Flexibility II

Learning Objectives

Flexibilty expressed through on-orbit servicing
Provider and Servicer perspective
Upgrading vrs life extension

Required Reading

1) Flexibility Framing II (11000 Flexibility II frame.doc)
2) Saleh on Flexibility and Servicing (11020 Flex_and_Servicing.doc)
3) Nilchiani on Servicing Architectures (11030 Flex_and_Service_Arch.doc)
4) Detailed theory of servicing using real options (11040 Flex_theory_OOS.pdf)
5) Detailed application of servicing using real options (11040 Flex_App_OOS.pdf)
6) Upgrading as a statement of flexibility (11060 Flex_Upgrade.pdf)

Recommended Reading

1) Modular satellites (11570 RiskRedModular.pdf)
2) HST flexibility (11580 HST flexibility.pdf)
3) Aircraft flexibility (11590 Flex_Aircraft.pdf)
4) Flexibility via orbital reconfiguration (11595 OrbitReconfig.pdf)

Homework

1. Read the paper "Policy options for LEO PCS systems (12590 leopcs_policy.pdf)" and address the issue of whether there were more flexible architectural choices that could have alleviated the ultimate fate of these systems.