

**Attachment Number 1 to the
Memorandum of Understanding (LIGO-M970038-00-M)
between the
University of Oregon Experimental Relativity Group (UOERG)
and the
Laser Interferometer Gravitational Wave Observatory (LIGO) Project
April 1, 1997**

This Attachment to the Memorandum of Understanding LIGO-L970038-00-M covers research involving use of the Caltech 40-meter prototype interferometer November 1994 test data set and the data-analysis package GRASP. Documentation on both the data and the GRASP package will be made available. The period of performance for the activities in this Attachment is from April 1, 1997 to March 31, 1998. This period may be modified by agreement to a revision of this Attachment.

1. This document is an agreement between James E. Brau and the LIGO project. The LIGO staff member Albert Lazzarini will serve as the internal LIGO collaborator and point of contact for the work described below.
2. James E. Brau plans, initially, to test the GRASP package, examining data distributions in an attempt to find any remaining bugs or errors. He will document such discoveries and report them; he will also search for errors in the manual, again reporting any findings. James E. Brau will participate in the Data Translation Group, comparing results of analysis of equivalent "old format" and "frame format" data sets. This work will be part of an ongoing effort to validate the translation process.
3. The results of this study will be communicated to the LIGO project in a collegial and timely manner. James E. Brau is also expected to relay any new knowledge gleaned from the data stream that might affect or influence the ongoing analysis of this data and understanding of the instrument, as well as any errors, bugs or problems with the GRASP package and suggested corrections or changes to it.
4. James E. Brau agrees that the data and GRASP will not be used for any public purpose (talk, paper, preprint, etc.) without the express written consent of the LIGO project. This agreement is intended to a) ensure that those individuals who made significant contributions towards obtaining and analyzing this data receive proper credit, and b) that the LIGO project has the opportunity to review and vet any conclusions reached. James E. Brau acknowledges that receipt of this software and data does not imply any future commitment on the part of LIGO to supply additional software or data.

5. James E. Brau agrees to accept responsibility for controlling access to the November 1994 test data set, and to GRASP. Access will be restricted to those individuals listed below; other individuals or organizations not covered by this agreement will not have access to these materials in any form. James E. Brau may request that individuals be added to (or removed from) this list in the future.
6. It is expected that James E. Brau will contribute to the GRASP package useful code derived from their work. This should be contributed with sufficient documentation and examples (in the appropriate format) to permit independent use by others; LIGO will take responsibility to maintain the overall GRASP package.
7. James E. Brau will accept LIGO's eventual decisions regarding the distribution of and access to GRASP, and the materials that they contribute to it.

Approved:

Barry Barish

Barry Barish
LIGO Principal Investigator

5/19/97

Date

James E. Brau

James E. Brau
UOERG Principal Investigator

5/19/97

Date

A. Lazzarini

Albert Lazzarini
LIGO Staff

12 May 1997

Date