

VLBA PROJECT BOOK

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As discussed in some recent Coordination Meetings, we would like to maintain a continuously updated reference book describing the technical design of the VLBA. We have decided to do this in the following way. The project will be divided into 11 sections, and each section will have a corresponding file on the Charlottesville VAX 11/780 computer (CVAX). One of the group leaders is assigned responsibility for maintaining each file. Some technical rules for the format of the files are given below. The intention is that these files will always represent the current design, and can be updated at any time. They will be readable by anyone, but will be edited only by the responsible person. It may be convenient to let a few changes accumulate before updating a file, but no more than one month should elapse between updates.

Here is a list of the files and the person responsible for each:

Sect.	File Name	Author	Remarks
1	CONFIG.TXT	C. Walker	Configuration
2	SITES.TXT	B. Peery	Buildings, site devel.
3	ANTENNAS.TXT	W. Horne	
4	MONCON.TXT	B. Clark	Monitor and control
5	FEEDS.TXT	P. Napier	Feeds, subreflector, etc.
6	RECEIVERS.TXT	S. Weinreb	Front ends, WVRs
7	LO.TXT	L. D'Addario	Local oscillators
8	DIGITIZER.TXT	A. Rogers	Baseband conv and digitizers
9	RECORDERS.TXT	A. Rogers	Recorders and playback syst
10	CORRELATE.TXT	M. Ewing	Correlator
11	POSTPROC.TXT	R. Burns	Post processing

All files will be kept in a directory called UMA3:[VLBABOOK].

PROCEDURES

Each author should edit a version of his file in his own area on CVAX, or in some other convenient machine from which it can be transferred to CVAX. Only Carolyn Williams (project office secretary in Charlottesville) will have writing privileges in the [VLABOOK] area; whenever a file is updated, the author should telephone Carolyn or send her a DECMAIL message specifying the file containing the new version. She will then copy it into the official area. If the machine containing the new file is accessible through a modem or DECNET, Carolyn will make the transfer; otherwise, the author must place the file in CVAX. Authors who do not have a user area of their own on CVAX should request one.

SEMANTICS

Each section (or file) will be divided into subsections numbered x.1, x.2, ..., where x is the section number given above. Each subsection shall begin with the subsection number and the subsection title, left justified and on a separate line from the other text. Subsection x.1 shall always be called "Specifications" and shall include the operational specifications of the subject system. Subsection x.2 shall always be called "Description" and shall contain a general description of the system design. Additional subsections are optional, according to the wishes of the author.

SYNTAX

The following syntactical restrictions are imposed to simplify interchange of files between computers and to ensure easy access by various users.

1. All files shall contain only ASCII text.
2. No control characters shall be included in the text other than the following: carriage return (<CR>, ASCII 13); horizontal tab (<HT>, 9); and form feed (<FF>, 12). If tabs are used, they are understood to represent spacing to the standard tab stops, which are every 8 spaces from the preceding carriage return.
3. Lines of text shall be no more than 72 characters long.
4. Figures may be included if they can be formed out of standard ASCII characters. They must conform to these rules: every figure must begin and end with a <FF>; no line may contain more than 79 characters. Figures which cannot be drawn in this way may be included by reference to a figure number of the form x.y.n, where x is the section number, y is the subsection, and n is the figure number. A hard copy version of the figure on one or more 8.5 by 11 inch sheets must have been received by Carolyn in Charlottesville before the text referring to it is submitted. Each sheet must contain the figure number, "Sheet k of n", and the date that it was last revised.
5. The first six characters of the file must be a six digit number specifying the date of the current revision in the form yymmdd. This must be followed on the same line by a description of the changes since the last revision; this may continue on the following line(s) if necessary, but should be about one sentence. Next there should be a blank line (i.e., <CR><CR>) and then the same information for the previous revision (date and description), and similarly for all earlier revisions. Finally, this list is terminated with a <FF>.

INITIALIZATION

An initial version of each file will be created based on material submitted for Volume III of the proposal. Each author is expected to review this and to submit a revised version representing the current design; the deadline for this first update is 840301.

MORE ABOUT FIGURES

Readers of a file which references a figure should request a copy from Carolyn. To minimize delays, a copy of each figure submitted will be sent automatically to one person at each site, provided that such person arranges this with Carolyn. However, note that the only way to be sure that a figure you have is the version which goes with the text you're reading is to see that its date is the same as the date of the latest version in Carolyn's file.

EXAMPLE

Here is a sample of the beginning of a file:

[BOT]

840206 Major update; all sections revised.

840120 Typos corrected, no substantive changes.

840115 Specs revised to incorporate special pulsar mode per recommendation of Scientific Committee.

840102 Project Book Section 7: Local Oscillators. (initial version)
<FF>

LOCAL OSCILLATORS
L. D'Addario

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