

A U T O N E T I C S

A DIVISION OF NORTH AMERICAN AVIATION, INC.

INDUSTRIAL PRODUCTS

3584 Wilshire Blvd., Los Angeles 5, Calif.

January 4, 1960

RECOMP TECHNICAL BULLETIN NO. 5

TITLE: STANDARD FLOW CHART SYMBOLS FOR RECOMP II

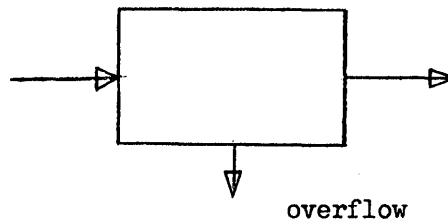
PURPOSE: The purpose of this bulletin is to specify standards for RECOMP II Flow Chart Symbols.

EFFECTIVE DATE: January 4, 1960

CONTENTS: The symbols defined below are intended to agree with, and augment the symbols in Reference I.

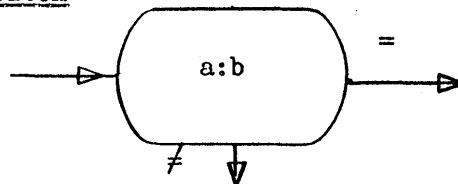
A. Operation

NAME



The box symbol will be used to 1) describe a working block of instructions 2) specify formulas or substitution expressions or 3) to indicate a program switch setting (flag). The symbolic on absolute location that heads the computation in the box should be printed for identification to one side of the box ("NAME"). Each box should have only one entry point and one exit point, overflow exits excepted.

B. Decision or Comparison



The oval symbol will be used to specify a two or more, branch decision or comparison. The colon means "The relationship between".

Revised: February 11, 1960

C. Fixed Connector



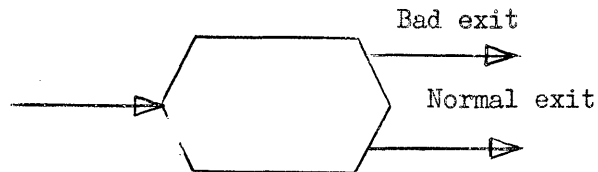
The large circle will be used to connect parts of a flow chart. These facilitate communication between parts of a complex or multipaged flow chart.

D. Variable Connector



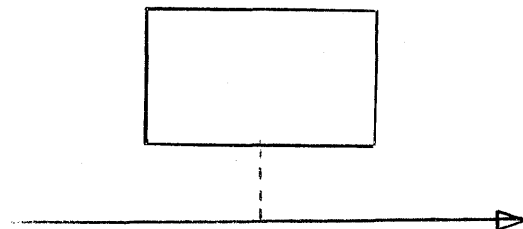
The small circle will be used to indicate a variable connector that branches to one of several points according to a predetermined program switch setting, which was set by a box symbol. Greek letters should be used to label the switch. The X subscript indicates the "NORMAL" or "UN-PRESENT" switch position, if any.

E. Subroutine



The hexagon will be used to specify that an open subroutine, or the calling sequence to a closed subroutine, occurs at this point in the flow chart. This symbol may have many exits, each of which should be labeled.

F. Assertion



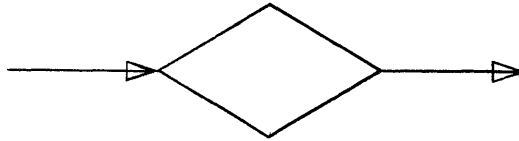
A box connected to the flow by a dotted line will be used to assert parenthetical remarks which are pertinent at the point of connection.

G. Terminals



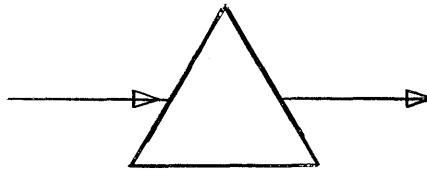
The half-ovals will be used to indicate the origin of a program or programmed stops.

H. Macro



The diamond will be used to indicate that a large region of code is entered at this point but that the flow chart for the code appears elsewhere. This should not be used for subroutines.

I. Input or Output



The triangle will be used to indicate input and output sequences. It may also be used, instead of the hexagon, to indicate input or output subroutines.

J. Tape Control Entry



The elongated oval will be used to indicate an entry from a tape start code.

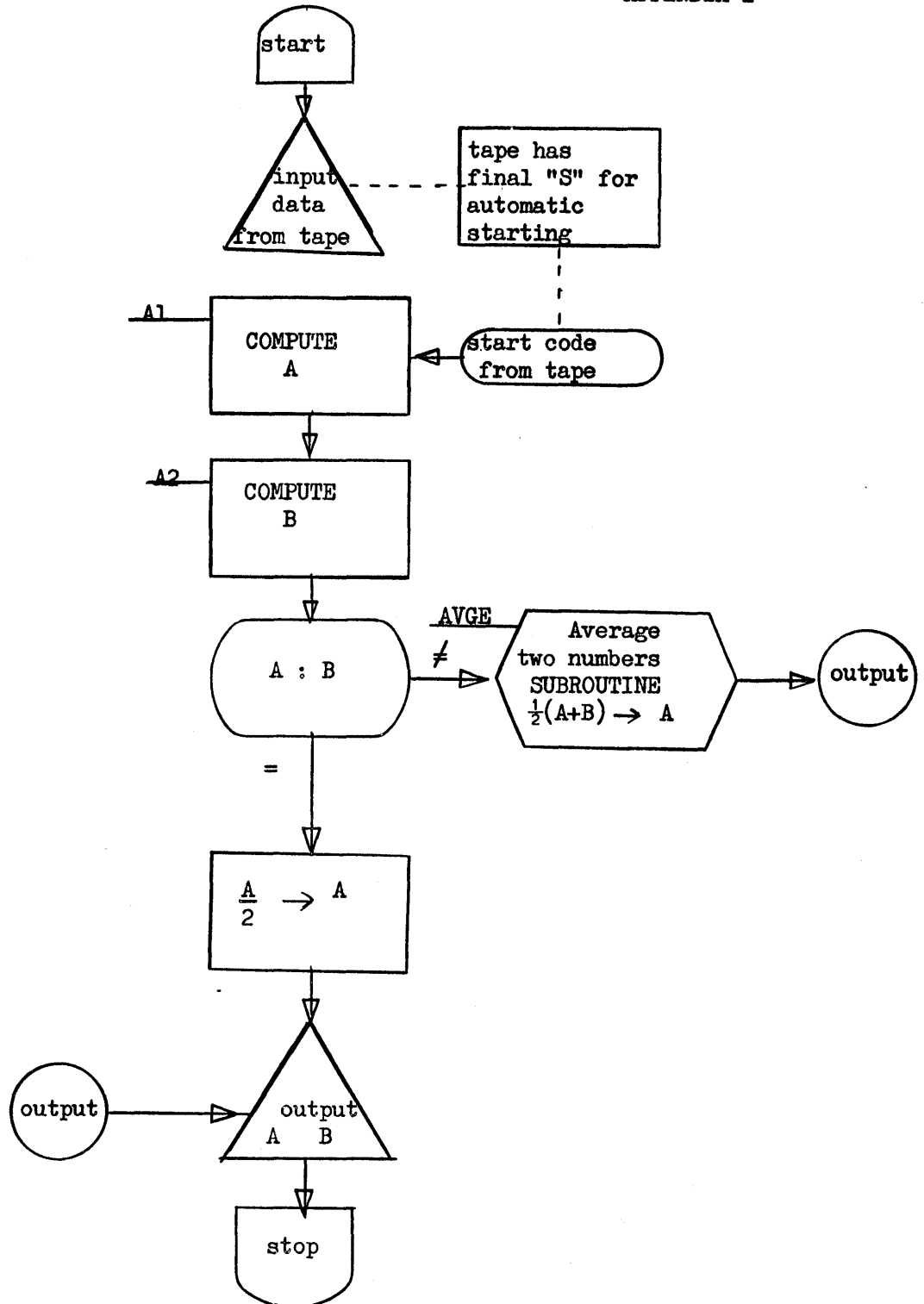
RECOMP TECHNICAL BULLETIN NO. 1 (Cont.)

REFERENCES: "ACM First Glossary of Programming Terminology" reprinted as
"Proposed Standard Flow Chart Symbols." ACM Communications,
October 1959.

INFORMATION TO: All Concerned

WRITTEN BY: M. Berman
Advanced Systems

EXAMPLE:



This program inputs a record of values from paper tape. This data tape has a start code on it that transfers control to Symbolic Location A1 after entry of the data. The parameters A and B are then computed. If $A = B$, $\frac{1}{2} A$ and A are output. Otherwise $\frac{A+B}{2}$ and B are output.