
SEL PROGRAM LIBRARY

PROGRAM DESCRIPTION

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Catalog No. 303011A

IDENTIFICATION: 810A Paper Tape Reader/Punch Test

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ACCEPTED: 17 January 1967

PURPOSE: This test is designed to verify the correct operation of a high speed paper tape system.

SOURCE PROGRAM LANGUAGE: MNEMLER

COMPUTER CONFIGURATION: SEL 810A with high speed paper tape punch and reader

STORAGE: Less than one map - Full above location 2000g

SUBROUTINES REQUIRED: N/A

TIMING: 31 seconds per test cycle (excluding error typeout)

USE: Load the program using the Standard Relocatable Loader.

Operation:

Sense Switch Settings:

Switch 0 up - terminate test at end of present cycle
down - start another cycle after present cycle

Switch 1 up - eliminate type out of errors
down - type message when error detected

Switch 2 up - restart test after detection of an error
down - continue test after error

Control switch 15 is set to eliminate all typeout.

1. Start at location 2000g. The program will type
"PAPER TAPE READER/PUNCH TEST"
"DATE"

The operator must then type the date and when finished, type a carriage return character. The program will then turn on the punch and punch two forward and reverse binary progressions, turn off the punch and type "PUT TAPE INTO READER THEN PRESS START".

2. When the operator complies with these instructions, the program will commence punching and reading until either sense switch 0 is set or the program detects an error.

3. When an error is detected, the program will type
"ERROR CONDITION DETECTED SHOULD HAVE
READ XXX
DID READ XXX"

The program will then halt. The operator has the option of having the test continue or restart (sense switch 2). If switch 1 had been set the error would be counted but otherwise ignored.

4. Upon termination (sense switch 0) the program will type "NUMBER OF CYCLES COMPLETED XXX
"NUMBER OF ERRORS DETECTED XXX"
it will then turn off punch power and halt.

METHOD:

This test is designed to exercise the mechanical functions of the punch and reader as well as test the accuracy of data transfer. To test the mechanical functions of punch and reader they are run in three modes:

1. continuous mode,
2. start/stop mode
3. simultaneous mode

In the continuous mode the punch and reader are operated at their maximum rates. In start/stop mode there is a delay of .02 seconds between each character punched and read. In the simultaneous mode the punch and reader are operated simultaneously.

To test the data transfer the program punches and reads repeated forward and reverse binary progressions, going from 001 to 377g, then 000, then 377g back to 001. A test

cycle is one forward and reverse progression punched and read in each of the three modes. The program will keep repeating the test cycle until the operator terminates it or an error is detected. When an error is detected, a message is typed on the ASR-33 indicating what should have been read and what was read. The operator can determine by looking at the tape whether the reader or punch was in error. The operator then has the option to either restart the test or continue. The operator also has the option to eliminate type out of errors, but they will be counted and the number of errors will be typed out upon termination of the test.

0001	00000	00000000	*	PAPER TAPE PUNCH/READER TEST SEL 810A	
0002	00000	00000000	*		
0003	00000	00000000	*		
0004	00000	00000000	*		
0005	00000	00000000	*	SENSE SWITCH SETTINGS	
0006	00000	00000000	*	SWITCH 0	TERMINATION OF TEST
0007	00000	00000000	*	SWITCH 1	IGNORE ERRORS
0008	00000	00000000	*	SWITCH 2	CONTINUE AFTER DETECTION OF ERROR
0009	00000	00000000	*		
0010	00000	00000000	*	CONTROL SWITCH 15 IS SET TO INHIBIT ALL TYPE OUT	
0011	00000	00000000	*		
0012	00000	00000000	*		
0013	00000	00000000	*		
0014	00000	00000000		REL	
0015	02000	00002000		ORG	'2000
0016	02000	01102320	PTPR	LAA C1	SET START FLAG
0017	02001	03102462		STA FLG	
0018	02002	00000003		CLA	
0019	02003	03102463		STA ERRC	SET ERROR COUNT TO ZERO
0020	02004	03102464		STA CYCL	SET CYCLE COUNT TO ZERO
0021	02005	12102510		SPB DPHD	TYPE HEADING
0022	02006	35402325		DAC MSG1	
0023	02007	00000022		DATA 18	
0024	02010	00000031		LCS	CHECK CONTROL SWITCH 1
0025	02011	00001716		LSL 15	
0026	02012	00000024		SAP	
0027	02013	11102025		BRU **10	
0028	02014	00130101		CEU 1,w	ASR-33 KEYBOARD MODE
0029	02015	00002000		DATA '2000	
0030	02016	0010301		AIP 1,w	INPUT A CHARACTER
0031	02017	00001016		LSL 8	
0032	02020	0010101		AOP 1,w	
0033	02021	06102321		SMA C2	CHECK IF CHARACTER IS A CARRIAGE RETURN
0034	02022	00000022		SAZ	
0035	02023	11102016		BRU *-5	
0036	02024	12102542		SPB CR0	DO A CARRIAGE RETURN AND LINE FEED
0037	02025	00130102		CEU 2,w	TURN PUNCH POWER ON
0038	02026	00004000		DATA '4000	

0039	02027	12102500	SPB	LEAD		PUT LEADER ON TAPE
0040	02030	01102323	CMPW	LAA	C4	CONTINUOUS MODE PUNCH WITH WAIT FLAG
0041	02031	00170102	AOP	2, W		OUTPUT A BINARY PROGRESSION
0042	02032	05102323	AMA	C4		
0043	02033	00000022	SAZ			
0044	02034	11102031	BRU	CMPW+1		NO, CONTINUE
0045	02035	00170002	CMPN	AOP	2	CONTINUOUS MODE PUNCH WITH NO WAIT FLAG
0046	02036	11102035	BRU	*-1		OUTPUT A REVERSE BINARY PROGRESSION
0047	02037	06102323	SMA	C4		
0048	02040	00000022	SAZ			FINISHED+
0049	02041	11102035	BRU	CMPN		NO, CONTINUE
0050	02042	01102323	SSPW	LAA	C4	START/STOP MODE PUNCH WITH WAIT FLAG
0051	02043	00170102	AOP	2, W		OUTPUT A BINARY PROGRESSION
0052	02044	12102465	SPB	DLAY		DELAY .02 SECOND
0053	02045	05102323	AMA	C4		
0054	02046	00000022	SAZ			
0055	02047	11102043	BRU	SSPW+1		
0056	02050	00170002	SSPN	AOP	2	START/STOP MODE PUNCH WITH WAIT NO WAIT FLAG
0057	02051	11102050	BRU	*-1		OUTPUT A REVERSE BINARY PROGRESSION
0058	02052	12102465	SPB	DLAY		DELAY .02 SECOND
0059	02053	06102323	SMA	C4		
0060	02054	00000022	SAZ			FINISHED+
0061	02055	11102050	BRU	SSPN		NO, GO BACK AND CONTINUE
0062	02056	01102462	LAA	FLG		CHECK START FLAG
0063	02057	00000024	SAP			
0064	02060	11102062	BRU	*+2		
0065	02061	11102100	BRU	READ		
0066	02062	00130102	CEU	2, W		PUNCH POWER OFF
0067	02063	00002000	DATA	'2000		
0068	02064	00000003	CLA			
0069	02065	05102462	STA	FLG		RESET FLAG
0070	02066	12102510	SPB	DPHD		OUTPUT MESSAGE
0071	02067	55402347	DAC	MSG2		
0072	02070	00000012	DATA	10		
0073	02071	12102510	SPB	DPHD		OUTPUT MESSAGE
0074	02072	55402361	DAC	MSG3		
0075	02073	00000010	DATA	8		
0076	02074	00000000	HLT			HALT
0077	02075	00130102	CEU	2, W		PUNCH POWER ON

0078	02076	00004000		DATA '4000	
0079	02077	11102030	BRU	CMRW	PUNCH ANOTHER BLOCK
0080	02100	00130102	READ	CEU 2,W	READER ENABLE
0081	02101	00001000		DATA '1000	
0082	02102	00170302		AIP 2,W	READ AND IGNORE LEADER
0083	02103	00000022		SAZ	
0084	02104	11102106	BRU	*+2	
0085	02105	11102102	BRU	*-3	
0086	02106	02102322	CMRW	LBA C3	CONTINUOUS MODE READ WITH WAIT FLAG
0087	02107	04102461	STB	BINP	READ A BINARY PROGRESSION
0088	02110	15102461	CMA	BINP	CHECK FOR ERROR
0089	02111	11102113	BRU	*+2	
0090	02112	11102114	BRU	*+2	
0091	02113	12102262	SPB	ERR	
0092	02114	14102461	IMS	BINP	
0093	02115	00170302		AIP 2,W	
0094	02116	00000022		SAZ	CHECK FOR END OF PROGRESSION
0095	02117	11102110	BRU	CMRW+2	
0096	02120	01102461	LAA	BINP	MAKE SURE ZERO IS THE CORRECT READING
0097	02121	06102323	SMA	C4	
0098	02122	00000023		SAN	
0099	02123	11102126	BRU	CMRN	CORRECT, GO ON
0100	02124	00000003		CLA	
0101	02125	11102113	BRU	CMRW+5	NOT CORRECT, GO BACK
0102	02126	02102324	CMRN	LBA C5	CONTINUOUS MODE READ WITH NO WAIT FLAG
0103	02127	04102461	STB	BINP	
0104	02130	00170202		AIP 2	READ A REVERSE BINARY PROGRESSION
0105	02131	11102130	BRU	*-1	
0106	02132	15102461	CMA	BINP	CHECK CHARACTER FOR ERROR
0107	02133	11102135	BRU	*+2	
0108	02134	11102136	BRU	*+2	
0109	02135	12102262	SPB	ERR	
0110	02136	06102322	SMA	C3	
0111	02137	03102461	STA	BINP	
0112	02140	00000022		SAZ	FINISHED+
0113	02141	11102130	BRU	CMRN+2	NO, GO BACK AND CONTINUE
0114	02142	14102461	SSRW	IMS BINP	
0115	02143	00170302		AIP 2,W	INPUT CHARACTER
0116	02144	00000022		SAZ	LAST CHARACTER+

0117	02145	11102153	BRU	**6	
0118	02146	01102461	LAA	BINP	MAKE SURE ZERO IS CORRECT
0119	02147	06102323	SMA	C4	
0120	02150	00000023	SAN		
0121	02151	11102161	BRU	SSRN	
0122	02152	00000003	CLA		
0123	02153	12102465	SPB	DLAY	DELAY .02 SECOND
0124	02154	15102461	CMA	BINP	CHECK CHARACTER FOR ERROR
0125	02155	11102157	BRU	**2	
0126	02156	11102160	BRU	**2	
0127	02157	12102262	SPB	ERR	
0128	02160	11102142	BRU	SSRW	
0129	02161	02102324	SSRN	LBA C5	START/STOP MODE READ WITH NO WAIT FLAG
0130	02162	04102461	STB	BINP	READ A REVERSE BINARY PROGRESSION
0131	02163	00170202	AIP	2	INPUT A CHARACTER
0132	02164	11102163	BRU	*-1	
0133	02165	15102461	CMA	BINP	CHECK CHARACTER FOR ERROR
0134	02166	11102170	BRU	**2	
0135	02167	11102171	BRU	**2	
0136	02170	12102262	SPB	ERR	
0137	02171	12102465	SPB	DLAY	DELAY .02 SECOND
0138	02172	06102322	SMA	C3	
0139	02173	03102461	STA	BINP	
0140	02174	00000022	SAZ		
0141	02175	11102163	BRU	SSRN+2	
0142	02176	00130102	CEU	2,W	READER ENABLE
0143	02177	00001000	DATA	'1000	
0144	02200	14102461	SPR	IMS BINP	SIMULTANEOUS PUNCH AND READ
0145	02201	00170302	AIP	2,W	INPUT A CHARACTER
0146	02202	00000022	SAZ		
0147	02203	11102211	BRU	**6	
0148	02204	01102461	LAA	BINP	MAKE SURE ZERO IS CORRECT
0149	02205	06102323	SMA	C4	
0150	02206	00000023	SAN		
0151	02207	11102216	BRU	**7	
0152	02210	00000003	CLA		
0153	02211	15102461	CMA	BINP	CHECK CHARACTER FOR ERROR
0154	02212	11102214	BRU	**2	
0155	02213	11102215	BRU	**2	

0156	02214	12102262	SPB	ERR	
0157	02215	00001016	LSL	8	
0158	02216	00170102	AOP	2,W	ØUTPUT CHARACTER
0159	02217	00000022	SAZ		
0160	02220	11102200	BRU	SPR	
0161	02221	01102324	LAA	C5	REINITIALIZE BINARY PRØGRESSION
0162	02222	03102461	STA	BINP	
0163	02223	00170302	RP AIP	2,W	INPUT A CHARACTER
0164	02224	13102461	CMA	BINP	CHECK FØR ERRØR
0165	02225	11102227	BRU	**2	
0166	02226	11102230	BRU	**2	
0167	02227	12102262	SPB	ERR	
0168	02230	00001016	LSL	8	
0169	02231	00170102	AOP	2,W	ØUTPUT CHARACTER
0170	02232	00001015	RSL	8	
0171	02233	06102322	SMA	C3	
0172	02234	03102461	STA	BINP	UPDATE BINARY PRØG
0173	02235	00000022	SAZ		
0174	02236	11102223	BRU	RP	
0175	02237	14102464	IMS	CYCL	INCREMENT CYCLE CØUNT
0176	02240	00130400	SNS	0	CHECK SWITCH ZERO FØR TERMINATION CØNDITION
0177	02241	11102243	BRU	**2	
0178	02242	11102030	BRU	CMPW	KEEP GØING
0179	02243	12102500	SPB	LØAD	
0180	02244	00130102	CEU	2,W	
0181	02245	00002000	DATA	'2000	
0182	02246	12102510	SPB	DPHD	
0183	02247	33402423	DAC	MSG7	
0184	02250	00000017	DATA	15	
0185	02251	12102563	SPB	CYØT	
0186	02252	33402464	DAC	CYCL	
0187	02253	12102510	SPB	DPHD	
0188	02254	33402442	DAC	MSG8	
0189	02255	00000016	DATA	14	
0190	02256	12102563	SPB	CYØT	
0191	02257	33402463	DAC	ERRC	
0192	02250	00000000	HLT		
0193	02261	11102000	BRU	PTPR	
0194	02262	00000000	ERR ZZZ	**	ERRØR SUBRØUTINE

0195	02263	14102463	IMS	ERRC	INCREMENT ERROR COUNT
0196	02264	00130401	SNS	1	IGNORE ERRORS
0197	02265	11102311	BRU	ER2	
0198	02266	00130102	CEU	2,w	DISABLE READER
0199	02267	00000400	DATA	'400	
0200	02270	03102460	STA	ERT1	SAVE A ACC.
0201	02271	12102510	SPB	DPHD	OUTPUT MESSAGE
0202	02272	35402371	DAC	MSG4	
0203	02273	00000014	DATA	12	
0204	02274	12102510	SPB	DPHD	OUTPUT MESSAGE
0205	02275	35402405	DAC	MSG5	
0206	02276	00000011	DATA	9	
0207	02277	12102563	SPB	CY0T	OUTPUT DATA
0208	02300	35402461	DAC	BINP	
0209	02301	12102510	SPB	DPHD	OUTPUT MESSAGE
0210	02302	35402416	DAC	MSG6	
0211	02303	00000005	DATA	5	
0212	02304	12102563	SPB	CY0T	OUTPUT DATA
0213	02305	35402460	DAC	ERT1	
0214	02306	00000000	HLT		
0215	02307	00130102	CEU	2,w	
0216	02310	00001000	DATA	'1000	
0217	02311	01102461	ER2	LAA	BINP
0218	02312	00130402	SNS	2	
0219	02313	11102315	BRU	*+2	
0220	02314	11302262	BRU*	ERR	CONTINUE
0221	02315	01102320	LAA	C1	RESTART
0222	02316	03102462	STA	FLG	
0223	02317	11102027	BRU	CMPW-1	
0224	02320	00100000	C1	DATA	'100000
0225	02321	00106400	C2	DATA	'106400
0226	02322	00000001	C3	DATA	1
0227	02323	00000400	C4	DATA	'400
0228	02324	00000377	C5	DATA	'377
0229	02325	00150301	MSG1	DATA	'PAPER TAPE PUNCH/READER TEST DATE ''
0229	02326	00150305			
0229	02327	00151240			
0229	02330	00152301			
0229	02331	00150305			

0229 02332 00120320
0229 02333 00152716
0229 02334 00141710
0229 02335 00127722
0229 02336 00142701
0229 02337 00142305
0229 02340 00151240
0229 02341 00152305
0229 02342 00151724
0229 02343 00120240
0229 02344 00142301
0229 02345 00152305
0229 02346 00120240
0230 02347 00150325 MSG2 DATA ''PUT TAPE INTO READER''
0230 02350 00152240
0230 02351 00152301
0230 02352 00150305
0230 02353 00120311
0230 02354 00147324
0230 02355 00147640
0230 02356 00151305
0230 02357 00140704
0230 02360 00142722
0231 02361 00152310 MSG3 DATA ''THEN PRESS START''
0231 02362 00142716
0231 02363 00120320
0231 02364 00151305
0231 02365 00151723
0231 02366 00120323
0231 02367 00152301
0231 02370 00151324
0232 02371 00142722 MSG4 DATA ''ERROR CONDITION DETECTED''
0232 02372 00151317
0232 02373 00151240
0232 02374 00141717
0232 02375 00147304
0232 02376 00144724
0232 02377 00144717
0232 02400 00147240

0232 02401 00142305
0232 02402 00152305
0232 02403 00141724
0232 02404 00142704
0233 02405 00151710 MSG5 DATA ''SHOULD HAVE READ ''
0233 02406 00147725
0233 02407 00146304
0233 02410 00120310
0233 02411 00140726
0233 02412 00142640
0233 02413 00151305
0233 02414 00140704
0233 02415 00120240
0234 02416 00142311 MSG6 DATA ''DID READ ''
0234 02417 00142240
0234 02420 00151305
0234 02421 00140704
0234 02422 00120240
0235 02423 00147325 MSG7 DATA ''NUMBER OF CYCLES COMPLETED ''
0235 02424 00146702
0235 02425 00142722
0235 02426 00120317
0235 02427 00143240
0235 02430 00141731
0235 02431 00141714
0235 02432 00142723
0235 02433 00120303
0235 02434 00147715
0235 02435 00150314
0235 02436 00142724
0235 02437 00142704
0235 02440 00120240
0235 02441 00120240
0236 02442 00147325 MSG8 DATA ''NUMBER OF ERRORS DETECTED ''
0236 02443 00146702
0236 02444 00142722
0236 02445 00120317
0236 02446 00143240
0236 02447 00142722

0236	02450	00151317			
0236	02451	00151323			
0236	02452	00120304			
0236	02453	00142724			
0236	02454	00142703			
0236	02455	00152305			
0236	02456	00142240			
0236	02457	00120240			
0237	02460	00000000	ERT1	ZZZ	**
0238	02461	00000000	BINP	ZZZ	**
0239	02462	00000000	FLG	ZZZ	**
0240	02463	00000000	ERRC	ZZZ	**
0241	02464	00000000	CYCL	ZZZ	**
0242	02465	00000000	*		
0243	02465	00000000	*		.02 SECOND DELAY SUBROUTINE
0244	02465	00000000	DLAY	ZZZ	**
0245	02466	03102476	STA	DSVA	
0246	02467	01102477	LAA	DMO	
0247	02470	03102475	STA	DCN	
0248	02471	14102475	IMS	DCN	
0249	02472	11102471	BRU	*-1	
0250	02473	01102476	LAA	DSVA	
0251	02474	11302465	BRU*	DLAY	
0252	02475	00000000	DCN	ZZZ	**
0253	02476	00000000	DSVA	ZZZ	**
0254	02477	00172327	DMO	DATA	-2857
0255	02500	00000000	*		
0256	02500	00000000	*		10 INCH LEADER SUBROUTINE FOR BRPE
0257	02500	00000000	LEAD	ZZZ	**
0258	02501	00000003	CLA		
0259	02502	02102507	LBA	M100	
0260	02503	00170102	AOP	2,w	
0261	02504	00000026	IBS		
0262	02505	11102503	BRU	*-2	
0263	02506	11302500	BRU*	LEAD	
0264	02507	00177634	M100	DATA	-100
0265	02510	00000000	DPHD	ZZZ	**
0266	02511	03102540	STA	DP5A	
0267	02512	04102541	STB	DSVB	

0268	02513	02302510	LBA*	DPHD	
0269	02514	14102510	IMS	DPHD	
0270	02515	01302510	LAA*	DPHD	
0271	02516	00000002	NEG		
0272	02517	03102531	STA	DNCT	SET UP NEGATIVE WORD COUNT
0273	02520	14102510	IMS	DPHD	
0274	02521	00000031	LCS		
0275	02522	00001716	LSL	15	
0276	02523	00000024	SAP		
0277	02524	11102535	BRU	**9	
0278	02525	12102542	SPB	CR0	
0279	02526	01400000	LAA	0,1	
0280	02527	12102556	SPB	TC0	OUTPUT TWO CHARACTERS
0281	02530	00000026	IBS		
0282	02531	00000000	DNCT	ZZZ	**
0283	02532	14102531	IMS	DNCT	
0284	02533	11102526	BRU	**5	
0285	02534	12102542	SPB	CR0	
0286	02535	01102540	LAA	DPSA	
0287	02536	02102541	LBA	DSVB	
0288	02537	11302510	BRU*	DPHD	
0289	02540	00000000	DPSA	ZZZ	**
0290	02541	00000000	DSVB	ZZZ	**
0291	02542	00000000	CR0	ZZZ	** CARRIAGE RETURN AND LINE FEED
0292	02543	03102554	STA	CRSA	SAVE A ACCUMULATOR
0293	02544	00000031	LCS		
0294	02545	00001716	LSL	15	
0295	02546	00000024	SAP		
0296	02547	11102552	BRU	**3	
0297	02550	01102555	LAA	C20	
0298	02551	12102556	SPB	TC0	OUTPUT TWO CHARACTERS
0299	02552	01102554	LAA	CRSA	RESTORE A ACC
0300	02553	11302542	BRU*	CR0	RETURN
0301	02554	00000000	CRSA	ZZZ	**
0302	02555	00106612	C20	DATA	'106612
0303	02556	00000000	*		
0304	02556	00000000	*		
0305	02556	00000000	TC0	ZZZ	** TWO CHARACTERS OUT
0306	02557	00170101	DATA	'170101	

0307	02560	00001016	LSL	8	
0308	02561	00170101	DATA	'170101	
0309	02562	11302556	BRU*	TC0	RETURN
0310	02563	00000000	*		
0311	02563	00000000	*		
0312	02563	00000000	CY0T	ZZZ	** TYPE NUMBER OF CYCLES (3 OCTAL DIGITS)
0313	02564	03102616	STA	CSVA	SAVE ACCUMULATORS
0314	02565	04102617	STB	CSV8	
0315	02566	02302563	LBA*	CY0T	PICK UP CALLING SEQUENCE
0316	02567	04102615	STB	CADD	
0317	02570	02302615	LBA*	CADD	
0318	02571	14102563	IMS	CY0T	
0319	02572	00000031	LCS		
0320	02573	00001716	LSL	15	
0321	02574	00000024	SAP		
0322	02575	11102611	BRU	**+12	
0323	02576	12102542	SPB	CR0	CR AND LF
0324	02577	00000713	FLL	7	
0325	02600	00000003	CLA		
0326	02601	00000313	FLL	3	
0327	02602	00000516	LSL	5	
0328	02603	00000313	FLL	3	
0329	02604	05102614	AMA	C10	
0330	02605	12102556	SPB	TC0	OUTPUT FIRST TWO CHARACTERS
0331	02606	00001313	FLL	11	
0332	02607	05102614	AMA	C10	
0333	02610	00170101	DATA	'170101	
0334	02611	01102616	LAA	CSVA	
0335	02612	02102617	LBA	CSV8	
0336	02613	11302563	BRU*	CY0T	
0337	02614	00130260	C10	DATA	'130260
0338	02615	00000000	CADD	ZZZ	**
0339	02616	00000000	CSVA	ZZZ	**
0340	02617	00000000	CSV8	ZZZ	**
0341	02620	70400000	END		
	PTPR	02000			
	CMPW	02030			
	CMPN	02035			
	SSPW	02042			

SSPN	02050
READ	02100
CMRW	02106
CMRN	02126
SSRW	02142
SSRN	02161
SPR	02200
RP	02223
ERR	02262
ER2	02311
C1	02320
C2	02321
C3	02322
C4	02323
C5	02324
MSG1	02325
MSG2	02347
MSG3	02361
MSG4	02371
MSG5	02405
MSG6	02416
MSG7	02423
MSG8	02442
ERT1	02460
BINP	02461
FLG	02462
ERRC	02463
CYCL	02464
DLAY	02465
DCN	02475
DSVA	02476
DMD	02477
LEAD	02500
M100	02507
DPHD	02510
DNCT	02531
DPSA	02540
DSVB	02541
CRJ	02542

CRSA	02554
C20	02555
TCØ	02556
CYØT	02563
C10	02614
CADD	02615
CSVA	02616
CSVB	02617

ASAV	0406							
BSAV	0387	0189	0196	0209	0214	0354	0362	
BZF	0408	0346						
BRLF	0389							
CR	0385	0078						
DELE	0405	0230						
D	0370							
END	0371							
E	0388							
FILL	0306							
FIX	0344	0232						
FL10	0320	0311	0314					
IA	0200	0206	0207					
IA04	0202							
IA10	0208							
IB	0429	0174						
ICH	0389							
IH	0420	0178	0224					
IK	0166	0075	0087	0181	0184			
IK10	0176							
IK20	0178							
IK25	0179	0175	0177					
IK30	0187							
IS	0218	0229						
IS10	0226							
IS11	0227							
IT	0411	0176	0226					
I	0396	0074	0092	0127				
J	0397	0010	0084	0089	0093	0210	0212	0213
KBIG	0376	0134						
MM1	0375	0182						
MM10	0381	0266	0345					
MM4	0380							
OO	0373	0227						
OO1	0374	0012						
OO257	0377	0205						
OO260	0378							
OO272	0379	0204						

UP31	0055		
UP33	0050		
UP34	0073		
UP36	0077		
UP38	0094	0091	
UP39	0099		
UP42	0113		
UP44	0125		
UP46	0131		
UP48	0136	0133	0349
UP50	0137		
UP54	0146		
UP58	0152		
UP62	0163		
X0FF	0386	0233	
X	0393		
Y	0372		