

RECOMP II USERS' PROGRAM NO. 1097

PROGRAM TITLE: LAOS (Luebbert Alphanumeric Output Subroutine)

PROGRAM CLASSIFICATION: Subroutine

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PURPOSE: To type out any amount of alphanumeric data stored in the computer memory in the 8 character per word format produced by the TYA instruction (+72 776X0), the sail subroutine or the URAL Utility Routine.

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1. PURPOSE:

- 1.1 To type out any amount of alphanumeric data stored in the computer memory in the 8 character per word format produced by the TYA instruction (+72 776X0), the sail subroutine or the URAL Utility Routine.

2. RESTRICTIONS:

- 2.1 Each word to be output must be packed in the manner specified below:

1st	2nd	3rd	4th	5th	6th	7th	8th
Char	Char	Char	Char	Char	Char	Char	Char
S	b						l
							9

Each character must be one five-bit byte in Baudot (teletypewriter) code. Words are typed in sequence from L(S), the starting location, to L(F) the final location as specified in the calling sequence.

- 2.2 Since data prepared by the AN-049 subroutine included in PPP-2 packs only 6 characters per word in a different format this routine cannot be used to output such data. The calling sequence is however identical.

3. METHOD: (See flow chart Paragraph 5)

4. USAGE:

4.1 Calling Sequence:

α	SLR	
	TRA LAOS	
$\alpha+1$	PZE L(S)	Location of first packed word
	PZE L(F)	Location of last packed word
$\alpha+2$	Normal Return	

- 4.2 Error Returns: None.

- 4.3 Extent of Storage: 21₈ words.

- 4.4 Unused Locations: None.

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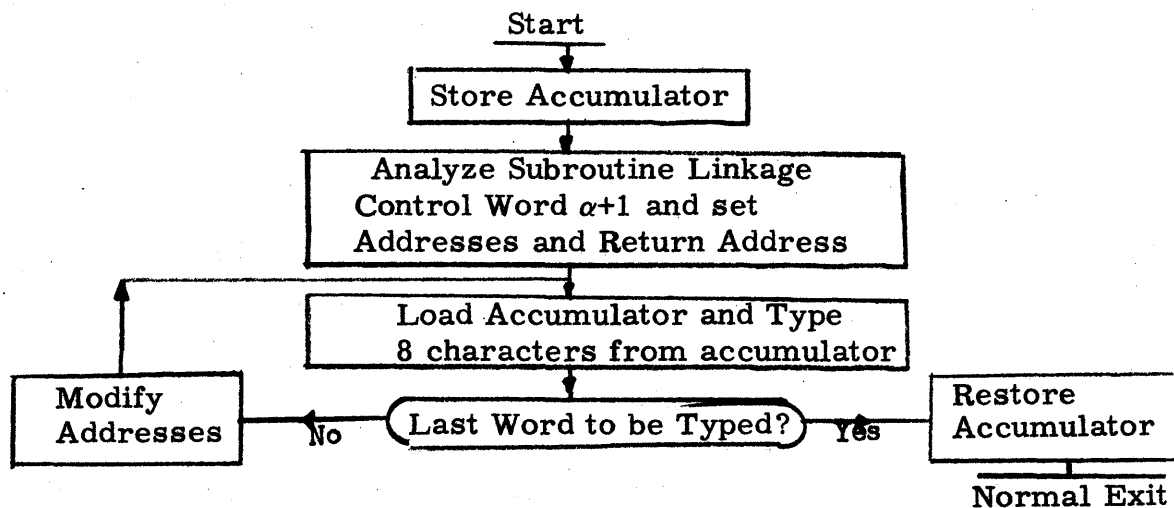
- 4.5 Relocation Information: This routine is not supplied in standard relocatable form because manual relocation is so simple. Merely mask off the location setting on the standard tape (L00000Enter", the very first block of characters on the tape), set the location counter to the location you would like the subroutine entered and then fill. Then increase the addresses of the first 3 instructions only by the starting location of the subroutine (the number you put into the location counter). This relocates the subroutine.
- 4.6 This subroutine restores the accumulator to its original value at the end of the subroutine. It utilizes both the L and V loops and does not restore them.
- 4.7 Restart Provisions: If the typewriter prints garbage at the start of a typeout the person who prepared the input data may not have set the shift condition of the typewriter. Thus, there is a possibility that the typewriter may be in the wrong initial shift condition. If this occurs change the shift position manually by depressing the appropriate shift key and start over.

5. CODING INFORMATION:

5.1 Constants: L00100 1b38
 L00110 1b39
 L00170 1b18

5.2 Unused Locations: None.
Erasable Locations (previous contents of which will be destroyed by this subroutine L00150.

5.3 Flow Chart:



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5.4 Typeout speed is essentially the maximum speed of the typewriter, approximately 100 words per minute.

6. CHECKOUT

6.1 This routine was used to typeout a variety of data from various memory locations prepared by RDA instruction (+71 776X0), the SAIL subroutine and the URAL Utility Routine.

