MPTP – TS21 Status

September 26, 2016

Nancy Horvath
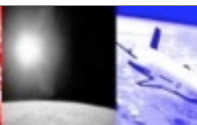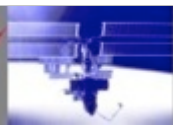
Lisa Smith

Training Team Lead

NASA/Marshall Space Flight Center

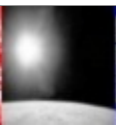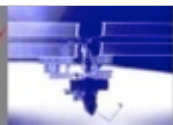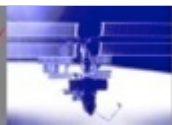256-544-2775

DEFINITIONS/OUTLINE

- TS21 – Training Systems for the 21st century
  - What is it?
    - New ISS Training Simulator to replace:
      - SSTF Full Task Trainer (FTT)
      - Part Task Trainer (PTT)
      - Flight Controller Part Task Trainer (FCPTT)
      - Flight Control Trainer (FCT)
      - SimCity
      - Robotics Flight Control Trainer (RFCT)
      - American Segment Trainer (AST) - *replacement not scheduled yet*
    - TS21 is the architecture and is vehicle agnostic
    - All future JSC/Flight Ops simulators will be built into the TS21 architecture
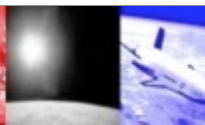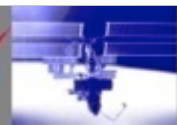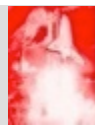
DEFINITIONS/OUTLINE

- Schedule
  - Formal testing in work
  - New plan for Operational Readiness Reviews (ORR):
    - 3 ORRs + 6 Acceptance Tests
    - Incremental build-up of capabilities
  - New milestones:
    - Single System Part-Task Training (FCPTT ORR) – Dec 2016
    - POIC-only Simulations (POIC AT) – February 2017
    - Sims with MCC-H - May 2017
      - Including JAXA-HTV, Cygnus, Dragon
      - Excluding Generic VV (FTT ORR)
    - First JMST to use TS21- June 2017
    - Generic Visiting Vehicle simulations (GenVV AT) – June 2017
    - Crew Part Task Trainer (PTT ORR) – April 2017
  - Future Work (beyond summer 2017)
    - American Segment Trainer (AST)

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DEFINITIONS/OUTLINE

- How does it impact Partner training?
  - JMST
    - Initially – less mature simulator, higher chance of problems
    - Will be performing GC training in simulations – could see ground network problems proposed in script meetings. CTO will integrate these proposals with the scripting priorities
    - Simulator testing and prep – more TS21 strings available, could make testing and prep more efficient
  - SVMF training
    - TS21 replaces PTT in SVMF, allows higher fidelity simulation

Backup

TS21 ORR Plan

	FY16			FY17										
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug
TS21 ORRs			PTT CDR ▽ 9/16P			**FCPTT ORR** ▽ **12/19P**		PTT SAR ▽ 2/24P		**PTT ORR** ▽ **4/21P**	**FTT ORR** ▽ **5/25P**	Project Closure ★ → TS Sustaining		
External Partner Acceptance Tests (AT)		Payload SAR ▽ 8/25P	JST AT ▽ 9/22P	COL-TRU AT ▽ 10/14P				Payload AT ▽ 2/28P / HTV AT ▽ 2/21P		Cygnus AT ▽ 4/4P		GenVV AT ▽ 6/28P		

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