

Note: This documentation can also be opened via the Orbiter help inside the simulation.

OFSS Mission 5 - DGIIV – Supply-1 – RangerPL

Required Downloads/Add-ons:

- *Orbiter 2006 P1 Base* (www.orbitersim.com)
- *Wideawake International* (<http://www.orbithangar.com/searchid.php?ID=3666>)
- *Energy Project* (<http://www.orbithangar.com/searchid.php?ID=1036>)
- *Universal RMS* (<http://www.orbithangar.com/searchid.php?ID=3373>)
- *Interplanetary MFD* (<http://koti.mbnet.fi/jarmonik/IMFD53.zip>)
- *XR-5 Vanguard* (<http://www.dougsorbiterpage.com/index-3.html>)
- *Ariane 6* (<http://orbiter.mustard-fr.com/addons/ariane6.php>)
- *PMA* (<http://orbiter.mustard-fr.com/addons/pma.php>)
- *Launch MFD* (<http://www.orbithangar.com/searchid.php?ID=2802>)
- *HL-20* (<http://www.orbithangar.com/searchid.php?ID=1489>)
- *Shuttle Fleet 4.15* (<http://www.orbithangar.com/searchid.php?ID=3730>)
- *Artemis* (<http://orbiter.mustard-fr.com/addons/themis.php>)
- *Delta Tug* (<http://www.orbithangar.com/searchid.php?ID=1127>)
- *DG-IV* (<http://orbiter.dansteph.com/index.php?disp=dgIV>)
- BaseSync and Aerobrake MFD are recommended:
<http://koti.mbnet.fi/jarmonik/BaseSyncMFD.zip>
<http://www.orbithangar.com/searchid.php?ID=2139>

Installation:

1. Create a new orbiter installation, unzip the Orbiter Base to any folder.
2. Unzip Wideawake International into that Orbiter folder.
3. Unzip Energy project, and run the setup to install it.
4. Unzip Universal RMS, and run the setup to install it.
5. Unzip Interplanetary MFD (IMFD) into the Orbiter folder.
6. Unzip XR-5 into the Orbiter folder.
7. Unzip Ariane 6 into the Orbiter folder.
8. Unzip PMA to the Orbiter folder.
9. Unzip Launch MFD to the Orbiter folder.
10. Unzip HL-20 to the Orbiter folder.
11. Unzip Shuttle Fleet to the Orbiter folder.
12. Unzip Artemis to the Orbiter folder.
13. Unzip Delta Tug and run the installer.
14. Run the installer of DG-IV.
15. Unzip the newest Orbiter Forum Space Station package from.
<http://www.orbithangar.com/searchauth.php?search=astrosammy> into the folder.
16. Activate Launch MFD and IMFD in the Orbiter launchpad.

Mission:

1. Launch orbiter and start the scenario “#5 Mission 5 Launch; RangerPL.scn”. Energia is ready for launch at Wideawake.
2. Open Launch MFD and enter “Core” as target. It now gives you the heading and the time for your launch
3. Wait until the time in LMFD is at 350s
4. Prepare your ship and launch. The Autopilot should put you into the right inclination.
5. Intercept the station, that should not take longer than 5 days.

6. When you are at the station switch to "Zoe" and enable it's pro- or retrograde autopilot to move the station to docking attitude.
7. Dock to the station, at the PMA below the Artemis node.
8. Move the RMS into position for grappling your payload, separate it, and grapple it. You can undock and do an EVA if the RMS isn't long enough for that.
9. Dock the payload to one of the ports at Artemis.
10. Wait for the next landing opportunity at Wideawake or Canaveral, using the standard Map MFD, or with BaseSync MFD.
11. Perform Atmospheric reentry and landing at Wideawake or Canaveral, using standard MFDs, or AerobrakeMFD.
12. If you are unable to do that, ask the other pilots for help in the "Reentry Help" discussion.
13. At the end you should save the scenario either with the scenario editor, or with the "Save Current" button in the Orbiter Launchpad, and post it in the discussion "Docs and packages" in the OFSS user group.

The mission should be finished after three days, to keep the waiting time for the next pilot short.

It is not required, but would be nice if screenshots of this mission are uploaded.

|||||**END OF OFSS MISSION-5 DOC**|||||

OFSS Mission 4 - STS – Artemis + PMA – Tex

Required Downloads/Add-ons:

- *Orbiter 2006 P1 Base* (www.orbitersim.com)
- *Wideawake International* (<http://www.orbithangar.com/searchid.php?ID=3666>)
- *Energy Project* (<http://www.orbithangar.com/searchid.php?ID=1036>)
- *Universal RMS* (<http://www.orbithangar.com/searchid.php?ID=3373>)
- *Interplanetary MFD* (<http://koti.mbnet.fi/jarmonik/IMFD53.zip>)
- *XR-5 Vanguard* (<http://www.dougsorbiterpage.com/index-3.html>)
- *Ariane 6* (<http://orbiter.mustard-fr.com/addons/ariane6.php>)
- *PMA* (<http://orbiter.mustard-fr.com/addons/pma.php>)
- *Launch MFD* (<http://www.orbithangar.com/searchid.php?ID=2802>)
- *HL-20* (<http://www.orbithangar.com/searchid.php?ID=1489>)
- *Shuttle Fleet 4.15* (<http://www.orbithangar.com/searchid.php?ID=3730>)
- *Artemis* (<http://orbiter.mustard-fr.com/addons/themis.php>)
- BaseSync and Aerobrake MFD are recommended:
<http://koti.mbnet.fi/jarmonik/BaseSyncMFD.zip>
<http://www.orbithangar.com/searchid.php?ID=2139>

Installation:

1. Create a new orbiter installation, unzip the Orbiter Base to any folder.
2. Unzip Wideawake International into that Orbiter folder.
3. Unzip Energy project, and run the setup to install it.
4. Unzip Universal RMS, and run the setup to install it.
5. Unzip Interplanetary MFD (IMFD) into the Orbiter folder.
6. Unzip XR-5 into the Orbiter folder.
7. Unzip Ariane 6 into the Orbiter folder.

8. *Unzip PMA to the Orbiter folder.*
9. *Unzip Launch MFD to the Orbiter folder.*
10. *Unzip HL-20 to the Orbiter folder.*
11. *Unzip Shuttle Fleet to the Orbiter folder.*
12. *Unzip Artemis to the Orbiter folder.*
13. *Unzip the newest Orbiter Forum Space Station package from.*
<http://www.orbithangar.com/searchauth.php?search=astrosammy> into the folder.
14. *Activate Launch MFD and IMFD in the Orbiter launchpad.*

Mission:

1. Launch orbiter and start the scenario “#4 Mission 4 Launch; Tex.scn”. Atlantis is ready for launch at Kennedy Space Center.
2. Open Launch MFD and enter “Core” as target. It now gives you the heading and the time for your launch
3. Wait until the time in LMFD is at 350s
4. Prepare your ship and launch. The Autopilot should put you into the right inclination.
5. Intercept the station, that should not take longer than 5 days.
6. When you are at the station switch to “Zoe” and enable it's pro- or retrograde autopilot to move the station to docking attitude.
7. Do not dock to the station, just translate below Zoe's docking port. Use the station's RMS to grapple the shuttle if required.
8. Use the shuttle's RMS to grapple Artemis and dock it to Zoe as shown in the included image in the folder “OFSS Docs”.
9. Dock the PMA to Artemis.
10. Dock Atlantis to the PMA.
11. Wait for the next landing opportunity at Canaveral or Wideawake, using the standard Map MFD, or with BaseSync MFD, available at <http://koti.mbnet.fi/jarmonik/BaseSyncMFD.zip>.
12. Perform Atmospheric reentry and landing at Canaveral or Wideawake, using standard MFDs, or AerobrakeMFD, available at <http://www.orbithangar.com/searchid.php?ID=2139>.
13. If you want to use Auto FCS, save the scenario and change the line "System Sol" to "System SolAlt". You may need the "Shuttle Fleet Expansion Pack" for that.
14. If you are unable to do that, ask the other pilots for help in the "Reentry Help" discussion.
15. At the end you should save the scenario either with the scenario editor, or with the "Save Current" button in the Orbiter Launchpad, and post it in the discussion “Docs and packages” in the OFSS user group.

The mission should be finished after three days, to keep the waiting time for the next pilot short.

It is not required, but would be nice if screenshots of this mission are uploaded.

|||||**END OF OFSS MISSION-4 DOC**|||||

OFSS Mission 3 - XR-5 – HL-20 – bradfirji92

Required Downloads/Add-ons:

- *Orbiter 2006 P1 Base* (www.orbitersim.com)
- *Wideawake International* (<http://www.orbithangar.com/searchid.php?ID=3666>)
- *Energy Project* (<http://www.orbithangar.com/searchid.php?ID=1036>)

- Universal RMS (<http://www.orbithangar.com/searchid.php?ID=3373>)
- Interplanetary MFD (<http://koti.mbnet.fi/jarmonik/IMFD53.zip>)
- XR-5 Vanguard (<http://www.dougsorbiterpage.com/index-3.html>)
- Ariane 6 (<http://orbiter.mustard-fr.com/addons/ariane6.php>)
- PMA (<http://orbiter.mustard-fr.com/addons/pma.php>)
- Launch MFD (<http://www.orbithangar.com/searchid.php?ID=2802>)
- HL-20 (<http://www.orbithangar.com/searchid.php?ID=1489>)
- BaseSync and Aerobrake MFD are recommended:
<http://koti.mbnet.fi/jarmonik/BaseSyncMFD.zip>
<http://www.orbithangar.com/searchid.php?ID=2139>

Installation:

1. Create a new orbiter installation, unzip the Orbiter Base to any folder.
2. Unzip Wideawake International into that Orbiter folder.
3. Unzip Energy project, and run the setup to install it.
4. Unzip Universal RMS, and run the setup to install it.
5. Unzip Interplanetary MFD (IMFD) into the Orbiter folder.
6. Unzip XR-5 into the Orbiter folder.
7. Unzip Ariane 6 into the Orbiter folder.
8. Unzip PMA to the Orbiter folder
9. Unzip Launch MFD to the Orbiter folder.
10. Unzip HL-20 to the Orbiter folder
11. Unzip the newest Orbiter Forum Space Station package from.
<http://www.orbithangar.com/searchauth.php?search=astrosammy> into the folder.
12. Activate Launch MFD and IMFD in the Orbiter launchpad.

Mission:

1. Launch orbiter and start the scenario “#3 Mission 3 Launch; bradfirji92.scn”. XR-5 is ready for launch at the runway at Wideawake International.
2. Open Launch MFD and enter “Core” as target. It now gives you the heading and the time for your launch
3. Wait until the time in LMFD is at 350s
4. Prepare your ship and launch into the heading shown by LMFD. Do a standard SCRAM-assisted ascend into an Orbit lower than the Core. A circular orbit somewhere between 200 and 280km is recommended.
5. Intercept the station, that should not take longer than 5 days.
6. Dock to port 2 of the station.
7. Use the station's RMS to grapple a HL-20 and dock it to one of the PMA's.
8. Dock the other HL-20 to the other PMA.
9. Stow and park the RMS.
10. Wait for the next landing opportunity at Wideawake, using the standard Map MFD, or with BaseSync MFD, available at <http://koti.mbnet.fi/jarmonik/BaseSyncMFD.zip>
11. Perform Atmospheric reentry and landing at Wideawake, using standard MFDs, or AerobrakeMFD, available at <http://www.orbithangar.com/searchid.php?ID=2139>
12. If you are unable to do that, ask the other pilots for help in the "Reentry Help" discussion.
13. At the end you should save the scenario either with the scenario editor, or with the "Save Current" button in the Orbiter Launchpad, and post it in the discussion “Docs and packages” in the OFSS user group.

The mission should be finished after three days, to keep the waiting time for the next pilot short.

It is not required, but would be nice if screenshots of this mission are uploaded.

|||||**END OF OFSS MISSION-3 DOC**|||||

OFSS Mission 2 - XR-5 – Zoe, PMA-1, PMA-2 – Mafuskas

Required Downloads/Add-ons:

- *Orbiter 2006 P1 Base* (www.orbitersim.com)
- *Wideawake International* (<http://www.orbithangar.com/searchid.php?ID=3666>)
- *Energy Project* (<http://www.orbithangar.com/searchid.php?ID=1036>)
- *Universal RMS* (<http://www.orbithangar.com/searchid.php?ID=3373>)
- *Interplanetary MFD* (<http://koti.mbnet.fi/jarmonik/IMFD53.zip>)
- XR-5 Vanguard (<http://www.dougsorbiterpage.com/index-3.html>)
- Ariane 6 (<http://orbiter.mustard-fr.com/addons/ariane6.php>)
- PMA (<http://orbiter.mustard-fr.com/addons/pma.php>)
- Launch MFD (<http://www.orbithangar.com/searchid.php?ID=2802>)
- BaseSync and Aerobrake MFD are recommended:
<http://koti.mbnet.fi/jarmonik/BaseSyncMFD.zip>
<http://www.orbithangar.com/searchid.php?ID=2139>

Installation:

1. *Create a new orbiter installation, unzip the Orbiter Base to any folder.*
2. *Unzip Wideawake International into that Orbiter folder.*
3. *Unzip Energy project, and run the setup to install it.*
4. *Unzip Universal RMS, and run the setup to install it.*
5. *Unzip Interplanetary MFD (IMFD) into the Orbiter folder.*
6. *Unzip XR-5 into the Orbiter folder.*
7. *Unzip Ariane 6 into the Orbiter folder.*
8. *Unzip PMA to the Orbiter folder*
9. *Unzip Launch MFD to the Orbiter folder.*
10. *Unzip the newest Orbiter Forum Space Station package from.*
<http://www.orbithangar.com/searchauth.php?search=astrosammy> *into the folder.*
11. *Activate Launch MFD and IMFD in the Orbiter launchpad.*

Mission:

1. Launch orbiter and start the scenario “#2 Mission2 Launch; Mafuskas.scn”. XR-5 is ready for launch at the runway at Wideawake International.
2. Open Launch MFD and enter “Core” as target. LMFD. It now gives you the heading and the time for your launch
3. Wait until the time in LMFD is at 350s
4. Prepare your ship and launch into the heading shown by LMFD. Do a standard SCRAM-assisted ascend into an Orbit lower than the Core. A circular orbit somewhere between 150 and 180km is recommended.
5. Intercept the station, that should not take longer than 5 days.
6. Dock to port 2 of the station.
7. Boost the station up to a 300km circular Orbit, use the Hover engines, if the station begins to rotate

- use Killrot, and if required use COG shifting.
8. Use the station's RMS to grapple Zoe and dock it to port 1 of the core
 9. Grapple a PMA and dock it to port 7.
 10. Dock the other PMA to port 8.
 11. Stow and park the RMS.
 12. Wait for the next landing opportunity at Wideawake, using the standard Map MFD, or with BaseSync MFD, available at <http://koti.mbnet.fi/jarmonik/BaseSyncMFD.zip>
 13. Perform Atmospheric reentry and landing at Wideawake, using standard MFDs, or AerobrakeMFD, available at <http://www.orbithangar.com/searchid.php?ID=2139>
 14. If you are unable to do that, ask the other pilots for help in the "Reentry Help" discussion.
 15. At the end you should save the scenario either with the scenario editor, or with the "Save Current" button in the Orbiter Launchpad, and post it in the discussion "Docs and packages" in the OFSS user group.

The mission should be finished after three days, to keep the waiting time for the next pilot short.

It is not required, but would be nice if screenshots of this mission are uploaded.

|||||**END OF OFSS MISSION-2 DOC**|||||

OFSS Mission 1 - Energia - Core Module – Woo482

Mission:

1. Launch orbiter and start the scenario "#1 Mission1 Launch; Woo482.scn". Energia is ready for launch at the pad at Wideawake International.
2. Press Ctrl+Space and click "Launch" in the window that now opened.
3. The autopilot is configured for the target orbit: Inclination 29° (EQ), and altitude 300km.
4. The first action by the pilot after Main Engine Cutoff will be a burn to circularize the orbit using the
5. DM-2 Tug.
6. In IMFD click at "Orbital", and at apogee click "AB" to start the burn.
7. Now the orbit should be close to 300km, if not adjust it to be at that altitude.
8. At the end the scenario you should save the scenario either with the scenario editor, or with the "Save Current" button in the Orbiter Launchpad, and post it in the discussion "Docs and packages" in the OFSS user group.
9. The RMS is stowed inside the Core, it will be deployed later to assist future missions.

The mission should be finished after three days, to keep the waiting time for the next pilot short.

It is not required, but would be nice if screenshots of this mission are uploaded.

|||||**END OF OFSS MISSION-1 DOC**|||||