

# CANADIAN METER STAMP NEWSLETTER

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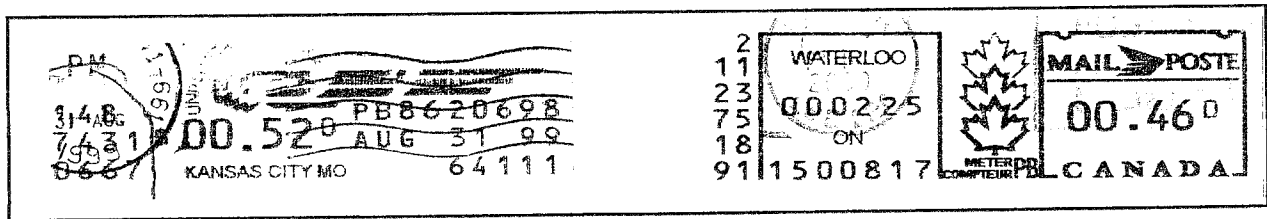
ISSUE NO. 61

2000

## EDITORIAL

There seems to be a developing interest in postage meters (possibly even collecting them). I note that dealers have more of a supply and prices tend to be close to the really old catalogue. I wonder if it is time to set a new standard for price? If so, how would it be done? Most collectors tend not to support such an endeavour as it influences prices you have to pay. Any comments on this? This issue is once again a series of small items. There seems to be a bit of variety around but they are associated with meter types rather than variations in appearance. What have you found lately?

## MY RESEARCH PROJECT



I obtained information from a series of 27 Pitney Bowes Personal Post Office meters - the one with two rectangular boxes. My project was to decipher the vertical numbers at the left of the indicia. In my condo is a high ranking officer with years of service in the classical British spy service - MI-5. We both looked for clues to break the encrypted code. Since we did not know what we were looking for, it failed. We did find a bit of interest. Remember the final check digit in the Nixdorf serial number? It was a security mark, which this code probably is as well. Can you add to the mystery?

My data set was:

7	9	2	3	9	9	5	2	2	8	4	5	7	1	2	1	2	2	9	1	6
10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
41	51	31	61	21	01	21	71	11	21	51	01	11	51	31	21	51	61	01	11	21
37	87	27	57	97	27	17	17	17	37	47	67	07	17	47	77	57	87	77	57	07
00	00	00	01	01	01	01	01	01	01	01	01	01	01	02	02	02	02	02	02	02
37	38	39	30	31	32	33	34	35	36	37	38	39	30	31	32	33	34	35	36	37



Notice the following:-

The first line appears to be random numbers.

The second row, for this meter, are the same "10"

The third row ends in "1" for this meter, but appear to be random.

The fourth row ends in "7" for this meter

The fifth row and sixth row go together. The fifth row is the number for the sequence in the last row. It repeats from 30 to 39 and the fifth row gives the repetition number.

If we rearrange the numbers as used for U.S.A. meters we get three columns, which I will not show in entire.

143 0370 1707

158 0390 1708

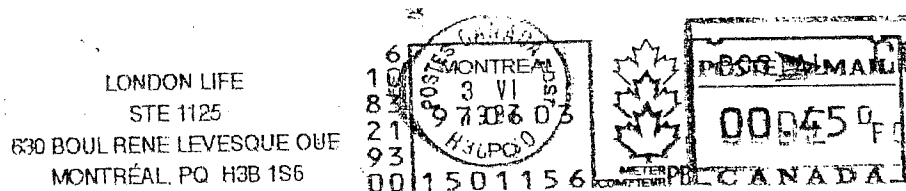
115 0310 1726

120 0360 1727

Notice that the last four digits are a sequence counter which ratchets up one for each piece mailed. In the left three all begin with "1" and do not repeat within the sequence I had to work with. The centre digits begin and end with "0" for this meter. Can anyone see any other clues as to the use of these numbers?



Note the POSTE>> MAIL format at top of right rate box. From Bob Kitchener.



For the record: The first day of use of the Pitney Bowes Model R series (140000) was on May 18, 1940.



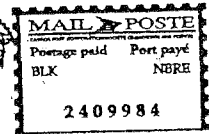
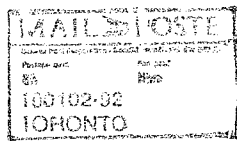
#### COST OF POSTAGE OUTRAGEOUS

I received a magazine from Great Britain with the envelope imprinted "PRINTED PAPER - Reduced Rate SURFACE and the indication that POSTAGE PAID. Obviously this was sent in bulk to the USA where a FLUSHING N.Y. H-meter 577963 applied a postal directive of PRINTED MATTER and postage of [00.43:]. The cover and contents weighed 350g. So, 43¢ to mail 350g to me. If I were to return the same package the smallest cost to me would be \$4.30 + GST to the U.K., or, \$3.90 to the USA. Even within Canada the cost would be \$2.00 + GST. Is Canada Post ripping us off by a factor of 10?

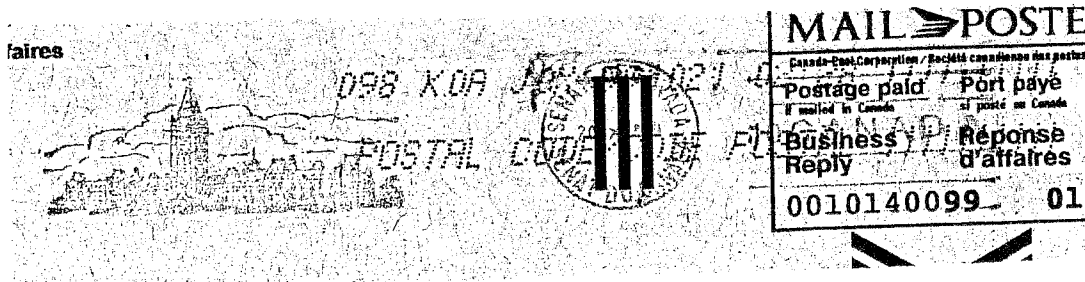
**BULK MAIL**

Some bulk mail items from Bob Kitchener:-

Bulk Mail, with postmark ad (Ontario Public Service Quarter Century Club)



Senate of Canada with meter mark 125 mm long.



Below is an inventory of excise meters used on cheques. If you have any examples that are not included here please send information on each. The Revenue Study Group is interested in this area and we want to fill out our table. I apologize for the messy appearance of the table. It will be re-done as a spreadsheet when I get your information. The information needed is the excis meter number, the value, the colour, the user and the date. Also the number of dingbats at the bottom of the earlier townmarks

**INVENTORY OF EXCISE METERS**

Ross W. Irwin

SERIAL	TOWNMARK or USER(--)	DING- BATS	TOWN	C	VALUE	YEARS USED
00000	SPECIMEN					R 3, 3+3 1934, 1939
45003	LEVER BROS LTD	2	Toronto			R 3
45006						G 3
45008	THRIFT STORES					3, 3+3 1933, 1934
45015	DOMINION STEEL & COAL CORP.LTD.	2	Sydney			3, 3+3 1934
45018	ALFRED LAMBERT LIMITED	1	Montreal			3, 3+3 1935, 1936
45023	ALFRED LAMBERT LIMITED	1	Montreal V			3, 3+3 1939, 1942
45023	ALFRED LAMBERT INCORPOREE	2	Montreal			3+3 1942
45023	no TM (Alfred Lambert)		Montreal			3, 3+3 1936, 1947
45036	DOMINION STEEL & COAL CORP.LTD.	1	Sydney			R 3
45041	THE PARKER FOUNTAIN PEN CO. LTD					

49001	FACOBEM (Sherrit Gordon Mines Ltd. Toronto)	3 Toronto	R 3
49002	R-M CORP.LTD.(Canadian Radio Corporation, Toronto)	2 Toronto	3 1939
49004	CHARLES E. FROSST & CO		R 3 1940, 1944
49007			R 6
49009			R 3
49012	THE STEEL COMPANY OF CANADA		
49013	ROYAL CONNAUGHT HOTEL	1 Hamilton	3 1941
49015	THE ANDREW JERGENS CO. LIMITED	Perth	3 1949
49023	GREENSHIELDS HODGSON RACINE LTD.	1 Montreal R	3, 6 1936, 1950
49027	CANADA CEMENT CO.LIMITED	2 Montreal	6 1945
49030	2721 THE PARKER FOUNTAIN PEN CO.		
49031	THE PARKER FOUNTAIN PEN CO. LTD		
49034	THE ART LITHO. CO. LONDON		3 1950
49037	(EASTERN STEEL PRODUCTS LTD)		
49040	BOULEVARD DRIVE TORONTO (Tip Top Tailors) 0		3, 6 1945, 1950
49043	(CANADA LIFE ASSURANCE CO)		
49045	FREDERICK STEARNS CO of Canada Ltd Windsor		3 1944
49052	ROLPH-CLARK-STONE LIMITED 3 Toronto		3, 6 1939, 1949
49053	THE QUAKER OATS COMPANY 1 Peterborough R		6 1940
49053	QUAKER OATS COMPANY OF CANADA LTD. 1 Peterborough R 3, 6		1945, 1948, no DM
49058	E.L.RUDDY CO.LIMITED 0		3 1953
49061			
49064	COLGATE-PALMOLIVE-PEET CO. LTD. 1 Toronto		3, 6 1939, 1949
49066	Leaside		3, 6 1939, 1951
49068	(THE REG B. BOXER COMPANY LTD)		
49081	THE STEEL COMPANY OF CANADA		
49086			R 6
49091	THE G.W. ROBINSON CO.LTD. 1		R 3 1940
49094	(UNITED COOPERATIVES OF ONTARIO)		R 3
49098	Shamrock Grocery, Kingston		R 3, 6 1952
49113	no TM, 2693 above rate mark (Lewis Bros Ltd, Montreal)		R 3, 6 1945
49121			R 6
49126	DUNLOP CANADA		R 3 1944 1952
49130	WILLIAM NEILSON LIMITED 2 Toronto		3 1941
49131	TUCKETTS above rate mark (Tucketts Limited, Hamilton)		2, 6 1945
49134	2501 in TM (Personal Products Ltd, Montreal) 2		3 1948
49137	HENRY K. WALPOLE & COMPANY LTD. 1 Perth		3 1940
49137	no TM, 2505 above rate mark (Henry K. Walpole) Perth		3 1941, 1950
49146	GUARANTEE GLOVE & SPORT GARMENT CO.1 Montreal		3 1941
49149	LIGHTNING FASTENER CO. LTD. 2 St Catharines		3, 6 1942, 1950
49151	SUPERIOR ELECTRIC SUPPLY CO Toronto		3 1952
49156	no TM, 2506 above rate mark (Robin Hood Flour)		
49158	SUPERIOR ELECTRIC SUPPLY CO Toronto		6 1953
49159	(Gutta Percha Rubber Ltd)		3, 6 1959
49160	no TM, 2716 above rate mark (Grover Mills Ltd, Montreal)		3, 6 1949
49162	no TM, 2511 above rate mark (Walter M. Lowney Co Ltd, Montreal)		3 1945
49164	(BENSON & HEDGES LTD)		
49173	(Mowatt and Moore Ltd)		
49181	no TM, 2678 above rate mark		3, 6 1946
49186	no TM, 2523 below rate mark (Canadian Cellucotton Products Co Ltd, Niagara Falls)		3, 6 1947
49201	no TM, 2521 above rate mark (S.C. Johnson Ltd, Brantford)		3 1950
49205	no TM, 2519 above rate mark (Simmons Limited, Montreal)		3, 6 1945, 1949

49201	no TM, 2514 above rate mark	3
49211		3, 6 1947
49218	no TM, 2525 above rate mark (Beatty Bros. Fergus)	3, 6 1942
49237	no TM, 2606 above rate mark (Zelikovitz Bros, Ottawa)	
49239	(Majestic Radio)	3, 6 1949
49251	no TM, 2559 above rate mark (Richmond Paper Co, Halifax)	
49258	no TM, 2572 above rate mark	
49264	no TM, 2689 above rate mark	3, 6 1946
49268	no TM, 2572 above rate mark (Hamilton)	3
49269	no TM, 2581 above rate mark (Savage Shoes, Preston)	6
49281	no TM (Toronto Elevators Ltd)	R 3,6 1942
49293	no TM, 2610 above rate mark (Rock City Tobacco Co (1936) Ltd, St Roch)	B 3, 6 1945
49293	no TM, 2610 below rate mark (Rock City Tobacco Co (1936) Ltd, St Roch)	
49296	2613 (The Hudson Paper Co. Ltd)	
49298	no TM, 2612 above rate mark (London Hosiery Mills Ltd, London)	3, 6 1948, 1951
49324	no TM, 2643 above rate mark (Thos. J. Lipton Ltd, Toronto)	R 3 1949
49331	no TM, 2649 above rate mark (Canada Varnish Co. Ltd., Leaside)	R 3 1950
49337	no TM, 2662 above rate mark (Ayerst, McKenna & Harrison, Oshawa)	3 1944
49338	2691 (G.F. Stephens & Co. Ltd)	
49342	2702 (Mid-West Paper Sales Ltd, Winnipeg)	R 3 1950
49347	no TM. 2675 above rate mark (Moore Business Forms Ltd, Toronto)	R 3 1949
49350	no TM, 2704 above rate mark (Canadian Fairbanks-Morse Co Ltd., Saint John NB)	R 3 1950
49362	no TM, 2728 above rate mark	
49364	(Reliable Toy Co. Ltd).	6 1951
49372	no TM, 2705 above rate mark (Daltons (1834) Limited, Toronto)	R 3 1948
49384	(Reliable Toy Co. Ltd)	
49415	(Andrew Jergens Co, Perth)	3 1951
49453		3
<hr/>		
49466	(Sunshine Waterloo Co. Ltd, Waterloo)	R .03 1948
49469		
49487	(The National Cash Register Co. of Canada Ltd.)	
49489	(Sumner Company Limited, Moncton, NB)	R .03, .06 1950
49493		
49496		
49498	(Heinz 57 Varieties, Toronto)	B .03, .06 1952
49522	(Frank W. Horner Limited)	
49523	(Whyte Packing Co. Ltd., Stratford)	R .03 1949
49532	(Carter, Cummings & Co. Ltd)	
49559	(Canadian General-Tower Ltd., Galt)	R .03 1948
49574	(Enamel & Heating Products Ltd, Sackville NB)	B .03, .06 1948
49579	(Anthony Foster & Sons Ltd)	G .03, .06 1948
49580	(Modern Office Industries, Toronto)	R .03 1951
49611	(Burroughs Wellcome & Co, Montreal)	R .03 1948
49618	(The Andrew Jergens Co., Perth)	R .03 1951
49633	(Colgate-Palmolive-Peet Co. Ltd, Toronto).	R .03 1952
49657		
49663	as above (Colgate)	
49678	(Maurice J. Walsh Ltd.)	
49692	(Butterfly Hosiery Co. Ltd, Drummondville)	R .03, .06 1948
49726		.06 1949
49746	(Marven's Ltd, Montreal)	R .03, .06 1950

49788 (Steele, Briggs Seed Co., Toronto)  
 49789 (Personna Blade Co of Canada, Montreal)  
 49800 (J&M Murphy Ltd., Halifax)  
 49808 (Colgate-Palmolive-Peet Co Ltd, Toronto)

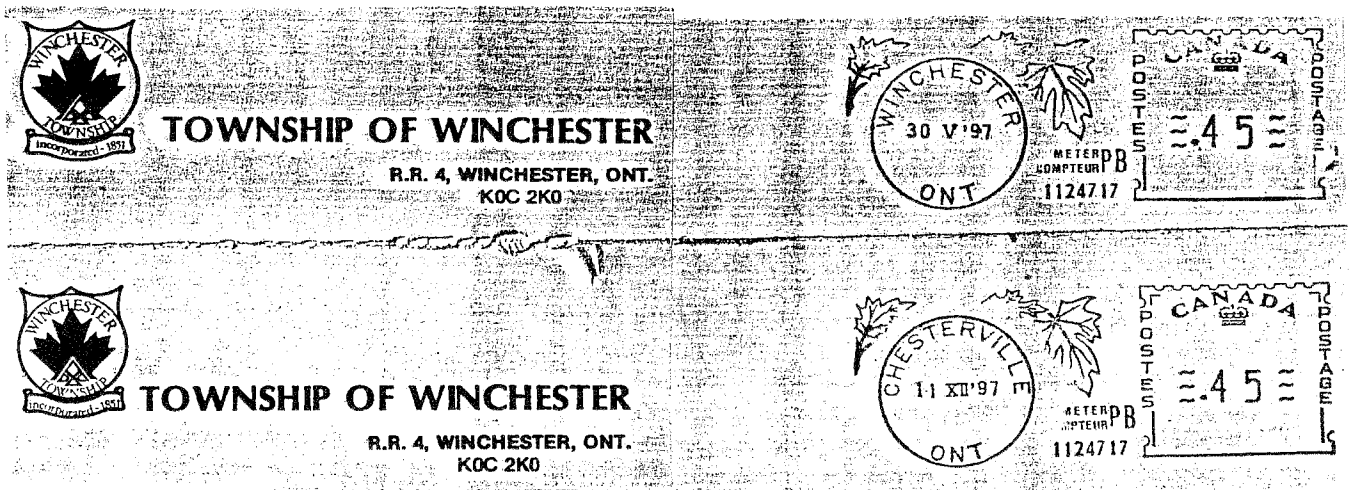
R 6 1950  
 R 3, 6 1949  
 R 3, 6 1950  
 DM R 3, 6 1950

000000 New pattern specimen  
 149007 (Canadian Life Assurance Co. Toronto)  
 149012  
 149031 (Ontario Hospital Association)  
 149078 (Canadian Life Assurance Co. Toronto)

R 3, 3+3 1951  
 R 3 1950  
 R 3, 1950, 1952

249007 (Levy Bros. Co. Ltd.)  
 249012 (Imperial Tobacco Sales Co of Canada Ltd, Montreal) 6  
 249042 different design 6  
 249065 (Parke Davis Co.) 6  
 249079 (Levy Bros. Ltd.)

A conundrum. The same meter number and the same return address. A different townmark!!!



The Bank of Nova Scotia appears to have its own "Spray-on" cancelling machine??



*BNS CANADA*

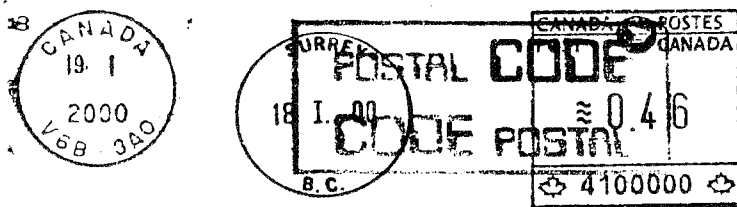
**CONFIDENTIAL / CONFIDENTIEL**

Table of Hasler Indicia

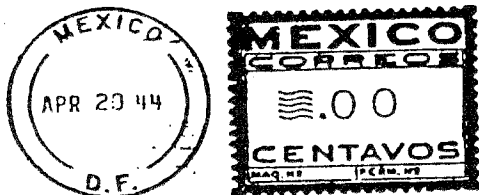
SERIAL	VALUE	TOP BOX	BOX-LEFT
H2000803	0.00	CANADA	C/M
H2001083	00.00	CANADA	C/M
H2050038	00.00	CANADA	C/M
H2060155	00.00	CANADA	C/M
H2050601	00.00:	CANADA	C/M
H2052574	00.00:	M>>P	M/M
H2052769	00.00	M>>P	M/M
H2061424	00.00:	M>>P	M/M
H2070198	00.00	M>>P	M/M

Something new from Postalia??

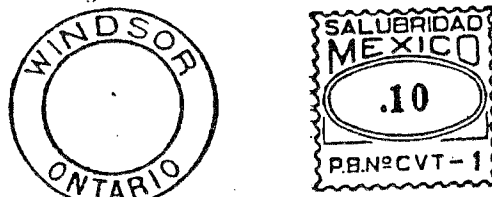
Looks like the beginning of a 4100000 serial however they have left off any identification of the source. From Wilf Whitehouse. I have found about three of these, mostly from the west.



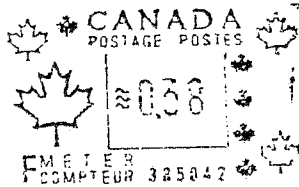
1944 unadopted essay of the National Postal Meter Company (USA)



1947 unadopted essay of the Pitney-Bowes Postage Meter Company.



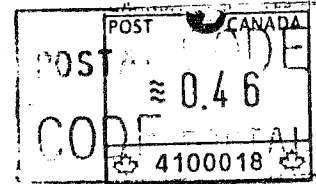
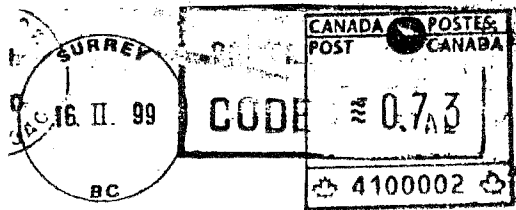




Marsh Canada Limited  
240 - 4th Avenue SW, Suite 2500  
Calgary, Alberta T2P 4H4

Who know about the Friden 385000 series?  
The design is too large and does not ink well.  
Provinces of Alberta and Saskatchewan must  
have a contract with them. Serials seen are:  
385035, 064, 079, 101, 149, 172, 189, 219,  
220, 222, 240, 233, 252, and 295.

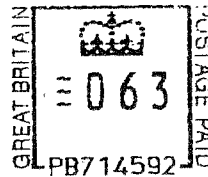
Paragon meter with no rate mark. Have seen  
several, all from Marsh of Calgary.



Two more examples of the Postalia shown on page 7. No varieties noted yet.

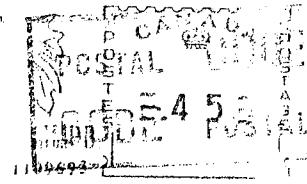
**HWS**  
Harman Wicks & Swayne Ltd  
110 Fenchurch Street  
London EC3M 5NA England

1  
19  
56  
57  
58  
42



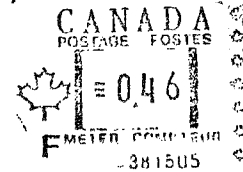
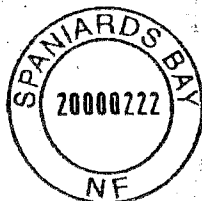
British PB Personal Post Office, with ad plate

Note many RETURN POSTAGE PREPAID

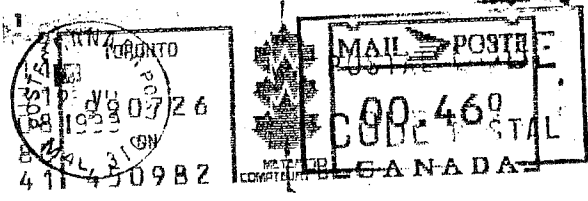
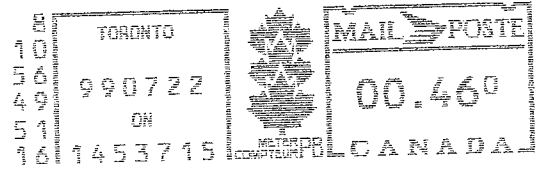
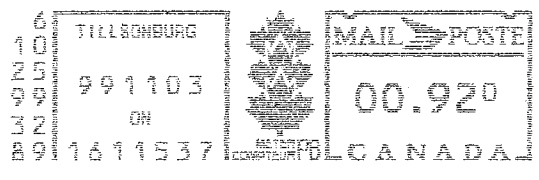
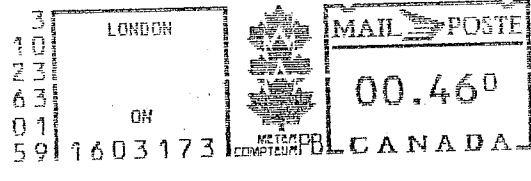
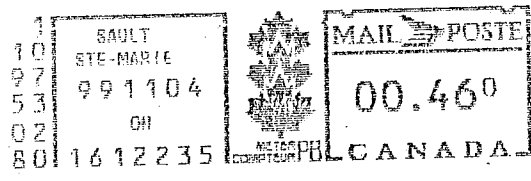
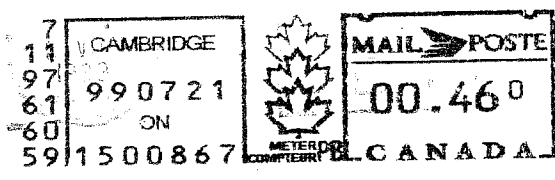


US meter with ad INTERNATIONAL /  
PRIORITY AIRMAIL.

Date mark 23 VII '07 ???



# CMMSG METER CATALOG

Type	Indicia	Remarks
36.1		Basic type, serial 450001 Printed by dot-matrix printer
36.2		Serial block, 1460000 Printed by dot-matrix printer
36.3		Serial block, 1600000 Printed by dot-matrix printer
36.3.1		No date in datemark
36.3.2		Townmark in two lines
36.4		Serial block 1500001 Printed by laser-jet printer on thermal mylar ribbon. Maple leaves not filled.

Type	Indicia	Remarks
36.4.1		Heading is POSTES>>MAIL for use in Quebec
36.4.2		Town and province type font uses serifed letters.
36.4.3		Town and province has tall letters
36.4.4		Townmark in two lines
36.4.5		Townmark has small letters
36.4.6		Specimen

## Post It!

**While e-mail, couriers and fax machines are important delivery systems, they have not replaced the postal system as the most widely used method of business communication.**

The mail is still most businesses' first choice for sending invoices, letters, company literature and parcels. Except for the Internet, how else can you send a letter from coast to coast — say St. John's, Newfoundland to Campbell River, British Columbia — for less than 50 cents? And now the latest technology in postage meters and mailing systems is making mailings easier and more cost effective than ever before.

### Electronic Mailing Machines

Yesteryear's postage meter is rapidly being replaced with the high performance electronic mailing system. Recognizing that mailing is a cost centre that demands speed and accuracy, manufacturers are providing high-speed digital machines that not only function as a postal meter but also integrate with other mail-processing machines to create a complete mailing centre.

Why spend working capital to lease a postage meter or mailing system? First, it's more affordable than you may realize. Manufacturers are designing units that fit the smaller budget and lower volume needs of small businesses. And because these systems are modular, you can custom-tailor a mail centre for

today's needs and later as the company grows, expand the system to accommodate increases in the volume of mail.

These machines offer quiet operation, ease-of-use, flexibility and greater durability than previous models. What's more, these leading edge postal meters have the ability to:

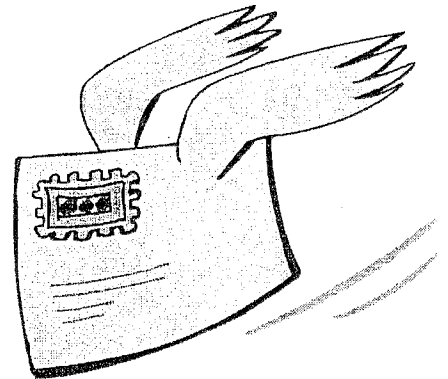
- Calculate rate comparisons quickly and precisely to ensure employees select the most cost effective delivery
- Print (frank) a postmark directly on envelopes, labels or tape
- Include the company name, address and advertising in the frank
- Interface with electronic postal scales, printers, feeders and stackers for high performance mail handling
- Register postage amounts and statistics to provide full accounting data of postal costs, and
- Be refilled by purchasing postage over the telephone.

### Get the Big Company Look

These latest machines allow you to add advertising to your postage mark to give your small business that big company look. Some manufacturers provide four or more advertising plates that can be customized to frank information such as your company name, return address, business logo, and special slogans or greetings along with the postage.

### Process Mail More Quickly

Sticking stamps and sealing envelopes, particularly for bulk mailings, are time-consuming tasks. So is having staff line up at the post office. With the latest postage meters, you can easily attach a device to moisten and seal envelopes. Some mailing systems can feed, fold, collate, insert, seal and frank — all at high speed.



### Reduce Under and Over Postage

Marketing brochures, invoices, or statements that are returned to your company because of insufficient postage are costly. Not only is it often necessary to mail these items again, but delayed invoices slow down your accounts receivable and delayed marketing literature can miss the market potential altogether, especially if your business is seasonal.

On the other hand, excessive postage on mail that has not been properly weighed costs money too. With its integrated weigh scale, the electronic postage meter eliminates over postage by providing precise calculations of postage and rate

*(Continued on page 7....)*

# Post It! continued...

comparisons for standard and oversized letters, small packages and bulk-class mailings.

## Control Costs of Mail Processing

While mail is an important part of a company's budget, these costs are often overlooked in the drive to improve productivity and efficiency. The innovations now available in today's mailing systems can substantially improve a business's mail processing as well as control costs. As small businesses are unlikely to have staff dedicated to mail processing, the ease-of-use of these machines means any staff person can process the company's mailings. Many mail machines can

now be integrated with a PC so that an administrator can collect, consolidate and edit postage meter data to generate postage meter reports.

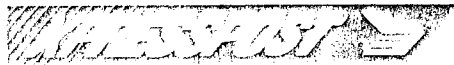
## Refill Over the Phone

The ability to refill the postage meter over the telephone from your office is more than a convenience, it also helps you budget for postage costs. For example, if your business has a large mailing, the meter can be easily refilled just prior to the mailing. This improves cash flow planning and prevents delays that would occur if sufficient postage were not available in the meter. And, of course, the system is

secured to ensure that only your office can update the amounts in the meter.

## Save Time and Money

If your office mails more than a few items a day, talk to your local post office to find out about the companies that lease postage meters specifically designed for meeting the mail-processing needs of small businesses. Having your own "post office" in-house makes the leasing of a postage meter a true moneysaver. \*



CANADA POST  
POSTES CANADA  
XPRESSPOST  
3125033

From Expéditeur

(416) 204-4446

CANADA POST CORPORATION  
SALES ACTION CENTRE  
1 DUNDAS ST WEST SUITE 301  
TORONTO ON M5G 2L5



GL 522 149 740 CA

33-086-566 (98-06)

To Destinataire

Attn: Ross Irwin  
Guelph Historical Society  
PO Box 1502 Stn Main  
Guelph ON N1H 6N9



GL 522 149 740 CA



Signature on Delivery  
Signature à la livraison

Sender warrants that this item does not contain dangerous goods.  
L'expéditeur garantit que cet envoi ne contient pas de matières dangereuses.

Inconsistency of postal cancellation marks has been of concern to Royal Mail and its customers alike for a number of years and recently ways have been sought to improve the quality and security of the impression.

The traditional process of cancellation employs a rotating die which makes contact with a letter as it passes over a rubber backing roller. As the gap between the roller and the rotating die is fixed, the impression generated can vary according to the thickness of the item of mail passing through the gap. Further, if too much ink is fed to the inking roller an over-inked and poorly formed cancellation mark will often result. Alternatively, if very little ink is applied to the roller, the image will gradually become poorer as the surface dries out. The filling of the ink reservoirs is frequently left to the judgement of the operator, although Klussendorf have

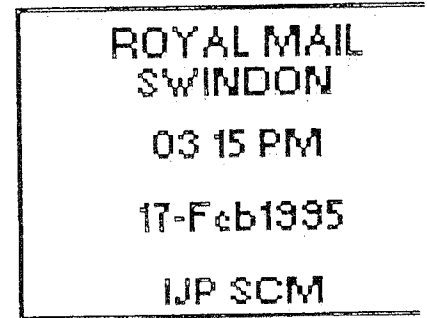
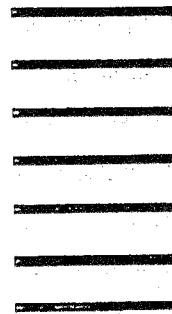
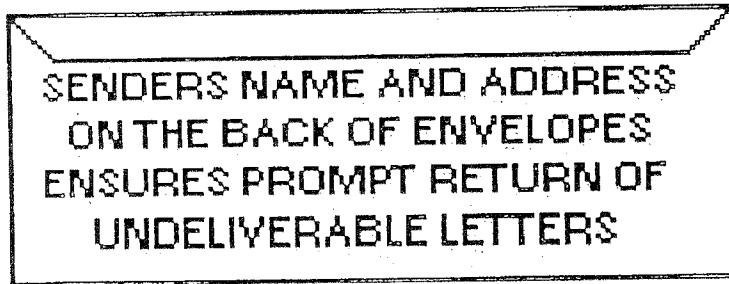
# Ink Jet Cancellation

Dr A. R. Lane, Head of Royal Mail Materials Laboratory, traces the development of this new cancellation technology.

project led to the development of a prototype stamp cancelling machine (SCM) which has now undergone extensive office trials (see Lane, A. R. and McCabe, A. J. M. 'A performance evaluation of an inkjet stamp cancelling machine'. Proceedings of Mail Systems

by the use of two inclined Trident heads, the first printing the lower half of the impression and the second the upper half, at a resolution equivalent to 64 dots per inch.

The result was a flexible system which allowed electronic generation of cancel-



automated this part of the process successfully. As the metal dies are individually manufactured, there is very little flexibility in the process in terms of the information that can be applied.

Jet printers have been used to apply bar codes to mail for sorting purposes for a number of years. These have been of the continuous ink jet design, the first version of which to be used in this country was designed and manufactured by Royal Mail. Later, as the number of machines increased, Domino printers were installed on all new equipment. These have greatly improved operational performance whilst being still able to apply the phosphorescent ink developed by Royal Mail scientists.

As a result of these findings the ink jet method appeared to offer a considerable improvement over older rotating die stamp cancellation equipment and, in 1989, a start was made to evaluate a number of jet printers for cancellation use. After a period of experimentation, it was found that Trident multi-channel impulse jet heads could produce an adequate area of impression (2.5 x 10cm) with fewer printing units than the continuous process would need. The

2000 Conference, I. Mech. E. London, May 1994, p. 61.

A further major benefit of this technology derived from the quick drying rate of the inks involved and additionally it was found that these materials adhered strongly to printed surfaces, thus offering improved security of the cancellation.

## The Jet Printer

Independently of Royal Mail, Cueprint Ltd developed a driver board and software for the Trident printer head designed to mark products on packaging and assembly lines. In their process a number of heads could be controlled to print an image at any speed up to 4 metres per second. This arrangement was adopted for the mail cancellation experiments and Cueprint were asked to supply the printers at each stage of the machine's development. Additional confidence was derived from the knowledge that the Cueprint Classic system had been developed to print reliably in an industrial environment.

In early trials it was determined that sufficient clarity of image could be gained

Acetate film of the cancellation applied by the Swindon Automated Processing Centre.

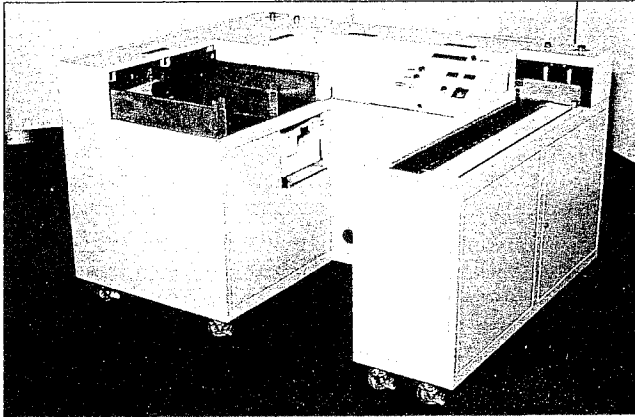
This represents the type of artwork scanned to generate the impression.

lating marks and maximised the possibility of artistic slogans which complemented the traditional posting information. A further achievement was the ability to update continuously the cancellation from the computer clock if required.

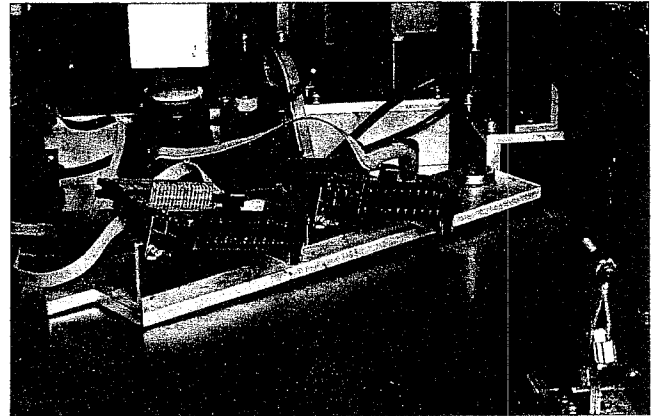
Among the benefits of the jet printer cancellation machines are the consistent application of ink, the lack of die wear, and the concept that slogan changes can easily be made on the software. Application of postage paid indicia is rapid, and the inclusion of advertising information is easy. The cancellation is secure and because it is a non-contact method of cancellation, the variable thickness of mail doesn't matter.

## Letter Transport

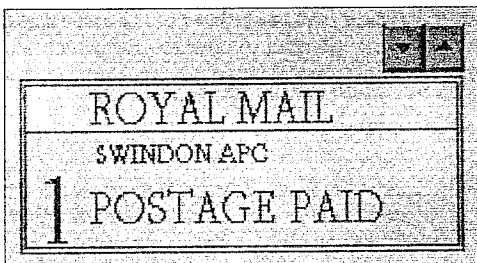
One essential requirement was the development of a system which allowed long term performance testing of the Trident printer heads. As work progressed and this was refined, it was



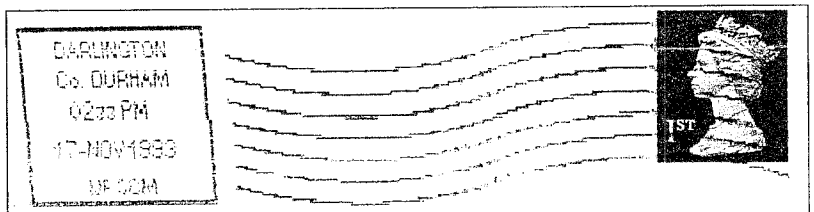
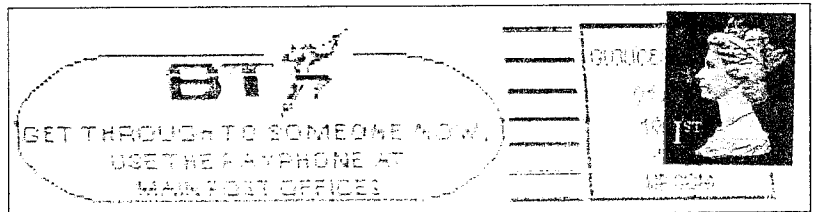
The prototype machine has been evaluated in a number of sorting offices, where it has been used for the cancellation of mail or the application of postage paid indicia.



The arrangement of the two Trident cancellation heads is shown. Ink is supplied from 125 ml reservoirs at the rear via sealed tubes, so very little loss occurs.



A postage paid impression displayed on a personal computer screen ready for storage on disk.

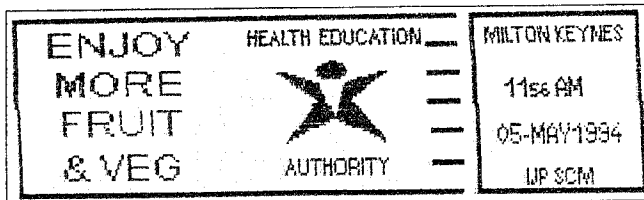


A postage paid impression designed by the same process as in the above illustration, applied by the machine at London Foreign Section.

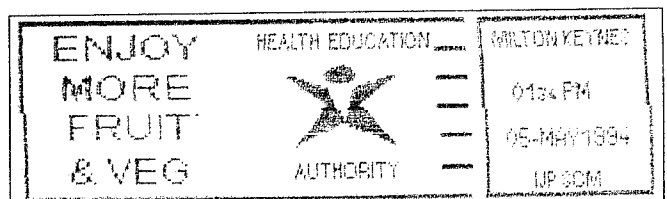
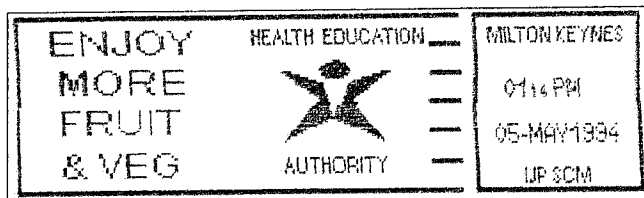


A selection of cancellation marks applied over the past two years. Stamp cancellations are in the minority, as the application of prepaid impressions in red ink to internal or overseas bulk mailings has taken preference.

A group of cancellations showing how the impression is automatically updated by the computer clock.



All illustrations are provided by the Royal Mail Technology Centre.



realised that a small scale cancelling machine was feasible. The destacker and transport belt arrangement was based on a Royal Mail third generation postcoding desk design but a metre long belt with vertical paddle was added to direct the mail into the vacuum assisted destacker. A light beam and photocell were placed after the snubbers to detect the front edge of an approaching letter. When this beam was broken the printer was activated and the cancellation mark applied. The item of mail then passed directly to the stacking boxes, a diverter sending the stream to a second bin when the first was full.

The design of the printer face plate and mounting was most important, and this component needed several modifications to ensure the distance of the letter surface to the printing head was accurately maintained, with least skew and minimum separation of the two halves of the printed image. The envelope surfaces remained the least controllable feature, but the Trident ink showed few problems of feathering, and the cancellation mark remained secure on all items.

### *Design of a Postmark*

In order to create a postmark two approaches were adopted. The first option was to scan artwork and record the image on the hard disk of a personal computer, when, with the use of a suitable graphics software package, this could be scaled and modified to produce a bit map which fitted the printer driver capability of application at 64 dots per inch. A second approach was to design the slogan directly on screen, using graphics software but applying the same final treatment as in the previous case.

A space could be left in both impressions for the cancellation date to be applied in real time. The resulting cancellation message was finally stored on 1.4 Mb floppy disk and placed in the cancelling machine disk drive when required. Appropriate security features were introduced to ensure that the SCM computer only accepted genuine slogans and access to it was also restricted. When a change of slogan was needed an alternative disk was selected, inserted and the machine re-started, a procedure which required a stoppage of no more than two to three minutes. If an ink change was needed, in order to print prepaid impressions for instance, the print heads were replaced by those of the new colour by simply exchanging the moveable cradle.

### *Examples of cancellation*

The first applications of cancellation marks to stamps in a sorting office by the new jet printer cancelling machine occurred at Gloucester, between November 1 and 13, 1993 when about 800,000 items of mail were cancelled with a British Telecommunications slogan. After the evaluation, the machine was transferred to Darlington sorting office in support of the self-adhesive stamp trial. Cancellations were carried out there from late November through to Christmas using both a variation on the normal Darlington die and also one applying the slogan 'Happy Christmas, please post early'.

In January 1994 the machine was returned to Swindon for servicing and modifications to the destacking arrangement, which resulted in the replacement of the arm activated servo motor feeding system with a vacuum assisted process. After completion of this work, it was sent to Birmingham in March for evaluation as part of a Ty-Phoo slogan campaign.

Initially this was required in red ink but due to operational and logistical problems this could not be continued and the colour was changed to black. However, the trial itself was not successful and little mail was cancelled.

In order to offer the technology to a wider audience, the machine was next demonstrated at the Royal Mail Teamwork 1994 exhibition at Milton Keynes on May 5. Impressions were applied to blank envelopes and given to visitors, encouraging them to 'Eat more fruit and veg' on behalf of the Health Education Council.

Following the exhibition, the machine was used for demonstration purposes at the Swindon Materials Laboratory for some months before being passed over to the new Automated Processing Centre for use on a trial basis. Slogans with the impression 'Senders Name and Address on the back of the envelope ensures prompt return of undeliverable letters' were applied to a variable extent in black between August 9 and Christmas. Mail was also printed with red prepaid impressions.

A second machine has been satisfactorily operating for some time at the London Foreign Section in King Edward Building. This machine has the capability to separate POP from C5 mail whilst applying mainly prepaid postal indicia and air mail impressions on items destined for overseas.

### *The future is exciting!*

A number of opportunities are possible with the equipment described but one development still required is a single 64 channel head. This is necessary to remove totally any problems of mis-registration between the upper and lower parts of the image. When a single head becomes available, slogan printing in four colours will be possible, using separate heads for each colour. Conventional cancellations in red or black ink will also be achievable without the need for an interchangeable printer cradle.

The ink jet SCM described was primarily built for evaluation of the Trident jet printers for suitability for secure mail cancellation. The same heads are to be used in the new integrated mail processors (IMP) which are contracted to AEG. When the first machines are delivered later this year, these new cancellation marks will become more abundant. In this context, there is the possibility also of fast changing of impressions.

The printing of different messages according to the address information, size and thickness (if pre-determined) of an item of mail is possible, assuming that image recognition and OCR technology allow capture of all details of a letter. Once a number of these IMP machines are installed it is likely that a much wider range of interesting slogans will appear with a greater targeting of the message at the recipient of the mail.

It is believed that the smaller SCM has a separate future but it has not yet received approval as a piece of office equipment. This new machine thus offers some very exciting prospects for mail processing in environments within or external to a postal system. It may be that the original SCM prototype described will spawn a variety of machines with slightly different capabilities which include the Trident jet printer for application of information. The author believes that there will remain a need for a cancelling machine in some form to handle non-machineable items, large flats and mail that cannot be concentrated at one large Automated Processing Centre. They may be of interest to European and other countries who cancel mail in local offices. Only the future will tell how important the role of these supporting machines will be. Whichever way the machines develop, the inkjet printer has transformed the technology of mail cancellation from the 19th century to the twenty first.