Monthly Progress Report

SPIRE Test Facility and Scientific Support

Contract Number: 9F007-020251/001/SR   **Date**: 7 January 2003
Prepared By: Peter Davis   **Period**: December 2002

Part 1

1. Is the project on schedule? **Yes.**

2. Is the project within budget? **Yes.**

3. Is the project free of any areas of concern in which the assistance or guidance of Canada may be required? **Yes.**

Part 2

Task 3.1: Provide SPIRE Test Facility FTS

- The linear stage from Aerotech has been installed on a breadboard and tests have been prepared to validate the linearity of the interpolation for position readings. Preliminary tests have shown that the linearity of the interpolation is of very high quality. However, two minor problems with the unidex driver card have been identified and work-arounds have been proposed. Aerotech will be contacted concerning the problems. Further tests are scheduled to check the performance of the linear stage under production-like conditions.

- The Data Interface Control Document for the test facility FTS has been submitted to ESA and published on Livelink. The document number is SPIRE-UoL-DOC-001452. Ian Schofield is revising the document due to suggestions from Ken King from Rutherford Appleton Laboratories (RAL).

- A number of crucial optical components have arrived. The breadboard for the test facility FTS has been ordered. All necessary optical components are due to arrive in January and February.

- Greg Tompkins is working on a hardware solution for an interface box to provide a means for the time synchronization between the test facility FTS and the Data Processing Unit. A counter card has arrived to pick up the 315kHz signal.

- The design for the beamsplitter mounts has been revised to accommodate the limited space available at the test facility. The stainless steel for the beamsplitter rings and mounts have arrived.

Task 3.2: Provide SPIRE Data Analysis Software

- Trevor Fulton has been identified as an adequate candidate for the software engineer position and an agreement has been reached for him to start work on January 1, 2003.

- IDL licenses have been obtained from Research Systems.

- Tanya Lim (RAL) has been contacted to discuss details of the Canadian contribution to the data analysis software.

Task 3.3: Canadian SPIRE Team Support

- Nothing to report.

Task 3.4: SPIRE ITT and ICC Support

- About two dozens of applications came in for the ITT and the ICC position at RAL. Among them are strong applicants.

NB: The website for the Canadian contribution to SPIRE has moved to http://research.uleth.ca/spire/