

EXPEDITION

31 & 32



GC Notes Of Interest

Increment Lead GC: Dot Wert

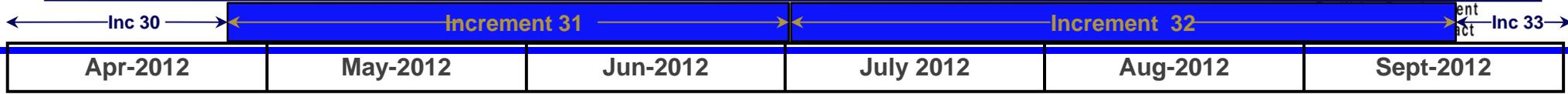
Increment Backup GC: Brian Jones

Expedition 31 begins with the Soyuz TMA-22 undocking in April 2012. Three new crew members will arrive shortly thereafter on Soyuz TMA-04M

Expedition 32 begins with the Soyuz TMA-03M undocking in July 2012. Three new crew members will arrive shortly thereafter on Soyuz TMA-05M

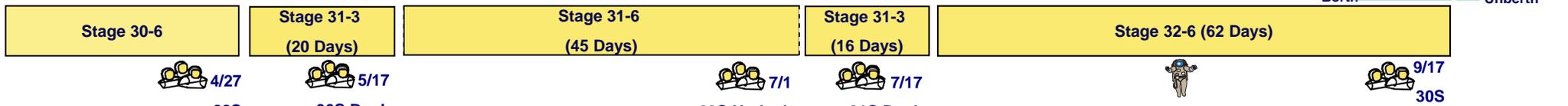
- 4/19/12 Progress 46 undocking
- 4/20/12 Progress 47 launch
- 4/22/12 Progress 47 docking
- 4/30/12 SpaceX/Dragon launch
- 5/03/12 SpaceX/Dragon Dock
- 5/15/12 Soyuz 30 launch
- 5/17/12 Soyuz 30 Dock
- 5/21/12 SpaceX/Dragon Undock
- 7/01/12 Soyuz 29 Undock
- 7/15/12 Soyuz 31 Launch
- 7/17/12 Soyuz 31 Dock
- 7/21/12 HTV-3 launch
- 7/30/12 Progress 47 Undock
- 8/26/12 HTV3 Undock
- 9/03/12 ATV3 Undock
- 9/17/12 Soyuz 30 Undock

INCREMENTS 31 & 32



MRM2	28S 27-Apr	17-May	30S	17-Jul	31 Sept
MRM1		29S	1-Jul		
DC-1		47P	*30-Jul	2-Aug	48P
SM Aft			ATV3		3-Sept

N2 Zenith				11 Aug	26 Aug	
N2 Nadir	3 May Berth	21 May Unberth	27 July Berth	20 Aug Berth	6 Sept Berth	20 Sept Unberth
		SpX-D			SpX-1	Orb-D1



CDR – D. Burbank	28S Undock		E31 FE-1 /E32 CDR - G. Padalka (45/123) (78/123)
FE-1 – A. Shkaplerov			E31/E32 FE-2 – S. Revin (45/123) (78/123)
FE-2 – A. Ivanishin			E31/E32 FE-3 – J. Acaba (45/123) (78/123)

E 31 CDR – O. Kononenko (62/191)	E 32 FE-4 – Y. Malenchenko (62/118)
E 31 FE-5 – A. Kuipers (62/191)	E 32 FE-5 – S. Williams (62/118)
E 31 FE-6 – D. Pettit (62/191)	E 32 FE-6 – A. Hoshide (62/118)

	Stage 31-3	Stage 31-6	Stage 32-3	Stage 32-6
Vehicle Traffic	<ul style="list-style-type: none"> Prep for 30S Arrival Prep for SpX-D and Fly-under Berth SpX-D 	<ul style="list-style-type: none"> Dock 30S Unberth SpX-D Undock 29S 	<ul style="list-style-type: none"> Prep for 31S Arrival 	<ul style="list-style-type: none"> Dock 31S Undock 30S Berth/Relocate/Unberth HTV3 Berth SpX-1 Berth Orb-D (<i>No crew time allocated</i>) Undock/Redock/Undock 47P Dock 48P Undock ATV3
Utilization, EVAs, Resupply and Outfitting	<p><i>First Time Payload Ops (SpaceX-Demo mission)</i></p> <p>NASA – New processes for early unpack after berthing, late cargo stow, rapid landing site recovery of payload hardware.</p> <p>NASA – Nanoracks9 – new educational science content</p>	<ul style="list-style-type: none"> HRCS Installation 		<p><i>First Time Payloads (Manifested on HTV3 and 48P)</i></p> <p>NASA – SCAN (external), Cubesat for Small Sat Deployer, ACE-1, ISERV, NanoRack Microplate Reader, HiMassSEE, REM, YouTube Spacelab</p> <p>JAXA – MCE (external), MEDAKA OSTEOCLAST (Aquatic Habitat), Cubesat for Small Sat Deployer</p> <ul style="list-style-type: none"> RS EVA #31 USOS EVA #18 (<i>No crew time allocated</i>)
S/W & Av Updates				<ul style="list-style-type: none"> JEMRMS update for HTV3 JEMRMS update for Small Satellite Deploy

<p>29 Soyuz</p> <p>Kononenko</p> <p>Kuipers</p>	<p>30 Soyuz</p> <p>Padalka</p> <p>Revin</p>	<p>31 Soyuz</p> <p>Malenchenko</p> <p>Williams</p> <p>Hoshide</p>
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ISS Crew Expedition 31 & 32

Soyuz Crew Exchange



As commander of Increment 31, to the International Space Station aboard the Soyuz TMA-03M Astronaut Oleg Kononenko traveled spacecraft to serve as an Expedition 30 flight engineer and Expedition 31 commander.



ESA Astronaut Andre Kuipers flew aboard the Soyuz TMA-03M spacecraft to serve as a flight engineer for Expeditions 30 and 31.



Nasa Astronaut Don Pettit traveled to the International Space Station aboard the Soyuz TMA-03M spacecraft to serve as a flight engineer for Expeditions 30 and 31.



NASA astronaut Joe Acaba will fly to the International Space Station aboard the Soyuz TMA-04M to serve as an Expedition 31 Flight Engineer and as the Expedition 32 Flight Engineer.



Russian Cosmonaut Gennady Ivanovich Padalka will fly to the International Space Station aboard the Soyuz TMA-04M to serve as an Expedition 31 Flight Engineer and as the Expedition 32 Commander.



Cosmonaut Sergei Revin will fly to the International Space Station aboard the Soyuz TMA-04M to serve as an Expedition 31/32 Flight Engineer

Increment 31 Patch



- **Thin crescents along the horizons of Earth and its moon depict International Space Station (ISS) Expedition 31. The shape of the patch represents a view of our galaxy. The black background symbolizes the research into dark matter, one of the scientific objectives of Expedition 31. At the heart of the patch are Earth, its moon, Mars, and asteroids, the focus of current and future exploration. The ISS is shown in an orbit around Earth, with a collection of stars for the Expedition 30 and 31 crews. The small stars symbolize the visiting vehicles that will dock with the complex during this expedition**

Increment 32 Patch



This patch represents the 32nd Expedition to the International Space Station (ISS) and the significance of the science being conducted there for current and future generations. The arch shape of the patch symbolizes the "doorway" to future space exploration possibilities. The ISS, an orbiting laboratory above the Earth, provides a unique perspective for Earth Observation and monitoring. The flame depicts the pursuit of knowledge and highlights the importance of education as the key to future human space flight. The astronaut symbol circles the Earth, acknowledging the work of all astronauts, past, present, and future. The names of each crew member located on the border of the patch are written to honor the various cultures and languages on the mission. The three flags also depict the home countries of the Expedition 32 crew members and signify the collaborative ISS partnership of 15 countries working as one.