7. Introduction

This section identifies *User documents* required for the CCPS Project, and provides detailed information about them, e.g., ownership, development schedules, etc. *Non-User documents are covered in other Project Plan sections*, but the overall documentation scheme is discussed below.

7.1 Overall Documentation Scheme

Project documentation work has been divided into the classes identified below.

7.1.1 User Documents

The User documentation development is minimal, comprising a Users Manual and Error Manual. In addition, the system will have a variety of "Help" screens, and these are being considered as documents as far as design (information content, location, etc.) is concerned. They will have to be actually implemented in software. The *implementation* of the Help screens is included in the software estimates, and this section refers only to their design.

7.1.2 Design Documents

These are the documents essential to building the product, such as requirements, architecture, and design. *All are covered elsewhere in the plan, as they are not (primarily) user documents.*

1. *Product* Definition Documents: the system-level documents are the following:

    - System Requirements Specification (given in the RFP)

    - Architecture Specification (Reference 2, summary in Section 3)

    The first two of the above exist as of the writing of this document, and the third is in preliminary form.

2. Software Documents:

    - Detailed requirements

    - Detailed design

    - Test plans

    Following the MSDS methodology, the first two documents above are combined into one, and are jointly produced by a systems engineer and developer.

3. Hardware Documents: since we have chosen to purchase the circuit pack from an external vendor, the only document required here is a detailed specification, which will then become an attachment to the board contract.

7.1.3 Test Documents

Test documents include test plans, scenarios, scripts *from integration test onward*. Unit test documentation is included as design documentation.

7.1.4 Project Documents

The primary project document is the Project Plan, of which this is the preliminary version. Both preliminary and final versions are covered in the task list.

7.1.5 Production Documents

This product will be manufactured externally, so that no documents are needed.

7.1.6 Installation Documents

An Installation Manual may or may not be required, depending on the extent of Customer involvement.

7.1.7 Other Documents

- ATCO contract

- BoardTech contract

Both contracts remain to be done, assuming that we win the job. Some negotiations with the board vendor have occurred. Both contracts are included as project tasks.

7.2 Special Considerations

External professional writers, who will use the project staff as resources, will do document preparation.

Documents will conform to the standards identified subsequently.

7.3 Required User Documents

Deliverable	Supplier	Customer	Accept Criteria	Due Date	CWV	Actual Date
User's Manual	External writer	HPE person (for ATCO)	Inspection			
Error Manual	External writer	HPE person (for ATCO)	Inspection			
"Help" screens	HPE person	SW Devel	Inspection			

7.4 Development Estimates

7.4.1 Estimation Approach

The estimates below were obtained using expert opinion of documentation developers who had worked on similar systems.

7.4.2 Scope of Estimates

The estimates include interviews with developers, study of product documents, and review and inspection of output, as well as basic document preparation and revision. It is assumed that an eight-hour workday has five (5) effective hours in order to convert staff-hours to elapsed time.

7.4.3 Estimation Results

The development effort is summarized in the table below.

Deliverable	Size	Duration	Effort
User's Manual	20 pages	6 weeks	1 person
Production		1 week	Outsource
Error Manual	10 pages	3 weeks	1 person
Production		1 week	Outsource
"Help" screens	30 menus	9 weeks	1 person

The above refers to the document developer's time only. An additional 180 staff-hours will be required from developers, etc., for review and inspection.

The actual production cost, based on 500 copies of two different manuals, and including covers, is estimated to be less than $5000.

7.4 Detailed Scheduling

The table following shows the final results of scheduling and staffing for the hardware portion of CCPS. The "task" level appears on the project task list.

Deliverable Task Sub-Task	Supplier/ Resp	Duration	Due Date	CWV	Actual Date
User's Manual					
Develop Prelim					
Draft					
Review					
Revise					
Develop Final					
Inspect					
Revise					
Baseline, Reproduce, Distribute					
Error Manual					
Develop Prelim					
Draft					
Review					
Revise					
Develop Final					
Inspect					
Revise					
Baseline, Reproduce, Distribute					

"Help" screens					
Design and review					
Revise and Inspect					
Baseline					

7.5 Document Delivery

Participants in the Beta site-training course will be provided applicable documents. Further documents will be provided to the ATCO training organization. Each installed workstation will include applicable documents.

7.6 Document Standards

Document (Type)	Standard
User Documents	MSDS Multi-weight Standard
Design Record Documents	MSDS Document Standards
Production Documents	N/A
Project Management Documents	Software Project Management Course
ATCO Contract	MSDS Contract Standards
	ATCO Contract Standards
Vendor Contract	MSDS Vendor Standards

7.8 Budget and Resource Summary

Discipline	**Effort**
Technical writer	*9 staff-weeks*
Human Performance Engineer	*9 staff-weeks*

Document reproduction (binders, printing, etc.) costs should not exceed $5000.