

NATIONAL RADIO ASTRONOMY OBSERVATORY  
Green Bank, West Virginia

October 19, 1983

TO: Coordinating Committee  
FROM: B. Peery  
SUBJECT: Drawing Numbering System for the VLBA

Attached is a description of the numbering system used to number engineering drawings made and/or filed by the NRAO engineering division in Green Bank. We follow this system very closely except for drawing sizes. To simplify filing and printing we use the D size exclusively except for very special situations.

It is understood the VLA is adopting this procedure, with some modifications, to renumber their drawings.

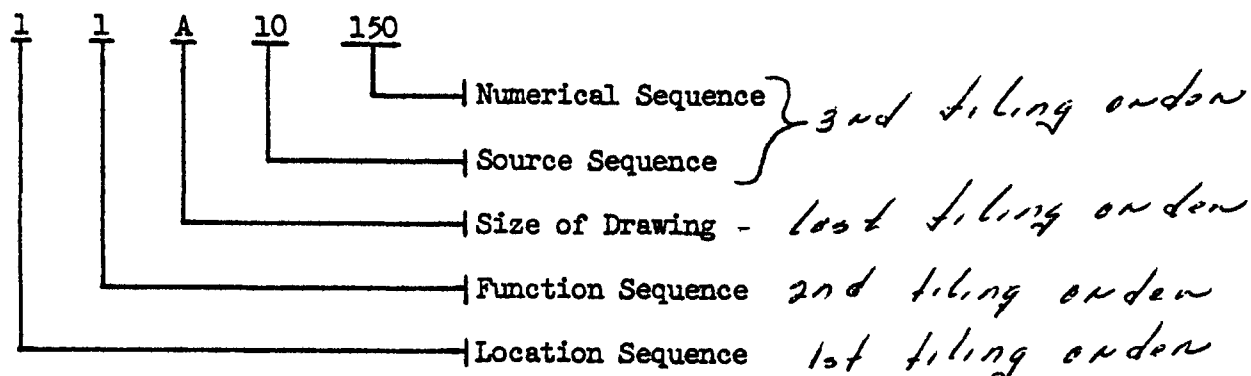
As best we can determine, the electronics drawings are not numbered with a definite numbering procedure.

BP/bbs

## DRAWING NUMBERING SYSTEM

The purpose of a new numbering system would be the coding of drawings by their numbers so that the number of a drawing would be known (approximately) by knowing the purpose of the drawing and what is shown thereon.

The drawing number would be composed of five parts as illustrated by the following example:



Location Sequence would be numbered as follows:

- 10 Series - General and Yard
- 20 Series - 85' Telescope
- 30 Series - 140' Telescope
- 40 Series - 300' Telescope
- 50 Series - Other Antennas
- 60 Series - Buildings
- 70 Series - Interferometer System
- 80 Series - 36' MM Wave Length System
- 90 Series - VLA
- 100 Series - For Future Assignment

Function Sequence would be numbered as follows:

- 0 - *specification Control Drawing*
- 1 - Civil and Concrete (foundations, surveys, paving, drainage)
- 2 - Heavy Equipment (machinery, gears, drives)
- 3 - Electrical
- 4 - Architectural
- 5 - Mechanical (including piping, heating and vent, plumbing)
- 6 - Structural (primary and secondary load carrying structure)
- 7 - Fixtures, furnishings, tools and equipment
- 8 - Electronic Equipment (shop, test and functional service equipment)
- 9 -

Size of drawing would be indicated by letters as follows. This also breaks up the numbering so that numbering code is easily understood.

- A - 8-1/2 x 11
- B - 11 x 17
- BM - Bill of Material (BM would then have the same number as drawing)
- C - 17 x 22
- D - 22 x 34
- E - Cut Sheets
- S - *specifications (S would then have the same number as a drawing)*

Source Sequence would serve to indicate where drawings are prepared. For example, when no number is shown here or numbers below 10,000 are used this would show that drawings were prepared at the NRAO, Green Bank, The 10,000 series would show that drawings were prepared by outside consultants. The 20,000 series could show manufacturers drawings. This would enable us to relate Green Bank drawings, consultant drawings, and manufacturers drawings by having the same numerical sequence of numbers preceded by the same code. For example, 300' telescope drawings on structural frame would be:

- 46 D            250 NRAO in house drawings
- 46 D            10,250 Consultant (Faelten)
- 46 D            20,250 Manufacturer (Bristol Steel)

Numerical Sequence would have to be broken down by a listing sheet for each location and function sequence as for General and Yard Group 11 series.

Civil and Concrete Break-down

- 0 - 50 Geological Investigation
- 51 - 150 Property and Surveys
- 151 - 250 Roads and Paving
- 251 - 350 Sewers and Drainage
- 351 - 450 Foundations and Toewalls
- 451 - 550 Power Distribution
- 551 - 600 Elevations and Plans
- 601 - 700
- 701 - 800

A break-down will not be provided other units such as electrical, mechanical, heavy equipment, architectural, or structural--merely use a numbering system of 0-999 in each respective division.