

TESLA TECHNOLOGY

TTC

COLLABORATION



FRIB

Machine Availability and Reliability of FRIB

October 12, 2022

TTC2022 at Aomori, Japan

Sang-hoon Kim on behalf of FRIB

MICHIGAN STATE
UNIVERSITY

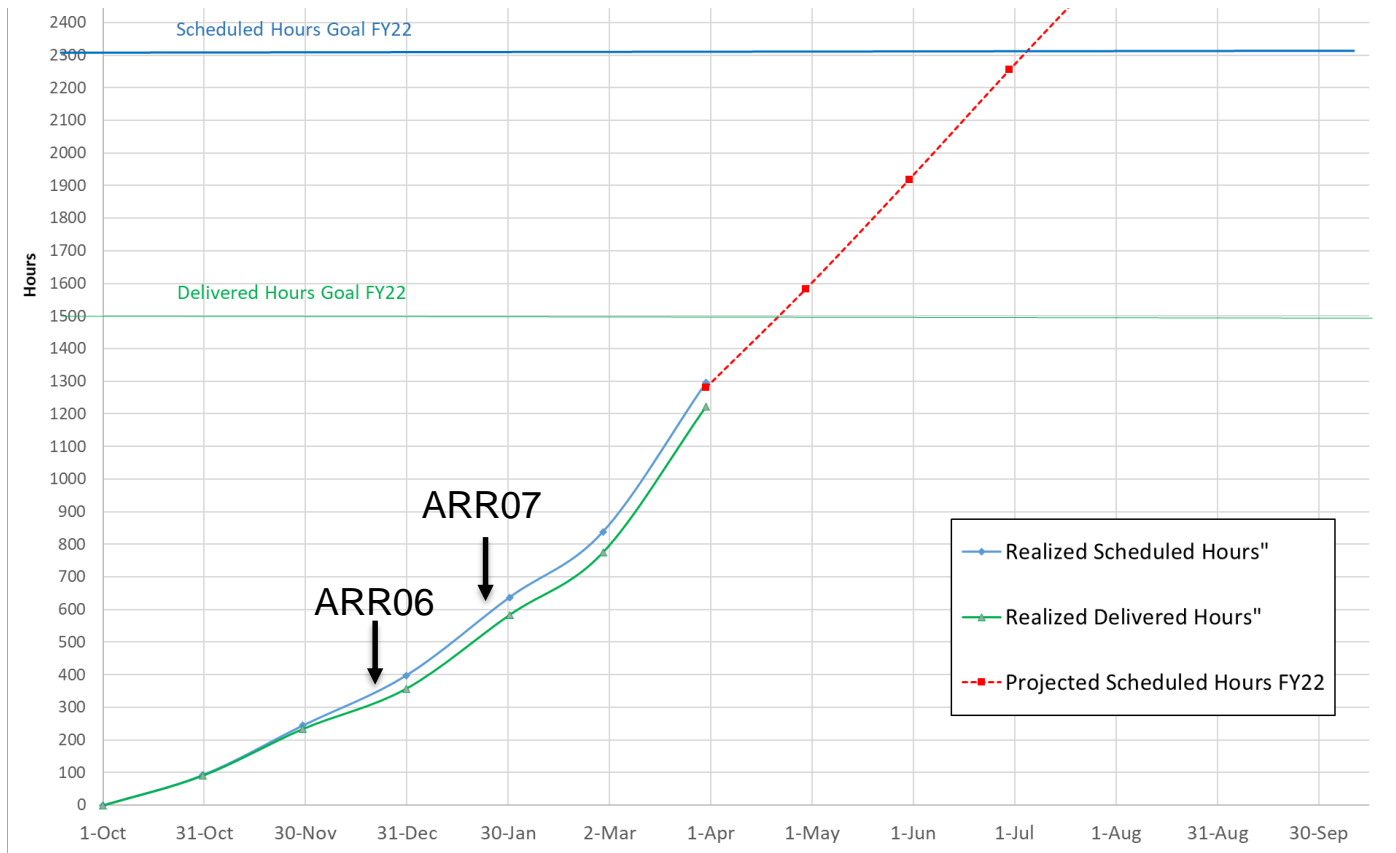


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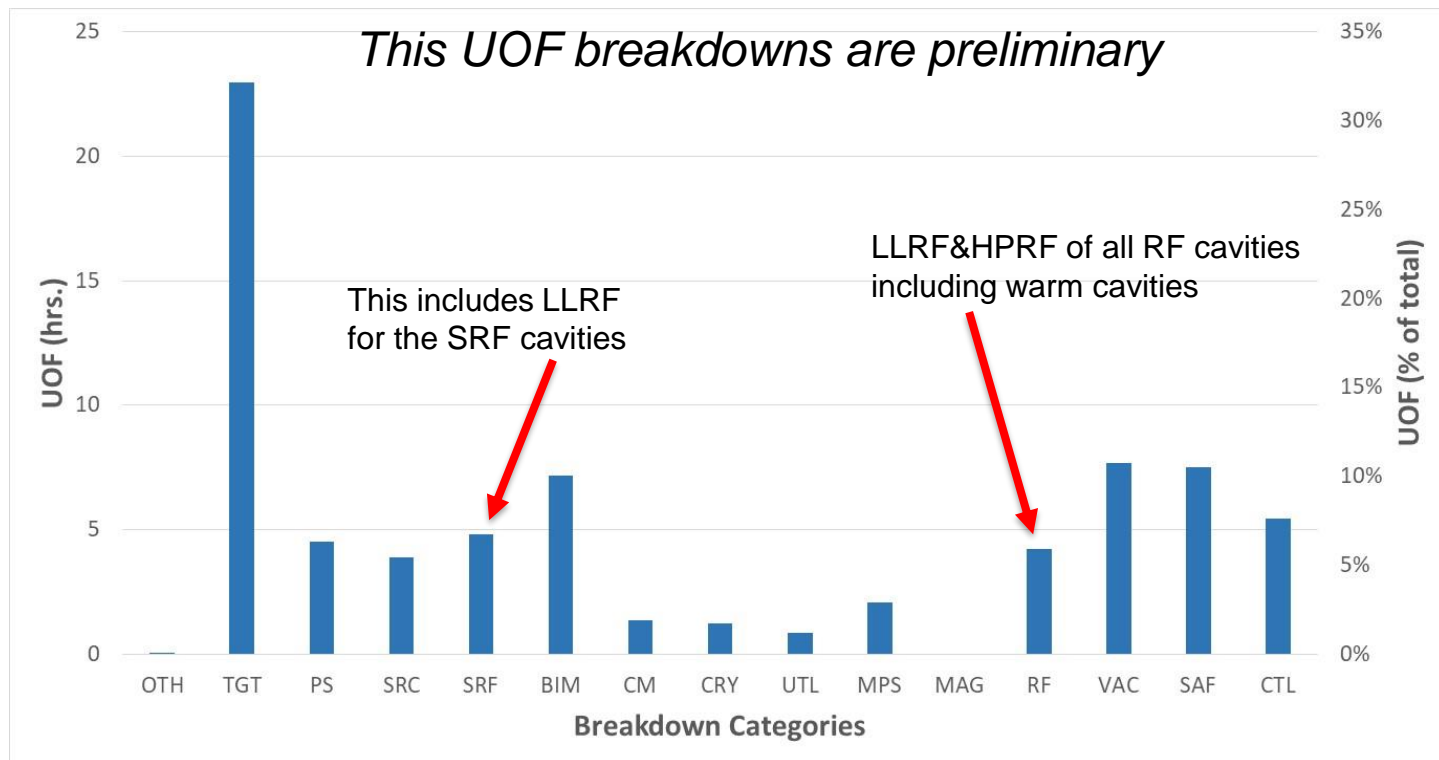
Hours Performances for First 6 Months of FY2022

- Scheduled Hours October 1st-March 31st 1295 hrs. (56%)
 - Delivered hours = 1221 hrs (81%)
 - Reliability (94%)



Breakdowns Statistics

- Each time period when beam is unavailable is reported as Unscheduled Off (UOF) in Hourlog summary and a breakdown category applied
- Overall Beam Availability is 94% for FY22
 - 74hrs UOF out of 1295 hours accumulated of beam operation



Most Significant Breakdowns in Linac FY22

- Beam instrumentation: slits stuck in FS1-3 hrs UOF
- RF system
 - RFQ water skid pump VFD (No UOF);
 - Multi-harmonic buncher phase off (<1 hr UOF);
 - MEBT buncher tuner (<1 hr UOF)
- SRF:
 - 1 cavity in LS1 (CB09): low-level multipacting- 1hr UOF

