



NASA Headquarters  
Washington, DC 20546

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HOWI8682 - M012  
REVISION A  
APRIL 16, 1999

# **Code M Expendable Launch Vehicles (ELV) Manifest Process**

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## Code M Expendable Launch Vehicles (ELV) Manifest Process

Approved and signed by

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### DOCUMENT HISTORY LOG

Status (Draft/ Baseline/ Revision/ Canceled)	Document Revision	Effective Date	Description
Baseline		12-16-98	
Revision	A	04-16-99	Revised as a result of DNV Pre-Registration Audit findings. In Section 5 added a quality record (Summary of Decisions & actions) & in Section 6 added corresponding action description. Additionally, changed Section 7 (records) to agree with NPG 1441.1B.

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## 1.0 PURPOSE

The purpose of this OWI is to prescribe the process steps to develop and document a manifest for NASA missions utilizing Expendable Launch Vehicles.

## 2.0 SCOPE

The OWI for Expendable Launch Vehicles Manifest Process applies to operations within the Office of Space Flight (Code M) at Headquarters and is limited to the activities performed by Headquarters personnel.

## 3.0 DEFINITIONS

The following definitions are offered to assist the user in understanding the process described in this OWI.

### **Expendable Launch Vehicle (ELV)**

A mode of space transportation that places a payload into a specified orbit or planetary trajectory with flight hardware that is not retrieved or reused for another flight.

### **Spacecraft (S/C)**

The NASA owned, NASA sponsored payload which is typically comprised of a payload, instrument(s) and hardware structure which provides power, attitude control, etc. for the payload in flight.

### **Flight Planning Board (FPB)**

The ELV Flight Planning Board serves as the single agency process to document the approved mission manifest for NASA-acquired ELV launch services and upper stages. The Flight Planning Board is held quarterly. The Board Members are the Deputy AA for the Offices of Space Flight (code M), Aero-Space Technology (code R), Space Science (code S) and Earth Science (code Y). The Office of Space Flight, Director of ELV Requirements chairs the Flight Planning Board.

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### **National Mission Model (NMM)**

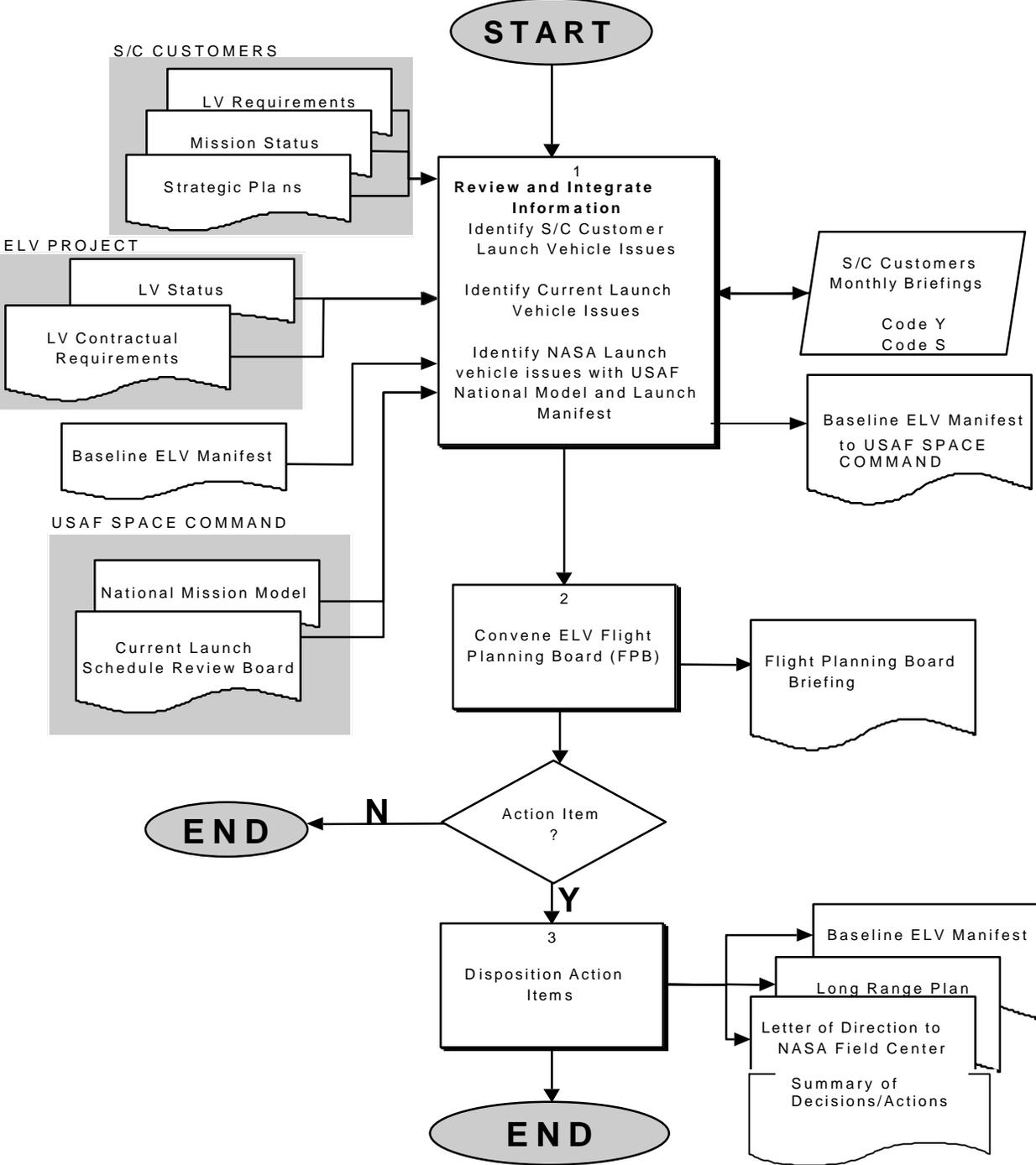
The model maintained by the USAF Space Command to reflect all planned military, civil and commercial United States launch activity occurring at government ranges.

### **4.0 REFERENCES**

The following documents contain provisions that, through reference in this OWI or in policy or procedure documents, constitute the basis for the documented procedure:

HQSM1200.A.1	Headquarters Quality System Manual
From Code S	Space Science Enterprise Strategic Plan Origin, Evolution, Destiny of the Cosmos and Life (Nov. 1997)
From Code Y	Earth Science Enterprise Strategic Plan 1998-2002

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## 6.0 EXPENDABLE LAUNCH VEHICLE MANIFEST PROCESS STEPS

The ELV Flight Planning Board serves as the single agency process to document the approved mission manifest for NASA-acquired ELV launch services and upper stages. The Flight Planning Board provides forum to identify and baseline mission launch requirements, discuss manifest issues, seek manifest conflict resolution and provide direction to NASA centers for implementation. The baseline NASA manifest approved at the FPB is provided to the USAF Space Command for inclusion in the National Mission Model. The products of the Flight Planning Board are the Baseline ELV and Upper Stages Manifest, the Long Range Plan and Letters of direction to NASA field centers.

The Director of ELV Requirements is responsible for maintaining cognizance on customer launch vehicle issues, supplier launch vehicle issues and USAF Launch Manifest issues. An emergency (meeting held in addition to normal quarterly review) Flight Planning Board can be held if determined necessary.

<u>Actionee</u>	<u>Flowchart Reference</u>	<u>Action</u>
Director ELV	1	As an ongoing process, identify all s/c Requirements customer issues, LV issues, LV contractual Requirements and/or USAF manifest issues that may affect NASA ELV Missions. The Office of Space Flight will provide monthly briefings to Code S and Code Y and will supply revisions of the Baseline NASA ELV Manifest to the USAF Space Command.
Director ELV Requirements	2	Convene ELV Flight Planning Board (FPB). Customer mission requirements for NASA- owned, NASA-sponsored spacecraft (s/c) when included in the annual President's Budget, are documented at the board for

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inclusion to the ELV manifest.

Issues and concerns involving missions on the manifest are discussed. The ELV Manifest is updated to reflect approved launch date changes as required. A final ELV Baseline Manifest is approved at the Board .

Director ELV  
Requirements

3

Disposition action items from FPB Update Baseline ELV Manifest, Long Range Plan. Write Letter of Direction to field centers to implement actions from FPB. Write summary of decisions and actions from FPB. All FPB products will be distributed within 30 calendar days after the FPB

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## 7.0 RECORDS

RECORD IDENTIFICATION	OWNER	LOCATION	RECORD MEDIA: ELECTRONIC OR HARD COPY	SCHEDULE NUMBER AND ITEM NUMBER	RETENTION/DISPOSITION
ELV & Upper Stages Manifest	MV	MV	Hardcopy	Schedule 7 Item 4,A	Permanent. Retire to FRC 5 yrs. after Supersession or completion.
Long Range Plan	MV	MV	Hardcopy	Schedule 7 Item 4,A	Permanent. Retire to FRC 5 yrs. after Supersession or completion.
Letter of Direction	MV	MV	Hardcopy	Schedule 7 Item 4,A	Permanent. Retire to FRC 5 yrs. after Supersession or completion.
Flight Planning Board briefing charts/actions	MV	MV	Hardcopy	Schedule 7 Item 4,A	Permanent. Retire to FRC 5 yrs. after Supersession or completion.
Flight Planning Board decisions & actions summary	MV	MV	Hardcopy	Schedule 7 Item 4,A	Permanent. Retire to FRC 5 yrs. after Supersession or completion.