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National Aeronautics and Space Administration



**Headquarters**

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October 31, 2024

Reply to attn. of:

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Re: FOIA Tracking Number 24-00410-F-JSC

This responds to your Freedom of Information Act (FOIA) request to the National Aeronautics and Space Administration (NASA), dated January 19, 2024, and received in this office on January 20, 2024. You seek:

*A copy of each NASA-Johnson engineering report or NASA Johnson engineering summary for the parachute recovery system for the Orion Module, dated between 2017 and present.*

On October 31, 2024 you agreed that providing the cover page and table of contents for the documents entitled: "System Safety Analysis Report for the Capsule Parachute Assembly System (CPAS) JSC-66788A" and "Verification and Validation Document: Plan and Report for the Capsule Parachute Assembly System (CPAS) JSC 64582" would be responsive to this request.

In response to your request we conducted a search of NASA's Engineering Directorate using the information in your original request and your correspondence of October 31, 2024. That search identified the enclosed records that are responsive to your request. We determined that all 15 pages are appropriate for release without excision and copies are enclosed.

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If you believe this to be an adverse determination, you have the right to appeal my action on your request. Your appeal must be received within 90 days of the date of this response. Please send your appeal to:

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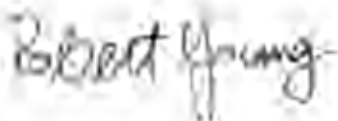
If you have any questions, please feel free to contact me at [robert.s.young@nasa.gov](mailto:robert.s.young@nasa.gov). For further assistance and to discuss any aspect of your request you may also contact:

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***Important:*** Please note that contacting any agency official including myself, NASA's FOIA Public Liaison, and/or OGIS is not an alternative to filing an administrative appeal and does not stop the 90 day appeal clock.

Sincerely,



Government Information Specialist

# System Safety Analysis Report for the Capsule Parachute Assembly System (CPAS)

**MPCV Program**

**Phase III**

**August 15, 2019**

**Revision A**

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National Aeronautics and  
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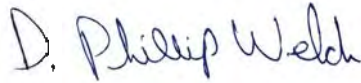
# System Safety Analysis Report for the Capsule Parachute Assembly System (CPAS)

NASA - LYNDON B. JOHNSON SPACE CENTER  
HOUSTON, TEXAS

## Phase III Review Package

August 15, 2019

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# System Safety Analysis Report for the Capsule Parachute Assembly System (CPAS)

NASA - LYNDON B. JOHNSON SPACE CENTER  
HOUSTON, TEXAS

## Phase III Review Package

August 15, 2019

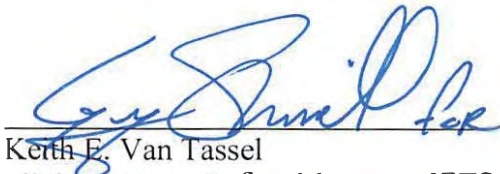
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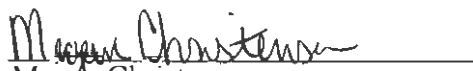
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**JSC 64582**  
REVISION C DCN-001  
SEPTEMBER 2021

# **Verification and Validation Document: Plan and Report for the Capsule Parachute Assembly System (CPAS)**

**Engineering Directorate  
Office of Primary Responsibility: EX/Project  
Management and Systems Engineering Office**

CEV-G-DRD-023

DRD-RV-10  
Revision C

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Engineering Directorate  
Project Management and Integration Office

DRD-CEV-G-023  
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JSC-64582

Revision: C DCN-001

Date: September 2021



National Aeronautics and Space Administration  
Lyndon B. Johnson Space Center  
Houston, Texas 77058

# Verification and Validation Document: Plan and Report for the Capsule Parachute Assembly System (CPAS)

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## JSC Engineering, Technology, and Science (JETS) Contract

### Verification and Validation Document Plan and Report for the Capsule Parachute Assembly System (CPAS)

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## Change Record

Rev.	Date	Description of Changes	Approvals
Baseline	August 2015	Initial issue	See signature page
A	February 2019	CPAS-162, CPAS-173, CPAS-188	See signature page
B	July 2019	CPAS-204, added verification results, updated VCM numbers	See signature page
C	September 2021	<p>Updated and finalized VCMs:</p> <ul style="list-style-type: none"> <li>• VCM-017: updated with test data and finalized the VCM</li> <li>• VCM-011: reflect that VCM-017 has been finalized and finalize VCM-011</li> <li>• Updated references to <i>JSC-67361 CPAS Asymmetry and Reefing Loop Load Assessment Summary</i> from Rev A to Rev B in VCM-007, VCM-019, and VCM-029</li> <li>• VCM-024: reference the official program waiver GEMCB-001 Rev 1</li> </ul> <p>Added <i>JSC-67361 CPAS Asymmetry and Reefing Loop Load Assessment Summary</i> to the Applicable Documents table in section 2.1</p> <p>Updated Appendix G to note that all VCMs have been finalized</p>	See signature page
C DCN-001	September 2021	Corrected typos in VCM-018 and VCM-025	See signature page



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