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Gravity Probe B Relativity Mission

PROCEDURE FOR
Artificial Star #2 Servo Alignment

GP-B P0223 Rev -

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Date

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- Procedure Start Date: _____.

1. Procedures for artificial star servo alignment:

- 1.1. Roll the reference mirror into the reference position.
- 1.2. Follow the steps described in the Artificial Star #2 Digital Servo manual for alignment.
- 1.3. Check the servo operation with the reference mirror.
- 1.4. Turn the servo system to standby.
- 1.5. Move the reference mirror out of the reference position.
- 1.6. Adjust the laser diode current for the reference beam such that the output on the quad would be comparable with that with the reference mirror.
- 1.7. Adjust the dewar tilt stepper motors to center the return image on the quad.
- 1.8. If no signal can be observed on the quad in the preceding step, a raster scan should be performed. In such case, the duration of the test would increase by 24 hours.*
- 1.9. Repeat procedure 1.2.
- 1.10. Turn the servo to lock.
- 1.11. The alignment process is complete.

Signed: _____

Date: _____

2. Completion status:

Success: _____

Fail: _____

Symptom if fail: _____