

Memorandum 6M-3291, Supplement 5

Page 1 of 4

Division 6 - Lincoln Laboratory  
Massachusetts Institute of Technology  
Lexington 73, Massachusetts

SUBJECT: SPECIFICATIONS FOR THE CENTRAL COMPUTER SYSTEM  
FOR THE AN/FSQ-7, SUPPLEMENT 5

To: S. H. Dodd

From: R. R. Shorey

Date: 15 December 1955

Approved:   
R. D. Buzzard

Abstract: The AN/FSQ-7 specifications for the central computer system as recommended by Lincoln Laboratory are listed in 6M-3291, (released by TIR #1-57) and in 6M-3291, Supplements 1, 2, 3, and 4 (released by TIR's #1-66, 1-78, 1-93, and 1-114) This supplement (supplement 5) lists changes and modifications in the following areas:

- a. Amendment to the Selection-Input-Output Control specifications.
- b. Rewrite of the Program Element specifications.
- c. Amendment to the PERSELBSN Code specifications.

## 1.0 INTRODUCTION

The specifications for the central computer system of the AN/FSQ-7 are described by Lincoln Laboratory Memorandum 6M-3291, Specifications for the Central Computer System for the AN/FSQ-7 (released by TIR #1-57) and Supplements 1, 2, 3, and 4 (released by TIR's #1-66, 1-78, 1-93, and 1-114). Modifications to and changes in the specifications since the release of 6M-3291 and supplements 1, 2, 3, and 4 are listed but not described in detail in this supplement, (Supplement 5). "Concurrence" as used below means that Lincoln and IBM have agreed on the adequacy of the technical design specified in a particular document.

IBM has indicated that all concurred on specifications will be included in the initial AN/FSQ-7 machines with the exception of those in which the statement "this change may be the subject of further negotiations between IBM and the Air Force" is included in the concurrence document. In this supplement Lincoln Laboratory change recommendations are made for those items which will not be included in the initial AN/FSQ-7 machines. It is understood that all other items will be included initially.

## 2.0 SPECIFICATIONS

### 2.1 Selection and Input-Output Control Specifications

IBM document D-19-5, Change to Selection and Input-Output Control Specifications, dated 20 October 1955, received concurrence with modification as noted in a letter dated 3 November 1955. This document is an amendment to the selection and input-output control specifications to:

- a. Reserve operate addresses for the input pattern generator;
- b. Specify sense flip flops for additional output alarm lines and the revised input pattern generator.

It is understood by Lincoln Laboratory that these amendments will be incorporated in the initial AN/FSQ-7 machines.

2.2 PERSELBSN Codes

IBM document D-16-8, Change to PERSELBSN Codes, dated 18 October 1955, received concurrence with modifications as noted in a letter dated 26 October 1955. This document is an amendment to the PERSELBSN code specifications to specify additional operate and sense instructions for the revised input pattern generator specifications and for additional output alarm lines. Lincoln Laboratory understands that these PERSELBSN code changes will be incorporated in the initial AN/FSQ-7 machines.

2.3 Program Element

IBM document S14, Program Element Specifications for AN/FSQ-7 Combat Direction Central and AN/FSQ-8 Combat Control Central, PH57-21004, dated 8 November 1955, received concurrence as noted in the document itself. This document is a rewrite of the program element specifications to include clarifications and consolidates and supersedes the previous program element specifications as contained in IBM documents D-5, D-5-1, and applicable sections of D-19-2, D-21, D-42, D-45, and D-70. Lincoln Laboratory understands that this document will be used as the specifications for the program element for the initial AN/FSQ-7 machines.

SIGNED: 

R. R. Shorey

RRS:ero

DISTRIBUTION LIST

Lincoln:

\*H. E. Andersen  
 \*W. H. Ayer  
 \*R. D. Buzzard  
 \*F. R. Durgin  
 \*J. Giordano  
 \*J. F. Jacobs  
 \*N. T. Jones  
 \*H. J. Kirshner  
 \*J. P. May  
 \*K. E. McVicar  
 \*B. E. Morriss  
 \*J. A. O'Brien  
 \*H. Rising  
 \*G. E. Valley, Jr.  
 \*C. W. Watt  
 \*C. A. Zraket  
 \*Div. 6 PCO File

ADES:

\*R. Bright, Jr.  
 \*A. Fernald  
 \*\*H. E. Gale  
 \*F. Simon (at Linc.)  
 \*A. Vafier

Burroughs:

\*H. W. Taylor  
 \*W. F. Ogletree

AFCRC:

\*Lt. Col. R. S. LaMontagne  
 \*\*W. J. Smith, CRRAC  
 \*L. C. Mansur, CRRAC

RAND:

\*M. O. Kappler

IBM

\*W. L. Batchelor  
 \*P. A. Beeby  
 \*T. A. Burke  
 \*R. W. Bottomley  
 \*R. P. Crago  
 \*G. A. Cullen  
 \*G. W. Hallgren  
 \*R. A. Imm  
 \*W. L. Jackman  
 \*C. F. Lynch  
 \*R. C. Marden  
 \*A. E. Quick  
 \*D. C. Ross  
 \*H. D. Ross  
 \*W. S. Squire  
 \*R. N. Sweetland  
 \*D. B. Thompson (1 repro.)  
 \*C. E. Walsten  
 \*E. J. White (at Linc.)  
 \*R. A. Whitehorne

ADC:

\*Cdr. 4620th ADW (3)  
 \*Cdr. ADC Attn: SAGE Proj. Group  
 \*Cdr. ADC Attn: ADOCE

JPO:

\*Col. A. R. Shiely (3)  
 \*H. E. Ernst

AMC:

\*\*Cdr. RAFD Attn: MRPC  
 \*Cdr. RAFD Attn: MRMN (2)

Hazeltine:

\*C. F. Knights

\*INDICATES RECIPIENTS OF COMPLETE MEMORANDA.

\*\*INDICATES RECIPIENTS OF COMPLETE MEMORANDA AND DETAILED TECHNICAL SPECIFICATIONS REFERENCED THEREIN.