SALT TECHNICAL OPERATIONS

PROJECT STATUS REPORT

TITLE: STATUS REPORT: TRACKER UPGRADE PROJECT
BEC # 60 ON 6TH OCTOBER 2015

Compiled by: Raoul van den Berg
SALT Project Manager
Date: Oct 2015

Raoul van den Berg
Digitally signed by Raoul van den Berg
DN: cn=Raoul van den Berg, o=SAAO, ou=SALT, email=raoul@saao.ac.za, c=ZA
Date: 2015.10.06 06:01:00 +02'00'

Approved by: Chris Coetzee
SALT Technical Operations Manager
Date: Oct 2015

J Chris Coetzee
Digitally signed by J Chris Coetzee
DN: cn=J Chris Coetzee, o=SAAO, ou=SALT Operations Manager, email=chris@salt.ac.za, c=ZA
Date: 2015.10.05 15:59:06 +02'00'

LIST OF ACRONYMS AND ABBREVIATIONS

Abbreviation	Description
CDR	Critical Design Review
CER	Concept Evaluation Review
COTS	Commercial Off The Shelf
CoC	Certificate of Conformance
ECR	Engineering Change Request
FAT	Factory Acceptance Test
FDR	Final Design Review
FEA	Finite Element Analysis
PDM	Product Data Management
PDR	Preliminary Design Review

1 Project Status Summary

The Tracker Upgrade project has successfully completed the Y-Drive Upgrade Stage of the project by passing the FDR and delivering the complete installation kit to SALT. The kit contains all the completed subassemblies as well as all the documents required to do the installation at SALT.

Subsequently, Stage 2 of the project, Rho-Upgrade, has also been successfully completed by passing FAT exceptionally well. FDR was passed and delivered the complete installation kit to SALT early in March 2015. The kit contains all the completed subassemblies as well as all the documents required to do the installation at SALT. This delivery was finally made 2.8 months later than planned mostly due to poor manufacturing supplier performance, resources allocated to other projects like RSS delaying FAT, and the Xmas holidays.

Stage 3 of the project was commenced the end of February 2015 and entails the Hexapod Upgrade. The concept design was culminated in the CER passed the middle of April 2015. The detail design phase was completed by passing the CDR end of July 2015. The industrialization phase is ongoing with the approved manufacturing data pack available middle September 2015 and orders currently being placed on suppliers. So far, we have recovered the original 2.8 month delay to a delay of approximately 1 month.

The Installation Stage has started with the Y-Upgrade currently being installed on SALT. The Rho and Hexapod Upgrade installation is planned during March and possibly April 2016 to minimize observation down time. This is dependent on the level of interference to be experienced by the laser frequency comb installation planned for January through March of 2016.
Please see Table 1 for the completion status of the project.

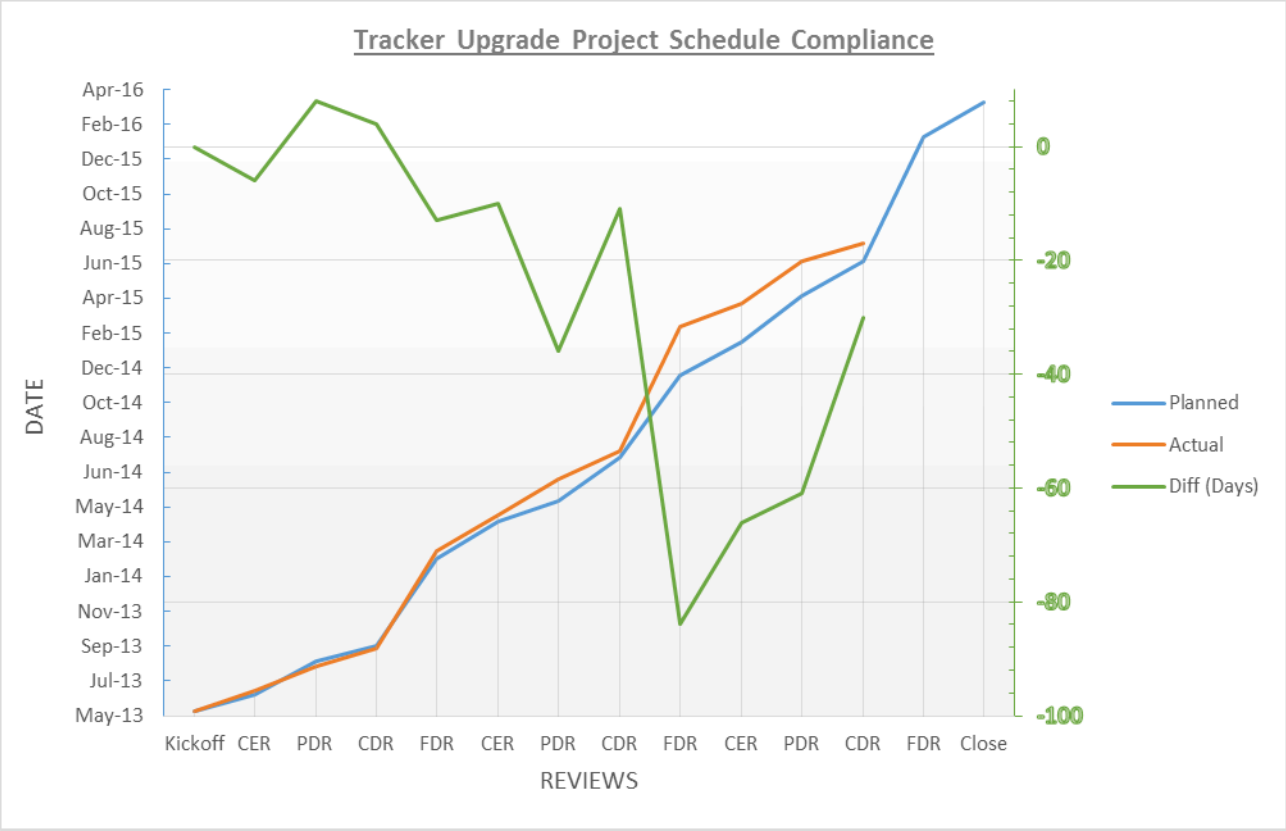
Project Highlights to Date:

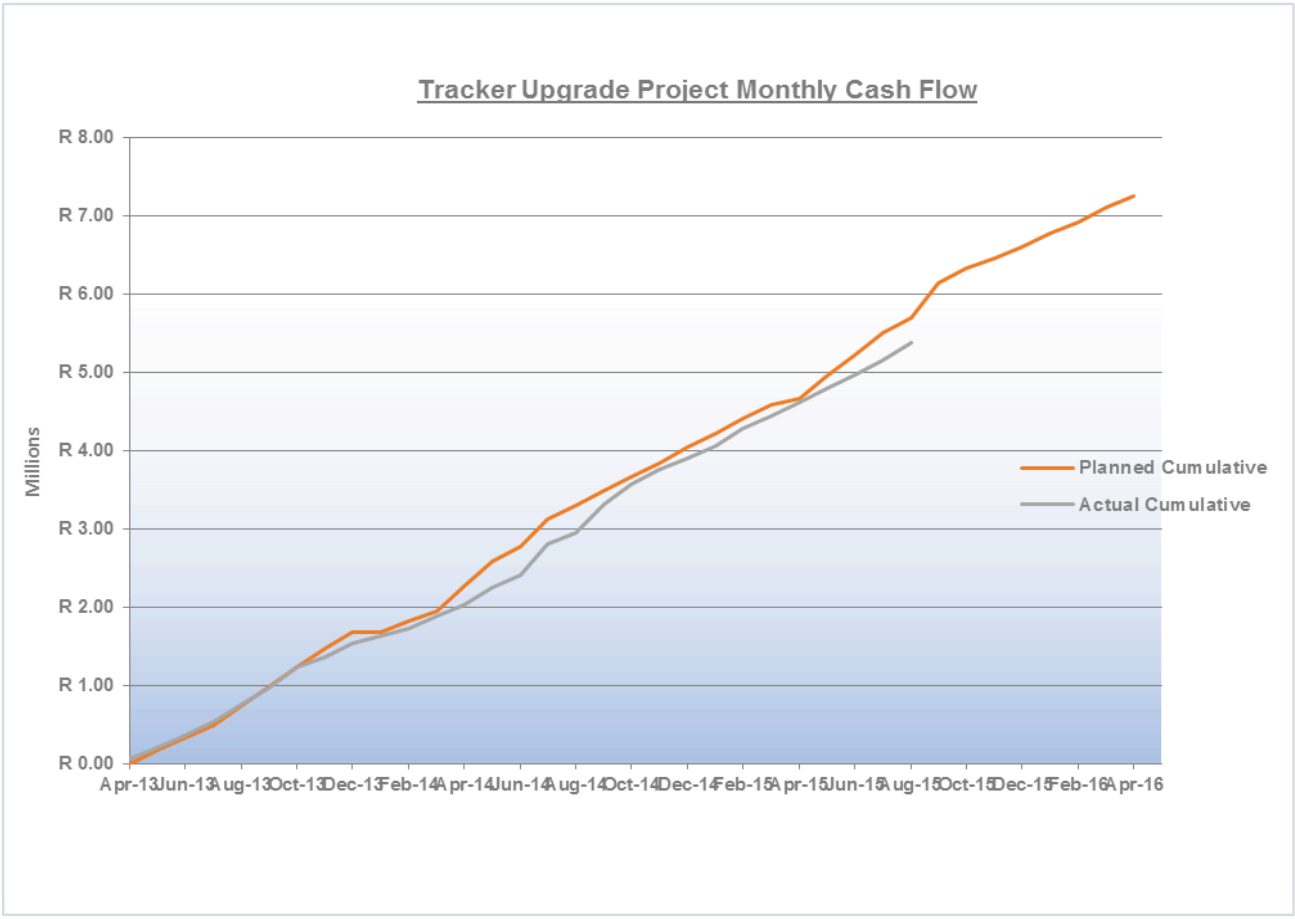
1. Y-Drive and Rho-Upgrade completed and tested successfully. Kits available for installation in SALT store.
2. Rho-Upgrade exceeded specification during FAT testing.
3. Hexapod Upgrade to date has recovered a 2.8 month project delay to a 1 month project delay.
4. A 3 year, highly complex project, is currently within budget and only 3% behind schedule.
5. The Project Team has adapted well to the “new” project processes & procedures and are now starting to execute other projects in the same manner.
6. Installation of the Y-Upgrade has started.

Item	% Complete	Date Complete	Responsible	Comments
Hexapod CDR	100%	July 2015	Project Team	Completed successfully.
Hexapod Data Pack and Manufacture	50%	Jan 2016	Raoul, Wouter, Keith, Eben, Vic	Data Pack complete middle September 2015. Quotes received, orders to be placed.
Hexapod FAT	0%	Nov 2015	Project Team	Pulled forward due to resource availability.
Hexapod FDR	0%	Feb 2016	Project Team	Planned.
Installation and Commissioning	10%	March 2016	Project Team	Depends on interference from the laser frequency comb installation planned for January through March of 2016
Project Closure	0%	March 2016	Project Team	Planned.

Table 1: Project Completion Status.

2 Schedule and Cash Flow Compliance





3 Conclusions

Stage 1 and Stage 2 of the Tracker Upgrade Project have been completed successfully and have passed all FAT, technical and project reviews. Complete 'Installation Kits' are currently in the SALT store ready for installation and commissioning.

Stage 3 of the project was commenced the end of February 2015 and entails the Hexapod Upgrade. The concept design phase was culminated in the CER passed the middle of April 2015, approximately 2 weeks ahead of schedule. The detail design phase PDR was passed on the 25th of June 2015 and by passing the CDR the end of July 2015. The Design Data Pack was completed in September 2015, manufacturing quotes received and orders are about to be placed with suppliers. So far, recovering the original 2.8 month delay to a delay of approximately 1 month.

Currently, the project is within budget with a cash flow below planned. Lower than planned cash flow is indicative of the project delay as some of the man-hours were directed towards other projects.

Project completion is planned towards March 2016 but depends on the level of interference to be experienced by the laser frequency comb installation planned for January through March of 2016.