*LOAD

ABSOLUTE LOAD ROUTINE

1.0 C O N T E N T S

This document is **preliminary** in nature and is intended as a vehicle for meeting immediate needs with regard to system familiarization and orientation. UNIVAC® Division of Sperry Rand Corporation reserves the right to change and/or modify such information contained herein as may be required by subsequent system developments.

2.0 I N T R O D U C T I O N

2.1 DESCRIPTION

*LOAD is a procedure that will produce a two card load routine which will load absolute programs. (Only 80 column cards can be used with *LOAD.)

2.2 FORMAT

To generate a two card loader use the following reference line:

LABEL	OP'N	OPERANDS
	*LOAD	e_1,e_2,e_3,e_4

When loading a card program, only parameter e_1 is used; when loading a tape program parameters e_1 and e_2 are used, and e_3 and e_4 are optional.

e_1 is the address where the second card of the loader will be read into storage. When loading a program from cards, e_1 must be an address that is a multiple of 64.

e_2 is blank for card loader and TAPE for a tape loader.

e_3 If e_2 = TAPE,this expression determines the rewind option after loading the program.

blank = no rewind
R = rewind
RL = rewind with lock

e_4 is blank or PRELD.

If PRELD, two extra segments will be generated that will enable the program to use the Executive Routine to locate a program on tape, then proceed to overlay the Executive. This option can only be used for absolute programs that control all input/output devices without the aid of the Executive.

If blank, the two extra segments will not be generated.

3.0 OPERATING PROCEDURES

3.1 NORMAL PROCEDURES

Example of how to generate loader:

LABEL	OP'N	OPERANDS
	BEGIN	0400
	*LOAD	e_1,e_2,e_3
	END	$

The output from this assembly will produce four cards: an R card, two load cards and a T card. The load cards are in order following the R card (load 1 and load 2). The R and T cards may be thrown away.

If the *LOAD call is not assembled as a separate program, the following procedure may be followed:

LABEL	OP'N	OPERANDS	COMMENTS
	BEGIN	n	
	main program		
	SEGJP	START	Go to start of program
	*LOAD	e_1,e_2,e_3	
	END	$	

The last four cards of the output from this assembly will be an S card, two load cards, and a T card. The S and T cards may be thrown away. The two load cards must be placed in front of the R card.

If the *LOAD call is assembled using the PRELD option, the following procedure must be used:

LABEL	OP'N	OPERANDS	COMMENTS
RX00	BEGIN	n	
	*LOAD	e_1,e_2,e_3,PRELD	
	main program		
	END	p_1	Go to start of program

The *LOAD call must immediately follow the BEGIN card. The segment that is located to load this program is the four character ID appearing in the label field of the BEGIN card +1, e.g., in this case, RX01. The fourth character of the ID must be numeric. The load procedure is identical to the load of any program being loaded under control of the Executive Routine.

The load operating procedure is as follows:

Depress the CLEAR button.
Depress the CARD LOAD button.
Depress the PROGRAM START button.
Depress the CONT button.
Depress the PROGRAM START button - loading will commence.

3.2 PROGRAM LOAD ERROR PROCEDURES

DISPLAY	DESCRIPTION	RECOVERY PROCEDURE
30 070104 60	The last card or block read contains an incorrect check sum or was read incorrectly.	If the card or block is known to contain an incorrect check sum, depress the PROGRAM START button and loading will continue. If not, reload the last card read and depress the PROGRAM START button. If the loader is a tape loader, restart.
30 070105 60	Card count error. The number of cards or blocks loaded does not agree with the card count contained in the T card.	If the card count is known to be in error the program may be executed by depressing the PROGRAM START button.
30 000000 20	Tape, reader or parity error.	Restart.