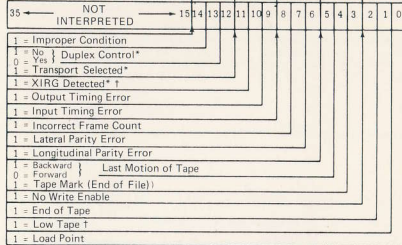




RD-358/1540/1240/AN/USH-19 MAGNETIC TAPE UNITS (7 TRACKS)

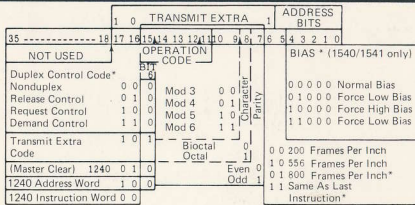
STATUS CODE FORMAT



\*RD-358/1540/1541 † Not applicable AN/USH-19

RD-358/1540/1240 MAGNETIC TAPE UNITS (7 TRACK)

FUNCTION CODE FORMAT



\*RD-358/1540/1541

ADDRESS BITS

1540 ADDRESSING					1240 ADDRESSING									
Bit Position	Switch	#	Position		Bit Position	Switch	#	Position						
4	3	2	1	0	5	4	3	2	1	0				
0	1	X	0	1	1	0	0	1	0	0	1	1	1	1
0	1	X	1	0	1	0	0	1	0	1	0	1	1	2
0	1	X	1	1	4	0	0	1	0	1	0	1	1	4
0	1	X	0	0	1	0	0	1	0	0	1	1	1	1
1	0	X	1	0	1	0	1	0	0	1	1	2	2	2
1	0	X	1	1	7	0	1	0	0	1	1	2	3	4
1	0	X	0	0	8	0	1	0	0	0	1	2	3	4
1	1	X	0	1	9	0	1	1	0	0	1	3	2	1
1	1	X	1	0	10	0	1	1	0	1	0	3	2	2
1	1	X	1	1	11	0	1	1	0	1	1	3	3	3
0	0	X	0	0	12	0	1	1	1	0	0	3	4	4
0	0	X	0	1	13	1	0	0	0	0	1	4	2	1
0	0	X	1	0	14	1	0	0	0	0	1	4	2	2
0	0	X	1	1	15	1	0	0	1	1	4	2	3	3
0	0	X	1	0	16	1	0	0	1	0	0	4	2	4

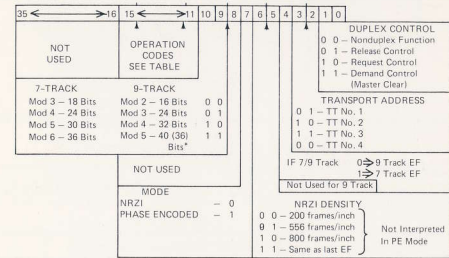
# Indicates position of address switch on each tape transport.  
 X = zero or one.

OPERATION CODES

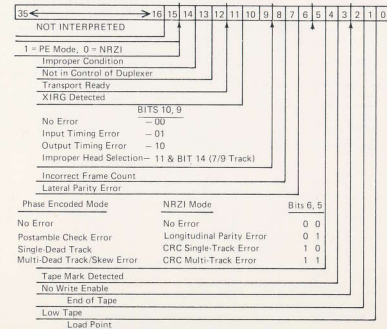
CODE	7-TRACK RD-358/1240 INSTRUCTIONS	7-TRACK RD-358/1540 INSTRUCTIONS	9-TRACK RD-358 INSTRUCTIONS
00000	Read Forward	Read Forward	Read Forward
00001	Read Selective	Read Selective	Read Selective
00010	Read-Ignore Error Halt	Read-Modified Stop	Space Block
00011	Space File	Space File	Space File
00100	Type I Search	Type I Search	Type I Search
00101	Type II Search	Type II Search	Type II Search
00110	Type I Search File	Type I Search File	Type I Search File
00111	Type II Search File	Type II Search File	Type II Search File
01000	Write	Write	Write
01001	Write-XIRG	Write-XIRG	Write-XIRG
01010	Write-Ignore Error Halt	Write-Ignore Error Halt	Write-Ignore Error Halt
01011	Write-XIRG Ignore Error Halt	Write-XIRG Ignore Error Halt	Write-XIRG Ignore Error Halt
01100	Write Tape Mark	Write-Modified Stop	Write-Modified Stop
01101	Write Tape Mark XIRG	Write Edit	Erase
01110	Write Tape Mark	Write Tape Mark	Write Tape Mark
01111	Write Tape Mark XIRG	Write Tape Mark XIRG	Write Tape Mark XIRG
10000	Backspace	Backread	Backread
10001	Backspace	Backread Selective	Backread Selective
10010	Backspace Read	Backread Modified Stop	Backspace Block
10011	Backspace File	Backspace File	Backspace File
10100	Type I Backsearch	Type I Backsearch	Type I Backsearch
10101	Type II Backsearch	Type II Backsearch	Type II Backsearch
10110	Type I Backsearch File	Type I Backsearch File	Type I Backsearch File
10111	Type II Backsearch File	Type II Backsearch File	Type II Backsearch File
11000	Rewind	Rewind	Rewind
11001	Rewind Clear Write Enable	Rewind Clear Write Enable	Rewind Clear Write Enable
11010	Rewind	Rewind Interrupt at Load Point	Rewind
11011	Rewind Clear Write Enable	Rewind Clear Write Enable	Rewind
11100	Rewind Read	Rewind Read	Rewind Read
11101	Rewind Read Clear Write Enable	Rewind Read Clear Write Enable	Rewind
11110	Rewind Read	Rewind Read	Rewind Read
11111	Rewind Read Clear Write Enable	Rewind Read Clear Write Enable	Rewind Read
*	Transmit Extra	Transmit Extra	Request Status

\*Bits 17, 16, and 6 of Function Word = 101 respectively.

RD-358 MAGNETIC TAPE UNIT  
9 OR 7/9 TRACK FUNCTION CODE FORMAT



RD-358 MAGNETIC TAPE UNIT  
9 OR 7/9 TRACK STATUS CODE FORMAT



CHARACTER CODES

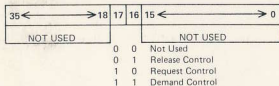
Character	1232 I/O Console Field Data	XS-3	ASCII	Teletype	Flexowriter Upper and Lower Case	BCD Tape Character	BCD Character	Card Punch
A	06	24	101	30	30	61	21	12-1
B	07	25	102	23	23	62	22	12-2
C	10	26	103	16	16	63	23	12-3
D	11	27	104	22	22	64	24	12-4
E	12	30	105	20	20	65	25	12-5
F	13	31	106	26	26	66	26	12-6
G	14	32	107	13	13	67	27	12-7
H	15	33	110	05	05	70	30	12-8
I	16	34	111	14	14	71	31	12-9
J	17	44	112	32	32	41	41	11-1
K	20	45	113	36	36	42	42	11-2
L	21	46	114	11	11	43	43	11-3
M	22	47	115	07	07	44	44	11-4
N	23	50	116	06	06	45	45	11-5
O	24	51	117	03	03	46	46	11-6
P	25	52	120	15	15	47	47	11-7
Q	26	53	121	35	35	50	50	11-8
R	27	54	122	12	12	51	51	11-9
S	30	65	123	24	24	22	62	0-2
T	31	66	124	01	01	23	63	0-3
U	32	67	125	34	34	24	64	0-4
V	33	70	126	17	17	25	65	0-5
W	34	71	127	31	31	26	66	0-6
X	35	72	130	27	27	27	67	0-7
Y	36	73	131	25	25	30	70	0-8
Z	37	74	132	21	21	31	71	0-9
Space	05	00	040	04	04	-	-	-
Tape Feed	-	-	-	-	00	-	-	-
Color Shift	-	-	-	-	02	-	-	-
Stop	-	-	-	-	43	-	-	-
Carriage Return	04	-	015	02	45	-	-	-
Shift Up	01	-	-	-	47	-	-	-
Shift Down	02	-	-	-	57	-	-	-
Tab	-	-	-	-	51	-	-	-
Backspace	-	-	-	-	61	-	-	-
Code Delete	-	-	-	-	77	-	-	-
Line Feed	03	-	012	10	-	-	-	-
Master	-	-	-	-	-	-	-	-
Space	00	-	-	-	-	-	-	-
Figures	-	-	-	33	-	-	-	-
Letters	-	-	-	37	-	-	-	-

CHARACTER CODES (Continued)

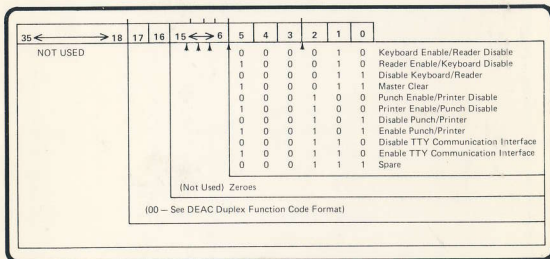
Character	1232 I/O Console Field Data	XS-3	ASCII	Teletype	Flexowriter UC	Flexowriter LC	BCD Tape Character	BCD Character	Card Punch
0	60	03	060	15	37		12	00	0
1	61	04	061	35	52		01	01	1
2	62	05	062	31	74		02	02	2
3	63	06	063	20	70		03	03	3
4	64	07	064	12	64		04	04	4
5	65	10	065	01	62		05	05	5
6	66	11	066	25	66		06	06	6
7	67	12	067	34	72		07	07	7
8	70	13	070	14	60		10	10	8
9	71	14	071	03	33		11	11	9
-	41	02	055	30	56	56	40	40	11
+	42	63	053	-	-	54	60	20	12
<	43	36	074	-	-	-	-	-	-
>	45	76	076	-	-	-	-	-	-
=	44	37	075	-	-	44	13	13	3-8
/	-	60	-	-	-	-	-	-	-
-0	-	-	-	-	-	-	52	52	-
+0	-	-	-	-	-	-	72	32	-
(	40	77	051	11	42	-	74	34	12-4-8
)	51	55	050	36	46	-	34	74	0-4-8
.	75	22	056	07	-	42	73	33	-
/	74	64	057	27	54	-	21	61	0-1
\	-	15	134	-	-	-	-	-	-
!	55	43	041	26	-	-	-	-	-
@	52	-	042	21	-	-	-	-	-
!	53	21	072	16	-	-	-	-	-
!	-	-	-	-	44	-	-	-	12-3-8
!	56	62	54	06	-	46	33	73	0-3-8
!	73	16	073	17	-	-	-	-	-
!	-	-	-	-	-	50	-	-	-
!	46	-	-	-	50	-	-	-	-
*	50	41	052	-	-	-	-	-	11-4-8
\$	47	42	044	22	-	-	53	53	11-3-8
!	-	56	100	-	-	-	-	-	-
!	72	40	047	32	-	-	14	14	-
#	-	35	043	-	-	-	-	-	-
&	-	20	046	13	-	-	-	-	-
?	54	23	077	23	-	-	-	-	-
↑	-	-	137	-	-	-	-	-	-
↑	77	-	138	-	-	-	-	-	-
□	-	01	135	-	-	-	-	-	-
□	76	-	-	-	-	-	-	-	-
0	-	17	133	-	-	-	-	-	-
0	-	-	-	24	-	-	-	-	-
Δ	-	57	-	-	-	-	-	-	-
⊗	-	61	045	-	-	-	-	-	-

DEAC FUNCTION CODE FORMATS

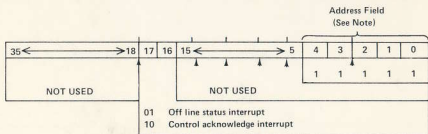
DEAC DUPLEX FUNCTION CODE FORMAT



DEAC KEYBOARD, PRINTER, READER, PUNCH AND TTY FUNCTION CODE FORMAT

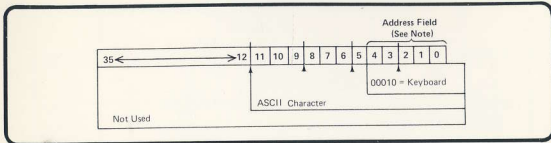


DEAC CONTROL ACKNOWLEDGE AND OFF-LINE STATUS INTERRUPT WORD FORMAT

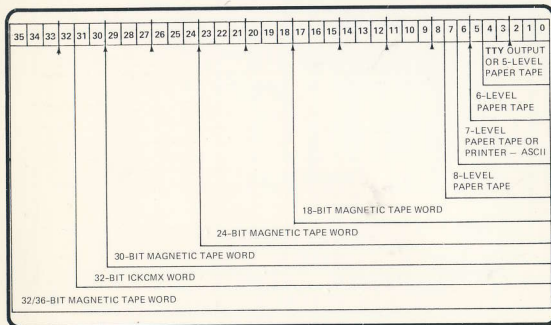


NOTE: Address field bits shall be set for both types of interrupts.

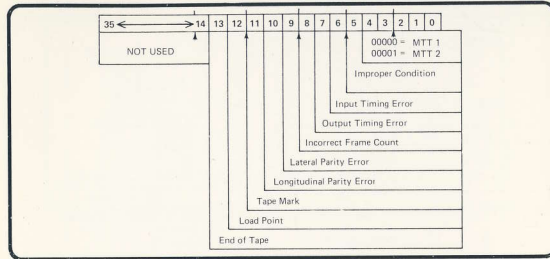
DEAC KEYBOARD INTERRUPT WORD FORMAT



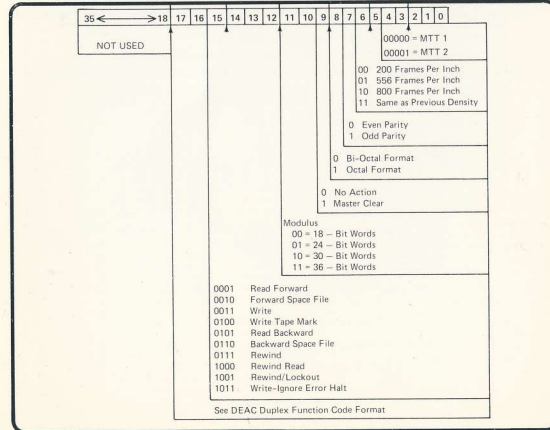
COMPUTER INPUT AND OUTPUT DATA WORD FORMAT



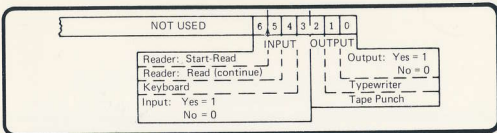
DEAC MAGNETIC TAPE TRANSPORT STATUS INTERRUPT WORD FORMAT



DEAC MAGNETIC TAPE TRANSPORT FUNCTION CODE FORMAT



FUNCTION CODE FORMAT



ASCII Code for the DEAC Keyboard Printer

Character Code Non-Print Codes	Printed Character	Functioning Keys	Character Code Printed Codes	Printed Character	Functioning Keys
000 0000		CTRL & @	010 1110	.	.
000 0001		CTRL & A	010 1111	/	/
000 0010		CTRL & B	011 0000	0	0
000 0011		CTRL & C	011 0001	1	1
000 0100		CTRL & EOT	011 0010	2	2
000 0101		CTRL & WRU	011 0011	3	3
000 0110		CTRL & RU	011 0100	4	4
000 0111		CTRL & BELL	011 0101	5	5
000 1000		CTRL & H	011 0110	6	6
000 1001		CTRL & I	011 0111	7	7
000 1010		Line Feed	011 1000	8	8
000 1011		CTRL & K	011 1001	9	9
000 1100		CTRL & L	011 1010	:	:
000 1101		Return	011 1011	:	:
000 1110		CTRL & N	011 1100	<	Shift & <
000 1111		CTRL & O	011 1101	=	Shift & =
001 0000		CTRL & P	011 1110	>	Shift & >
001 0001		CTRL & Q	011 1111	?	Shift & ?
001 0010		CTRL & Tape On	100 0000	@	Shift & @
001 0011		CTRL & X OH	100 0001	A	A
001 0100		CTRL & Tape Off	100 0010	B	B
001 0101		CTRL & U	100 0011	C	C
001 0110		CTRL & V	100 0100	D	D
001 0111		CTRL & W	100 0101	E	E
001 1000		CTRL & X	100 0110	F	F
001 1001		CTRL & Y	100 0111	G	G
001 1010		CTRL & Z	100 1000	H	H
001 1011		CTRL, Shift & K	100 1001	I	I
001 1100		CTRL, Shift & L	100 1010	J	J
001 1101		CTRL, Shift & M	100 1011	K	K
001 1110		CTRL, Shift & ↑	100 1100	L	L
001 1111		CTRL, Shift & ←	100 1101	M	M
111 1101		Alt. Mode	100 1110	N	N
111 1111		Rub Out	100 1111	O	O
			101 0000	P	P
			101 0001	Q	Q
			101 0010	R	R
			101 0011	S	S
			101 0100	T	T
			101 0101	U	U
			101 0110	V	V
			101 0111	W	W
			101 1000	X	X
			101 1001	Y	Y
			101 1010	Z	Z
			101 1011		Shift & K
			101 1100	/	Shift & L
			101 1101	!	Shift & M
			101 1110	↑	Shift & ↑
			101 1111	←	Shift & ←
Printed Codes					
010 0000	(space)	Space Bar			
010 0001		Shift &			
010 0010	"	Shift & "			
010 0011	#	Shift & #			
010 0100	\$	Shift & \$			
010 0101	%	Shift & %			
010 0110	&	Shift & &			
010 0111	' (apos.)	Shift & '			
010 1000	(	Shift & (			
010 1001	)	Shift & )			
010 1010	*	Shift & *			
010 1011	+	Shift & +			
010 1100	-	-			
010 1101	-	-			

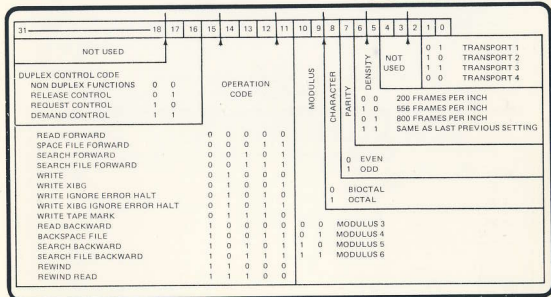
Note: CTRL is a key that deletes the 2<sup>6</sup> bit of the seven-bit code.

DATA FORMAT

EQUIPMENT	INTERFACE	KEYBOARD/PRINTER	READER/PUNCH
1232	8 Bit Maximum	Field Data Character (Modified)	Binary
1532	8 Bit Maximum	ASCII Character	Binary

AN/USH-19 MAGNETIC TAPE SUBSYSTEM (7 TRACK)

FUNCTION WORD FORMAT



Note: CTRL is a key that deletes the 2<sup>6</sup> bit of the seven-bit code.