

The Postcode Programmes of France

The Experimental Years

1958 - 1978



Presented to the Royal Philatelic Society London

26 March 2015

Michael L Bister

The Postcode Programmes of France
The Experimental Years
1958-1978

Paper and Display to Fellows and Members of the Royal Philatelic Society London
on 26 March 2015 by Michael L Bister

Front cover: '*La codification postale*'
Designed and engraved by Albert Decaris (1901-1988)
and printed by Jean Munier, Paris, 1972

Back cover: prototype coding desk and Hotchkiss-Brandt 8 D sorter,
Centre National d'Études des Télécommunications, 1960

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Foreword



I can recall precisely how and when I began to take an interest in mechanised letter sorting in France.

In March 1970, the *P et T* issued its first phosphor band stamps but, under a cloak of secrecy, they were only put on sale at Clermont-Ferrand and in a few other towns in the *département* of Puy-de-Dôme. As the stamps would play an intrinsic role in

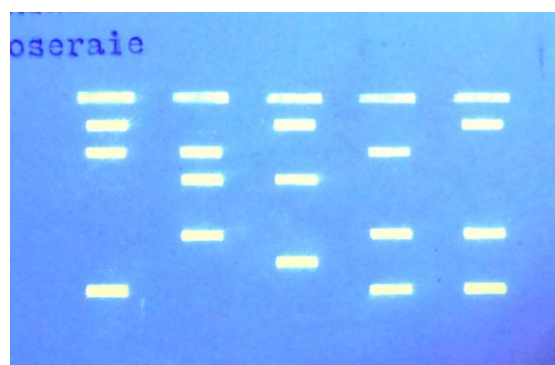
the testing of new equipment at Clermont-Ferrand designed to face and separate 1st and 2nd class mail, the covert sales would ensure that they were used by the public as intended and would avoid the trials being compromised by collectors and dealers making speculative bulk purchases.

However, once the plot had been uncovered, the postal administration at Clermont-Ferrand yielded to the demands of philatelists and from the end of August 1970 the phosphor band stamps were available by mail order. I responded immediately and the above cover serviced at the Clermont-Ferrand *Recette Principale* arrived opportunely through my letter box on 26 September just before my departure for London Phililypia. Once inside the Empire Hall my first purchase was a desktop ultra-violet lamp which has continued to give me faithful service to this day and is still with its original Sylvania daylight and UV bulbs.

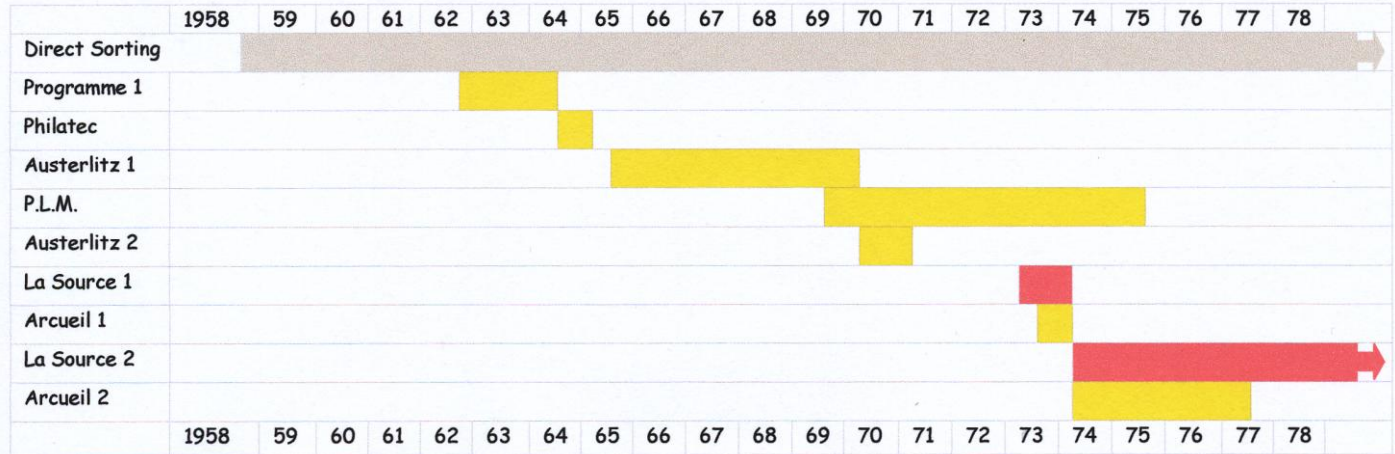
It was a natural progression from examining phosphor bands under UV light to studying further evidence of mechanised sorting in France and I soon became absorbed in the study and translation of the postcode languages and the barcodes (*indexations*) which appeared on the mail. Dealers, however, were reluctant to identify and list such material (and this deficiency still exists today) and so the only means of procurement involved a tedious trawl through all their stock linked to the 1960s and 70s. Correspondence to bemused friends in France pleading for coded mail ensued, a fruitful link was established with an employee at the mechanised letter sorting office at Orléans-la-Source and contacts were made with like-minded collectors for the exchange of information and material. In 1975 a fellow collector and member of the France and Colonies Philatelic Society, John Hayhurst, joined forces with me to co-write and publish in the Society's *Journal* what was probably the first article in English devoted to the development of the postcode programmes of France.

Today, dealers still eschew the genre but, thankfully, material both mundane and rare is sold by collectors on the internet. I do hope you enjoy the fruits of my years spent writing begging letters and trawling through dealers' boxes and websites.

Michael L Bister



A Brief History of Mechanised Letter Sorting in France



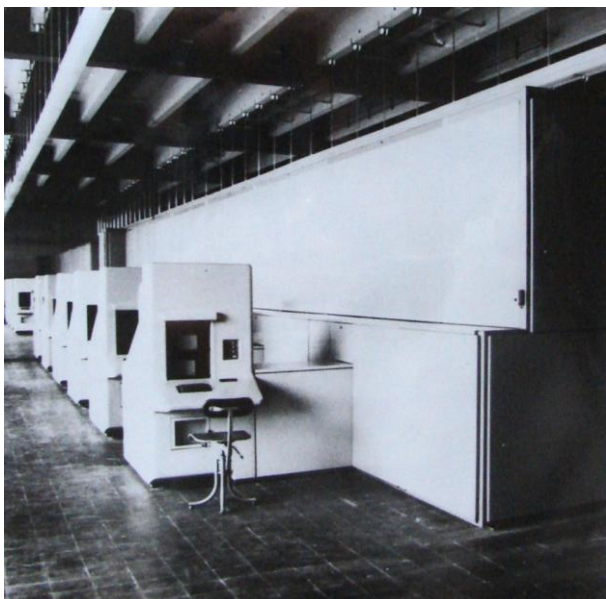
1953 - Direct Sorting



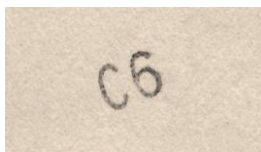
Hotchkiss-Brandt 300 D direct sorter at Paris 1, rue du Louvre

The first steps towards mechanised sorting were taken in 1953 when a prototype Hotchkiss-Brandt 5/144 electro-mechanical 'direct' sorter, capable of 144 separations, was installed at Bordeaux. The machine was operated by five sorters who, by typing a numeric code on their keyboard, for example 24 for Agen, signalled a command to a series of electro-magnets which activated flaps and selector bars and directed the letter to one of 144 receptacles or 'bins'. The trial lasted only a few months. In 1958, two larger capacity direct sorters, the Hotchkiss-Brandt 300 D which had provision for 300 separations, were installed at the Paris 01 sorting office in the rue du Louvre. The 300 bins were assigned to destinations according to the volume and importance of the mail handled. For

example, each Paris *arrondissement* had its own dedicated bin as did the major towns and cities; in contrast, mail to certain *départements* and regions in the less populated areas of France such as the south-west was directed to a single bin for separating manually at a later stage. The six operators on the machine were each able to treat between 4000 and 6000 letters an hour.



Modified Hotchkiss-Brandt 300 D direct sorter at Paris-Brune

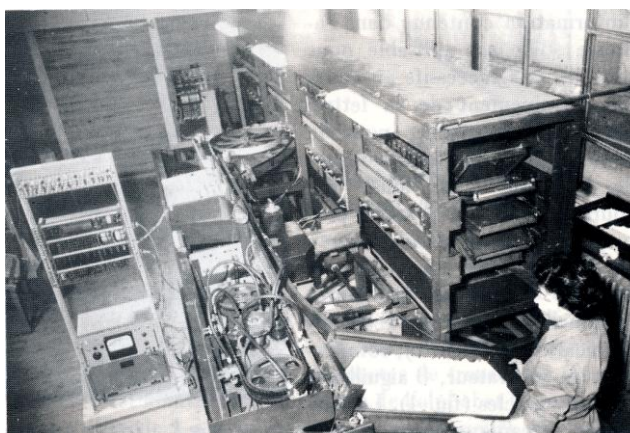


Hotchkiss-Brandt 300 D idents

The reverse of the envelope. The idents were uninked and are sometimes difficult to detect but at the last count 77 different ident patterns, including variants, have been recorded. In 1967 an inked typeface ident was trialled at the Paris-Brune office and adopted elsewhere from 1969. The ident, composed of a letter identifying the machine and a number identifying the operator, was applied diagonally to the face of the envelope. A total of 42 inked idents, including variants, has been recorded.

1960 - The first automated programme

The weakness of the direct sorting system was the lack of permanent coding data carried by the item of mail.



Prototype Hotchkiss-Brandt 48 D sorter

Once retrieved from the bins and bagged, there was no residual information on the letters treated by a HB 300 D to assist further sorting at a later stage or in another office. A means had to be found of printing onto each envelope the sorting information in the form of a permanent code. This could then be re-read at each stage of mechanised sorting encountered during the item's journey from acceptance to delivery. In 1959, studies were already underway and in 1960 a Hotchkiss-Brandt eight-bin mechanised sorter was tested

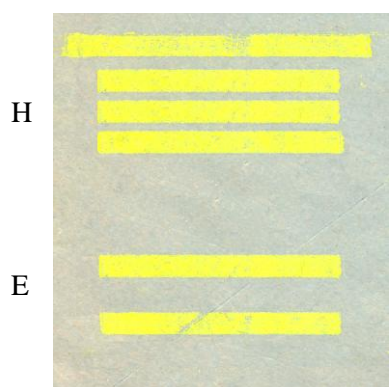
at the *Centre National d'Études des Télécommunications* at Issy-les-Moulineaux on the outskirts of Paris. In order to automate the system, the sorting information was printed by the coding desk operator in the form of a barcode or *indexation* on the envelope. Black, magnetic, phosphorescent

| DESTINATION | POSTCODE and <i>INDEXATION</i> |
|-----------------------|--------------------------------------|
| Versailles | KD |
| Rueil-Malmaison | RM |
| Argenteuil | GT |
| Maisons-Lafitte | ZF |
| Mantes-la-Jolie | MJ |
| Saint-Cloud | SD |
| Saint-Germain-en-Laye | GM |
| Meudon | MD |
| Aulnay-sous-Bois | ZO |
| Chatou | HO |
| Draveil | DV |
| Plessy-Trévisé | RW |
| Les Mureaux | JD |
| Marly-le-Roi | JV |
| Pontoise | OZ |
| Poissy | PK |
| Sarcelles | SC |
| Sèvres | SE |
| Blanc-Mesnil | LM |
| Houilles | HE |
| Livry-Gargan | VG |
| Corbeil | KB |
| Sevran | SV |
| Sartrouville | TO |
| Montmorency | KC |
| Massy | MS |
| Juvisy-sur-Orge | UX |
| Conflans-Ste-Honorine | CN |
| Savigny-sur-Orge | SG |
| Villeneuve-St-George | WO |
| Le Vésinet | VN |
| Villeneuve-le-Roi | WE |
| Bezons | BZ |
| Enghien-les-Bains | GB |
| Palaiseau | PZ |
| Gagny | GN |

and fluorescent inks in different colours were tested; finally a 110 mm silk ribbon impregnated with yellow fluorescent ink was adopted for printing the *indexation*. This in turn was read by an ultra-violet scanner which, by interpreting the pattern of strokes, signalled an instruction for the item to be routed to the appropriate bin at a rate of over 14,000 items an hour.

Hotchkiss-Brandt would continue to dominate the manufacture and supply of automated postal equipment. In 1961 a larger model with forty-eight bins was tested at the C.N.E.T. before being transferred to the Paris-Gare d'Austerlitz sorting office in September 1962 where trials with real mail were conducted until October 1964. Only mail addressed to the surrounding *département* of Seine-et-Oise was used in the trials. The target towns were arbitrarily assigned a two character alphabetical postcode which was transcribed by the coding desk operator into an *indexation* applied in yellow fluorescent ink to the back of the envelope. The programme and its coding desk computer language became known as **Programme N° 1** and achieved sorting rates of between 18,000 and 21,000 items an hour. A modified version, producing an *indexation* on the face of the letter comprising two lateral columns instead of two superimposed ones, was demonstrated at **Philatec**, the international philately and technology exhibition held in Paris in June 1964. However, no details were published on how to translate the Philatelic *indexations*.

Examples of Programme N° 1 alphabetical postcode and indexation



Programme N° 1 indexation for HOUILLES

The town of Houilles will be used hereafter in all representations of indexations in order to facilitate the comparison of language patterns.



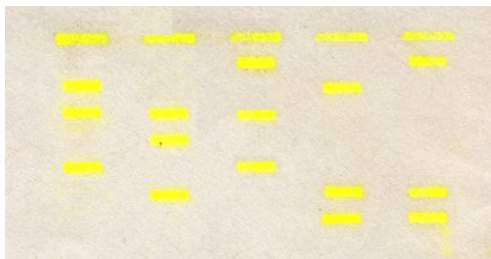
Philatec indexation for unknown destination

1964 - Introduction of the national two-digit postcode

In 1964, the postal administration introduced a national two-digit numeric postcode. Each *département* was instructed to adopt as its postcode its *département* vehicle licence number which would replace the *département* name in postal addresses. For example, mail previously



*Seine-et-Oise (78)
vehicle licence plate*

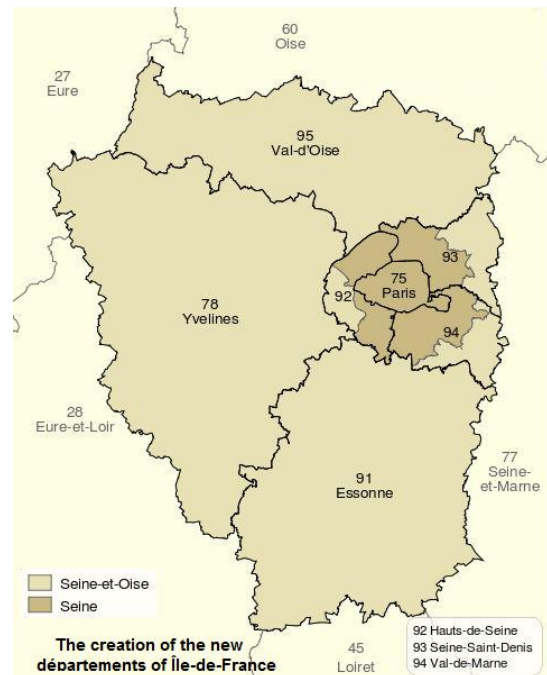


U O H 8 7

*Indexation, from right to left, for
78 HOUILLES using the **Austerlitz 1**
language with fixed long start*

addressed to HOUILLES, Seine-et-Oise, would henceforth be addressed to 78 HOUILLES. In the meantime, the Paris-Gare d'Austerlitz sorting office, now designated as a *Centre de Tri Expérimental (C.T.E.)*, had been equipped with more advanced sorting equipment and leaner coding desks with a more economic 34 mm ribbon. The Austerlitz language combined the two-digit numeric postcode and the first three letters extracted from the town into a code which was transcribed into an alpha-numerical *indexation*. The pattern of the *indexation*, printed from right to left on the front of the envelope, comprised four strokes distributed over eight rows in each of five columns. The start of each column was fixed, i.e. the first stroke was always in position one. 78 HOUILLES would be therefore transcribed as 78HOU although appear in reverse on the envelope as UOH87. The **Austerlitz 1** language, as it became known, operated from March 1965 to July 1966 with a 'long' start of 7 mm and from August 1966 to March 1970 with a 'normal' start of 5 mm.

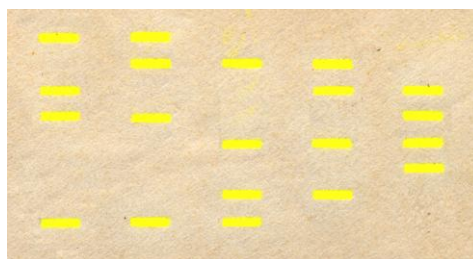
On 26 October 1965 the first postcode campaign was launched with the slogan *postmark 'Codifiez vos adresses postales - pensez-y'*. A second postcode campaign targeted the newly created *départements* of the Île-de-France. As a result of demographic density and growth, the *départements* of Seine and Seine-et-Oise were too large to be governed effectively. By an act passed in 1964 began the process of subdividing them and the six smaller *départements* of Hauts-de-Seine, Val-de-Marne, Seine-St-Denis, Val-d'Oise, Essonne and Yvelines were created. Paris became autonomous as Ville-de-Paris and adopted the number 75 of the former Seine. Yvelines was given the number 78 of the former Seine-et-Oise. The remaining new *départements* were allocated numbers 91 to 95.



On 28 November 1966, the *département* of Val-de-Marne spearheaded the postcode campaign with a slogan canceller '*Département du Val-de-Marne : N° de Code Postal 94 : Pensez-y*'. Over the next twelve months similar slogans were progressively introduced by the other new *départements*. A third postal campaign was launched nationwide on 2 August 1967 with a slogan postmark '*Dans vos adresses postales, pensez à indiquer le numéro du département*'.

1969 - The P.L.M. Programme

In 1969, the Paris-Gare P.L.M. (Paris-Lyon-Méditerranée) sorting office was upgraded to a *Centre de Tri Expérimental* and equipped with a suite of coding desks and sorters capable of reaching speeds of 25,000 items an hour. In an attempt to resolve issues encountered with the fixed start Austerlitz 1 a new programme language was written, the **P.L.M.** language. The *indexation* had a floating start and the distribution of strokes within the pattern was broader thereby reducing



U O H 8 7

Indexation for 78 *HOUILLES* using **P.L.M.** language with floating start

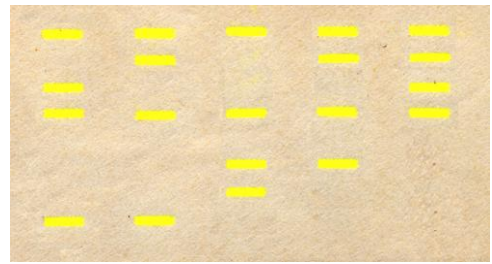
localised wear on the ribbon. The treatment of mail at Paris-Gare P.L.M. began in October 1969 and continued until June 1975. The P.L.M. language was also adopted at the new Arcueil C.T.E. in Val-de-Marne from January 1971 to July 1973 to treat specifically second class mail posted in the Paris suburbs. Shortly afterwards, the P.L.M. programme was introduced at Clermont-Ferrand-Gare thereby upgrading it to a C.T.E.. Here the P.L.M. programme operated, according to official sources, from June 1971 to October 1974 treating mail from Puy-de-Dôme and its contiguous *départements* of Allier, Cantal and Haute-Loire. However, mail prior to this date has been recorded and is evidence of the equipment being tested before the centre's official inauguration.

To meet the increased performance of the sorter, the speed of the coding desk operators needed likewise to be accelerated. In theory the coding desk operator would need to touch five keys to print the five elements of the *indexation*. In practice this was rarely the case. Sets of internal codes were created and stored in the compiler; these enabled the operator to print the full *indexation* with the touch of just one or two short-cut keys. Sub-programmes were also devised which increased by almost tenfold the destinations achievable with the latest Hotchkiss-Brandt HD-7 50 D sorter.

| DESTINATION | CODE | INDEXATION | BIN |
|-----------------------|-----------|------------|-----|
| Arfeuilles | CG | 03 ARF | 1 |
| Bellenaves | ZI | 03 BØ1 | 2 |
| Bellerive | ZN | 03 BEL | 3 |
| Bellenaves Passés | MO | 03 BØ2 | 4 |
| Le Breuil | RN | 03 BRE | 5 |
| Chantelle | NY | 03 (Cha)NT | 6 |
| Droiturier | EN | 03 DRO | 7 |
| Escurolles | XC | 03 ESC | 8 |
| Gannat | WL | 03 GAN | 9 |
| St Germain des Fossés | AR | 03 GER | 10 |
| Hauterive | XP | 03 HAU | 11 |
| Isserpent | TM | 03 ISS | 12 |
| Audes | EM | 03AUD | 13 |
| St Bonnet Tronçais | BP | 03 BON | 14 |
| Chamberat | MY | 03 (Cha)MB | 15 |

Extract from Secondary Sub-programme N° 6 at Clermont-Ferrand showing short-cut keyboard codes for destinations within the *département* of Allier (03)

Shortly after the introduction of the P.L.M. language, the Austerlitz 1 language being used at the Paris-Gare Austerlitz C.T.E. was modified to bring the stroke patterns in line, as far as technically possible, with those of the P.L.M. language. As the Austerlitz programme required a fixed start not all the letters could be aligned like the P.L.M. strokes but an acceptable parity was achieved. The programme, **Austerlitz 2**, was introduced in early 1970 (possibly March) and continued briefly until May 1971. The reprogramming of the coding desks and sorters from Austerlitz 1 to Austerlitz 2, was undertaken in stages and hence during that time both languages can be encountered.



U O H 8 7

Indexation for 78 HOUILLES using **Austerlitz 2** language with fixed start

1972 - Launch of the five-digit numeric postcode

1972 promotional literature and logo for the five-digit numeric postcode

There were still problems and complications inherent in an alpha-numeric code particularly in the case of *départements* which had several communities starting with the same three letters. A more sophisticated postcode had to be formulated and in 1972 a five-digit numeric postcode was launched. The first two digits of the postcode, as before, identified the *département*; the second group of three digits identified without any ambiguity the sorting office within the *département*. In the *département* of Yvelines, which had retained the number 78 of its predecessor, Seine-et-Oise, 78 VERSAILLES now became 78000 VERSAILLES with the three zeros identifying it as the *chef-lieu* of the *département*. The next eight most important sorting offices were allotted a postcode ending in two zeros and the remaining localities just one zero. If there were more than 88 sorting offices in the *département*, the excess were allocated a postcode ending in a digit other than a zero. For example, 78 HOUILLES became 78800 HOUILLES, 78 BOIS D'ARCY became 78390 BOIS D ARCY and

78 CONDÉ-SUR-VESGRE became 78113 CONDE SUR VESGRE. Note that accents, hyphens and apostrophes in place names had to be excluded. The five-digit code, although more sophisticated, was still only a *code acheminement* or forwarding code, the equivalent of the Royal Mail 'outward' code. The two elements of a French postcode eg. 78+800 for Houilles were the equivalent of the

Area and District elements of the British postcode *cf.* W1+G in the postcode of the R.P.S.L. The French public was not required to use, let alone remember, an 'inward' or delivery code with a Sector and Unit like the 6+JY in the R.P.S.L. postcode. A major postcode awareness campaign was launched on 1 June 1972 and the slogan postmark '*Code Postal, mot de passe de votre courrier*' was used in 237 offices of which 21 were in Paris, 195 in the provinces, 18 in armed forces offices and 5 in overseas *départements*. A distinctive logo was designed by Studio Bassiani and was featured on stamps, postmarks, booklet covers, vignettes and promotional literature.

1973 - The prototype numeric language

On 30 January 1973 the first purpose built fully mechanised *Centre de Tri Automatique* was inaugurated at Orléans-la-Source in the *département* of Loiret. In preparation for the new five-figure postcode a compatible numeric language, **La Source 1**, had been developed earlier in 1972. The bar code or *indexation* was comprised of five elements but arranged in a continuous horizontal row and applied in red ink from a 13 mm ribbon. Each element had a fixed start represented by a stroke on the right and with strokes in three of the five other positions. Amongst the early installations at Orléans-la-Source were two new generation sorters. Each



sorter was equipped with 64 bins comprised of two modules of 32 with the capability of being extended to a maximum capacity of 256 separations; each sorter attained a speed of 28,000 items an hour. In addition to a number of manual coding desks, the centre also boasted the first optical character recognition equipment known as L.I.A.P – *Lecteur Indexeur d'Adresses Postales* manufactured in Dallas, Texas, by Recognition Equipment Incorporated. In contrast to the manual coding desk the L.I.A.P. was capable of automatically identifying and reading the characters of printed and typed addresses. The letter passed under a sensor which scanned and homed onto the last line of the address. The machine read the name of the town and its postcode separately and sent the information to a database. Upon confirmation that the two elements corresponded, the letter received an *indexation* produced by spots of ink from a jet printer at a rate of up to 42,000 items an hour. L.I.A.P. trials took place before and after the centre's inauguration using envelopes provided by the PTT *Chèques Postaux* service. To alert the operators of their experimental status the enclosed payment slips were overprinted *ANNULÉ* and the addressed statements were headed *SPECIMEN ESSAI DE LECTURE OPTIQUE*.

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Contents of L.I.A.P. test mail

The *indexation* applied by a La Source 1 manual coding desk is identifiable by its even perpendicular strokes. In contrast, the *indexation* applied by a L.I.A.P. jet printer displays less evenly shaped strokes.



0 | 0 | 8 | 8 | 7

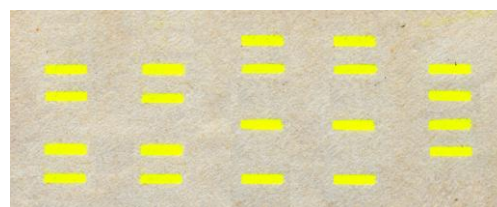


0 | 0 | 8 | 8 | 7

*Left, a P.I.S. (poste d'indexation simplifié) coding desk and, right, the L.I.A.P. at Orléans-la-Source with their respective indexations for 78800 HOUILLES using the **La Source 1** language*

The mail treated at Orléans-la-Source was predominantly bills and statements from *Électricité de France - Gaz de France*, *Crédit Agricole*, *Crédit Lyonnais*, *Banque Populaire* and the *Caisse Nationale d'Épargne* as their window envelopes and printed address fonts were compatible with the L.I.A.P. equipment. However, such envelopes were rarely retained by their recipients hence the rarity of examples today. The La Source 1 language was used from January 1973 to March 1974.

Meanwhile, at the Arcueil C.T.E., the alphabetical elements of the P.L.M. language were discarded as they were redundant with the introduction of the numeric postcode. Retaining its floating start the modified language, **Arcueil 1**, was used briefly from August 1973 to March 1974. However the P.L.M. programme in use at the Paris-Gare P.L.M. was not modified and continued with its full alpha-numeric language until well into 1975.



0 0 8 8 7

*Indexation for 78800 HOUILLES using **Arcueil 1** language with floating start*

1974 - The definitive numeric language

In March 1974, after just one year of use, the La Source 1 language at Orléans was reconfigured to create **La Source 2**. In presenting the new language the *P et T* ensured that the binary equivalents of the numbers one to nine were now in ascending order and in so doing the figure nought was brought into order by treating it as zero and not as a ten as hitherto. The La Source 2 language was subsequently adopted at Arcueil and Clermont-Ferrand and progressively introduced to other



Video-coding room

sorting offices as the mechanised letter sorting programme was developed elsewhere in the capital and across France. The new *Centres de Tri Automatique* included Paris 17 (May 1974), Paris-Montparnasse (September 1974), Nantes (January 1976), Strasbourg (March 1976), Nanterre (late 1976), Rennes (February 1977), Issy-les-Moulineaux (August 1977), Lyon-Montrochet (October 1977) and Paris 14 (September 1978).

In an experiment to eliminate the noisy environment in which coding desk operators had to work, a video link system S.I.V.I.C. (*Système d'Indexation par Vidéo-Codage*) was trialled at Arcueil during the spring of 1974 using the obsolete La Source 1 language. The operators processed mail presented to them on a monitor in a room away from the *indexation* printer and sorting equipment. Another system developed at Arcueil was the A.S.A.L.O. (*Appareil à Sélectionner les Adresses Lisibles Optiquement*) which, by measuring the regularity of spaces between characters and lines on letters, could discriminate between printed/typed addresses and manuscript addresses.

At the Arcueil C.T.E. the Arcueil 1 language was transposed to render it compatible with La Source 2 thereby creating **Arcueil 2**. This was achieved by adopting the same pattern of strokes as La Source 2 but rotated by 90°. The programme went into service a few weeks before its counterpart la Source 2 and was used briefly for five months, March - July 1974, before being taken out of service and transferred to Clermont-Ferrand. Here it replaced the obsolete alpha-numeric P.L.M. programme and operated from October 1974 to May 1977.



0 | 0 | 8 | 8 | 7

Indexation for 78800 *HOUILLES*
using **La Source 2** language



0 0 8 8 7

Indexation for 78800 *HOUILLES*
using **Arcueil 2** language

1978 - The introduction of the 'inward' alpha-numeric language

Projects were already underway in the early 1970s to devise an 'inward' code, likewise composed of five elements as in the 'outward' code. The first public demonstration is recorded as taking place at S.I.C.O.B. (*Salon de l'Informatique de la Communication et de la Bureautique*) at Puteaux in 1973 with the inward code accompanying an outward code in the La Source 1 language. All future trials and demonstrations took place during the period of the La Source 2 language.

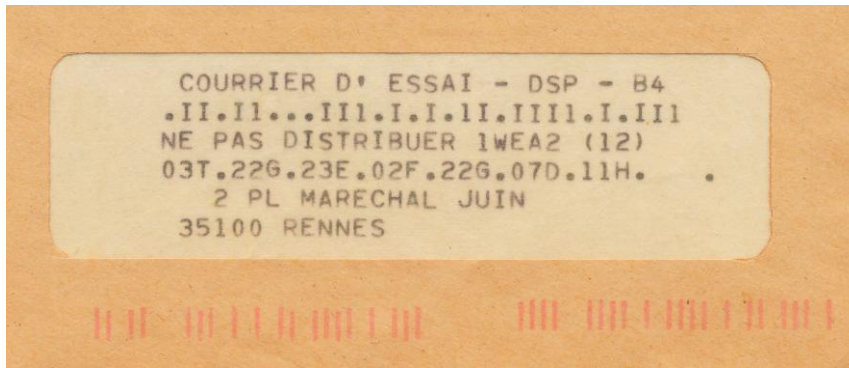
As mentioned earlier, the inward code in Great Britain is a public one, represented by the second half of the postcode and identifying the sector and unit, or in simpler terms, the postman's round. It was decided in France however, that the equivalent *code distribution* or delivery code would not be a public code but an internal arbitrary one. The objective was to devise a system by which the coding desk operator or scanner could extract elements from the address to provide the data for printing an *indexation distribution* on the item of mail.

To achieve this a comprehensive *fichier des voies* had to be compiled - a database containing the names of all the streets served by each sorting office. When a street was shared between two or more postmen's rounds, the highest house number in each section would be added to the data base. A five-character alpha-numerical code identifying each postman's round was then created and similarly stored. Finally a new breed of coding desk, the *poste d'indexation mixte*, was designed with the capability of transcribing both the outward and inward codes.

To generate the inward *indexation*, the coding desk operator would extract the necessary information by typing in the 'radical' ie. the first three letters of the last word of the street. For example, from the address *25 avenue Jean Rieux*, the letters RIE would be extracted. Normally, this would be sufficient for the database to recognise the address and to command the printer head to apply the five-character *indexation* with a pattern of nineteen strokes distributed between two to six strokes per character. However, should there be any ambiguity, for example two streets starting with the same three letters or the two sides of the same street allocated to different postman's rounds, a dialogue would be initiated between the computer and the operator. A series of requests on a visual display unit would seek further information - house number, type of street (*rue, avenue, boulevard*), next three letters of the name etc. In the case of letters processed by optical character recognition equipment the same dialogue would take place between the optical scanner head and the computer.



Visual display unit on a poste d'indexation mixte. The computer illuminates the appropriate command when requesting the input of supplementary data from the operator.

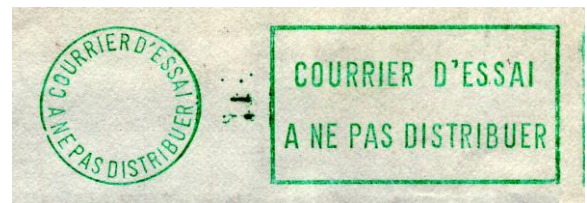


2 | A | E | W | 1 0 | 0 | 1 | 5 | 3

Inward code trial conducted at Rennes C.T.A.

The envelope window displays in black ink the strokes and spaces of the target indexation as a series of vertical lines and dots. This enabled the technicians to compare it with the machine indexation printed in red on the envelope and to check the accuracy of the dialogue between the coding desk operator and the printer.

Inward code trials using test mail took place in a number of *Centres de Tri Automatique*, notably at Orléans-la-Source, Paris-Montparnasse (real mail was used intermittently between September 1974 and November 1975), Paris 17 and Rennes. To prevent test mail from entering the postal system instruction marks and slogan postmarks were applied.



Slogan postmarks are known in black, red and green.



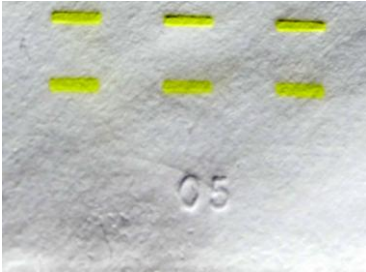
Once the trials had been perfected, the inward sorting code programme became fully operational but there is still speculation as to which office first applied it consistently on real mail and when.



Some of the mail treated at Rennes C.T.A. on 4 December 1978 promotes the above claim with a special cachet and hence, for the purpose of this study, this date has been accepted as marking the end of the experimental period.

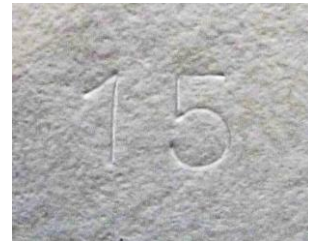
Coding desk idents

There is one more mark found on mail which shows evidence of its passage through a coding desk and therefore merits our attention - the ident. Mention has already been made of its role in the identification of operators and offices equipped with the early HB 300 D direct sorters. The ident did not have a role though in the Programme N° 1 trials nor during the first two years of the Austerlitz 1 programme. The ident was re-instated in the summer of 1967 and from that date coding desks printing the yellow *indexation* (Austerlitz 1 & 2, P.L.M., and Arcueil 1 & 2) displayed a two-figure uninked ident impressed below the second column of bars from the left.



05
Austerlitz-Gare
1967

When the La Source programme was launched, the manual coding desks retained the same format of numerical idents but they were now impressed on the back of the envelope. The optical character recognition equipment, applying the *indexation* by a jet printer, was not equipped with an ident.



15
Orléans-la-Source
1973

The composition of the ident was changed in September 1976 for two reasons. Firstly, the original two-figure format, limited to identifying a maximum of 99 desks, was inadequate for the increasing number of machines in existence and, secondly, there was a need to identify not only the coding desk but also its location. This was resolved by introducing the '*bigramme*', an alpha-numeric ident composed of two characters, a letter plus a number. Further permutations were later achieved by reversing the sequence to number plus letter, or by switching from lower case to upper case. Finally idents appeared with algebraic and geometric symbols as one of the elements.



C7
Orléans-la-Source
1976



b5
Erstein
1978



B↓
Caen
1978

The Display

Frame One

1958: the first Hotchkiss-Brandt HB 300 D direct sorter is installed at the Paris R.P. sorting office in the rue du Louvre.

- 1959 Phase 1: uninked idents identifying direct sorters used at the Paris offices. (fig 1)
- 1967 inked ident trial at Paris-Brune. (fig 2)
- 1969 Phase 2: inked idents, identifying coding desks at Paris, Lille and Marseille.



Fig 1



Fig 2



Frame Two

1962: elementary postcodes are devised and the first mechanised sorting trials are conducted.

- 1962 Programme N°1 - creation of an alphabetical postcode for internal use and the inception of fluorescent barcodes (*indexations*) on mail.
- 1964 coding desk demonstration at the Paris Philatec exhibition. (fig 3)
- 1965 launch of a national *département* postcode campaign and the accompanying alpha-numeric programme language, Austerlitz 1 LS (long start).
- Demonstration material from the International Communications Exhibition, Munich, 1965 employing the Austerlitz 1 LS language. (fig 4)

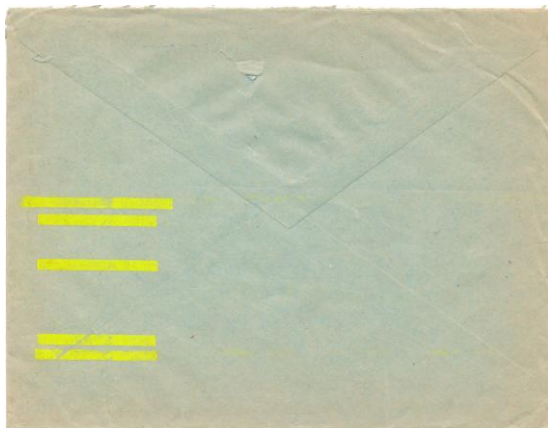


Fig 3



Fig 4

Frame Three

1966: introduction of the Austerlitz 1 (normal start) language.

- Letter to Versailles dated 1 August 1966, the earliest recorded use of the Austerlitz 1 normal start. (fig 5)
- Examples of variants devised to address the limitations of the programme.
- Return to Sender mail and misplaced *indexations*. (fig 6)



Fig 5

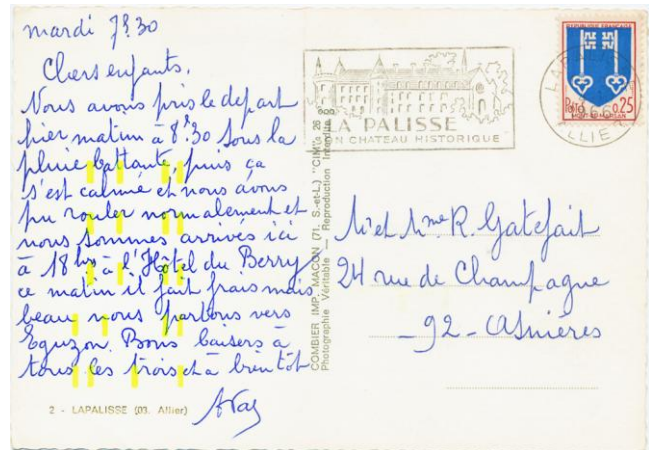


Fig 6

Frame Four

1969: the floating start P.L.M. language is created and becomes the longest serving experimental language.

- Letter group variants.
- Variants for specific towns - Cannes, Lyon and Marseille. (fig 7)
- Special treatment of mail for Monte-Carlo. (fig 8)



Fig 7



Fig 8

Frame Five

P.L.M. language (continued) - further variants including a code comprising only numeric elements.

- Creation of CEDEX (*Courrier d'Entreprise à Distribution Exceptionnelle*) for recipients of large volumes of mail. (fig 9)
- Test mail using the numeric variant.
- Application of the numeric variant on mail for Paris and TPOs.

Fig 9



Frame Six

1971: P.L.M. language (continued) - the P.L.M. programme is extended to Clermont-Ferrand in the *département* of Puy-de-Dôme.

- 1971 test mail at Clermont-Ferrand using the P.L.M. language. (fig 10)
- The use of short-cut keys including SP, ChL, CCP and Fin Adr. (fig 11)
- Short-cut key error.

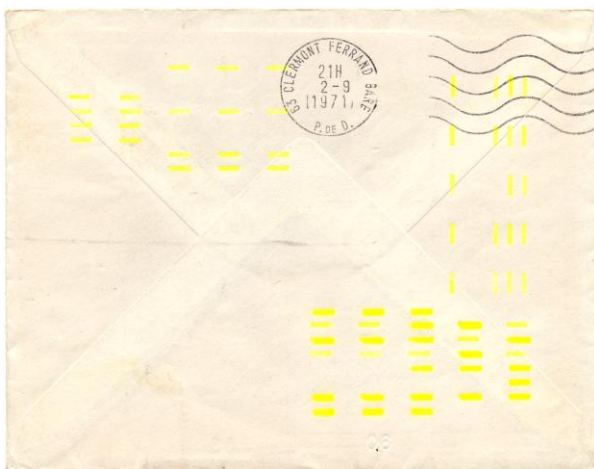


Fig 10

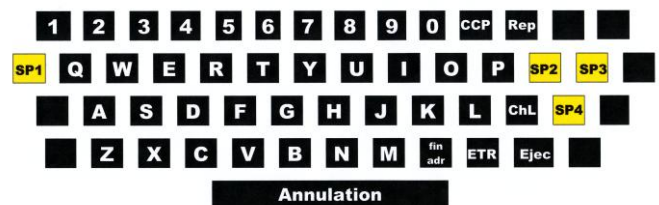


Fig 11

Frame Seven

The P.L.M. language (continued)

- Coding desk malfunctions creating misplaced, multiple and defective *indexations*. (fig 12)
- Mail displaying evidence of combined direct sorting and mechanised sorting including a *Poste Restante* item for Marseille.
- Mis-routed mail (*fausse direction*). (fig 13)



Fig 12

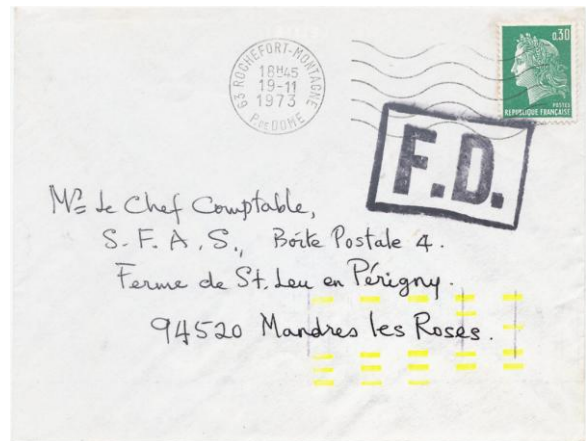


Fig 13

Frame Eight

1971: The P.L.M. language (continued) - the P.L.M. programme is extended to Arcueil in the *département* of Val-de-Marne. In 1970, the Austerlitz 1 language is reconfigured to bring it in line with the P.L.M. language thereby creating Austerlitz 2.

- Second class and bulk mailings treated at Arcueil.
- Last day of P.L.M. programme. (fig 14)
- Austerlitz 2 language including errors. (fig 15)

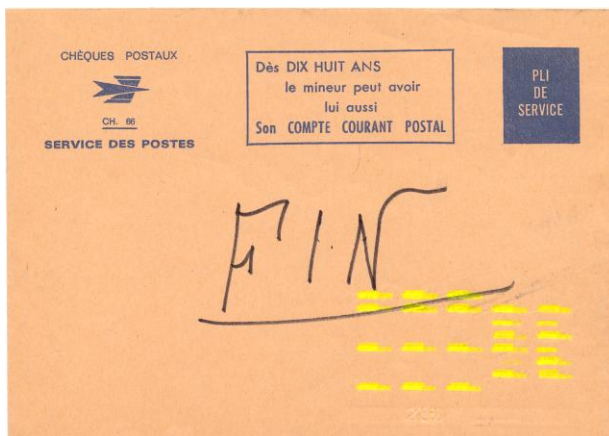


Fig 14



Fig 15

Frame Nine

1972: the five digit postcode is launched and in 1973 two numeric languages, La Source 1 and Arcueil 1, are introduced.

- 1973 Inauguration of the *Centre de Tri Automatique* at Orléans-la-Source. (fig 16)
- Mail processed during L.I.A.P. trials testing optical character recognition equipment and using La Source 1 language.
- Arcueil 1 language on normal and CEDEX mail.
- Arcueil 1 *indexation* error on mail to Belgium. (fig 17)

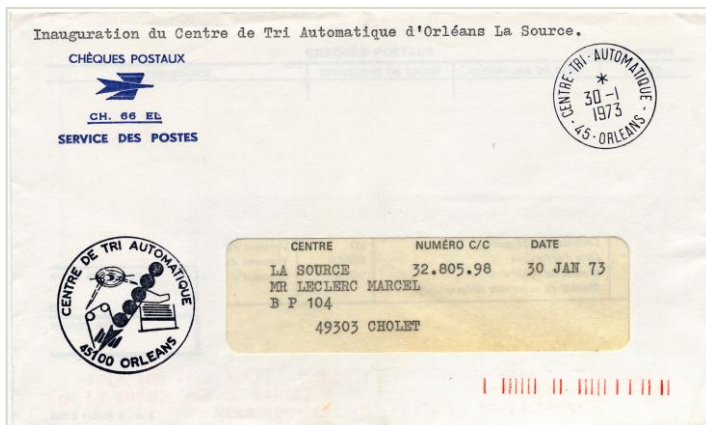


Fig 16

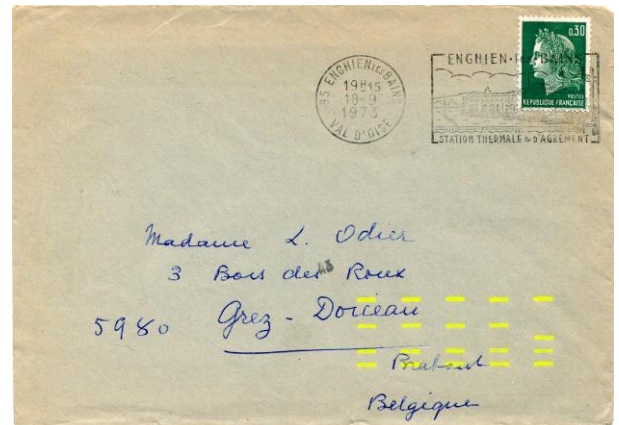


Fig 17

Frame Ten

1974: the La Source 1 language is modified to become La Source 2.

- Coding desk trials and training material at Orléans and Arcueil. (fig 18)
- Colour stationery trials at Paris-Montparnasse. (fig 19)
- Double *indexation* (manual coding desk and O.C.R. ink jet) on test cover.
- Mail displaying evidence of combined direct sorting and mechanised sorting.
- Mis-routed mail (*fausse direction*).

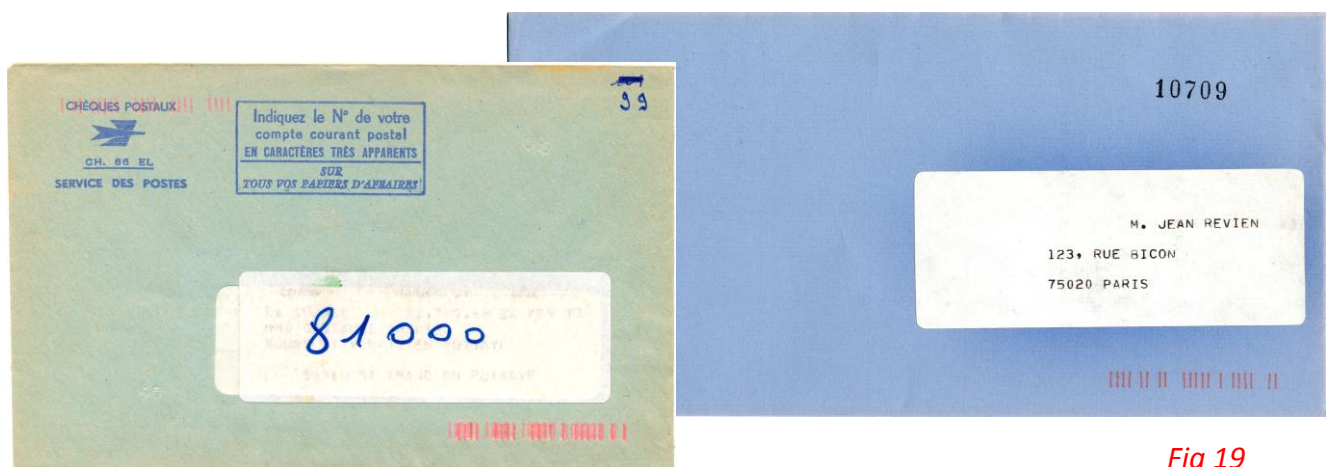


Fig 18

Fig 19

Frame Eleven

1974: to achieve consistency with the La Source 2 language, Arcueil 1 is reconfigured to create Arcueil 2. After a few months, the programme is transferred from Arcueil to Clermont-Ferrand where it replaces the P.L.M. programme.

- Examples of mail treated at both the Arcueil and Clermont-Ferrand sorting offices.
- Mail showing evidence of combined direct and mechanised sorting and mixed *indexations*. (La Source 2 and Arcueil 2). (fig 20)
- Video-coding trials at Arcueil with combined La Source 1 + Arcueil 1 *indexations* (fig 21) and combined La Source 1 + Arcueil 2 *indexations*.



Fig 20

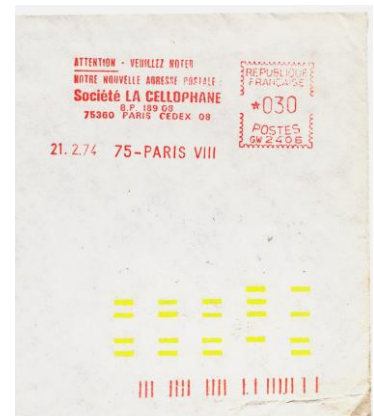


Fig 21

Frame Twelve

1973: introduction of alpha-numeric inward code beginning with prototype demonstration material and concluding with real mail from 1978.

- S.I.C.O.B. demonstration mail using La Source 1. (fig 22)
- Recognition Equipment Inc. trials using La Source 2 in Dallas and Paris 17.
- Test mail displaying multiple use at both Nanterre and Rennes.
- First day of application of inward code on real mail, Rennes, 4 December 1978.



Fig 22

A Guide to the *Indexations*



Programme N° 1: September 1962 - October 1964

Austerlitz 1: March 1965 - March 1970

P.L.M.: October 1969 - June 1975

Austerlitz 2: March 1970 - May 1971

Arcueil 1: August 1973 - March 1974

Arcueil 2: March 1974 - May 1977



La Source 1: January 1973 - March 1974

La Source 2 Outward: March 1974 to the present day

La Source 2 Inward: December 1978 to the present day

CODES AND THEIR VARIANTS

Alpha-numeric Languages

Austerlitz 1, Austerlitz 2 and P.L.M.

The codes below are those which have been identified to date. New variants are occasionally encountered but their interpretation is open to debate as they could be the result of human error or the arbitrary decision of a technician. The codes are expressed from left to right although they appear in reverse when printed as an *indexation* on mail.

| CODE | EXAMPLE OF CODE AND DESTINATION | APPLICATION |
|---------------------------------|---|---|
| Standard Code | 33ARC Arcachon in Gironde (33) | The standard code is composed of the two digit <i>département</i> number and the first three letters of the locality. |
| <i>Chef-lieu</i> | 37VVV Tours in Indre-et-Loire (37) | The code VVV denotes mail addressed to the <i>chef-lieu</i> (county town) of the <i>département</i> . |
| <i>Département majorité</i> | 37KKK All towns but Tours in Indre-et-Loire (37) | The variant KKK is applied when it is impractical to identify and sort mail for every town in a <i>département</i> . |
| CH | 03VI(CH) Vichy in Allier (03) | CH is a frequently encountered digraph in French place names and is allocated the same stroke distribution as the less frequently encountered Y and Z. |
| Letter Group | 63(PONT)GI Pontgibaud in Puy-de-Dôme (63) | Some <i>départements</i> have several towns starting with the same group of letters. To differentiate such towns the third column of the <i>indexation</i> is assigned one of the ten available letter group transcriptions. The fourth and fifth columns then pick up the next two letters of the town. |
| Cannes | 06(CANNES)KK Cannes in Alpes-Maritimes (06) | For reasons that are still unclear, Cannes is treated as a letter group variant. The town's name is represented by a single column of strokes followed by the letters KK as 'fillers'. |
| Monte-Carlo | 06(MONT)EC Monte-Carlo Monaco | Monaco is integrated into the French postcode system and is treated as if it were located in the neighbouring French <i>département</i> of Alpes-Maritimes. It is therefore allocated the Alpes-Maritimes postcode 06 followed by the letter group variant MONT + EC. Occasionally it is coded 06KKK as a <i>département majorité</i> . |

| | | |
|--|---|--|
| Prefix 1 (Saint) | 92CLO St Cloud in Hauts-de-Seine (92) | Saint or Sainte before a town's name is omitted from the code, the three letters being extracted from the proper noun. |
| Prefix 2 (Definite Article) | 76HAV Le Havre in Seine-Maritime (76) | The definite article is ignored and the three letters are extracted from the main element of the place name. |
| Zero Ø | 63CØ1 Courpière in Puy-de-Dôme (63) | In some <i>départements</i> there may be towns which share the same first syllable for which there is not a prescribed letter group variant. For example, in the <i>département</i> of Puy-de-Dôme there are the towns of Cournon, Courpière and Coudes which would all be transcribed as 63COU. Only Cournon is transcribed in full. In order to distinguish the two other towns, the coding desk operator transcribes the <i>département</i> number, then the first letter of the town followed by a zero and finally an assigned digit to differentiate the two - in this case 63CØ1 and 63CØ2. |
| Lyon & Marseille (with <i>arrondissement</i>) | 69L02 Lyon, 2 ^e in Rhône (69) | After the <i>département</i> number Lyon is represented by the letter L and Marseille by the letter M. The remaining two columns identify the number of the <i>arrondissement</i> or district. |
| Lyon & Marseille (without <i>arrondissement</i>) | 13MKK Marseille in Bouches-du-Rhône (13) | If the sender has omitted the <i>arrondissement</i> number or if it is incorrect it is replaced by the characters KK or 00. |
| Paris numeric | 00006 Paris 6 ^e Ville de Paris (75) | The <i>département</i> number 75 is omitted and replaced by three zeros followed by the number of the <i>arrondissement</i> , 01 to 20. If the sender has omitted the <i>arrondissement</i> number it is replaced by KK as in the case of Lyon and Marseille. |
| T.P.O. numeric | 06111 Vence in Alpes-Maritimes (06) | <i>Bureau Ambulant</i> (T.P.O.) mail can be pre-sorted and allocated a distinctive code consisting of the <i>département</i> number and three repeated digits (111, 222 etc) indicating the designated T.P.O. on which it will be manually sorted. |
| <i>Centre de Chèques Postaux</i> | 34CCC Montpellier CCP in Hérault (34) | Items destined for a <i>Centre de Chèques Postaux</i> are coded with the <i>département</i> number followed by CCC. |
| Cedex | 38G22 Grenoble Cedex in Isère (38) | Mail destined for a single large delivery point known as Cedex (<i>Courrier d'Entreprise à Distribution Exceptionnelle</i>) is coded with the <i>département</i> number followed by the first letter of the town and two repeated digits. |

Numeric Languages

La Source 1, La Source 2, Arcueil 1, Arcueil 2

| CODE | EXAMPLE OF CODE AND DESTINATION | APPLICATION |
|--|--|---|
| Standard Code | 54980 Batilly in Meurthe-et-Moselle (54) | The standard code is composed of the two digit <i>département</i> number and three further digits indicating the locality. |
| <i>Chef-lieu</i> | 24000 Périgueux in Dordogne (24) | The postcode of the <i>chef-lieu</i> of the <i>département</i> terminates in three zeros. |
| <i>Département Majorité</i> | 24999 All towns but Périgueux in Dordogne (24) | The variant 999 is applied in the same circumstances as KKK in the alpha-numeric languages. This variant is only encountered in the early years of the numeric languages. |
| Paris, Lyon, Marseille | 75012 Paris 12 ^e Ville de Paris (75) | Paris, Lyon and Marseille postcodes are composed of the <i>département</i> number, a zero and the number of the <i>arrondissement</i> . |
| Monte-Carlo | 06222 Monte-Carlo Monaco (98) | Monaco continues to be 'annexed' to <i>Alpes-Maritimes</i> and mail is coded 06222, 06000 or 06999. Only from 1982 is it assigned its own code of 98 (Monte-Carlo is 98000) as if it were a separate French <i>département</i> . |
| Corsica | 20200 Bastia in Haute-Corse (2B) | With effect from 1 January 1976, Corsica is divided into two <i>départements</i> comprising Corse-du-Sud in the south with the <i>département</i> number 2A and Haute-Corse in the north with the <i>département</i> number 2B. However, the original <i>département</i> number 20 is retained for postcodes throughout the island. |
| Cedex | 45888 Cedex Orléans in Loiret (45) | All Cedex holders receive a personalised postcode but on occasions, mail is coded 888 and routed to a single bin for later sorting. |
| <i>Centre de Chèques Postaux</i> | 34900 Montpellier CCP in Hérault (34) | Items destined for a <i>Centre de Chèques Postaux</i> are coded with the <i>département</i> number followed by 900. |
| Overseas <i>Départements</i> and Territories | 97133 St Barthélémy Guadeloupe (971) | The overseas <i>départements</i> are allocated three figure numbers starting from 971 and overseas territories are allocated three figure numbers starting from 984. The locality is represented by two digits. |

PROGRAMME N° 1

1 or 6
2 or 7
3 or 8
4 or 9
5 or 10



B

Only mail destined for the *département* of Seine-et-Oise was treated. Each targeted town was assigned a two letter postcode.

1 or 6
2 or 7
3 or 8
4 or 9
5 or 10



R

1 or 6
2 or 7
3 or 8
4 or 9
5 or 10



C

1 or 6
2 or 7
3 or 8
4 or 9
5 or 10



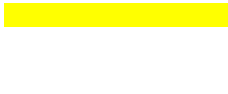
K

1 or 6
2 or 7
3 or 8
4 or 9
5 or 10



S

1 or 6
2 or 7
3 or 8
4 or 9
5 or 10



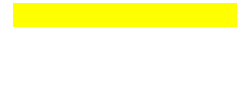
D

1 or 6
2 or 7
3 or 8
4 or 9
5 or 10



L

1 or 6
2 or 7
3 or 8
4 or 9
5 or 10



T

1 or 6
2 or 7
3 or 8
4 or 9
5 or 10



E

1 or 6
2 or 7
3 or 8
4 or 9
5 or 10



M

1 or 6
2 or 7
3 or 8
4 or 9
5 or 10



U

1 or 6
2 or 7
3 or 8
4 or 9
5 or 10



F

1 or 6
2 or 7
3 or 8
4 or 9
5 or 10



N

1 or 6
2 or 7
3 or 8
4 or 9
5 or 10



V

1 or 6
2 or 7
3 or 8
4 or 9
5 or 10



G

1 or 6
2 or 7
3 or 8
4 or 9
5 or 10



O

1 or 6
2 or 7
3 or 8
4 or 9
5 or 10



W

1 or 6
2 or 7
3 or 8
4 or 9
5 or 10



H

1 or 6
2 or 7
3 or 8
4 or 9
5 or 10



P

1 or 6
2 or 7
3 or 8
4 or 9
5 or 10



X

1 or 6
2 or 7
3 or 8
4 or 9
5 or 10



J

The letters A, I, Q and Y do not feature in the Programme N° 1 language.

1 or 6
2 or 7
3 or 8
4 or 9
5 or 10



Z

PROGRAMME N° 1

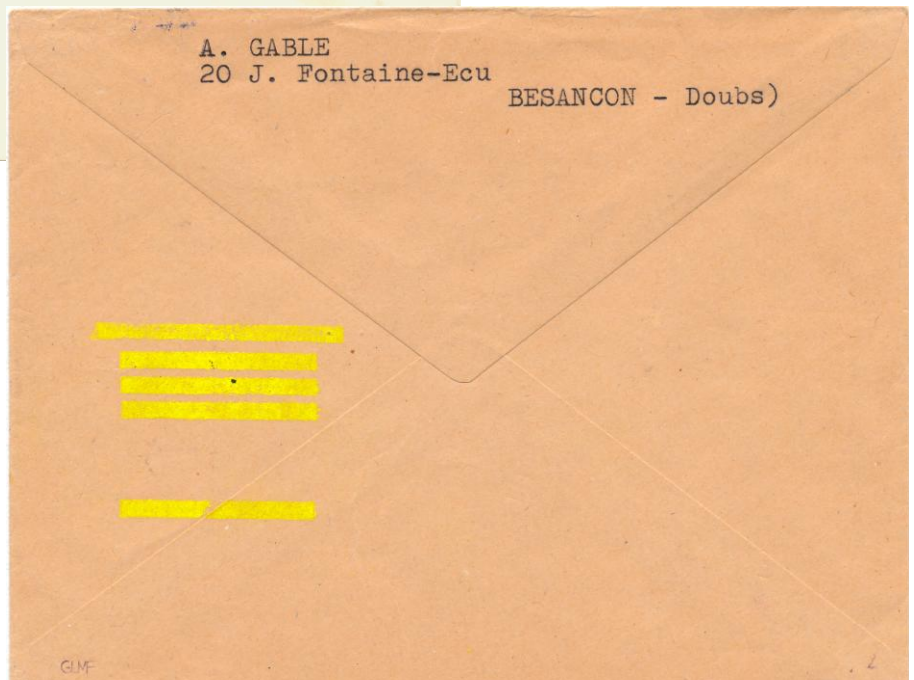
The town's two letter postcode is translated into an *indexation* comprised of a long start and two groups of between one and four bars, each group representing one of the two letters.



Le Vesinet = VN



V
N



H
O

Chatou = HO

AUSTERLITZ 1

CH

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | |
| 2 | | █ | | | | | █ | | | | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | |
| 3 | | | █ | | | | | █ | | | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | |
| 4 | █ | | | █ | | | | | █ | | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | |
| 5 | █ | | | | █ | | | | | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | |
| 6 | | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ |
| 7 | | | | | | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ |
| 8 | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ |

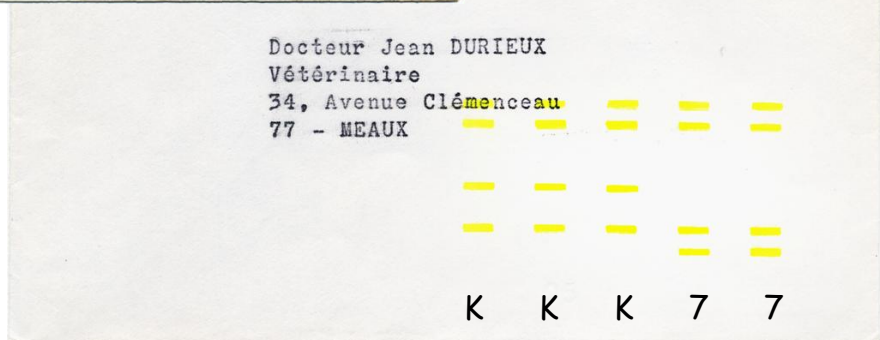
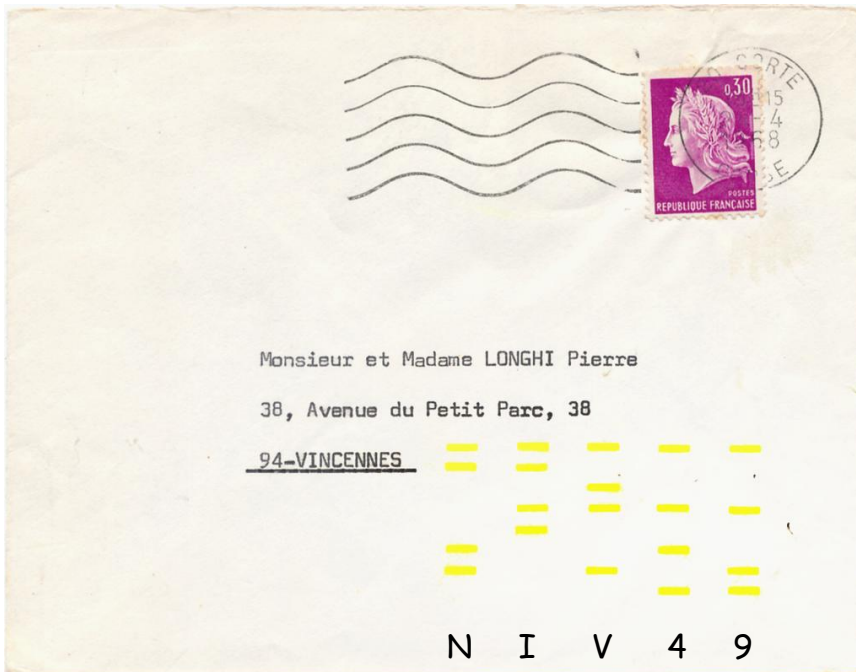
BOU CHATEAU MONT ROU VILLE
 CHA MAR PONT VER CANNES

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| 1 | █ | █ | █ | █ | █ | █ | █ | █ |
| 2 | | █ | | | | | █ | |
| 3 | | | █ | | | | | █ |
| 4 | █ | | | █ | | | | █ |
| 5 | █ | | | | █ | | | █ |
| 6 | | █ | █ | █ | █ | █ | █ | █ |
| 7 | | | | | | █ | █ | █ |
| 8 | █ | █ | █ | █ | █ | █ | █ | █ |

The Austerlitz 1 language is identifiable by its fixed start i.e. all the characters have a stroke in position 1. The two digits of the *département* always include strokes in positions 1 and 8 and in two of the remaining six.

NB. the letter group variants have the same stroke patterns and hence the same binary values as the numerals.

Standard Code



Département majorité variant

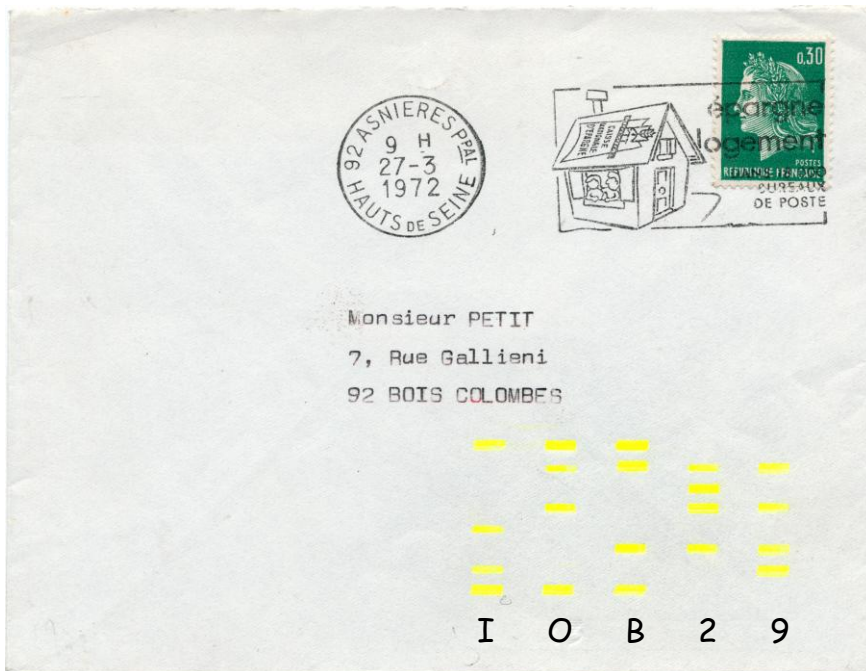
P.L.M.

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | CH | Y | Z | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---|---|--|--|--|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

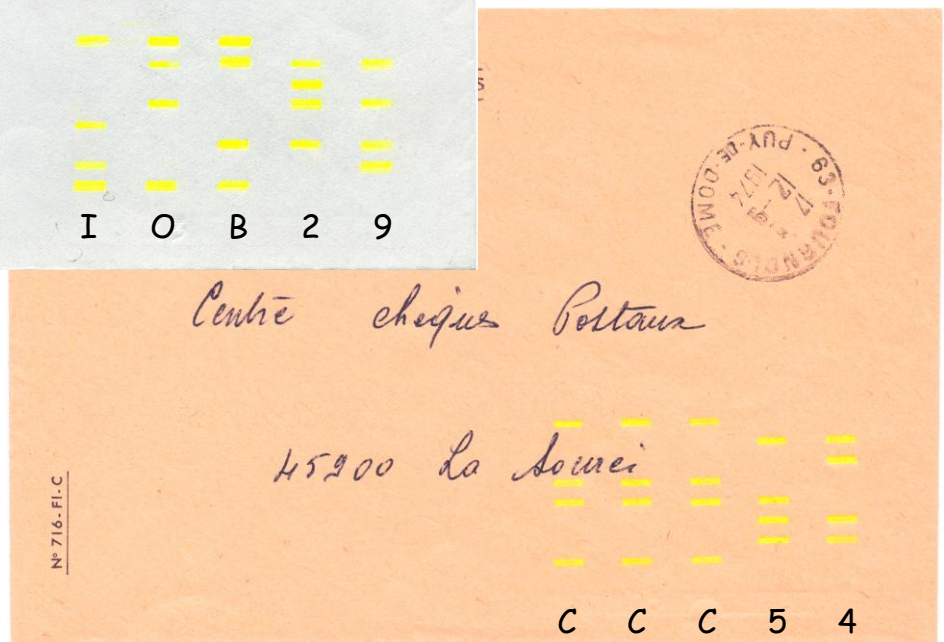
BOU CHATEAU MONT ROU VILLE
 CHA MAR PONT VER CANNES

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

The P.L.M. language is identifiable by its floating start and by the transcription of the two digits of the *département* being confined to strokes in positions 2 to 7.

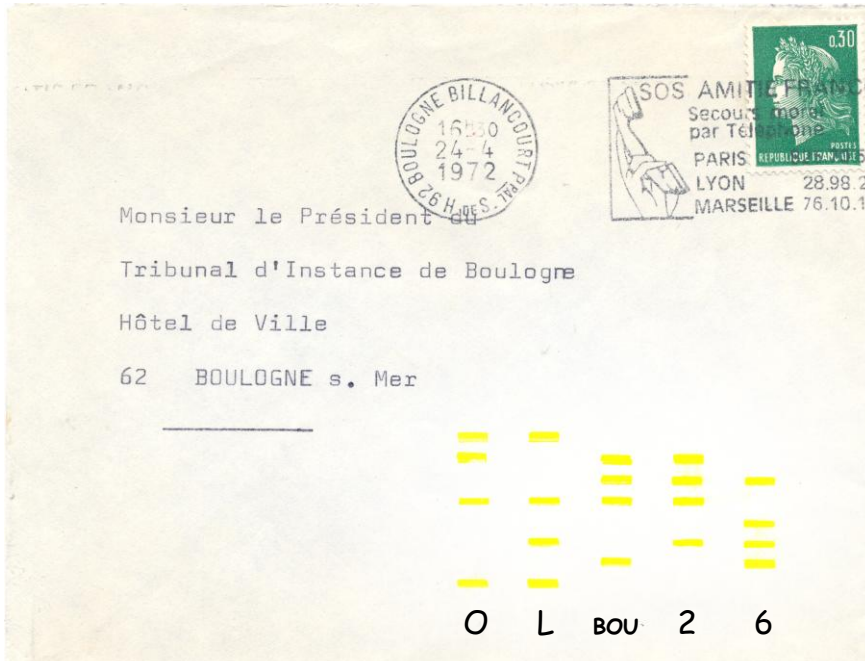


Standard Code



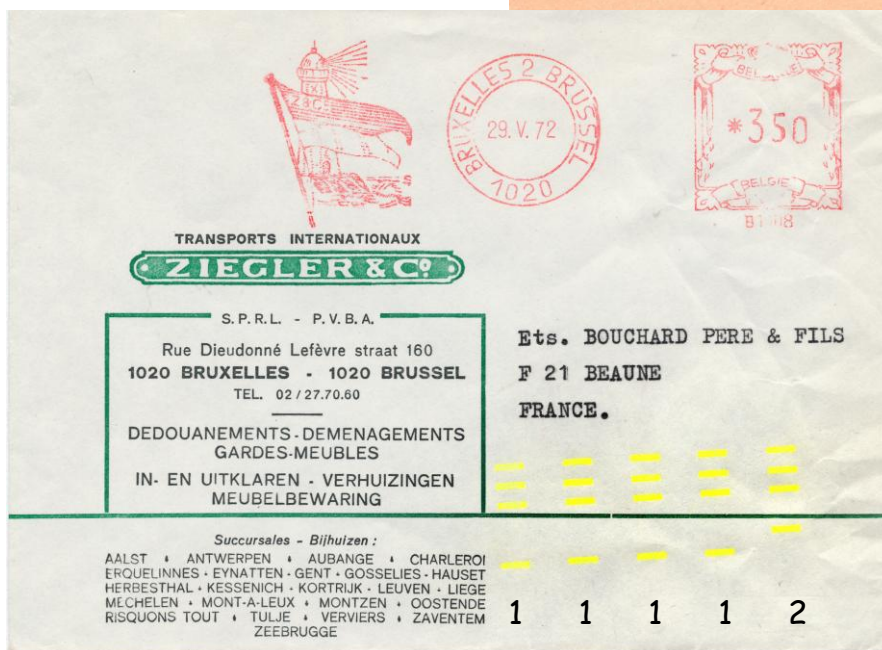
**Centre de Chèques
 Postaux variant**

Letter group variant



The group variant BOU serves here to distinguish between the towns of BOULOGne-sur-Mer, BOURLon and BOUVIgny-Boyeffles in the département of Pas-de-Calais (62).

Cannes variant



T.P.O. numeric variant

AUSTERLITZ 2

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ |
| 2 | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ |
| 3 | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ |
| 4 | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ |
| 5 | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ |
| 6 | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ |
| 7 | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ |
| 8 | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ |

| | BOU | CHATEAU | MONT | ROU | VILLE | CHA | MAR | PONT | VER | CANNES |
|---|-----|---------|------|-----|-------|-----|-----|------|-----|--------|
| 1 | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ |
| 2 | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ |
| 3 | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ |
| 4 | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ |
| 5 | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ |
| 6 | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ |
| 7 | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ |
| 8 | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ |

The Austerlitz 1 language was modified to attain parity with the P.L.M. language but had to retain the fixed start due to equipment restrictions. The new Austerlitz 2 language is identifiable by the two digits of the *département* translated by strokes only in positions 1 to 6.

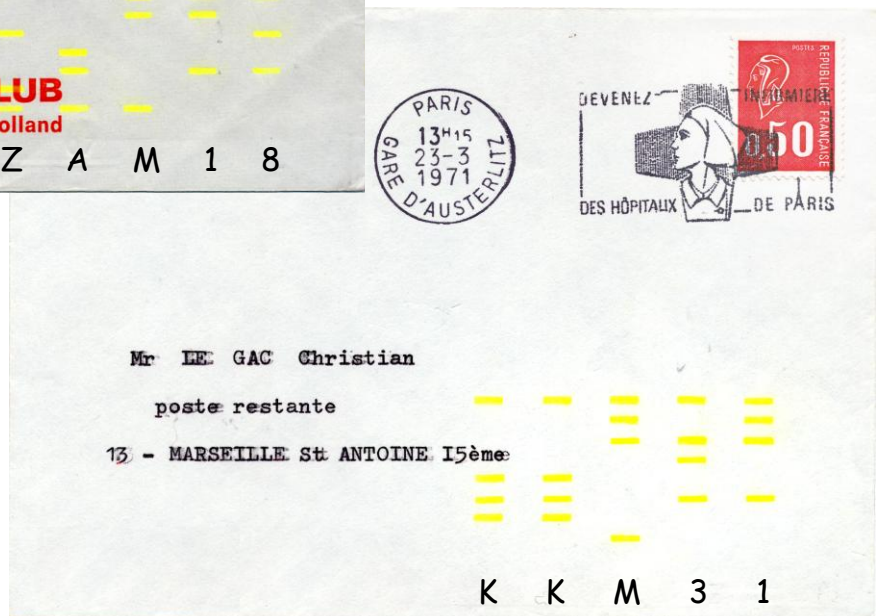


Standard Code

Z A M 1 8

Marseille variant

Addressed to the Poste Restante counter at Marseille 15^e, the arrondissement number has been ignored and replaced by KK.



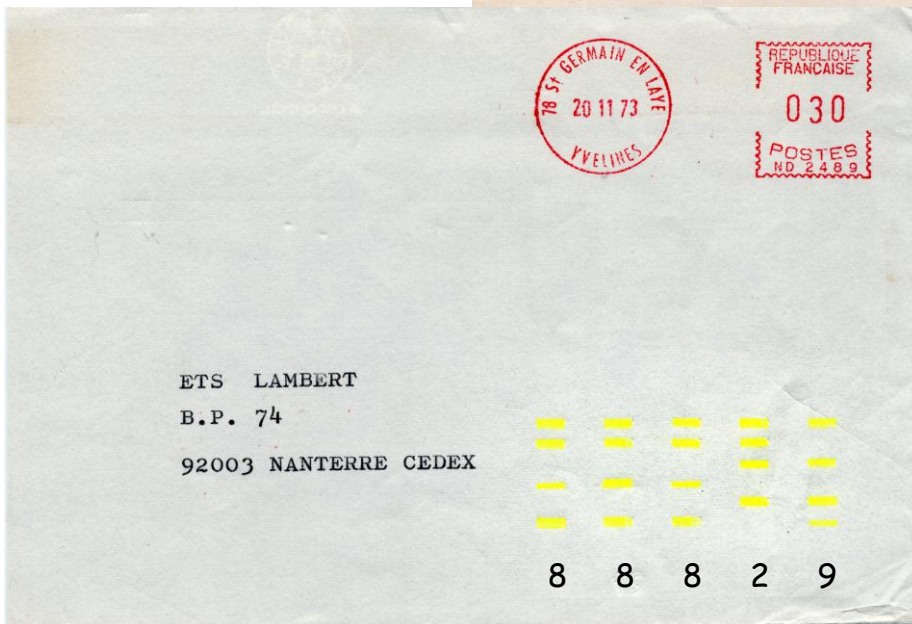
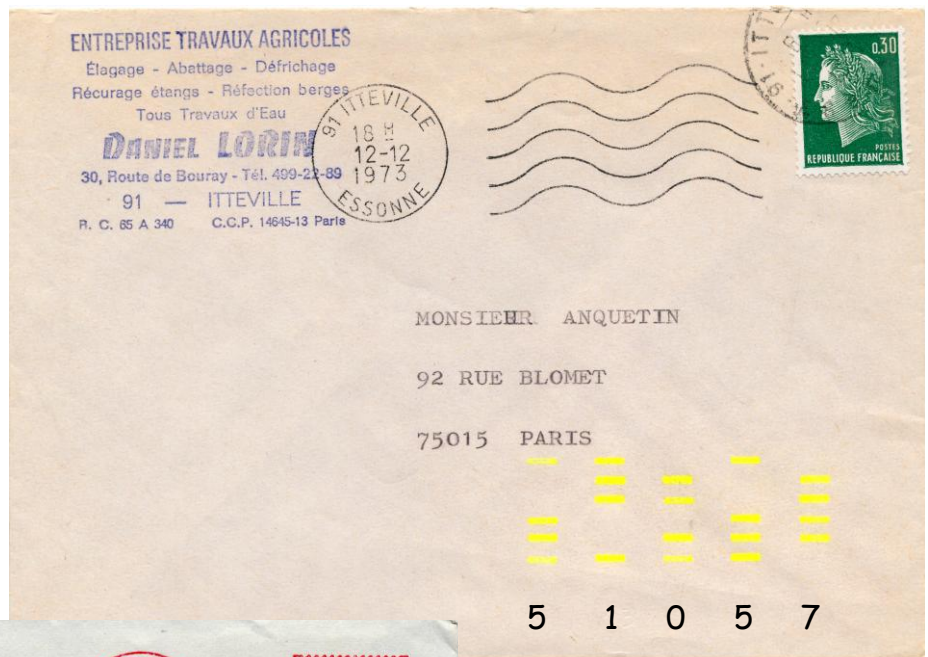
K K M 3 1

ARCUEIL 1

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | ■ | ■ | ■ | ■ | ■ | | | ■ | ■ | |
| 2 | ■ | ■ | | ■ | | ■ | ■ | ■ | | ■ |
| 3 | ■ | ■ | | | | | ■ | | ■ | ■ |
| 4 | ■ | ■ | ■ | | | | ■ | ■ | ■ | ■ |
| 5 | | | ■ | | ■ | ■ | ■ | ■ | ■ | ■ |
| 6 | | ■ | | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| 7 | ■ | | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| 8 | | | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |

The Arcueil 1 language is identical to the P.L.M. language but without the alphabetic transcription which was made redundant upon the introduction of the five figure numeric postcode.

Paris Variant

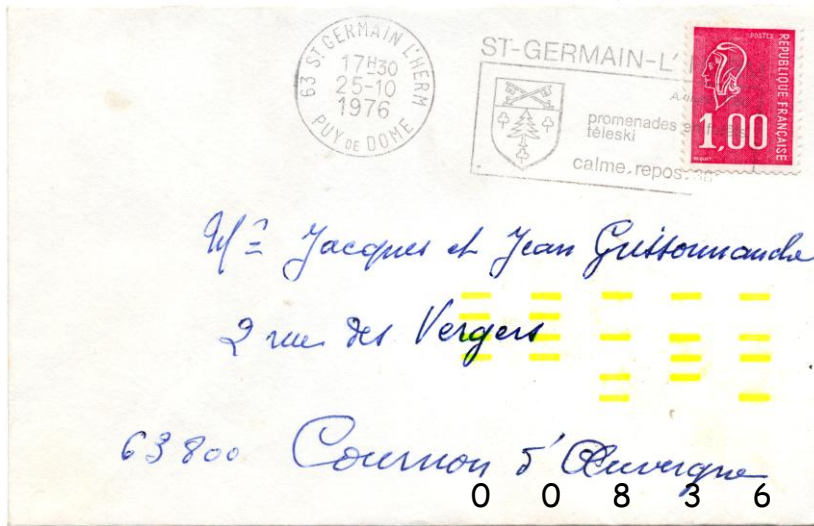


Cedex variant

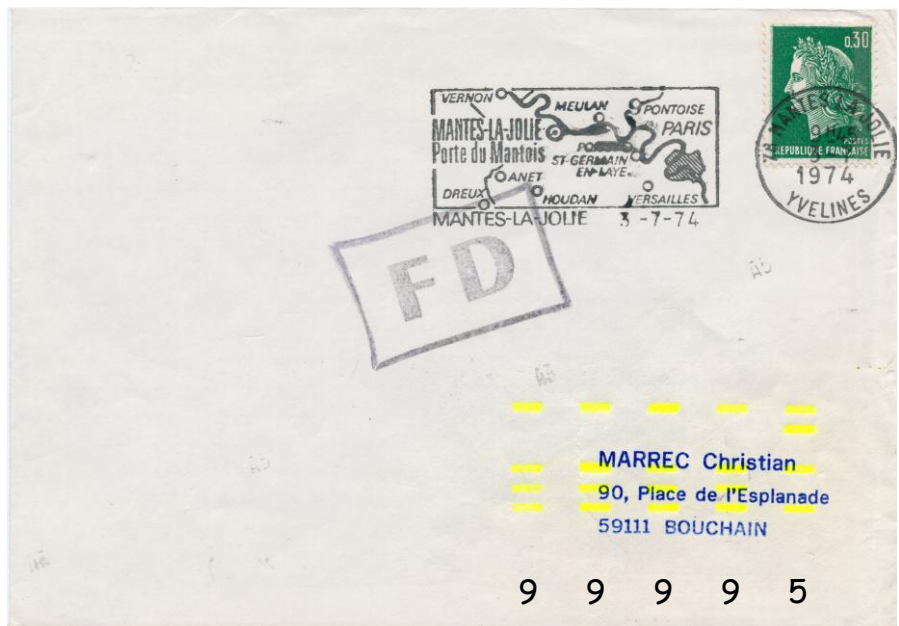
ARCUEIL 2

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |
| 1 | | | | | | | | | | |
| 2 | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| 3 | ■ | | | ■ | ■ | | ■ | | | ■ |
| 4 | ■ | | ■ | ■ | | ■ | | ■ | | ■ |
| 5 | | ■ | ■ | | ■ | | | | ■ | ■ |
| 6 | ■ | ■ | ■ | | | | ■ | ■ | ■ | |
| 7 | | | | ■ | ■ | ■ | ■ | ■ | ■ | |
| 8 | | | | | | | | | | |

In order to attain consistency with the La Source 2 language (see page 34) Arcueil 1 was reconfigured to reconcile it with La Source 2 pattern. The strokes of Arcueil 2 are therefore identical but rotated by 90°.

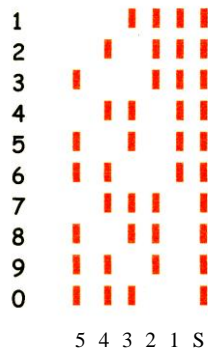


Standard Code

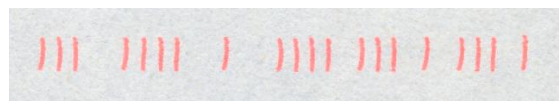
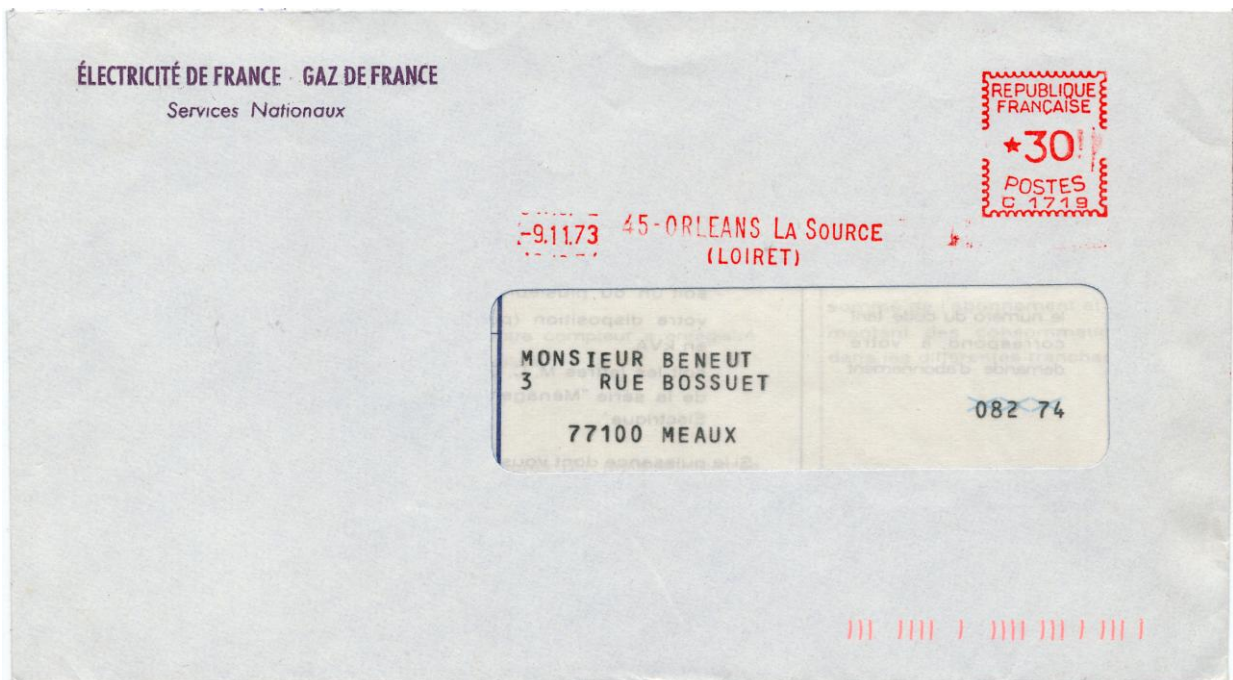


**Département majorité
variant**

LA SOURCE 1

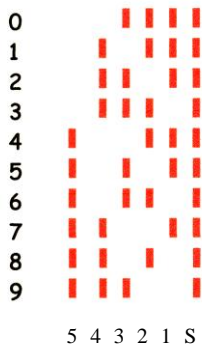


La Source 1 is identifiable by a fixed start represented by a stroke on the right and by strokes in three of five other positions. The figure 0 is interpreted as a 10.



0 | 0 | 1 | 7 | 7

LA SOURCE 2 - OUTWARD

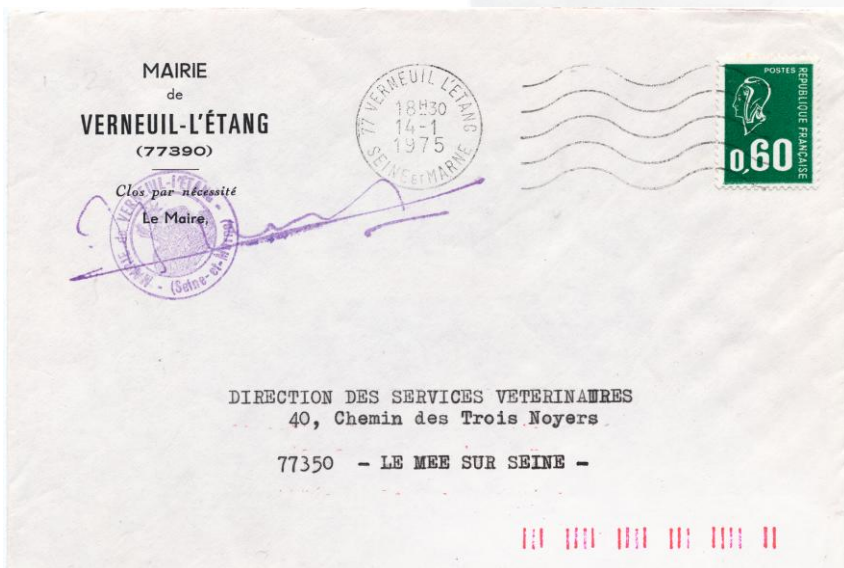


The La Source 2 language works on the same in principle as its predecessor, La Source 1. However, the binary equivalents of the numbers 1-9 are now in ascending order and the figure 0 is interpreted as a zero.

Standard Code



0|0|1|7|7



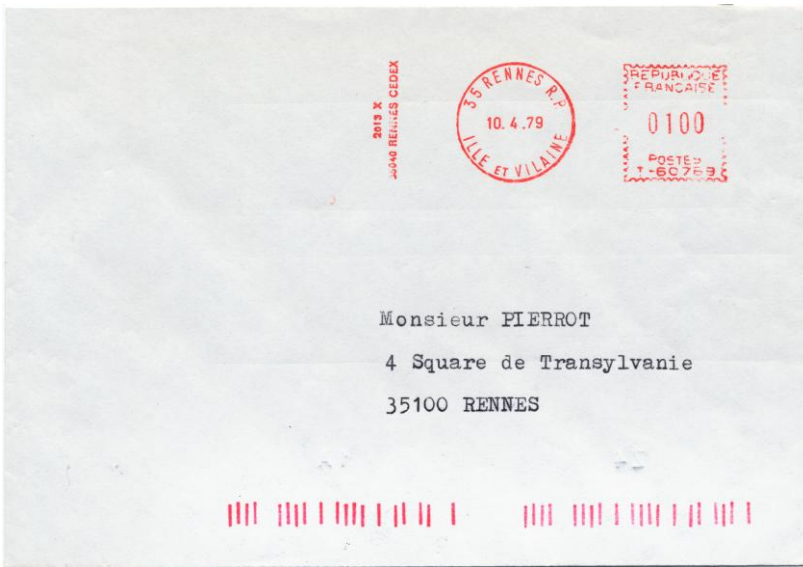
9|9|9|7|7

*Département majorité
variant*

LA SOURCE 2 - INWARD

| | | | | | |
|-----|-------------|-----|-------------|---|-------------|
| R | | H 7 | | 7 | |
| S | | J 8 | | 8 | |
| T | | K 9 | | 9 | |
| A 0 | | 0 | | V | |
| B 1 | | 1 | | W | |
| C 2 | | 2 | | X | |
| D 3 | | 3 | | Y | |
| E 4 | | 4 | | Z | |
| F 5 | | 5 | | M | |
| G 6 | | 6 | | | |
| | 5 4 3 2 1 S | | 5 4 3 2 1 S | | 5 4 3 2 1 S |

The inward language is composed of characters grouped into five categories according to whether they are represented by two, three, four (identical to La Source 2 outward), five or six strokes. Each character has a fixed start represented by the stroke on the right.



The house number is only incorporated into the inward code if the street is shared between two postmen's rounds, otherwise it is substituted by two zeros.

0 | 0 | 1 | 5 | F

Inward code incorporating transcription of house number.



4 | 3 | Z | C | 1

0 | 0 | 1 | 5 | 3

Select Bibliography

- *'L'automation dans les P.T.T. - Les marques électroniques'*
Claude Bourgois, 1974
- *'Centre de tri automatique d'Orléans-la-Source'*
Direction Générale des Postes, 1974
- *'Postal Code Markings'*
J. D. Hayhurst and M. L. Bister, Journal of the France and Colonies Philatelic Society, N°129/130, 1975
- *'Exploitation du code P.L.M.- les programmes de tri de Clermont-Ferrand'*
Patrick Le Barzic, Groupement Ultra-violet de France, 1976
- *'L'automation du courrier'*
Claude Bourgois, 1977
- *'Le traitement automatique du courrier en France'*
Direction Générale des Postes, 1977
- *'Histoire résumée de la période expérimentale (1953-1976) de l'automatisation du traitement du courrier en France'*
Alain Frybourg, Documents Philatéliques N° 92-94, 1982
- *'Le guide du collectionneur en automation'*
Dr Eric Blondelle, 1982
- *'Automation dans le tri du courrier - les marques de tri mécanique'*
Jean-Claude L'Abbé, Groupement Ultra-violet de France, 1984
- *'Le tri distribution mécanisé'*
Direction Générale des Postes, 1986
- *'Essai de calendrier sur la mise en route de l'indexation-distribution par la lecture optique'*
Yvon Coquin & Daniel Vergos, Groupement Ultra-violet de France, 1988
- *'Les essais de marquages des encres fluorescentes et phosphorescentes'*
Jean Renard, 2002

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Centre National d'Études des Télécommunications, Issy-les-Moulineaux, c.1960



Centre de Tri Automatique, Orléans-la-Source, 1973

