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1 Revision History

2 Introduction

This Software Development Plan (SDP) is a document used to capture the management approach and engineering environment effort associated with our program. The software and organizational structure will be established. The SDP will discuss the high level software schedule with key milestones and what risks and how they will be managed with regard to the development process. The SDP will determine the optimal route for how to take advantage of reusable software and systems. The software configuration management plan will be established here. This document will also describe the software engineering environment including in house lab facilities and infrastructure.

3 Software Organization / Structure

3.1 Process Model

This project utilizes an iterative development and deployment using SCRUM methodologies. The goal is to create the Crash Avoidance System to the expected dates developing engineering and software applications simultaneously.

Crash Avoidance System	Planned Completion Date	People Who Must Sign Off
Develop Crash Avoidance System	December 31st, 2021	Project Manager Engineering Lead, Documentation Lead
Develop In-Flight Test of Crash Avoidance System	December 31st, 2022	Project Manager Engineering Lead, Documentation Lead
Incorporate Test Results and Associated Design Changes into Final System	December 31st, 2023	Project Manager Engineering Lead, Documentation Lead, Customer Approval
TBD	TBD	TBD

3.2 Organizational Structure

3.3 Organizational Boundaries

4 Software Development Process

The CAS software is utilizing guidelines of IEEE. Table 7-1 showcases the phases that these standards expect.

Project Phases	Sections Integrated
Project Planning & Expectations	2.0 Introduction, 3.1 Process Model
<i>Phase 1</i> : Software Requirements	12 Software Requirements
<i>Phase 2</i> : Design	5 Software Schedule
<i>Phase 3</i> : Unit Testing	Section 3-1,
<i>Phase 4</i> : Qualification Tests	Section 3-1,
<i>Phase 5</i> : Support for Use	Section 3-1,
Quality Assurance	TBD,
Project Reviews	TBD,

Table 4-1 CAS Project Activities utilizing IEEE