April 24, 1962

MEMORANDUM TO: Users of 1401 Autocoder System

SUBJECT: 1401 Autocoder System, Program #1401-AU-037, Version 3, Modification Level 2

This modification letter has been prepared for distribution to all users of the 1401 Autocoder System and contains changes to Version 3, Modification Level 1 of that system. These change cards, enclosed, listed and identified below (Attachment #1) are to be inserted in the system deck as follows:

Card Number (Cols. 72-75)	Place between cards in system deck
C005	0067-0068
C006, C007	0294-0295
C008	0350-0351
C009, C010	0381-0382
C011 to C030	C001-0454
C031, C032	C002-0499
C033	0523-0524
C037	0968-0969

Card C005 places a WORDMARK after the R 056 instruction in the OVLAY macro.

Card C006 interchanges the 006 and 046 DIOCS parameters.

Cards C007, C009, C032, and C033 initialize error halts in the general Tape Read/Write Routine.

Cards C008 and C011 initialize the halts in Pass 2 to correspond to the Autocoder (Version 3) manual.

Cards C010 and C012 through C030 correct the discrepancy in which a CALL Statement within a CALL or INCLD statement was not handled properly by Autocoder.

Card C031 defines the condition in which a CODE 1 in column 26 of the control card indicates the presence of the READ-PUNCH RELEASE FEATURE.

Card C037 corrects the error condition resulting from a unique use of an ORIGIN with a blank operand.

We appreciate your cooperation in making these changes. A list of the material distributed with this letter follows:

Item No.	Contents
1	33 cards (designated as C005, C006, C007, etc.)
2	Attachment #1 - listing of change cards
3	Attachment #2 - symbolic changes to Autocoder listing

Initial requests for this system which are filled after the date of this letter will not include the cards itemized above, as there cards are included in the system deck as corrections. However, the Autocoder listing does not include these corrections and should be corrected by the user by referring to attachment #2. Any discrepancy between the material received and the above list, as well as any errors in card reproduction should be directed to the attention of the Manager of the Program Information Department, IBM, 112 East Post Road, White Plains, New York.

Continued reporting of any difficulties encountered in using 1401 Autocoder will be appreciated.

GP Applied Programming

:np

Attachments

cc: Branch Offices
(No attachments sent with carbons)

Attachment #1 - Listing of Change Cards

1401 Autocoder System, Program #1401-AU-037, Version 3,
Modification Level 2

```
               DCW  #1                                            C0053712L
006STO046                              L009E49,E47040,040040,0400401040C0063721L
U07                                    L003P23,040040,040040,0400401040C0073721L
DT01U27                                L007S86,040040,040040,0400401040C0083722L
U07                                    L003423,040040,040040,0400401040C0093725L
BT08/BO33BH50                          L013453,446450,040040,0400401040C0103725L
DX29Y54                                L007X14,040040,040040,0400401040C0113726L
BM05BL01020DL011466                    L019K42,K28K36,040040,0400401040C0123726L
LH460?0                                L007L15,040040,040040,0400401040C0133726L
)024BO33/086BL010?0 MH69018M099094BG46 L038L89,L56L60,L64L72,L79L861040C0143726L
M0?00S1Q099BL45BO33,006BK2852          L029M18,L97M01,M05M09,M13M171040C0153726L
C0S1H47BN09SAI07089C089M18BM23/C072H47 L038M80,M50M55,M62M69,M740401040C0163726L
AI07089B000?I11090                     L018N19,N09N13,040040,0400401040C0173726L
SI08090BN20HO21BN54AI07089C089M18      L033N60,N35N39,N43N47,N540401040C0183726L
MH89075BO33AI07W01                     L018P17,P07P11,040040,0400401040C0193726L
AH90095                                L007P47,040040,040040,0400401040C0203726L
AH90095                                L007P85,040040,040040,0400401040C0213726L
LQ650?0                                L007Q31,040040,040040,0400401040C0223726L
SI08090                                L007?47,040040,040040,0400401040C0233726L
C089I10BA26TC0S1H47                    L019?93,?82?87,040040,0400401040C0243726L
SI08090                                L007A54,040040,040040,0400401040C0253726L
AI07089                                L007G75,040040,040040,0400401040C0263726L
MH89075                                L007H17,040040,040040,0400401040C0273726L
U%U5BBW50NV89B454DCW                   L020H69,H55H59,H63H67,0400401040C0283726L
R3                                     L002H90,H90040,040040,0400401040C0293726L
510                                    L003I11,040040,040040,0400401040C0303726L
B1321891N132                           L012117,114040,040040,0400401040C0313727L
Y34                                    L003V89,040040,040040,0400401040C0323727L
Y34                                    L003922,040040,040040,0400401040C0333728L
0033B                                  L005Y58,040040,040040,0400401040C0373752L
```

Attachment #2 - Symbolic Changes

1401 Autocoder System, Program 1401-AU-037, Version 3,
Modification Level 2

Action	Pass/ Page#	Seq.	Pg.	Lin.	Label	Op	Operands	Sfx	Ct	Loc	Instruction
Change	2/19	960	9	34		DCW	@006@	I	3	3543	
	2/19	962	9	36		DCW	@046@	I	3	3549	
Change	2/14	751	7	27	TDF1	DCW	&ICHALT	I	3	2723	U07
Change	2/7	430	4	19		MN	ITAPEC&7,IHALT&5	I	7	1280	D T01 U27
Change	2/26	1210	11	88	TDFSYS	DCW	&ICHALT	I	3	0423	U07
	2/26	1219	11	99		BU	SUREXX	X	5	0441	B T08 /
	2/26	1220	12	00		B	SBROTX	X	4	0446	B O33
	2/26	1221	12	01		B	BKSP5	X	4	0450	B H50
	2/26	1222	12	02	REWIND	RWD	5	X	5	0454	U %U5 R
Change	2/39	1738	17	14		MN	CTAPEC&7,CHALT&5	X	7	1708	D X29 Y54
	2/41	1836	18	10		C	0&X2,BLNK3	X	7	2177	C 0!0 H48
	2/41	1845	18	19		B	STWMK	X	4	2224	B M05
	2/41	1850	18	24		LCA	MAINX&10,PARTB	X	7	2236	L 011 466
	2/42	1867	18	41	HEARTX	LCA	BLNK3-2,0&X3	X	7	2309	L H46 0?0
Delete	2/42	1874 through 1875 (pg/lin 18/48 - 18/49)									
Change	2/42	1876	18	50		CW	MAINX&23	X	4	2352	) 024
	2/42	1877	18	51		B	SBROT	X	4	2356	B O33
	2/42	1878	18	52		CS	LMAINX	X	4	2360	/ 086
	2/42	1879	18	53		BCE	SWITCH,0&X3,	X	8	2364	B L01 0?0
	2/42	1880	18	54		MCW	DCW,MAINX&17	X	7	2372	M H56 018
	2/42	1881	18	55		MCW	INDEX3,INDEX2	X	7	2379	M 099 094
	2/42	1882	18	56		B	SBGRDX	X	4	2386	B G46
	2/42	1883	18	57		MCW	0&X3,MAINX&20&X1	X	7	2390	M 0?0 0S1
	2/42	1884	18	58		SAR	INDEX3	X	4	2397	Q 099
	2/42	1885	18	59		B	SLAM	X	4	2401	B L45
Add	2/42	1885	18	591	STWMK	B	SBROTX	X	4	2405	B O33
	2/42	1885	18	592		SW	6	X	4	2409	, 006
	2/42	1885	18	593		B	NOCALX&8	X	4	2413	B K28

Attachment #2 - Symbolic Changes

1401 Autocoder System, Program 1401-AU-037, Version 3,
Modification Level 2

Action	Pass/ Page#	Seq.	Pg.	Lin.	Label	Op	Operands	Sfx	Ct	Loc	Instruction
	2/42	1885	18	594	K52	DCW	@52@	X	2	2418	
Change	2/42	1893	18	67		C	MAINX&20&X1,BLNK3-1	X	7	2443	C 0S1 H47
	2/42	1895	18	69	CXIT1	A	K10-1,INDEX1	X	7	2455	A I07 089
	2/42	1896	18	70		C	INDEX1,K52	X	7	2462	C 089 M18
	2/42	1898	18	72		C	MAINX&71,BLNK3-1	X	7	2474	C 072 H47
	2/42	1903	18	77	CXIT	A	K10-1,INDEX1	X	7	2502	A I07 089
	2/42	1905	18	79	SCNAT	ZA	K510,INDEX1&1	X	7	2513	? I11 090
	2/42	1907	18	81		S	K10,INDEX1&1	X	7	2528	S I08 090
	2/43	1914	18	88	WEDDBX	A	K10-1,INDEX1	X	7	2547	A I07 089
	2/43	1915	18	89	NEWEED	C	INDEX1,K52	X	7	2554	C 089 M18
	2/43	1948	19	22	MSUBTX	MCW	R,MAINX&74	X	7	2700	M H89 075
	2/43	1950	19	24		A	K10-1,SYMNM	X	7	2711	A I07 W01
	2/43	1963	19	29		A	K3,INDEX2&1	X	7	2741	A H90 095
	2/44	1969	19	35	COMSN	A	K3,INDEX2&1	X	7	2779	A H90 095
	2/44	1976	19	42	BTREND	LCA	RDTP1,0&X3	X	7	2825	L Q65 0?0
	2/45	2020	19	86	DEFND	S	K10,INDEX1+1	X	7	3041	S I08 090
	2/45	2026	19	92		C	INDEX1,K510-1	X	7	3075	C 089 I10
	2/45	2028	19	94		C	MAINXX&20&X1,BLNK3-1	X	7	3087	C 0S1 H47 ? MAINX ?
	2/45	2041	20	07	UPENGL	S	K10,INDEX1+1	X	7	3148	S I08 090
	2/47	2141	21	07		C	0&X1,BLNK3	X	7	3671	C 0’0 H48
	2/47	2162	21	28		S	K10,INDEX2&1	X	7	3762	S I08 095
	2/47	2163	21	29		A	K10-1,INDEX1	X	7	3769	A I07 089
	2/48	2172	21	38	CHAINX	MCW	R,MAINX&74	X	7	3811	M H89 075
	2/48	2178	21	440	BLNK3	DCW	@ @	X	3	3848	
Delete literals in locations 3850 through 3869, p. 48											
Add	2/48	2178	21	441	BKSP5	BSP	5	X	5	3850	U %U5 B
	2/48	2178	21	442		B	CTAPEX	X	4	3855	B W50

Attachment #2 - Symbolic Changes

1401 Autocoder System, Program 1401-AU-037, Version 3,
Modification Level 2

Action	Pass/ Page#	Seq.	Pg.	Lin.	Label	Op	Operands	Sfx	Ct	Loc	Instruction
	2/48	2178	21	443		NOP	TDF5	X	4	3859	N V89
	2/48	2178	21	444		B	REWIND	X	4	3863	B 454
	2/48	2178	21	445	DCW	DCW	@DCW@	X	3	3869	
Delete	2/48	Literals in locations 3889 to 3890, 3907 to 3908									
Add	2/48	2178	21	446	R	DCW	@R@	X	1	3889	
	2/48	2178	21	447	K3	DCW	@3@	X	1	3890	
	2/48	2178	21	448	K10	DCW	@10@	X	2	3908	
	2/48	2178	21	449	K510	DCW	@510@	X	3	3911	
Change	2/32	1458	14	371		BCE	RED,CARDSX,1	A	8	0106	B 132 189 1
	2/32	1459	14	372		NOP	RED	A	4	0114	N 132
	2/37	1712	16	88	TDF5	DCW	&CCHALT	X	3	1589	Y34
	2/30	1404	13	84	TDFRAL	DCW	&CCHALT	X	3	0922	Y34
Change	5/16	798	7	68	HGHCTR	DCW	&00332		5	1858	