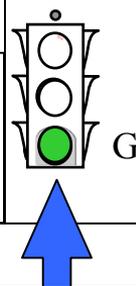


# ISSP Flight Readiness and Program Progress

Chart Owner: OC/D Pallesen Phone: x4-7054

Last Update: 8/13/03



**Purpose:** Show progress toward overall ISSP flight readiness. Basis is maturity of products relative to requirements/schedules.  
**Goal:** All products needed for flight readiness meet requirements and/or schedule. **Metric Summary:** ISSP Technical is 81% satisfactory. Schedule status is 87% satisfactory, 12% moderate and 1% serious. Of the total Program's flight readiness-related products, 1% have serious (R) and 18% have moderate (Y) issues, contrasted with 0% and 12%, respectively, on 7/18/03.

## Readiness Criteria for Known Problems

### Near Term Flights: next major milestone = SORR

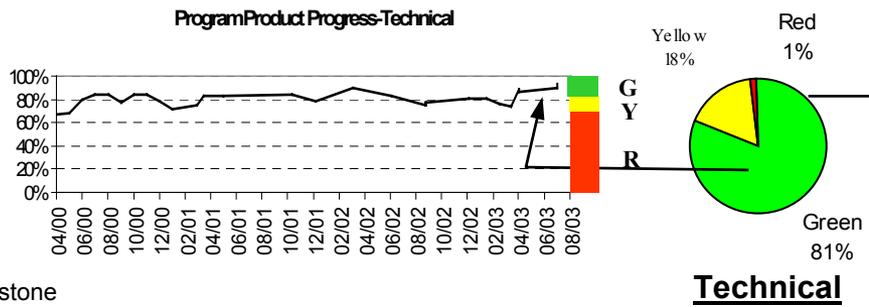
- Green-credible plan and resolved by SORR
- Yellow-credible plan and resolved by FRR
- Red-questionable plan

### Near Term Flights: next major milestone = FRR

- Green-credible plan and resolved by FRR
- Yellow-credible plan and resolved by L-2 days
- Red-questionable plan

### Farther Out Flights (greater than L-4 months)

- Green-credible plan and resolved by next major milestone
- Yellow or Red (problem severity)-questionable plan



**ISSP Stoplight Criteria**

- 81-100% = Green Status
- 71-80% = Yellow Status
- 0-70% = Red Status

## Technical

IDRD Assembly Sequence	Incr 7		Incr 8						Increment 9						Increment ULF-1		Increment/12.A.1						Increment/TBD													
	6S		12P		7S		13P		14P		15P		8S		16P		17P		ATV1		ULF-1		12A		12A.1		13A		13A.1		15A		10A			
	10/28/2003		08/30/2003		10/18/2003		11/20/2003		01/30/2004		03/25/2004		04/25/2004		06/20/2004		08/20/2004		09/27/2004		03/11/2004		07/24/2004		09/13/2004		12/15/2004		02/17/2005		02/17/2005		02/17/2005			
	Tec	Sc	Tec	Sc	Tec	Sc	Tec	Sc	Tec	Sc	Tec	Sc	Tec	Sc	Tec	Sc	Tec	Sc	Tec	Sc	Tec	Sc	Tec	Sc	Tec	Sc	Tec	Sc	Tec	Sc	Tec	Sc	Tec	Sc		
Overview			G	G	G	G	G	Y	G	Y	G	Y	G	G	G	G	G	G	Y	R	R	Y	G	G	G	G	Y	Y	G	G	G	G	G	G		
Flight Element/OB/OC/OM																							Y	G	G	G	Y	Y	G	G	G	G	G	G		
Flight/Qual ORUs/OB/OD			G	G			G	G	G	G	G	G			G	G	G	G			G	G	G	G	G	G	G	G	G	G	G	G	G	G		
Analysis & Verif/OB/OM																					G	G	G	Y	G	G	G	G	G	G	G	G	G	G	G	
Software/OD			G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	Y		G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	
IP/P H-W/Vehicles/OM/OC	G	G	G	G	G	G	G	Y	G	Y	G	Y	G	G	Y	G	Y	G	G	Y	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	
Payloads/OZ																					R	G	Y	G	G	G	Y	G	G	G	G	G	G	G	G	
Safety/OE			Y		Y		Y		Y		Y		Y		Y		Y				G	G	Y	G	G	G	G	G	G	G	G	G	G	G	G	
Shuttle Integration/OC																							Y	Y	Y	G	G	G	Y	G	G	G	G	G	G	G
Pressurized & Unpress'd Carriers/OC/OM																							G	G			G	G			G	G				
Operations/OC/MOD					G	G																	Y	G	G	G	Y	G	Y	Y	G	G	G	G	G	G
Cargo Intgr/Launch Processing	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G			G	G			G	G				

Tec = Technical, Sc = Schedule, IP/P = Intn'l Partner/Participant, G = Green, Y = Yellow, R = Red, Blank box = no data, / = none, Source = ISS Office Mgrs+LPMs+ISS Monthly Review+MOD, SORR = Stage Readiness Review, FRR = Flight Readiness Review, SHAB=SPACEHAB ★ = Status degradation or Red status-see Key Issues chart

# Red/Yellow Key Flight Readiness Issues (Backup to Flt Readiness chart)

Chart Owner: OC/D. Pallesen Phone: x4-7054

Last Update: 81303



**Purpose:** This chart is keyed to the Flight Readiness chart and provides technical or schedule issues and any degradation since the last metrics review which threatens the conduct of successful flight readiness reviews. **Goal:** The goal is to remove all issues prior to the flight readiness reviews. Sources are ISS Office Mgrs, LPMs, MOD, and the ISS Monthly Review package.

## 12P- I5P

•**Safety:** MMOD NCR update will be required.

## 7S

•**Safety:** MMOD NCR update will be required.

## 8S

•**Safety:** MMOD NCR update will be required.

## 13P-15P

•**IP H/W Vehicles-** uncertainty about funding/Launch Schedules for Russian vehicles to support increased flight rate. Status has changed from Red to yellow because the situation at Energia seems to be improving.

## ATV1

•**Software- Lack credible integrated test plan and schedule. ATV software schedules have little margin.** Two week to two month delays in various deliverables announced in mid July.

•**IP/P H-W/Vehicles** – Hardware schedules have little margins. Two week to two month delays in various deliverables announced in mid July.

## Flt ULF1

•**Analysis & Verification** – VLA deliverables are at risk pending definitions of return to flight requirements

•**Payloads** – Manifest impacts due to return to flight hardware may delete all payloads from middeck and will eliminate TBD payloads from the MPLM.

•**Safety** – 2 open NCR's: MPLM Berthing loads and Rapid safing.

- Shuttle Integration-** Manifest Impacts due to weight of return to flight hardware requires off loading of cargo
- Operations** – Timeline is fully subscribed with no margin.

## FLT 12A

•**Flight Element-** Preventative maintenance plan still being developed. Secondary locking issue still in work.

•**Shuttle Integration and Payload-** Manifest impacts due to return to flight hardware may eliminate all payloads from flight and require pre-positioning agreement with ULF-1 to ensure hardware is available to support the primary mission objectives.

## Flt 12A.1

•**Ops:** OC-Concerns with pump module transfer on EVA1 and complexities associated with the power system reconfiguration are in work. Additional EVA time will be required for installation of jumper cables to allow for heating of ISS cameras during planned power down. Mission extensionCR will mitigate this issue.

## Flt 13A

•**Flight Element-** Preventative maintenance plan still being developed. Trigger cup bolts and secondary locking issue still in work.

•**Payloads-** Manifest impacts due to return to flight hardware may eliminate all payloads.

### •**Ops and Overview-**

• Issues related to S4 activation in work; S4 system management prior to PVR installation, thermal management of PVR during relocation, over-pressure of PVR by ETCS prior to P6 removal.

• Potential Hardware constraints regarding on-orbit configuration of SARJ interface that may result in impacts to current EVA 1 & 2 content. Assessing Options. Analysis Schedule Slipped. Will impact STS-117 FOR on 9/16/03

• BMRRM latch on-orbit operations constraints are still in work.

**Worsened or Red status issues shown-new status in bold, underlined font - (see ISSP Flt Readiness & Progress chart)**