

MIT/IL  
Apollo Guidance and Navigation  
System Test Group Memo #1415

RECEIVED  
OCT 23 1969  
GEORGE SILVER

To: Distribution  
From: James V. Harrison  
Subject: K-START Tape Numbering System Change  
Date: 22 October 1969

Effective for program releases beyond COMANCHE 67 and LUMINARY 116 the numbering system for K-START tapes is being changed to reflect the program revision number rather than the vehicle.

A typical number will be:

F11C0671-K00081-4

The F designates Florida, the 11 designates COMANCHE, the 067 designates the revision of COMANCHE, the 1 designates the revision to that revision (remember LUM 99 REV 1), the K00081 designates the tape, and 4 designates the tape revision.

For this tape R1, R2 and R3 would display:

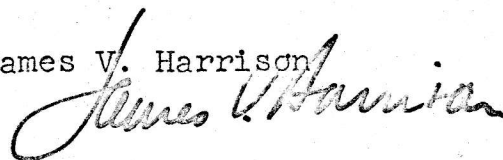
R1 = +11067  
R2 = +00081  
R3 = -00014

Notice that the revision to the program revision and tape revision appear in R3.

The first 3 digits of R3 are used only for E-MEMORY Loads.

Complete description of these changes is presented on the attached memo.

James V. Harrison



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MEMORANDUM SSW-69-60A-294

17 October 1969

To: G. Tiermeyer

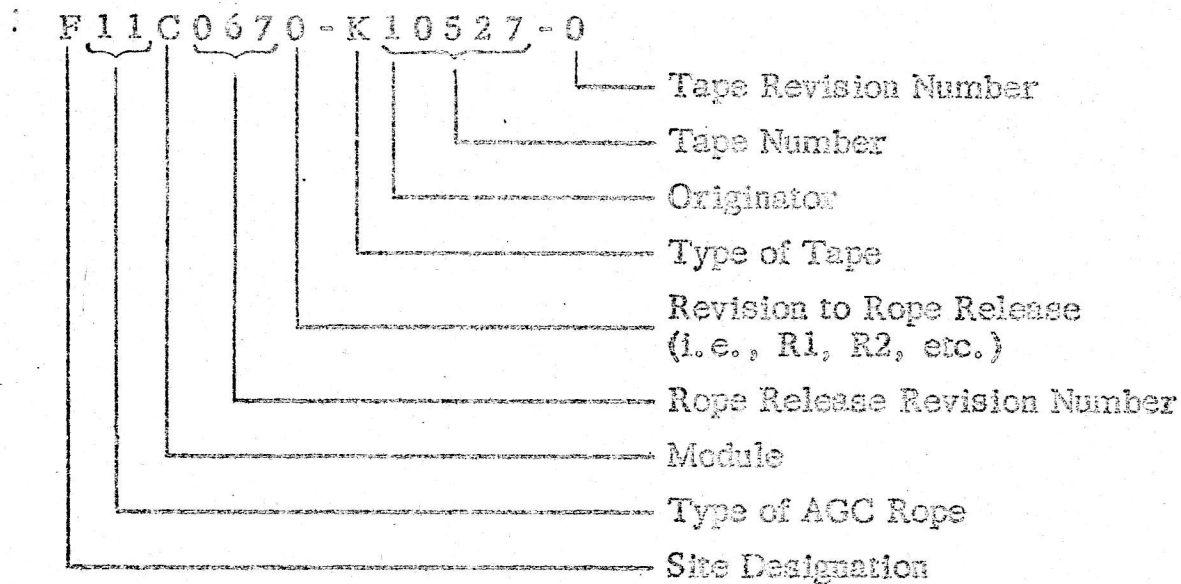
cc: D. Ziemer, T. Pierce, B. Beh, A. Alderson, H. Timm,  
M. Sanders, J. Harrison MIT/IL, H. Herr, J. Cappon,  
C. Giggstead, J. Wachholz, R. Lingg, D. Holland, S. Macy,  
S. Snipes, R. Lewis, R. Parker, E. Austin, D. Dettmann,  
D. Karstedt

SUBJECT: K-START TAPE NUMBERING SYSTEM CHANGE

References: (1) STG Memo #623B, "Numbering System of K-Start Tapes and Their Verification", dated 8 August 1966  
(2) SSW 69-60A-272, "Numbering System of K-Start Tapes", dated 2 October 1969  
(3) NASA CM Checkout Coordination Meeting 20N held at NAR 8 and 9 October 1969.

Reference (2) suggested a change to the K-Start Tape numbering system and requested comments and recommendations on the proposed change. The new system has been reviewed by all interested parties (reference 3 and telephone conversations with LM personnel), and found to be a desirable change, with the exception that MIT requires that the first three digits of DSKY display R3 at the start of the Mission E-Memory Load tape be reserved for the Spacecraft Number. This requires a slight change to the R3 display which was suggested in Reference (2). For the sake of clarity, the system which has been agreed to is repeated here with the MIT change included. The new numbering system will become effective with Apollo 13 LM and CM flight rope releases which are currently scheduled for 5 November and 20 October 1969, respectively. If changes or additional tapes are required for the GAEC Bethpage K-Start tapes which utilize Aurora 88 or the NAR Downey K-Start tapes which utilize Sundial E, the old system of numbering will be used since these tapes can still be uniquely defined with that system. This numbering system change has no impact on existing OCP's.

The new numbering system contains seventeen characters as follows:



The following is a description of each of the characters:

(1) Site Designations

- N - North American Rockwell
- F - Florida (Kennedy Space Center)
- G - Grumman Aircraft Engineering Corporation
- M - Manned Spacecraft Center

(2) Type of AGC Rope

- 00 Sunrise 69 Ropes
- 01 Corona 261
- 02 Sunspot
- B2 Sunspot B Revision
- 03 Aurora
- 04 Solarium
- 05 Sundial
- 06 Sunburst
- 07 Sundance
- 08 Sundisk
- 09 Colossus
- 10 Luminary
- 11 Comanche
- etc - to be defined later

- (3) Module (This refers to Lunar Module or Command Module)
  - L - LM
  - C - CM
  
- (4) Rope Release Revision Number
  - 55
  - 116
  - etc
  
- (5) Revision to Rope Release
  - R1 = 1
  - R2 = 2
  - etc
  
- (6) Type of Tape
  - K - K-Start Tape
  
- (7) Originator
  - 0 - MIT
  - 1 - AC Electronics
  
- (8) Tape Number
  - A five decimal digit number including originator number
  
- (9) Tape Revision Number
  - A one decimal digit number

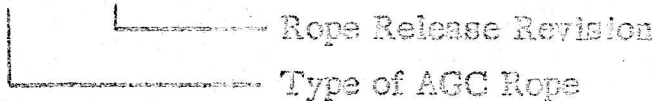
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When a K-Start Tape is started, the following information should be displayed on the DSKY:

R1 = + XX YYY

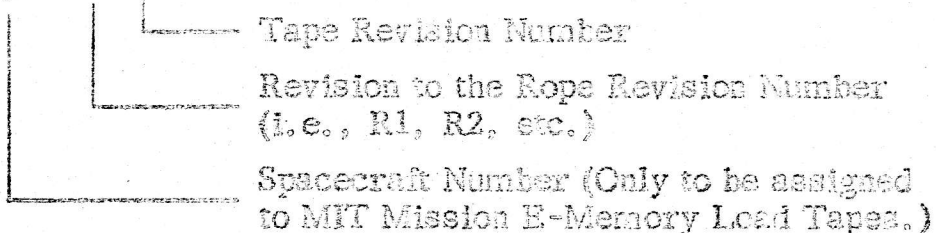


Rope Release Revision

Type of AGC Rope

R2 = + XXXXX ——— Tape Number

R3 = - XXX Y Z



Tape Revision Number

Revision to the Rope Revision Number  
(i.e., R1, R2, etc.)

Spacecraft Number (Only to be assigned  
to MIT Mission E-Memory Load Tapes.)

*R. Lennon*

R. Lennon

Test Integration Group

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