



## Virtual United States Space Program Generalized Rules and Procedures for Spaceflight Standard Operating Procedures (SOP)

Effective: April 9, 2003

- I. **PURPOSE:** The purpose of this document is to establish a set of rules, regulations, and procedures in regards to long and short duration manned spaceflight missions that have not been outlined in the "Space Mission Flight Plans and Flight Recording SOP".
- II. **APPLICABILITY:** This SOP is applicable to all VUSSP spaceflight missions with activities to include extending beyond a 24-hour period beginning exactly at 00:24:00:00.
- III. **DAILY CREW REPORTS:** All crew members who participate in a mission that lasts for longer than 24 hours must submit at the end of each mission day, depending on what rank you hold during that mission, a crew report stating, recapping, describing, and summarizing the days events including anomalies, schedule changes, and burn maneuvers. Regarding burn maneuvers, the Commander AND Pilot must report these. It should include information on the thrust maneuvering system used to perform the burn (RCS, OMS, etc.), the thrust power (%), time and date that the burn was executed, how many times the engine(s) were fired, how long the engine(s) burned, and the reason for performing the burn.
- IV. **SCIENCE REPORTS:** Science reports should be filed at the end of every mission day by each Mission Specialist or Station Specialist. In the report should be a summary of experiments conducted that day including observations made of the Earth and other celestial objects such as the Sun. In addition, if any tests were conducted, the results should also be compiled into the report. Please note that for every experiment done or observation made, each should be on a separate page within the report, or divided into sections according to the type of science it applies to.

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### Emergency Operations

- I. **SELECTION PROCESS:** To be eligible for an Emergency Crew, a astronaut must meet the following requirements:
  - Have been part of at least one VUSSP spaceflight
  - Have served as a Pilot of at least one VUSSP spaceflight
  - Sign a statement he/she can go on 24 hours notice for the specified period.
  - Not be a member of any other mission scheduled for launch up to 30 days following the completion of the active mission.

**II. CONTACTING PROCESS:** In the event that the Administration activates the Spaceflight Contingency Plan, the Director of Manned Spaceflight Operations will name the Emergency Crew and notify them of the need to go into space and affect the needed rescue. The following communications preparations are also required before the Emergency Mission will be cleared for launch:

- Working e-mail of the astronaut
- Instant Messaging Service: Default is MSN Messenger or AOL Instant Messenger.
- An agreed upon contact schedule setup, between those required.

**Optional:**

- Cell phone with Text Messaging for instant alert that we'll be activating the Space Contingency Plan.

**III. MISSION ACTIVATION CHAIN:** In the event of an emergency, the following chain of events will take place as quickly as possible within safety constraints:

- Mission Crew notifies FLIGHT and the Mission Control Operations Director there is a need for an Emergency Mission. They will **Immediately Notify** via the most expedient method, the Executive Committee, VUSSP Director, VUSSP Assistant Director, Organization Operations Director, VUSSP Spaceflight Operations Director, and Manned Spaceflight Operations Director.
- Jet Propulsion Laboratory and Director of Unmanned Spaceflight Operations begin calculations for next three Launch Windows. As soon as the information is available and confirmed, it should be forwarded to the Director of Manned Spaceflight Operations and Executive Committee.
- Director of Manned Spaceflight Operations immediately contacts the Emergency Crew and establishes positive communications. He will also contact the Executive Committee for the Go clearance to proceed with mission preparations.
- Once the Emergency Crew is activated and mission authorization is received, the Director of Manned Spaceflight Operations and crew will set up an online meeting with the Mission Control Operations Director, Manned Spaceflight Operations Director, VUSSP Spaceflight Operations Director, and Chief Mission Planner for the purpose of discussing the mission plan and setting the Launch Window.
- Once the Mission Plan and Launch Window is set and approved by the Director of Manned Spaceflight Operations, will begin preparing the Emergency Crew for the Mission. Simultaneously, the Director Mission Control Operations, in conjunction with PAO, will make the required internal and external notifications. The Director Unmanned Spaceflight Operations will get a team running continuous mission simulations. Emergency Mission Team will prepare and move the Emergency Vehicle to the launch position, and FLIGHT and his team will update the Primary crew of the mission plan and any actions required by that crew.
- At EL-6 hours, the Administrator or his designee will poll all members of the Emergency Mission Team and Primary Mission Team on their status on the Network Channel and issue the Go or No Go to pick up the count at EL-6 hours and counting. Once the clearance is given to start the count, the mission will proceed, as any other via established SOPs and other policies.

**IV. CHANGES:** This policy is subject to periodic update and changes as required by the evolving nature of VUSSP operations.