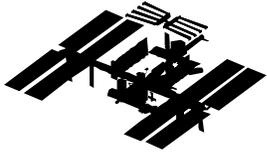


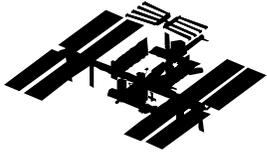
ULF-1

Utilization Status



ULF-1 Overview

- **Launch on January 16, 2003**
- **Three Facility Class Payloads**
 - **Human Research Facility 2 (HRF-2)**
 - **Minus Eighty Degree Celsius Laboratory Freezer for the ISS (MELFI)**
 - **Window Observation Research Facility (WORF)**
- **Four sub-rack payloads**
 - **Advanced Astroculture-Growth Chamber (ADVASC-GC)**
 - **Commercial Protein Crystal Growth (CPCG-H)**
 - **Protein Crystal Growth – Single Thermal Enclosure System (PCG-STES)**
 - **Space Dynamically Responding Ultrasonic Matrix System (Space-DRUMSTm)**
 - **Space-DRUMSTm is the first containerless facility that can control large objects while in microgravity. Solid objects up to three inches (7.62 cm) and liquid objects up to 5.5 inches (14 cm) can be controlled inside the 12.5 inch (30cm) chamber.**



ULF-1 Month-In-Review

Human Research Facility 2 (HRF-2):

- No activity

Minus Eighty Degree Celsius Laboratory Freezer for the ISS (MELFI):

- PDL inputs have been made and review has begun

Window Optical Research Facility (WORF):

- PDL inputs have been made

ADVASC-GC:

- No Activity

CPCG-H:

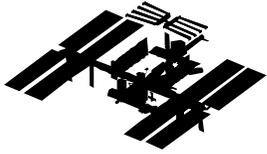
- No Activity

PCG-STES:

- No Activity

Space DRUMS:

- No activity



ULF-1 Looking Forward

Human Research Facility 2 (HRF-2):

- Requirements under review

Minus Eighty Degree Celsius Laboratory Freezer for the ISS(MELFI):

- Review PDL inputs and issue RCN to baseline file
- Hardware on dock 3/29

Window Optical Research Facility (WORF):

- Review PDL inputs and issue RCN to baseline file

ADVASC-GC:

- Requirements already baselined

CPCG-H:

- Requirements already baselined

PCG-STES:

- All units have been previously tested in PTCS with no changes. Tentatively planning exception to bypass PTCS testing for this flow

Space DRUMS:

- Requirements under review