**MSPSP EXAMPLE (VOL. I)**

The following document(s) (SEAL-SSD-008.01 through 008.03) are provided as an example of possible layout for a Missile System Pre-launch Safety Package (MSPSP). Specific details on required content are included in AFSPCMAN 91-710 Volume 3, Attachment 2. The Range User has the flexibility to decide on document layout and format.

The following MSPSP example presents information in a three volume set, as follows:

1. Volume I, Executive Summary
2. Volume II, Launch Vehicle First Stage
3. Volume III, Launch Vehicle Second Stage

As described in Volume 3, Attachment 2, the MSPSP provides a detailed description of hazardous and safety critical ground support and flight hardware equipment, systems, and materials and their interfaces used in the launch of launch vehicles, reusable launch vehicles and payloads. It is one of the media through which missile system prelaunch safety approval is obtained.

If the Range User chooses to use this template as a deliverable format, it is recommended that the Volume 3, Attachment 2 be used as a checklist for populating the existing sections and subsections, or adding new sections or subsections to the document, as needed. This MSPSP example is by no means complete; therefore the Range User should use the Volume 3, Attachment 2 as the driver for document completion.

[*Guidance:* *Critical systems identified in Volume 3 of AFSPCMAN 91-710 that will be a part of a facility design and will not be addressed as part of any program MSPSP shall be addressed in the FSDP. As applicable, data requirements from Volume 3, Attachment 2 shall be included in the FSDP*. *Reference Vol 5, Attch 2, A2.2.3.13*]

[*Guidance:* *An alternative approach to data grouping that has also been used by launch providers has been a document breakdown as follows:*

1. *Volume I, Launch Vehicle (1st Stage, 2nd Stage, Fairing, etc.)*
2. *Volume II, Ground Support Equipment*
3. *Volume III, Payload*]

**<Company Name>**

DRAFT

**MISSILE SYSTEM PRELAUNCH**

**SAFETY PACKAGE (MSPSP)**

**FOR THE**

**<Title> PROGRAM**

Volume I

Executive Summary

Document Number: XXXXX

Revision X, 15 Sep 2020

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This document is meant as an example only. Detailed requirements

are included AFPSPCMAN 91-710 Vol 6, Attachment 2

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

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**Document Change History:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Revision****Identification** | **Revision****Date** | **Pages Affected** | **Change Description** |
|  |  |  |  |
| Initial Release | 18 Sep 19 | N/A | N/A |
| A | 15 Sep 20 |  |  |
|  |  |  |  |
|  |  |  |  |

[*Guidance:* *The “change” section contains a summary of all changes to the latest edition of the MSPSP. All changes shall be highlighted using change bars or similar means of identification*.]

**PREFACE**

This document establishes and defines the <Company Name> CorporationMissile System Prelaunch Safety Package (MSPSP) and its elements as required by AFSPCMAN 91-710 [T] for the <Title> Program at Vandenberg Space Force Base (VSFB).

<Company Name> Corporation, located at Isle of Avalon, Florida, has contracted with the USAF to launch < Title > launch vehicles from the Western Range. The < Title > launch vehicle consists of two stages. The first and second stage propellants are RP-1 and LOX.

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## GLOSSARY OF ACRONYMS AND DEFINITIONS

# SLD 30 Space Launch Delta 30

**SLD 45** Space Launch Delta 45

# A&V Activation & Validation

**AFSPCMAN** Space Force Space Command Manual

**C&C** Command & Control

**CC** Computer Console

**GN2** Gaseous Nitrogen

**LN2** Liquid Nitrogen

**LO2** Liquid Oxygen

**N/A** Not Applicable

**SLC** Space Launch Complex

**TBD** To Be Determined

**Temp** Temperature

**VSFB** Vandenberg Space Force Base

**1.0 INTRODUCTION**

**1.1 Missile System Prelaunch Safety Package** **Purpose**

This MSPSP is prepared and submitted in accordance with AFSPCMAN 91-710 Range Safety User Requirements, as tailored for the < Title > Program, to satisfy the applicable portions of Volume 3, Attachment 2.

**1.2 Missile System Prelaunch Safety Package** **Scope**

This MSPSP encompasses all systems, subsystems, hardware and software for the < Title > Program located at the Western Range at Complex X on the Vandenberg Space Force Base (VSFB).

**1.3 Missile System Prelaunch Safety Package** **Applicability**

The MSPSP applies to

**1.4 Missile System Prelaunch Safety Package Updates**

The MSPSP will be updated whenever necessary, or annually whichever is sooner, to reflect any changes to the < Title > System. MSPSP updates will follow the same approval protocol as the original document.

**1.5 Applicable Documents and Standards**

**2.0 Missile System Prelaunch Safety Package**

This Missile System Prelaunch Safety Package (MSPSP) provides a detailed description of the hazardous and safety critical equipment, systems and materials and their interfaces as used for the < Title > Program.

In accordance with the requirements for an MSPSP in AFSPCMAN 91-710, Volume 3, Attachment 2, the following technical areas are covered:

 1. Structures and mechanisms

 2. Pressure and propellant systems

 3. Electrical and electronic subsystems

 4. Non-ionizing radiation sources

 5. Acoustic Hazards

 6. Hazardous materials subsystems

 7. Computing systems data

No ionizing radiation sources are present for the < Title > program.

**2.1 Volume I, Executive Summary for < Title > Launch Vehicle**

This volume of the MSPSP provides a summary of the <Company Name> Launch Vehicle.

The descriptions herein include or reference design information, nomenclature, materials data, dimension, finishes, sketches, schematics, figures, tables, volumes, mass data, safety/design factors, safety margins, pressures, locations, and any other information required to adequately assess the hazard, safety risks, and compliance with AFSPCMAN 91-710 safety requirements.

**2.2 Volume II, < Title > Launch Vehicle First Stage**

This volume of the MSPSP provides a description of each item, component, assembly, subsystem or system required for the < Title > Launch Vehicle’s First Stage.

The descriptions herein include or reference design information, nomenclature, materials data, dimension, finishes, sketches, schematics, figures, tables, volumes, mass data, safety/design factors, safety margins, pressures, locations, and any other information required to adequately assess the hazard, safety risks, and compliance with AFSPCMAN 91-710 safety requirements.

**2.2 Volume III, < Title > Launch Vehicle Second Stage**

This volume of the MSPSP provides a description of each item, component, assembly, subsystem or system required for the < Title > Launch Vehicle’s Second Stage.

The descriptions herein include or reference design information, nomenclature, materials data, dimension, finishes, sketches, schematics, figures, tables, volumes, mass data, safety/design factors, safety margins, pressures, locations, and any other information required to adequately assess the hazard, safety risks, and compliance with AFSPCMAN 91-710 safety requirements.

**3.0 < Title > System Safety**

**3.1 < Title > System Safety Program**

**3.2 Tailoring, Deviation and Waivers**

**3.2.1 Deviations**

**3.2.2 Waivers**

**3.3 Summary of Safety Analysis**

**3.3 Safety Certification**

This MSPSP is submitted in accordance with the AFSPCMAN 91-710. It provides compliance data necessary for safety certification of the < Title > Program at the Western Range (VSFB). The data reflects the completeness necessary to support the iterative safety review process and is accurate and valid.

The submittal of the MSPSP constitutes certification that the < Title > is safe to operate at VSFB when properly operated within the parameters identified within this MSPSP.

**4.0 < Title > launch vehicles**

4.1 Launch Vehicle Configurations

4.2 Payload Accommodation

**5.0 < Title > flight operations**