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PROGRAM LIBRARY

DECUS NO.	8-197
TITLE	Overlay for Standard Editor and PAL III Assembler
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SOURCE LANGUAGE	PAL III

/THE FOLLOWING OVERLAY AND SUBROUTINES
 /ALLOWS PAL III TO READ IN FROM THE EDITOR
 /INSTEAD OF PAPER TAPE FOR EACH PASS.
 /

/OPERATION IS AS FOLLOWS:
 /DEPOSIT IN LOCATION 0 FIELD 0 THE EDITOR
 /BIT 0 & 1 SWITCH OPTION DESIRED.
 /LOAD ADDRESS 7777, PRESS START.
 /AT THIS TIME THE EDITOR IS PLACED IN
 /COMMAND MODE. THE BUFFER IS NOT CLEARED,
 /USE K RETURN IF A CLEAR BUFFER IS DESIRED.
 /ONLY THE HIGH SPEED P PUNCH COMMAND
 /OPERATION IS CHANGED. AFTER NORMAL
 /EDIT OPERATION AND PAL III IS DESIRED,
 /SET SWITCH REGISTER BIT 10 TO 1,
 /SET THE PAL III PASS SWITCH REGISTER
 /OPTION AND TYPE P RETURN. AFTER HALT IF
 /PUNCH DESIRED TURN ON AND PRESS CONTINUE.
 /AFTER DESIRED PAL III PASS, CONTROL IS
 /RETURNED TO THE EDITOR IN COMMAND MODE.
 /IF NO EDITING IS REQUIRED SELECT NEXT
 /PAL III PASS SWITCH OPTION AND REPEAT
 /THE P RETURN COMMAND.
 /UPON COMPLETION OF PASS 3 RETURN SWITCH
 /REGISTER BIT 10 TO A 0 FOR LOW SPEED
 /PUNCH OUTPUT.
 /

/LOADING INSTRUCTIONS - DEPOSIT RIM LOADER
 /INTO FIELD 1. LOAD DEC-08-LBAA-PM BINARY
 /LOADER INTO FIELD 1. LOAD DEC-08-ASBI-PB
 /2/24/67 PAL III BINARY TAPE INTO FIELD 1.
 /LOAD DEC-08-ESAB-PB 8/4/67 PDP-8 EDITOR,
 /HIGH AND LOW SPEED COMBINED INTO FIELD 0.
 /LOAD THE FOLLOWING OVERLAY OF BOTH FIELDS.
 /

/ EDITOR MODIFICATIONS

FIELD 0

*0

0000	0000	0	/LOCATION NOW USED FOR EDITOR READ /AND OUTPUT FORMAT OPTIONS, WERE
0001	7730	7730	/SWITCH REGISTER BITS 0 & 1. /UPPER BUFFER LIMIT

*1154

1154	5755	JMP	I PALIII
1155	7746	PALIII,	CKPAL

*1104

1104	1000	TAD	0	/OUTPUT FORMAT OPTION
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*1445

1445 1333 IAD 0 /READ IN FORMAT OPTION CHECK.

*7746

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7746 3371 CKPAL, DCA ASCII /SAVE CHARACTER
7747 1376 IAD STARTF
7750 7650 SNA CLA /HAS PAL BEEN STARTED?
7751 5355 JMP SETPAL /NO
7752 1371 PALOUT, IAD ASCII
7753 6213 CIF CDF 10 /CHANGE TO FIELD 1
7754 5774 JMP I PAL
7755 2376 SETPAL, ISZ STARTF /SET PAL-STARTED FLAG
7756 6213 CIF CDF 10 /CHANGE TO FIELD 1
7757 5775 JMP I START
7760 1372 CHAR, IAD CIFLAG
7761 7640 SZA CLA /FIRST CHARACTER RECIEVED?
7762 5773 JMP I EDITR /YES, GET NEXT CHARACTER
7763 2372 ISZ CIFLAG
7764 5352 JMP PALOUT
7765 7300 CLEAR, CLL CLA
7766 3372 DCA CIFLAG
7767 3376 DCA STARTF
7770 5177 JMP 177
7771 0000 ASCII, 0
7772 0000 CIFLAG, 0
7773 1157 EDITR, 1157
7774 1404 PAL, 1404
7775 0200 START, 200
7776 0000 STARTF, 0
7777 5365 ENTER, JMP CLEAR

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/NOTE: THE FOLLOWING LOCATIONS IN THE EDITOR
 /CONTAIN OSR INSTRUCTIONS. *1062 - BIT 2,
 /TERMINATE OUTPUT AND RETURN TO CONTROL MODE.
 /*1240 - BIT 10, HIGH OR LOW SPEED PUNCH.
 /*1253 - BIT 11, HIGH OR LOW SPEED READER.

/PAL III MODIFICATIONS

FIELD 1

*241

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0241 5642 JMP I PASS /PASS COMPLETE.
0242 7600 PASS, PASSD

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*1401

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1401 6203 CIF CDF 00 /CHANGE TO FIELD 0
1402 5603 JMP I EDIT
1403 7760 EDIT, CHAR

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*7600

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7600 6203 PASSD, CIF CDF 00 /CHANGE TO FIELD 0
7601 5602 JMP I PCLEAR
7602 7765 PCLEAR, CLEAR

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ASCII	7771
CHAR	7763
CKPAL	7746
CLEAR	7765
CI FLAG	7772
EDIT	1423
EDITR	7773
ENTER	7777
PAL	7774
PALIII	1155
PALOUT	7752
PASS	3242
PASSD	7603
PCLEAR	7602
SETPAL	7755
START	7775
STARTF	7776