Actually 5-level paper tape comes in two forms, normal and reverse. In the reverse format the "1" bit is not on the right but on the left when the papertape is looked at with the three punches right of the "sprocket hole". Of course this is only as far as the logic is concerned, I could have shown all code tables for three holes on the right, but the tables are clearer (I think) this way.

Normal

Numerous codes have been devised in this scheme. I will give the following:

LEO

	0	1	2	3	4	5	6	7
00	NUL	–	EON				EOB	
10								
20	0	1	2	3	4	5	6	7
30	8	9	10	11				DEL

This code has only few symbols. It's British ancestry can be seen from the special codes for "10" and "11" (useful in the pound-shilling-pence system of that time with 1 shilling = 12 pence). There are only a few special codes: NULl, DELete, End Of Block and End Of Number.

Note that LEO stands for "Lyon's Electronic Office", Lyon's was a tea merchant with numerous outlets, and it built it's own computer for accounting purposes.

English Electric Deuce

Letters								
	0	1	2	3	4	5	6	7
00		A	B	C	D	E	F	G
10	H	I	.	J	K	L	M	N
20	O	P	Q	R	FS	LS	S	T
30	U	V	W	X	Y	Z	NL	DEL

Figures								
	0	1	2	3	4	5	6	7
00	0	1	2	3	4	5	6	7
10	8	9	10	11	12	13	14	15
20	16	17	18	19	FS	LS		
30		+	-	.	EON		NL	DEL

This code is more complete and contains letters in addition to digits. To accomodate all the required symbols two shifting codes are introduced, one shifts to figures (Figure Shift) and one shifts to letters (Letter Shift). Also here clearly a British ancestry. The reason for the numbers upto 19 coded in a single code was that 1 pound = 20 shillings. The code is clearly intended for accounting. However, when you look good (and know something about Hollerith card codes) the coding of the letters becomes strangely familiar. It is strange that the period and the space have different encodings for figures and for letters.

The Deuce was the (commercial) successor of one of the first British computers, NPL's Ace (as it's name implies).

Illiac

Letters								
	0	1	2	3	4	5	6	7
00	P	Q	W	E	R	T	Y	U
10	I	O	K	S	N	J	F	L
20	DLY	D	NL	B	LS	V	A	X
30	DLY	G	M	FS	H	C	Z	

Figures								
	0	1	2	3	4	5	6	7
00	0	1	2	3	4	5	6	7
10	8	9	+	-	N	J	F	L
20	DLY	$	NL	(	LS	,	)	/
30	DLY	=	.	FS	'	:	×	

The code used for the Illiac (one of the first large US computers). The assignment of the digits was for easy translation. That some letters are also available in Figure Shift is because the original code only had figures with six additional letters (later the figure shift K and S were replaced by + and -). Why those six letters were chosen is not clear, nor is the reason for the letter arrangement.

CCITT #1 (Baudot)

Letters								
	0	1	2	3	4	5	6	7
00	NUL	Y	E	I	A	U	/	O
10	FS	B	G	F	J	C	H	D
20	LS	S	X	W	-	T	Z	V
30	ER	R	M	N	K	Q	L	P

Figures								
	0	1	2	3	4	5	6	7
00	NUL	3	2	?	1	4	?	5
10	FS	8	7	?	6	9	?	0
20	LS	?	?	?	.	?	:	'
30	ER	-	)	£	(	/	=	+

This is the first of a series of standard codes defined by the CCITT. It is the original code as created by Baudot. The second CCITT code is below. I have no idea why this particular arrangement for the letters and digits is chosen.

CCITT #2 (Murray)

Letters								
	0	1	2	3	4	5	6	7
00	NUL	T	CR	O		H	N	M
10	LF	L	R	G	I	P	C	V
20	E	Z	D	B	S	Y	F	X
30	A	W	J	FS	U	Q	K	LS

Figures								
	0	1	2	3	4	5	6	7
00	NUL	5	CR	9			,	.
10	LF	)	4		8	0	:	;
20	3	"	WRU	?	'	6		/
30	-	2	BEL	FS	7	1	(	LS

This is the second code defined by the CCITT. Generally this code is named Baudot, but actually that is wrong. The Baudot code is the first code defined above. The third code defined is a 7-level code. The codes shown as unassigned could be used for national or special purposes. The position of many symbols is changed considerably with respect to the previous code, and here too I have no idea why this particular arrangement is chosen, although it seems that the letter arrangement is chosen to reduce the number of punches for frequent letters. This code forms the basis for many other codes.

Alcor

Letters								
	0	1	2	3	4	5	6	7
00	NUL	T	CR	O		H	N	M
10	LF	L	R	G	I	P	C	V
20	E	Z	D	B	S	Y	F	X
30	A	W	J	FS	U	Q	K	LS

Figures								
	0	1	2	3	4	5	6	7
00	NUL	5	CR	9		10	,	.
10	LF	)	4	]	8	0	:	=
20	3	+	≠	*	'	6	[	/
30	-	2	;	FS	7	1	(	LS

This code was designed to enable the punching of programs in the programming language Algol 60. Is has been standardized as such by the German standards organization DIN. The basis is CCITT #2.

Teletype

Letters								
	0	1	2	3	4	5	6	7
00	NUL	T	CR	O		H	N	M
10	LF	L	R	G	I	P	C	V
20	E	Z	D	B	S	Y	F	X
30	A	W	J	FS	U	Q	K	LS

Figures								
	0	1	2	3	4	5	6	7
00	NUL	5	CR	9		#	,	.
10	LF	)	4	&	8	0	:	;
20	3	"	$	?	'	6	!	/
30	-	2	BEL	FS	7	1	(	LS

This is the US variant of CCITT #2 with the national symbols filled.

AT&T

Letters								
	0	1	2	3	4	5	6	7
00	NUL	T	CR	O		H	N	M
10	LF	L	R	G	I	P	C	V
20	E	Z	D	B	S	Y	F	X
30	A	W	J	FS	U	Q	K	LS

Figures								
	0	1	2	3	4	5	6	7
00	NUL	5	CR	9		#	¼	.
10	LF	¾	4	&	8	0	½	¾
20	3	"	$	⅝	BEL	6	⅛	/
30	-	2	,	FS	7	1	⅜	LS

This is a variation of the previous code clearly designed for the figures from the stock market exchange.

Flexowriter 5-level

Letters								
	0	1	2	3	4	5	6	7
00	NUL	T	CR	O		H	N	M
10	LF	L	R	G	I	P	C	V
20	E	Z	D	B	S	Y	F	X
30	A	W	J	FS	U	Q	K	LS

Figures								
	0	1	2	3	4	5	6	7
00	ST	5	CR	9		(	,	.
10	LF	)	4	&	8	0	NP	PF
20	3	PO1	HT	$	/	6	,	PO2
30	-	2	ER	FS	7	1	PR	LS

Again a variation, this time with a lot of additional control symbols to control the punching and printing devices attached to the reader.

Metro-Vick 950

Letters								
	0	1	2	3	4	5	6	7
00	LS	T	CR	O		H	N	M
10	LF	L	R	G	I	P	C	V
20	E	Z	D	B	S	Y	F	X
30	A	W	J	FS	U	Q	K	DEL

Figures								
	0	1	2	3	4	5	6	7
00	LS	?	CR	+		£	,	.
10	LF	)	*	&	%	-		=
20	0	1	2	3	4	5	6	7
30	8	9		FS	!	/	(	DEL

A British variant of the codes above. Note the curious placement of the letter shift and the sane arrangement of the digits.

Elliott 405

Letters								
	0	1	2	3	4	5	6	7
00	NUL	A	B	C	D	E	F	G
10	H	I	J	K	L	M	N	O
20	P	Q	R	S	T	U	V	W
30	X	Y	Z	FS		CR	LF	LS

Figures								
	0	1	2	3	4	5	6	7
00	NUL	1	2	*	4	$	=	7
10	8	!	,	+	:	-	.	⅝
20	0	(	)	3	?	5	6	/
30		9	£	FS		CR	LF	LS

A completely different British coding. The letters have a sane arrangement. The digits are a bit strange, but there is at least some sense here (the high order bit is an odd parity bit, the remainder encodes just the digit).

EMI 2400

	Letters								Figures							
	0	1	2	3	4	5	6	7	0	1	2	3	4	5	6	7
00	LS	A	B	C	D	E	F	G	LS	1	2	)	4	½	%	7
10	H	I	J	K	L	M	N	O	8	£	+	11	/	-	.	NUL
20	P	Q	R	S	T	U	V	W	0	→	(	3	¼	5	6	*
30	X	Y	Z	&		NL	'	FS	¼	9	10	¾	×	NL	LF	FS

A similar British coding. Note that here the typical British codings appear for the numbers 10 and 11 (money), but they are placed in sensible places.

BSI Proposal

	Letters								Figures							
	0	1	2	3	4	5	6	7	0	1	2	3	4	5	6	7
00	NUL	A	B	C	D	E	F	G	NUL	1	2		4			7
10	H	I	J	K	L	M	N	O	8		+	11		-	.	
20	P	Q	R	S	T	U	V	W	0		WRU	3		5	6	
30	X	Y	Z	FS		CR	LF	LS		9	10	FS		CR	LF	LS

A proposal from the British standards institute (BSI). This is apparently a cross between several British codes used at that time. Many codepoints are still undefined. I do not know whether this proposal actually made it to a standard, it might be that the development of ASCII and ISO-646 have made the proposal obsolete before being a standard.

Reverse

I know of the following reverse codes:

- Stantec Zebra
- EMI M/C Tool
- EMI 1100
- Pegasus-Mercury
- Pegasus-Flexowriter

As said before, in these codes the "1" and "2" bits are on the side with two punches while the "4", "10" and "20" bits are on the side with three punches. However, the code tables are shown with 8 symbols from left to right.

Stantec Zebra

	0	1	2	3	4	5	6	7
00	0	1	2	3	4	5	6	7
10	8	9	K	Q	.	L	R	I
20	B	C	D	E	T	U	V	N
30	A	X	+	-	Y	Z	P	#

The code used for the Zebra at Stanford Tech. Not all letters have a code. The order of the letters is curious the supply of puncuation too.

EMI M/C Tool

	0	1	2	3	4	5	6	7
00	0	1	2	3	4	5	6	7
10	8	9	S	T	U	V		NL
20	ST	B	C	D	E	F	G	H
30	J	K	L	M	N	A	R	DEL

The code used for early computers at EMI, also here not all letters have a code. This code also supplies the NewLine, so apparently is able to encode more than a simple stream of characters.

EMI 1100

Letters								
	0	1	2	3	4	5	6	7
00	FS	P	Q	R	S	T	V	W
10	X	Y	Z	D	M	U	&	
20	A	B	C	E	F	G	H	I
30	J	K	L	N	O	NL	LS	DEL

Figures								
	0	1	2	3	4	5	6	7
00	FS	%	£	-	*	/	.	¼
10	¾	'	(	)	+	×	½	
20	0	1	2	3	4	5	6	7
30	8	9	10	11	12	NL	LS	DEL

Again another EMI 5-level code. Strange is the placement of some of the letters.

Pegasus-Mercury

Letters								
	0	1	2	3	4	5	6	7
00	FS	A	B	C	D	E	F	G
10	H	I	J	K	L	M	N	O
20	P	Q	R	S	T	U	V	W
30	X	Y	Z	LS	.	?	£	DEL

Figures								
	0	1	2	3	4	5	6	7
00	FS	1	2	*	4	(	)	7
10	8	≠	=	-	U	LF		,
20	0	>	≥	3	→	5	6	/
30	×	9	+	LS	.	η	CR	DEL

Another reasonable 5-level code. Curious here is that space, CarriageReturn and LineFeed are only present in figure shift. Also the presence of the Greek eta and upsilon is strange.

Pegasus-Flexowriter

Lower Case

Letters

	0	1	2	3	4	5	6	7
00	FS	a	b	c	d	e	f	g
10	h	i	j	k	l	m	n	o
20	p	q	r	s	t	u	v	w
30	x	y	z	LS		UC	LC	DEL

Figures

	0	1	2	3	4	5	6	7
00	FS	1	2	SW	4	PR	NP	7
10	8	+	-	11	HT	NL	.	
20	0	PN	PF	3	BK	5	6	BS
30	ST	9	10	LS		UC	LC	DEL

Upper Case

Letters

	0	1	2	3	4	5	6	7
00	FS	A	B	C	D	E	F	G
10	H	I	J	K	L	M	N	O
20	P	Q	R	S	T	U	V	W
30	X	Y	Z	LS		UC	LC	DEL

Figures

	0	1	2	3	4	5	6	7
00	FS	¼	½	SW	/	PR	NP	<
10	>	'	CR	:	HT	NL	,	
20	£	PN	PF	¾	RD	&	?	BS
30	ST	%	=	LS		UC	LC	DEL

This is the only 5-level code I know off that is not monocase. A complicated code with two kinds of shifts (figure/letter and lower/upper). Note also the rich repertoire of control symbols in figure shift. Most interesting is BlacK and ReD in the same position in lower and upper case.