
SEL PROGRAM LIBRARY

PROGRAM DESCRIPTION

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Catalog No. 320001A

IDENTIFICATION: 810A Card to Paper Tape

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ACCEPTED: 20 January 1967

PURPOSE: To punch compressed card images on paper tape.

COMPUTER
CONFIGURATION: 810A with card reader; High Speed Paper Tape optional

SUBROUTINES
REQUIRED: None

STORAGE: 507₁₀ (no inter-map references)

TIMING: N/A

USE:

1. Load with relocatable loader
2. Options
 - SNS 0 - Output Option
 - a. OFF - Punch on ASR-33
 - b. ON - Punch on High Speed Paper Tape
 - SNS 2 - ON to suppress card error messages; otherwise, OFF.
3. Sense Switch 2 further defined:
Whenever a card is mispunched in several different columns so that the characters read in cannot be matched by the programs table lookup operation, an error message telling the card number and column number will be typed out for each column that is in error. If a card has many errors in it, the operator can suppress the error message typeout for the remaining errors in that card (thus avoiding lengthy typeouts on the same card) by turning on Sense Switch Two. When the next card is read, a message to

"RESET SWITCH 2" types out and the program will not continue until switch 2 is reset.

4. When Sense Switch 0 is OFF thereby specifying the output is from the ASR-33 punch, message typeouts create a problem in that anything typed while the punch is turned ON results in the typed characters also being punched on the output tape. This situation is handled in the following manner: whenever the computer wants to type out a message and it cannot because switch 0 is OFF, it will halt and the A-register will display all ones (the halt instruction is located at relative address 271). When this occurs, the operator should then turn OFF the ASR-33 punch and press START. The computer will then type out the message, followed by another message to "TURN ON THE ASR-33 PUNCH" and will again halt. The operator should then take the appropriate action and press START. This method is used with the end-of-job message as well, because the operator may have several decks stacked in the card reader; the EOJ message types out for each \$ card encountered and blank trailer is put out. It would not be desirable to have the EOJ message punched in the output tape between the card image decks.
5. The program will eliminate all blank columns to the right of the last punched column from the paper tape card image; each card image is followed by carriage return and line feed characters. Thus, a card that was not punched from columns 42 to 80 would be punched on paper tape as 41 characters, followed by a carriage return and line feed.
6. Operating Procedure:
 - A. Load the card to paper tape program.
 - B. Set Sense Switch 0 as desired; set sense switch 2 to OFF.
 - C. Place cards in card reader and ready the device.
 - D. Press START, program will punch leader, then transfer compressed card images to paper tape; when a card with a \$ punched in column 1 is read, it is transferred to paper tape and

trailer is punched; message "\$CD.. CARD COUNT-XXX" and "HIT START TO CONTINUE" then types out.

E. If another deck follows, press START.

METHOD:

When a card is fed, the eighty columns are read in and stored in an eighty word buffer. The buffer is scanned from right to left for blank card characters (all zeros); when a non-zero character is encountered, a pointer is set for that address in the buffer. If the entire buffer contains all blanks, a "BLANK CD AT - XXX" message is issued and nothing is punched on tape. Otherwise, beginning with buffer word 1, the characters are converted to ASC II code by a table look-up operation and punched on tape, until the previously set pointer stops this loop. Then, a carriage return and line feed are punched and the first buffer word checked to see if it contains a \$ character. If yes, a message to this effect, along with a card count, is typed out and the computer halted. Otherwise, the next card is fed and the process repeated. If the table look-up loop is fallen through, meaning a no-match condition, an error message indicating the card number and column number is issued.

0001	00000	00000000	* * * * *	ASSEMBLED JANUARY 20, 1967	* * * * *
0002	00000	00000000	*		
0003	00000	00000000	*	810A CARD-T0-PAPERTAPE	
0004	00000	00000000	*		
0005	00000	00000000		REL	
0006	00000	00000000		ORG 0	
0007	00000	02100746	CTC	LBA CN2	
0008	00001	01100640		LAA A0P1	
0009	00002	00130400		SNS 0	* OUTPUT OPTION SWITCH
0010	00003	11100005		BRU **2	* ON FOR H.S.P.T. PUNCH
0011	00004	11100010		BRU **4	
0012	00005	00130102		CEU 2,W	* ENABLE HIGH-SPEED PUNCH
0013	00006	00004000		DATA 4000	
0014	00007	05100750		AMA CN5	* CHANGE TO A0P 2,W
0015	00010	03100263		STA PNCH+1	* STORE IN PUNCH SUBRTNE.
0016	00011	00000003		CLA	
0017	00012	12100262		SPB PNCH	* PUNCH LEADER
0018	00013	00000026		IBS	
0019	00014	11100012		BRU *-2	
0020	00015	00130402	NEXT	SNS 2	
0021	00016	11100020		BRU **2	
0022	00017	11100036		BRU 31	
0023	00020	12100265		SPB TEST	
0024	00021	12100310		SPB CRLF	
0025	00022	02100747		LBA CN3	
0026	00023	01500650	A0	LAA MSG1+7,1	* MSGG- RESET SWITCH 2
0027	00024	00170101		A0P 1,W	
0028	00025	00001016		LSL 8	
0029	00026	00170101		A0P 1,W	
0030	00027	00000026		IBS	
0031	00030	11100023		BRU *-5	
0032	00031	12100310		SPB CRLF	
0033	00032	00000000		HLT	
0034	00033	00130402		SNS 2	
0035	00034	11100023		BRU A0	
0036	00035	12100273		SPB ALRT	
0037	00036	14100534	B1	IMS CARD	* +1 TO CARD COUNT
0038	00037	02100751		LBA CN5	

0039	00040	00130104	CEU	4,N		* FEED A CARD
0040	00041	00004000	DATA	14000		
0041	00042	00170304	AIP	4,N		* RECEIVE A COLUMN
0042	00043	03200634	STA	BUFF+80,1		* STORE IN BUFFER
0043	00044	00000026	IBS			
0044	00045	11100042	BRU	*-3		
0045	00046	01100751	LAA	CN6		* BEGIN SCAN FOR BLANKS
0046	00047	03100537	STA	ACNT		
0047	00050	02100552	LBA	3ADD		
0048	00051	01400300	B2	LAA	0,1	
0049	00052	00000022	SAZ			
0050	00053	11100126	BRU	SGNF		
0051	00054	15100752	AMB	CN7		
0052	00055	14100537	IMS	ACNT		
0053	00056	11100051	BRU	32		
0054	00057	12100265	SPB	TEST		
0055	00058	02100753	LBA	CN8		
0056	00051	01200561	B3	LAA	MSG3+6,1	* BLANK CD MESSAGE
0057	00062	00170101	AAP	1,N		
0058	00063	00001316	LSL	8		
0059	00064	00170101	AAP	1,N		
0060	00065	00000026	IBS			
0061	00066	11100061	BRU	33		
0062	00067	01100534	LAA	CARD		
0063	00070	03100721	STA	31V		
0064	00071	12100075	SPB	WASC		* GO TO OUTPUT CARD CNT
0065	00072	12100310	SPB	CRLF		
0066	00073	12100273	SPB	ALRT		
0067	00074	11100015	BRU	NEXT		* GO FOR NEXT CARD
0068	00075	23400000	WASC	DAC	**	
0069	00076	01100754	LAA	CN9		* CNVRT CD CNT TO ASC AND
0070	00077	03100572	STA	TEMP		* TYPE IT OUT
0071	00100	01100570	LAA	ADD1		
0072	00101	03100571	STA	IFCT		
0073	00102	02100721	LBA	31V		* PUT CNT IN B
0074	00103	01100561	LAA	SAZ		
0075	00104	03100107	STA	32		
0076	00105	00000003	B4	CLA		
0077	00106	10300571	DIV*	IFCT		

0078	00107	00000022	B5	SAZ		
0079	00110	11100112		BRU	**2	
0080	00111	11100123		BRU	B6	
0081	00112	05100755		AMA	CN10	
0082	00113	00001016		LSL	8	
0083	00114	00170101		AOP	1,W	
0084	00115	01100662		LAA	N0P	
0085	00116	05100107		STA	B5	
0086	00117	14100671	B50	IMS	IFCT	* INCREMENT FACTOR ADDR55
0087	00120	14100672		IMS	TEMP	* +1 TO LOOP CNT
0088	00121	11100105		BRU	B4	
0089	00122	11300375		BRU*	0ASC	* GO TO EXIT
0090	00123	01100370	B6	LAA	ASC+42	* LOAD A BLANK
0091	00124	00170101		AOP	1,W	
0092	00125	11100117		BRU	B50	
0093	00126	15100745	SGNF	AMB	CN1	
0094	00127	04100536		STB	IBJF	
0095	00130	14100536		IMS	IBJF	* FROM COL. 1
0096	00131	02100720		LBA	CN5	
0097	00132	04100635		STB	C0L	* RESET COL. CNT
0098	00133	02100537	C1	LBA	ACNT	
0099	00134	01300536		LAA*	IBJF	* FETCH COL. 1 PLUS INDEX
0100	00135	02100726		LBA	CN11	
0101	00136	15500514		CMA	BVRY+63,1	* COMPARE TO BINARY TABLE
0102	00137	11100141		BRU	**2	
0103	00140	11100144		BRU	MTCH	
0104	00141	00000026		IBS		
0105	00142	11100136		BRU	**4	
0106	00143	11100226		BRU	NMCH	
0107	00144	01500415	MTCH	LAA	ASC+53,1	* PICK UP ASC CODE
0108	00145	12100262		SPB	PNCH	* PUNCH ASC CHARACTER
0109	00146	14100635		IMS	C0L	
0110	00147	14100637		IMS	ACNT	
0111	00150	11100133		BRU	C1	
0112	00151	01100722		LAA	EREC	
0113	00152	12100262		SPB	PNCH	* OUTPUT A CARRIAGE RETURN. . .
0114	00153	00001016		LSL	8	
0115	00154	12100262		SPB	PNCH	* OUTPUT A LINE FEED. . .
0116	00155	01100214		LAA	BUFF	

0117	00150	12100757	CMA	CN12	* CHECK FOR \$
0118	00157	11100015	BRU	NEXT	* GØ FØR NEXT CARD
0119	00150	11100162	BRU	**2	
0120	00151	11100015	BRU	NEXT	* GØ FØR NEXT CARD
0121	00152	02100746	LBA	CN2	
0122	00153	00000003	CLA		
0123	00154	12100262	SPB	PUNCH	
0124	00155	00000026	IBS		
0125	00156	11100164	BRU	*-2	
0126	00157	00130400	SNS	0	
0127	00170	11100172	BRU	**2	
0128	00171	11100175	BRU	**4	
0129	00172	00130102	CEU	2,N	* TURN PUNCH OFF
0130	00173	00002000	DATA	'2000	
0131	00174	11100176	BRU	**2	
0132	00175	12100265	SPB	TEST	
0133	00176	02100760	LBA	CN13	
0134	00177	01500706	D1	LAA	MSG4+11,1 * PUT ØUT EØJ MSSG
0135	00200	00170101	AØP	1,N	
0136	00201	00001016	LSL	8	
0137	00202	00170101	AØP	1,N	
0138	00203	00000026	IBS		
0139	00204	11100177	BRU	D1	
0140	00205	01100634	LAA	CARD	
0141	00206	03100721	STA	31N	
0142	00207	12100075	SPB	ØASC	* PUT ØUT CD CNT
0143	00210	12100310	SPB	ØRLF	
0144	00211	02100760	LBA	CN13	
0145	00212	01500721	D2	LAA	MSG5+11,1
0146	00213	00170101	AØP	1,N	
0147	00214	00001016	LSL	8	
0148	00215	00170101	AØP	1,N	
0149	00216	00000026	IBS		
0150	00217	11100212	BRU	D2	
0151	00220	12100310	SPB	ØRLF	
0152	00221	00000000	HLT		* HALT
0153	00222	12100273	SPB	ALRT	
0154	00223	00000003	CLA		
0155	00224	03100634	STA	CARD	

0156	00225	11100000	BRU	CTC	* GO TO START
0157	00226	00130402	NMCH	SNS 2	* SNS 2 ON- SUPPRESS CD ERR MESSAGE
0158	00227	11100260	BRU	E1	
0159	00230	12100265	SPB	TEST	
0160	00231	12100310	SPB	CRLF	
0161	00232	02100761	LBA	CN14	* TYPE C0L ERR MSSG
0162	00233	01500727	LAA	MSG6+4,1	
0163	00234	00170101	A0P	1, W	
0164	00235	00001016	LSL	8	
0165	00236	00170101	A0P	1, W	
0166	00237	00000026	IBS		
0167	00240	11100233	BRU	*-5	
0168	00241	01100634	LAA	CARD	
0169	00242	03100721	STA	31V	
0170	00243	12100075	SPB	0ASC	* OUTPUT CARD CNT
0171	00244	02100762	LBA	CN15	
0172	00245	01500732	LAA	MSG7+3,1	
0173	00246	00170101	A0P	1, W	
0174	00247	00001016	LSL	8	
0175	00250	00170101	A0P	1, W	
0176	00251	00000026	IBS		
0177	00252	11100245	BRU	*-5	
0178	00253	01100635	LAA	C0L	
0179	00254	03100721	STA	31V	
0180	00255	12100075	SPB	0ASC	* OUTPUT C0L CNT
0181	00256	12100310	SPB	CRLF	
0182	00257	12100273	SPB	ALRT	
0183	00260	01100370	E1	LAA ASC+42	* FETCH A BLANK
0184	00261	11100145	BRU	MICH+1	
0185	00262	22400000	PNCH	0AC **	* PUNCH SUBROUTINE
0186	00263	00170101	A0P	1, W	
0187	00264	11300262	BRU*	PNCH	
0188	00265	22400000	TEST	0AC **	
0189	00266	00130400	SNS	0	
0190	00267	11300265	BRU*	TEST	
0191	00270	01100752	LAA	CN7	* LOAD A-REG W. ALL ONES FOR HLT IDENTFCATN.
0192	00271	00000000	HLT		* TURN OFF ASR-33 PUNCH
0193	00272	11300265	BRU*	TEST	
0194	00273	22400000	ALRT	0AC **	

0195	00274	00130400	SNS	0	
0196	00275	11300273	BRU*	ALRT	
0197	00276	02100760	LBA	CN13	
0198	00277	01500745	LAA	MSS8+11,1	* TYPE MSSG- TURN ASR-33 PUNCH 0N.
0199	00300	00170101	A0P	1,N	
0200	00301	00001016	LSL	8	
0201	00302	00170101	A0P	1,N	
0202	00303	00000026	IBS		
0203	00304	11100277	BRU	*-5	
0204	00305	12100310	SPB	CRLF	
0205	00306	00000000	HLT		
0206	00307	11300273	BRU*	ALRT	
0207	00310	22400000	CRLF	DAC	**
0208	00311	00170501	M0P	1,N	
0209	00312	00106400	CR	DATA	'106400
0210	00313	00170501	M0P	1,N	
0211	00314	00105000	LF	DATA	'105000
0212	00315	11300310	BRU*	CRLF	
0213	00316	00140540	ASC	DATA	'A B C D E F G H I J K L M N O P Q ''
0213	00317	00141240			
0213	00320	00141540			
0213	00321	00142240			
0213	00322	00142540			
0213	00323	00143240			
0213	00324	00143540			
0213	00325	00144240			
0213	00326	00144540			
0213	00327	00145240			
0213	00330	00145540			
0213	00331	00146240			
0213	00332	00146540			
0213	00333	00147240			
0213	00334	00147540			
0213	00335	00150240			
0213	00336	00150540			
0214	00337	00151240	DATA	'R S T U V W X Y Z 0 1 2 3 4 5 6 7 ''	
0214	00340	00151640			
0214	00341	00152240			
0214	00342	00152540			

0214	00343	JJ153240	
0214	00344	JJ153540	
0214	00345	JJ154240	
0214	00346	JJ154540	
0214	00347	JJ155240	
0214	00350	JJ130240	
0214	00351	JJ130540	
0214	00352	JJ131240	
0214	00353	JJ131540	
0214	00354	JJ132240	
0214	00355	JJ132640	
0214	00356	JJ133240	
0214	00357	JJ133540	
0215	00358	JJ134240	DATA '18 9 @ [''
0215	00361	JJ134540	
0215	00362	JJ140240	
0215	00363	JJ155540	
0216	00364	JJ157540	DATA '14 ''
0217	00365	JJ126540	DATA '1J ''
0218	00366	JJ120240	DATA '1 ''
0219	00367	JJ120240	DATA '1 ''
0220	00370	JJ120240	DATA '1 " # + % ' () ''
0220	00371	JJ120240	
0220	00372	JJ121240	
0220	00373	JJ121540	
0220	00374	JJ125540	
0220	00375	JJ122540	
0220	00376	JJ123540	
0220	00377	JJ124240	
0220	00400	JJ124540	
0221	00401	JJ125240	DATA '1* + , - . / : ; < = > \$ ''
0221	00402	JJ125540	
0221	00403	JJ126240	
0221	00404	JJ126540	
0221	00405	JJ127240	
0221	00406	JJ127540	
0221	00407	JJ132240	
0221	00410	JJ135540	
0221	00411	JJ136240	

0221	00412	00136640			
0221	00413	00137240			
0221	00414	00122240			
0222	00415	00004400	BNRY	DATA '4400	A
0223	00416	00004200		DATA '4200	B
0224	00417	00004100		DATA '4100	C
0225	00420	00004040		DATA '4040	D
0226	00421	00004020		DATA '4020	E
0227	00422	00004010		DATA '4010	F
0228	00423	00004004		DATA '4004	G
0229	00424	00004002		DATA '4002	H
0230	00425	00004001		DATA '4001	I
0231	00426	00002400		DATA '2400	J
0232	00427	00002200		DATA '2200	K
0233	00430	00002100		DATA '2100	L
0234	00431	00002040		DATA '2040	M
0235	00432	00002020		DATA '2020	N
0236	00433	00002010		DATA '2010	O
0237	00434	00002004		DATA '2004	P
0238	00435	00002002		DATA '2002	Q
0239	00436	00002001		DATA '2001	R
0240	00437	00001200		DATA '1200	S
0241	00440	00001100		DATA '1100	T
0242	00441	00001040		DATA '1040	U
0243	00442	00001020		DATA '1020	V
0244	00443	00001010		DATA '1010	W
0245	00444	00001004		DATA '1004	X
0246	00445	00001002		DATA '1002	Y
0247	00446	00001001		DATA '1001	Z
0248	00447	00001000		DATA '1000	ZERO
0249	00450	00000400		DATA '0400	ONE
0250	00451	00000200		DATA '0200	TWO
0251	00452	00000100		DATA '0100	THREE
0252	00453	00000040		DATA '0040	FOUR
0253	00454	00000020		DATA '0020	FIVE
0254	00455	00000010		DATA '0010	SIX
0255	00456	00000004		DATA '0004	SEVEN
0256	00457	00000002		DATA '0002	EIGHT
0257	00450	00000001		DATA '0001	NINE

0258	00461	JJ000006	DATA '0006	@	COMMERCIAL AT-SIGN
0259	00462	JJ002022	DATA '2022	[LEFT BRACKET
0260	00463	JJ002006	DATA '2006	/	BACKWARD SLASH
0261	00464	JJ001012	DATA '1012]	RIGHT BRACKET
0262	00465	JJ001202	DATA '1202	^	UP ARROW
0263	00466	JJ004006	DATA '4006	<	LEFT-POINTING ARROW
0264	00467	JJ000000	DATA '0000		BLANK
0265	00470	JJ005000	DATA '3000	!	EXCLAMATION POINT
0266	00471	JJ001006	DATA '1006	"	QUOTATION MARK
0267	00472	JJ001022	DATA '1022	#	POUND SIGN
0268	00473	JJ006000	DATA '6000	+	QUESTION MARK
0269	00474	JJ004022	DATA '4022	%	PERCENT SIGN
0270	00475	JJ000042	DATA '0042	'	APOSTROPHE
0271	00476	JJ001042	DATA '1042	(LEFT PARENTHESIS
0272	00477	JJ004042	DATA '4042)	RIGHT PARENTHESIS
0273	00500	JJ002042	DATA '2042	*	ASTERISK
0274	00501	JJ004000	DATA '4000	+	PLUS SIGN
0275	00502	JJ001102	DATA '1102	,	COMMA
0276	00503	JJ002000	DATA '2000	-	MINUS SIGN
0277	00504	JJ004102	DATA '4102	.	PERIOD
0278	00505	JJ001400	DATA '1400	/	SLASH
0279	00506	JJ000022	DATA '0022	:	COLON
0280	00507	JJ002012	DATA '2012	;	SEMI-COLON
0281	00510	JJ004012	DATA '4012	<	LESS THAN
0282	00511	JJ0000102	DATA '0102	=	EQUAL
0283	00512	JJ000012	DATA '0012	>	GREATER-THAN
0284	00513	JJ002102	DATA '2102	\$	DOLLAR SIGN
0285	00514	JJ000120	RUFF BSS 80		
0286	00634	JJ000000	CARD DATA 0		
0287	00635	JJ000000	COL DATA 0		
0288	00636	22200000	IBUF DAC# 0		
0289	00637	JJ000000	WCNT DATA 0		
0290	00640	JJ1/0101	AOP1 AOP 1,4		
0291	00641	JJ151305	MSG1 DATA ''RESET SWITCH 2''		
0291	00642	JJ151/05			
0291	00643	JJ152240			
0291	00644	JJ151/27			
0291	00645	JJ144/24			
0291	00646	JJ141/10			

J291	00647	JJ120262	
J292	00650	JJ000000	CNT1 DATA 0
J293	00651	JJ17766	CNT2 DATA -10
J294	00652	35400563	BADD DAC BUFF+79
J295	00653	JJ141314	MSG3 DATA ''BLNK CD AT- ''
J295	00654	JJ147313	
J295	00655	JJ120303	
J295	00656	JJ142240	
J295	00657	JJ140724	
J295	00660	JJ126640	
J296	00661	JJ000022	SAZ SAZ
J297	00662	JJ000033	N0P N0P
J298	00663	JJ023420	FCTR DATA 10000,1000,100,10,1
J298	00664	JJ001750	
J298	00665	JJ000144	
J298	00666	JJ000012	
J298	00667	JJ000001	
J299	00670	35400563	ADD1 DAC FCTR
0300	00671	25400000	IFCT DAC **
J301	00672	JJ000000	TEMP DATA 0
J302	00673	JJ122240	MSG4 DATA ''S CD. . . CARD COUNT- ''
J302	00674	JJ141704	
J302	00675	JJ127240	
J302	00676	JJ127240	
J302	00677	JJ127240	
J302	00700	JJ141701	
J302	00701	JJ151304	
J302	00702	JJ120303	
J302	00703	JJ147725	
J302	00704	JJ147324	
J302	00705	JJ126540	
J303	00706	JJ144311	MSG5 DATA ''HIT START TO CONTINUE.''
J303	00707	JJ152240	
J303	00710	JJ151724	
J303	00711	JJ140722	
J303	00712	JJ152240	
J303	00713	JJ152317	
J303	00714	JJ120303	
J303	00715	JJ147716	

0303	00/16	JJ152311		
0303	00/17	JJ147325		
0303	00/20	JJ142656		
0304	00/21	JJ000000	RIN	DATA 0
0305	00/22	JJ100012	EREC	DATA '106512
0306	00/23	JJ142722	MSG6	DATA ''ERR- CD ''
0306	00/24	JJ121225		
0306	00/25	JJ120303		
0306	00/26	JJ142240		
0307	00/27	JJ120240	MSG7	DATA '' CXL ''
0307	00/30	JJ141717		
0307	00/31	JJ146240		
0308	00/32	JJ122325	MSG8	DATA ''TURN ASR-33 PUNCH 0N. ''
0308	00/33	JJ151316		
0308	00/34	JJ120301		
0308	00/35	JJ151722		
0308	00/36	JJ126563		
0308	00/37	JJ131640		
0308	00/40	JJ150325		
0308	00/41	JJ147303		
0308	00/42	JJ144240		
0308	00/43	JJ147716		
0308	00/44	JJ127240		
0309	00/45	JJ100000	CN1	DATA '100000
0310	00/46	JJ177634	CN2	DATA -100
0311	00/47	JJ177771	CN3	DATA -7
0312	00/50	JJ000001	CN5	DATA 1
0313	00/51	JJ177600	CN6	DATA -80
0314	00/52	JJ177777	CN7	DATA -1
0315	00/53	JJ177772	CN8	DATA -6
0316	00/54	JJ177773	CN9	DATA -5
0317	00/55	JJ0000260	CN10	DATA '260
0318	00/56	JJ177701	CN11	DATA -63
0319	00/57	JJ0002102	CN12	DATA '2102
0320	00/60	JJ177765	CN13	DATA -11
0321	00/61	JJ177774	CN14	DATA -4
0322	00/62	JJ177775	CN15	DATA -3
0323	00/63	JJ400000	END	CIC
		CIC		00000

NEXT	00015
A0	00023
B1	00036
B2	00051
B3	00061
0ASC	00075
B4	00105
B5	00107
B50	00117
B6	00123
SGNF	00126
C1	00133
MICH	00144
D1	00177
D2	00212
NMCH	00226
E1	00260
PNCH	00262
TEST	00265
ALRT	00273
CRLF	00310
CR	00312
LF	00314
ASC	00316
BNRY	00415
BUFF	00514
CARD	00634
C0L	00635
IBUF	00636
WCNT	00637
A0P1	00640
MSG1	00641
CNT1	00650
CNT2	00651
BADD	00652
MSG3	00653
SAZ	00661
N0P	00662
FCTR	00663

ADD1	00570
IFCI	00571
TEMP	00572
MSG4	00573
MSG5	00706
BIN	00721
EREC	00722
MSG6	00723
MSG7	00727
MSG8	00732
CN1	00745
CN2	00746
CN3	00747
CN5	00750
CN6	00751
CN7	00752
CN8	00753
CN9	00754
CN10	00755
CN11	00756
CN12	00757
CN13	00760
CN14	00761
CN15	00762

ADD1	0298	0070							
ALRT	0193	0033	0055	0152	0181	0195	0205		
AZP1	0289	0007							
ASC	0212	0089	0106	0182					
AU	0025	0034							
BADD	0293	0046							
BIN	0303	0062	0072	0140	0168	0178			
BNRY	0221	0100							
BUFF	0284	0041	0115	0293					
B1	0036	0021							
B2	0047	0052							
B3	0055	0060							
B4	0075	0087							
B5	0077	0074	0084						
B50	0085	0091							
B6	0089	0079							
CARD	0285	0036	0061	0139	0154	0167			
CNT1	0291								
CNT2	0292								
CN1	0308	0092							
CN10	0316	0080							
CN11	0317	0099							
CN12	0318	0116							
CN13	0319	0132	0143	0196					
CN14	0320	0160							
CN15	0321	0170							
CN2	0309	0006	0120						
CN3	0310	0024							
CN5	0311	0013	0095						
CN6	0312	0037	0044						
CN7	0313	0050	0190						
CN8	0314	0054							
CN9	0315	0068							
C0L	0286	0096	0108	0177					
CRLF	0206	0023	0031	0064	0142	0150	0159	0180	0203
CR	0208								0211
CTC	0006	0155	0322						
C1	0097	0110							

D1	0133	0136						
D2	0144	0149						
EREC	0094	0111						
E1	0132	0157						
FCTR	0297	0298						
IBUF	0287	0093	0094	0098				
IFC1	0299	0071	0076	0085				
LF	0210							
MSG1	0290	0025						
MSG3	0294	0055						
MSG4	0001	0133						
MSG5	0002	0144						
MSG6	0005	0161						
MSG7	0006	0171						
MSG8	0007	0197						
MICH	0106	0102	0183					
NEXT	0019	0066	0117	0119				
NMCH	0126	0105						
NOP	0296	0083						
WASC	0057	0063	0038	0141	0169	0179		
PNCH	0154	0014	0016	0107	0112	0114	0122	0136
SAZ	0295	0073						
SQNF	0092	0049						
TEMP	0000	0069	0036					
TEST	0187	0022	0053	0131	0158	0189	0192	
WCNT	0258	0045	0051	0097	0109			