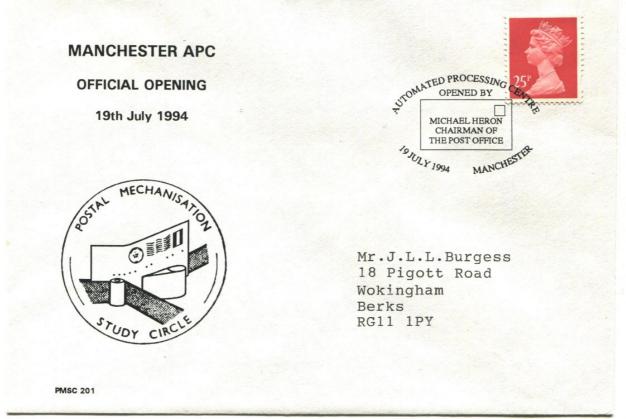
There are 10,077 places and street names containing the word "wood".

Each year approximately 16,000 new postcodes are added and 12,000 are deleted.

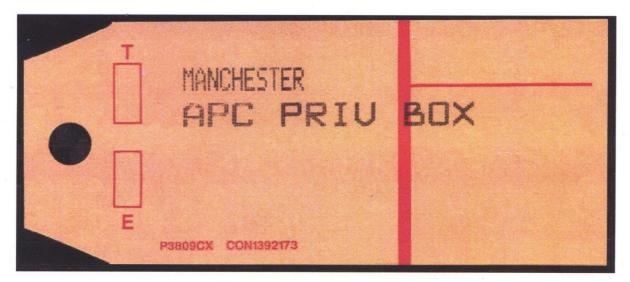
On average, each postcode covers 17 different addresses.

1992 – The Automated Processing Centre

Between 1992 and 1996 newly opened Royal Mail sorting offices were called 'Automatic Processing Centres'. The commemorative cover below marked the opening of the Manchester APC in 1994.



PMSC Cover 201: Manchester APC – 19th July 1994



Manchester APC bag label

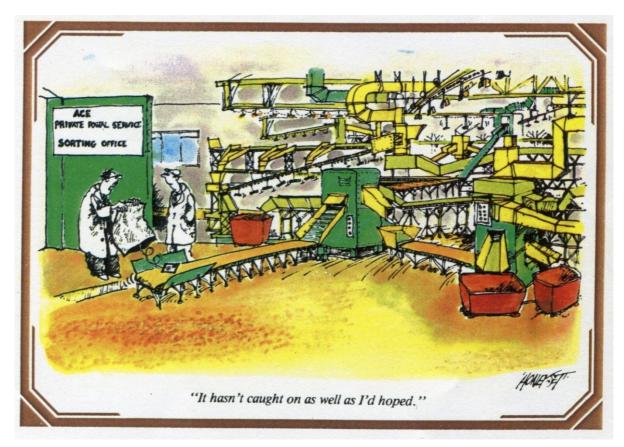
1993 – Farnborough 'Automated Centre of Excellence'

In January 1993, Farnborough APC was chosen to be Royal Mail's 'Automated Centre of Excellence' (ACE) and become a model of best practice for automated processing and equipment.

The objectives included:

- i) To determine the most efficient handling methods
- ii) To enhance team working
- iii) To introduce team 'coaches'
- iv) To introduce single grade working

Indeed, in 2002, Farnborough was chosen as a testbed for the introduction of Address Interpretation (AI). However, Royal Mail decided to close the office in 2011 as part of the ongoing mail concentration programme.



A Royal Mail produced postcard with a cartoon featuring the ACE

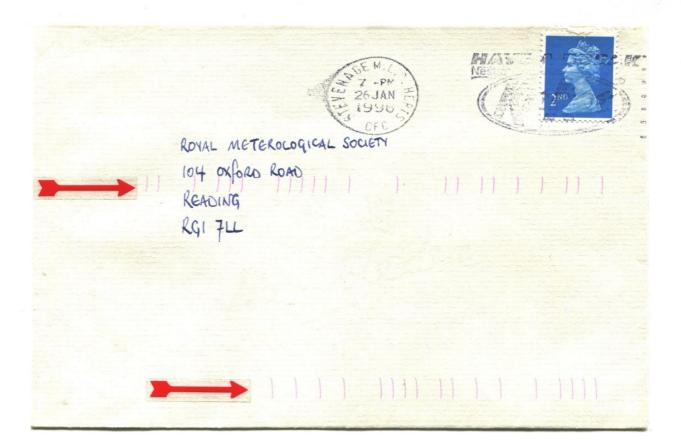
1995 - MTT Transitional Code Marks

Between June 1995 and July 1996, a mail transport system (MTT) was introduced nationwide. This code was brought in as an interim stage, prior to the development of a 4-state code reader.

A 'tagcode' (top row) was printed in the area where the Inward code was traditionally found and a 'routing code' (bottom row) was printed in the area where the Outward code traditionally appeared.

The codes were not encrypted and the tagcode contained the machine identity, the day of the month, the time of day and a letter identity; whereas the routing code contained both outward and inward code information.

Below is an item posted at Stevenage MLO on 26 Jan 1996 that bears both a transitional tagcode and a routing code.



1995 – The Royal Mail Internal 4-state code

Initial trials of the Royal Mail 4-state code took place in 1994 and early 1995 at Swindon, Glasgow, Preston and Manchester. The first operational use was at Glasgow from 9 April 1995. This was followed by Aberdeen, Belfast and Edinburgh on 2 October 1995. The nationwide roll-out took place during 1996.

The code involves a complicated algorithm and has been designed with some built-in redundancy to cater for any poorly printed bars.

The upper row is the 'tagcode' and comprises a machine identifier, the day of the month, the time of day and an item count. The lower row is the 'routing code' and contains information relating to the address shown on the envelope.

	NEED A POS' 0345 11	1222 -		
ITALIAN			ST	THE LINE
1 PRINCES LONDON				
WIR	SAY	A manufacture of the second se		111'

4-state tag and routing code – Glasgow, 23 Aug 1995

1996 – The Integrated Mail Processor (IMP / IMPEX)

In 1996, the first 'Integrated Mail Processor' was installed at Watford Mail Centre. The machine combines the processing that was previously carried out by stand-alone sorting equipment, namely Culler Facer Cancellers (CFC), Optical Character Recognition / Video Coding Systems (OCR/VCS) and Letter Sorting Machines (LSMs).

In some offices, extra machines known as IMPEXs have also been installed for processing meter mail. These are similar to IMPs but without the segregation and culling section.

The main sections of the IMPEX are shown in the diagram below:

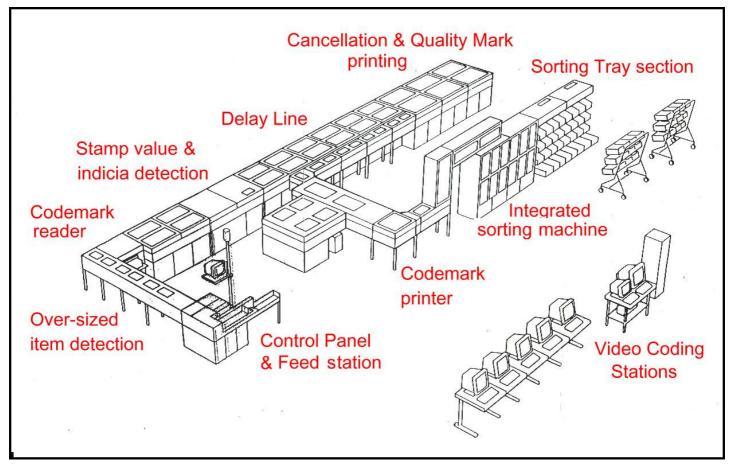


Diagram showing the typical layout of an IMPEX

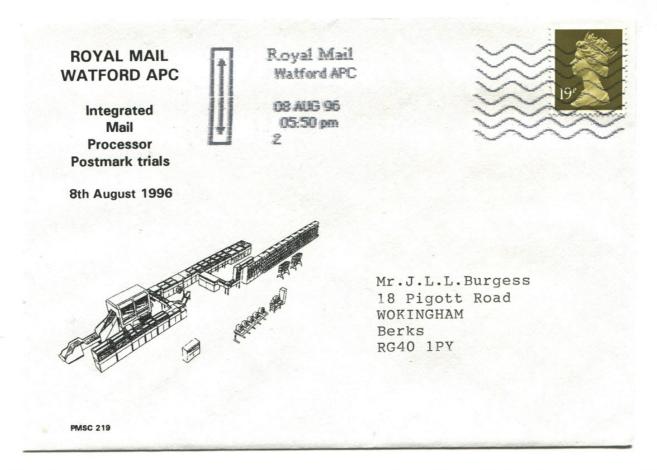
Currently, in 2016, there are 103 IMPs and 17 IMPEXs operational in about half of the Mail Centres across the country.

1996 – The Watford IMP

The IMP at Watford APC first processed live mail on 8 Aug 1996 which marked a landmark event for Royal Mail.

The postmark used on the IMP had 8 wavy lines and also contained a 'Block Quality Mark', comprising the name of the office, the date, the time and an digit (1 or 2) to indicate the class of the mail item. On the left-hand side, the postmark also contained a double-arrowed vertical line known as a 'Return Mail Marker' which was used to detect any mail items that had re-entered the mail stream.

The item below is a special PMSC commemorative cover to mark the first day of operations.



First day commemorative cover processed by the IMP at Watford – 8 Aug 1996