TABLE A-3
GMT AND PROGRAM TIME CODE FORMAT
ASCII CODE

Byte Number	Function	
0	Synch	
1	Synch	
2	STX	8 bits per byte
3	Hundreds of Days	30 bytes per frame
4	Tens of Days	10 frames per second
5	Unit of Days	300 bytes per second
6	Tens of Hours	2400 bits per second
7	Unit of Hours	RS-232-C
8	Tens of Minutes	
9	Unit of Minutes	Bytes 3-12 are time of Day
10	Tens of Seconds	
11	Unit of Seconds	
12	Tenth of Seconds	Bytes 13-20 are program time
13	H or R (Hold or Run)	
14	+ or -	
15	Units of Hours	
16	Tens of Minutes	
17	Unit of Minutes	
18	Tens of Seconds	Parity - The 28 bytes are
19	Unit of Seconds	successfully exclusive or'ed
20	Tenth of Seconds	with each other to provide
21	Nul	parity for the frame. (The
22	U	parity is for each bit
23	U	position within the byte.)
24	U	
25	U	
26	U	
27	U	
28	Parity	
29	ETX	

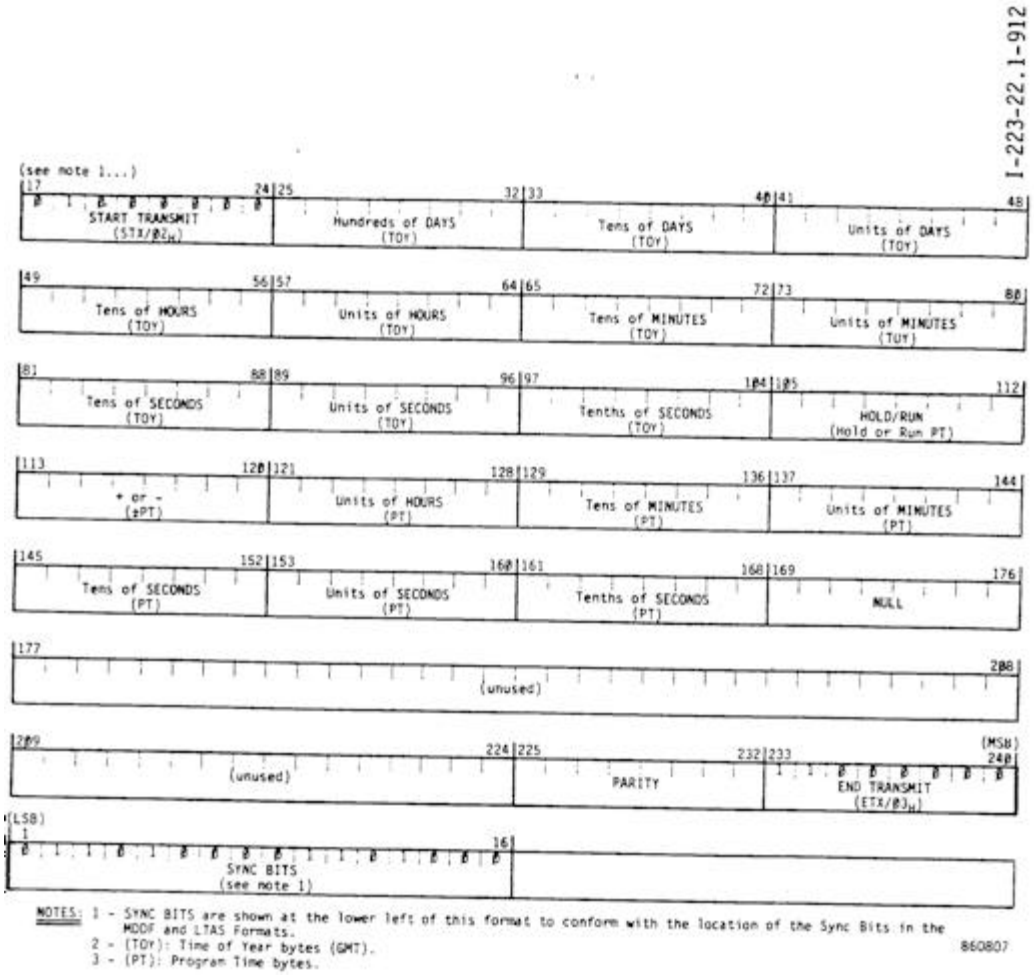
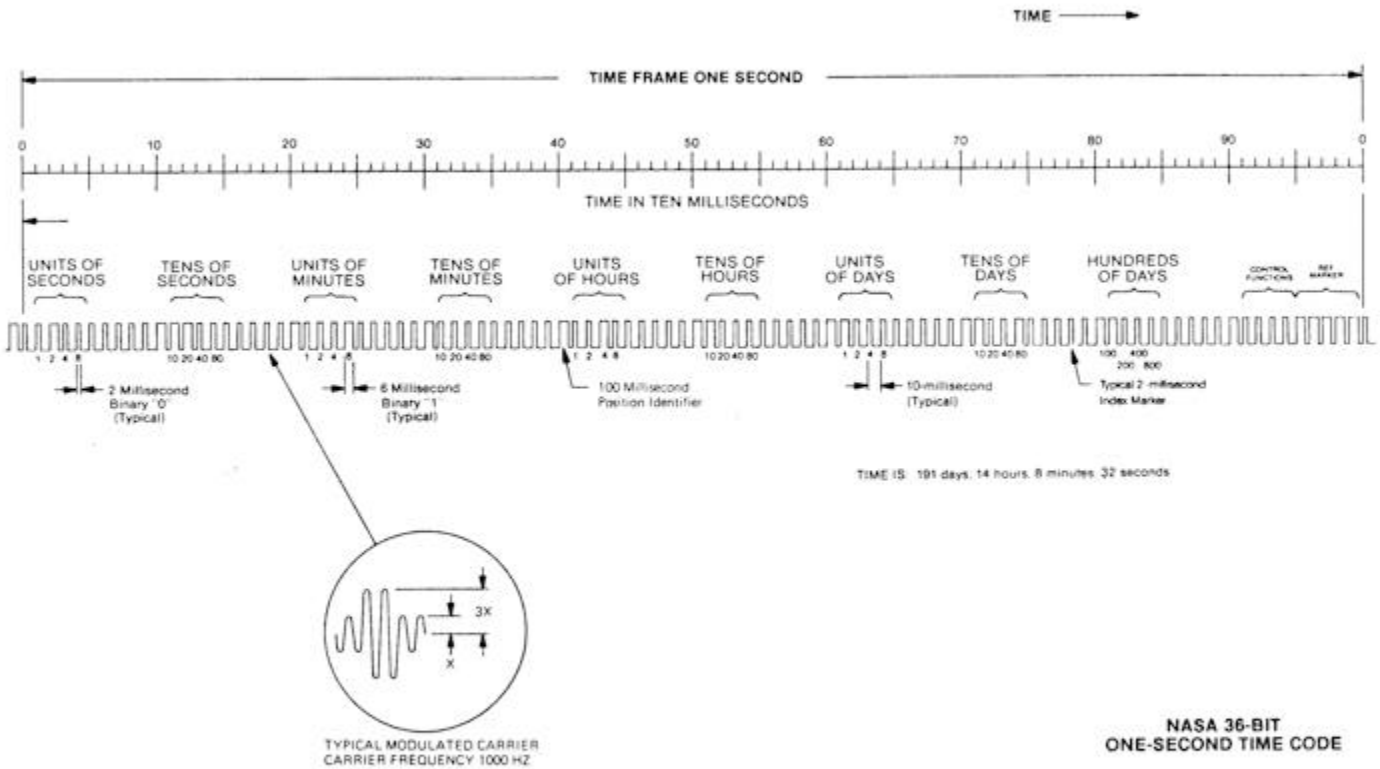


Figure A-3. ASCII Binary Format Key



NASA 36-BIT
ONE-SECOND TIME CODE

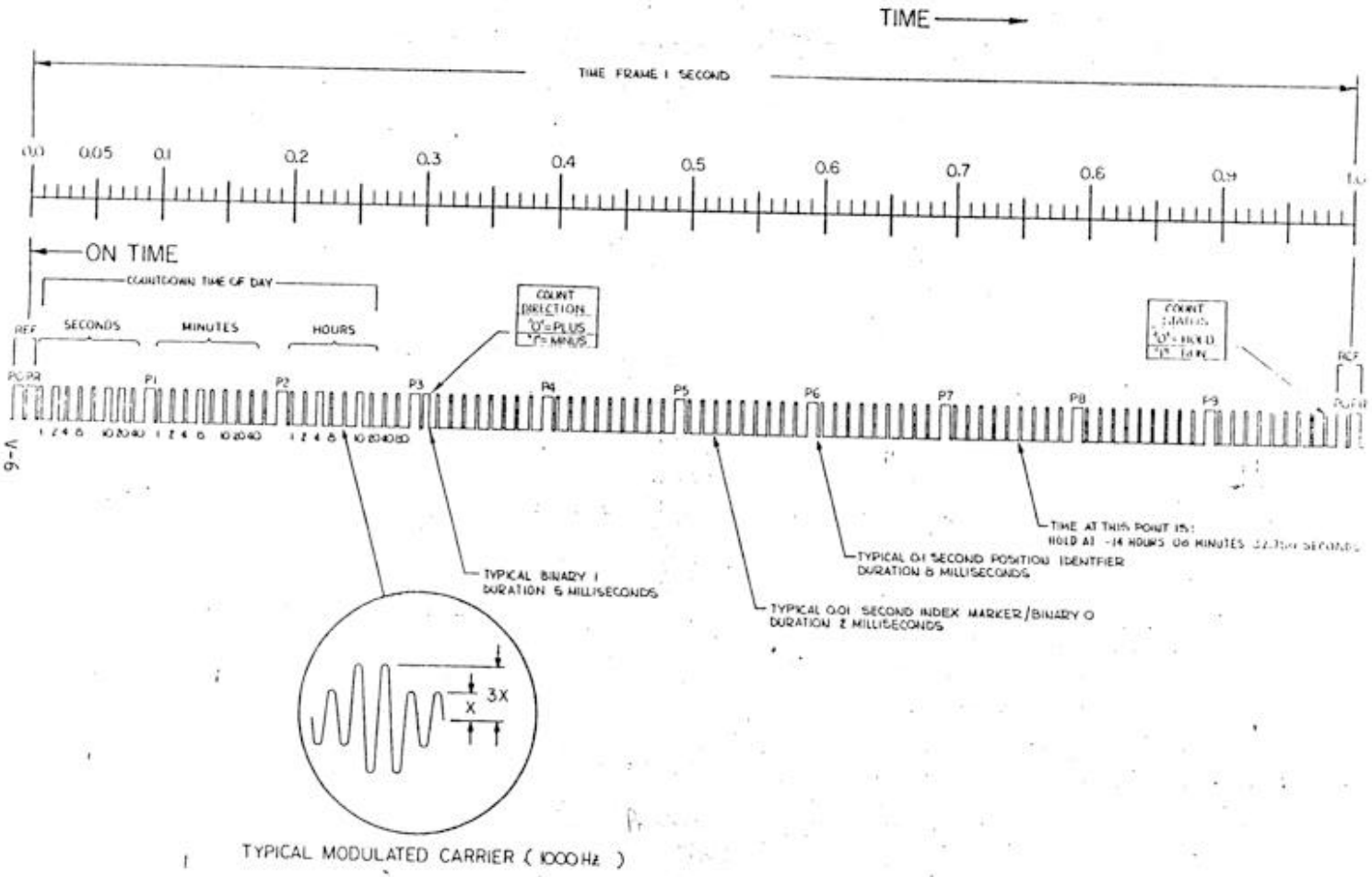

TIME
TIME FRAME 1 SECOND
0.0
0.05
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
ON TIME
COUNTDOWN TIME OF DAY
REF
SECONDS
MINUTES
HOURS
P0 P1
P1
P2
P3
P4
P5
P6
P7
P8
P9
P0 P1
REF
COUNT DIRECTION
"0" = PLUS
"1" = MINUS
COUNT STATUS
"0" = HOLD
"1" = RUN
TIME AT THIS POINT IS:
HOLD AT -14 HOURS 06 MINUTES
TYPICAL BINARY 1
DURATION 5 MILLISECONDS
TYPICAL 0.1 SECOND POSITION IDENTIFIER
DURATION 8 MILLISECONDS
TYPICAL 0.01 SECOND INDEX MARKER/BINARY 0
DURATION 2 MILLISECONDS
3X
X
TYPICAL MODULATED CARRIER (1000 Hz)

FIGURE 5-1