RTTY code

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features :	**Tones: (standard, but adjustable)**
Modulation : FSK	**Level 0 : Low frequency : Mark : 2125 Hz**
Speed : 45.45 bauds **1/6 s for 1 Char**	**Level 1 : High frequency : Space : 2295 Hz** **Space = Mark + Shift = 2125 Hz + 170 Hz**
Transmission : Asynchronous	**1 Start bit; 5 data bits; 1.5 or 2 Stop bits**
characters : Baudot Code	**360 characters per minute maximum**

5 data bits (reduced format)
Restricted number of characters. No check code. 300 Hz bandwidth

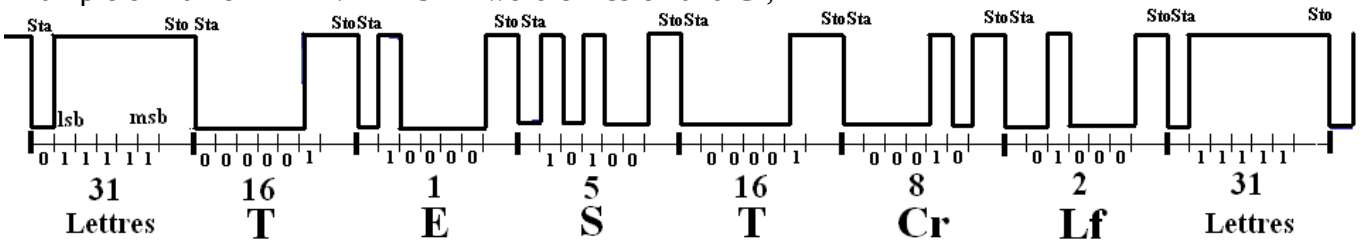
Usual frequencies: Center of activity (No fixed freq.)
14,080 Mhz / 14,100 Mhz
7,040 Mhz /7,050 Mhz

Self-taught and French engineer, Émile Baudot (1845-1903), improved Morse code by inventing a binary code for transmitting teletypes. The term "baud" is derived from its name.

Code		Characters	
binary	decimal	Letter mode	Symbol mode
00000	0	NULL	
00001	1	E	3
00010	2	LF	
00011	3	A	-
00100	4	SP	SP
00101	5	S	BEL
00110	6	I	8
00111	7	U	7
01000	8	CR	
01001	9	D	$
01010	10	R	4
01011	11	J	'
01100	12	N	,
01101	13	F	!
01110	14	C	:
01111	15	K	(

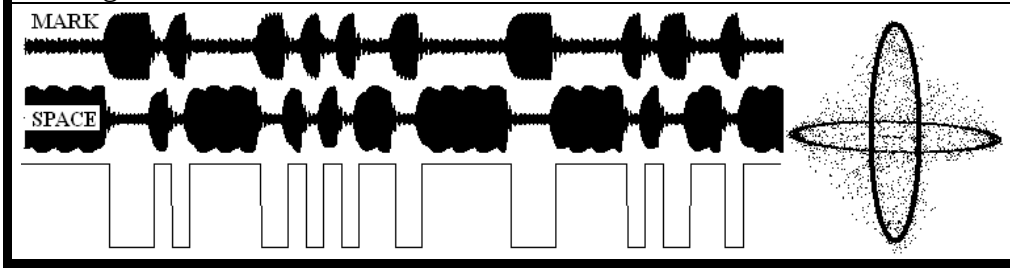
Code		Characters	
binary	decimal	Letter mode	Symbol mode
10000	16	T	5
10001	17	Z	"
10010	18	L	)
10011	19	W	2
10100	20	H	#
10101	21	Y	6
10110	22	P	0
10111	23	Q	1
11000	24	O	9
11001	25	B	?
11010	26	G	&
11011	27	Symbol mode enable	
11100	28	M	.
11101	29	X	/
11110	30	V	;
11111	31	Letter mode enable	

Example of frame RTTY : « TEST » word emission and Cr, Lf



Description:

We start by sending an NL1 for a few ms, then the Start bit arrives at the NL0. The 5 data bits are then sent starting with the least significant bit. We end with the stop bit and a half at NL1. In this example, we send code 31 which corresponds to letter mode. If you want to send numbers, you must first signal it and transmit the code 27



The decoding software performs digital filtering on the 2 Mark and Space frequencies in order to recreate the binary frame.