

# Automated Playbacks

## **Purpose:**

to reduce the number of console operators and associated support personnel

## **Two tests conducted:**

1 week feasibility test,  
console operator intervention allowed

2 week full simulation test,  
console operator intervention not allowed

# Results of test #1: Polar

RESULTS OF TAPE RECORDER AUTOMATION TESTING FROM  
12/16/02 – 12/22/02

## **POLAR**

Overall the test was successful.

Lost a total of 11 hours 18 minutes 12 seconds of data during the 1 week test.

11 hours 18 minutes 12 seconds could have been recovered by the FOT without Tape Recorder (TR) Automation.

01/18/02 352/1710 pass.

Actual data loss 11 hours 18 minutes 12 seconds, 1 anomaly.

Total playback data loss 12 hours, real-time data recovered 41 minutes 48 seconds.

Caused by station being unable to support due to antenna problems. Spacecraft TR intervention along with ground system intervention could have reduced data loss significantly. The ground system intervention by FOT did not impact data recovery because a support could not be scheduled until after the TRs played back the data.

# Results of test #1: Wind

## **WIND**

Overall the test was successful.

Lost a total of 6 hours 26 minutes 28 seconds of data during the 1 week test.

There were 2 anomalies that resulted in data loss.

The data losses were due to TGC problems after the playbacks had started and were not related to TR Automation.

The FOT intervened by contacting the station, informing them of the problems, and requesting that they be fixed.

Without intervention the data loss could have been as high as 46 hours.

# Results of test#2: Polar

## **Polar**

Overall the test was successful.

Lost a total of 7 hours 31 minutes 34 seconds of data during the 2 week test.

2 hours 51 minutes 34 seconds could have been recovered by the FOT without Tape recorder (TR) Automation.

There were 4 anomalies that produced data gaps.

- 01/14/03 1345z pass. Total data loss 4hours 40 minutes. Real-time data reduced the loss by 1 hour 20 minutes. Caused by loss of file during transfer from the station. Data loss was not related to TR automation and could not have been prevented.
- 01/18/03 0610z pass. Total data loss 2 hours 45 minutes. Real-time data reduced the loss by 1 hour 15 minutes. Caused by cancellation of pass. The data could have been recovered through real-time scheduling by FOT.
- 01/19/03 0840z pass. Total data loss 3 minutes 30 seconds. Caused by TGC problems. Data could have been recovered through delaying playback start time.
- 01/24/03 2340z pass. Total data loss 3 minutes 4 seconds. Caused by TGC problems. The data could have been recovered through delaying playback start time.

# Results of test #2: Wind

## **WIND**

Overall the test was successful. No data loss or anomalies related to TR Automation.