

LIGO-M040042

ENS-LIGO Reports to NSF & DIA

V. Sandberg

Contents: Reports for January 2004 through October 2004 for the DIA Program "ENS-Laser Interferometric Gravity Experiment"

This is a program funded by the Defense Intelligence Agency (DIA) to examine and characterize the interferometer and PEM channels of the LIGO detector at Hanford, Washington to external impulsive signals generated in the environment.

As per the agreed upon reporting chain, reports were sent to Dr. Tom Lucatorto, tlucator@nsf.gov, at the National Science Foundation. They were then forwarded by him to DIA/DTT-1, Mr. Miguel J. Guerra of the DIA. The format is in the form supplied by and required for reporting to the sponsor.

DATE: (sent to NSF April 23, 2004)

FROM: Tom Lucatorto, NSF Project Officer for LIGO

SUBJECT: ENS-Laser Interferometric Gravity Experiment Monthly Status Report (Please DO NOT Change the project's name)

TO: DIA/DTT-1, Mr. Miguel J. Guerra, (321) 494-6353, DSN: 854

Unclas Internet: Miguel.Guerra@aftac.patrick.af.mil or Unclassified FAX: (32) 494-2680

Classified SIPRNet: Miguel.Guerra@aftac.patrick.af.smil.mil or Classified FAX: (321) 494-5952

The following is the monthly input for January 2004 for CLIN 001.

TASK	BUDGETED FOR TASK	PROJECTED START DATE	PROJECTED COMPLETION DATE	ACTUAL START DATE	PERCENT COMPLETE	ACTUAL COMPLETION DATE	MONTHLY EXPENDED	EXPENDED TO DATE
Characterize the response of LIGO to seismic and atmospheric impulses	\$25,000.00	10/01/03		01/01/04	10.00%		\$4,521.38	\$4,521.38
Examine signals from environmental monitoring channels	\$50,000.00	10/01/03		01/01/04	10.00%		\$4,521.28	\$4,521.38
Design and participate in observations and experiments with explosive events	\$175,000.00	10/01/03			0.00%		0	0
PROJECT TOTAL	\$250,000							

Narrative:

DATE: (sent to NSF April 23, 2004)

FROM: Tom Lucatorto, NSF Project Officer for LIGO

SUBJECT: ENS-Laser Interferometric Gravity Experiment Monthly Status Report (Please DO NOT Change the project's name)

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The following is the monthly input for February 2004 for CLIN 001.

TASK	BUDGETED FOR TASK	PROJECTED START DATE	PROJECTED COMPLETION DATE	ACTUAL START DATE	PERCENT COMPLETE	ACTUAL COMPLETION DATE	MONTHLY EXPENDED	EXPENDED TO DATE
Characterize the response of LIGO to seismic and atmospheric impulses	\$25,000.00	10/01/03		01/01/04	15.00%		\$4,521.38	\$9,042.76
Examine signals from environmental monitoring channels	\$50,000.00	10/01/03		01/01/04	15.00%		\$4,521.28	\$9,042.76
Design and participate in observations and experiments with explosive events	\$175,000.00	10/01/03			0.00%		0	0
PROJECT TOTAL	\$250,000							

Narrative:

DRAFT

DATE: (sent to NSF April 23, 2004)

FROM: Tom Lucatorto, NSF Project Officer for LIGO

SUBJECT: ENS-Laser Interferometric Gravity Experiment Monthly Status Report (Please DO NOT Change the project's name)

TO: DIA/DTT-1, Mr. Miguel J. Guerra, (321) 494-6353, DSN: 854

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The following is the monthly input for March 2004 for CLIN 001.

TASK	BUDGETED FOR TASK	PROJECTED START DATE	PROJECTED COMPLETION DATE	ACTUAL START DATE	PERCENT COMPLETE	ACTUAL COMPLETION DATE	MONTHLY EXPENDED	EXPENDED TO DATE
Characterize the response of LIGO to seismic and atmospheric impulses	\$25,000.00	10/01/03		01/01/04	20.00%		\$4,521.38	\$13,564.14
Examine signals from environmental monitoring channels	\$50,000.00	10/01/03		01/01/04	20.00%		\$4,833.38	\$13,876.14
Design and participate in observations and experiments with explosive events	\$175,000.00	10/01/03			0.00%		0	0
PROJECT TOTAL	\$250,000							

Narrative:

DRAFT

DATE: (sent to NSF April 23, 2004)

FROM: Tom Lucatorto, NSF Project Officer for LIGO

SUBJECT: ENS-Laser Interferometric Gravity Experiment Monthly Status Report (Please DO NOT Change the project's name)

TO: DIA/DTT-1, Mr. Miguel J. Guerra, (321) 494-6353, DSN: 854

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The following is the monthly input for April 2004 for CLIN 001.

TASK	BUDGETED FOR TASK	PROJECTED START DATE	PROJECTED COMPLETION DATE	ACTUAL START DATE	PERCENT COMPLETE	ACTUAL COMPLETION DATE	MONTHLY EXPENDED	EXPENDED TO DATE
Characterize the response of LIGO to seismic and atmospheric impulses	\$25,000.00	10/01/03		01/01/04	25.00%		\$4,521.38	\$18,085.52
Examine signals from environmental monitoring channels	\$50,000.00	10/01/03		01/01/04	25.00%		\$4,521.38	\$18,397.52
Design and participate in observations and experiments with explosive events	\$175,000.00	10/01/03			0.00%		0	0
PROJECT TOTAL	\$250,000							

Narrative:

DRAFT

DATE: (sent to NSF May 14, 2004)

FROM: Tom Lucatorto, NSF Project Officer for LIGO

SUBJECT: ENS-Laser Interferometric Gravity Experiment Monthly Status Report (Please DO NOT Change the project's name)

TO: DIA/DTT-1, Mr. Miguel J. Guerra, (321) 494-6353, DSN: 854

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The following is the monthly input for May 2004 for CLIN 001.

TASK	BUDGETED FOR TASK	PROJECTED START DATE	PROJECTED COMPLETION DATE	ACTUAL START DATE	PERCENT COMPLETE	ACTUAL COMPLETION DATE	MONTHLY EXPENDED	EXPENDED TO DATE
Characterize the response of LIGO to seismic and atmospheric impulses	\$25,000.00	10/01/03		01/01/04	30.00%		\$3,575.00	\$21,660.52
Examine signals from environmental monitoring channels	\$50,000.00	10/01/03		01/01/04	30.00%		\$3,574.00	\$21,971.52
Design and participate in observations and experiments with explosive events	\$175,000.00	10/01/03			0.00%		0	0
PROJECT TOTAL	\$250,000							

Narrative:

DATE: (sent to NSF May 14, 2004)

FROM: Tom Lucatorto, NSF Project Officer for LIGO

SUBJECT: ENS-Laser Interferometric Gravity Experiment Monthly Status Report (Please DO NOT Change the project's name)

TO: DIA/DTT-1, Mr. Miguel J. Guerra, (321) 494-6353, DSN: 854

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The following is the monthly input for June 2004 for CLIN 001.

TASK	BUDGETED FOR TASK	PROJECTED START DATE	PROJECTED COMPLETION DATE	ACTUAL START DATE	PERCENT COMPLETE	ACTUAL COMPLETION DATE	MONTHLY EXPENDED	EXPENDED TO DATE
Characterize the response of LIGO to seismic and atmospheric impulses	\$25,000.00	10/01/03		01/01/04	30.00%		\$0.00	\$21,660.52
Examine signals from environmental monitoring channels	\$50,000.00	10/01/03		01/01/04	50.00%		\$9,828.00	\$31,799.52
Design and participate in observations and experiments with explosive events	\$175,000.00	10/01/03			0.00%		0	0
PROJECT TOTAL	\$250,000							

Narrative:

DATE: (sent to NSF July 2, 2004)

FROM: Tom Lucatorto, NSF Project Officer for LIGO

SUBJECT: ENS-Laser Interferometric Gravity Experiment Monthly Status Report (Please DO NOT Change the project's name)

TO: DIA/DTT-1, Mr. Miguel J. Guerra, (321) 494-6353, DSN: 854

Unclas Internet: Miguel.Guerra@aftac.patrick.af.mil or Unclassified FAX: (32) 494-2680

Classified SIPRNet: Miguel.Guerra@aftac.patrick.af.smil.mil or Classified FAX: (321) 494-5952

The following is the monthly input for July 2004 for CLIN 001.

TASK	BUDGETED FOR TASK	PROJECTED START DATE	PROJECTED COMPLETION DATE	ACTUAL START DATE	PERCENT COMPLETE	ACTUAL COMPLETION DATE	MONTHLY EXPENDED	EXPENDED TO DATE
Characterize the response of LIGO to seismic and atmospheric impulses	\$25,000.00	10/01/03		01/01/04	30.00%		\$0.00	\$21,660.00
Examine signals from environmental monitoring channels	\$50,000.00	10/01/03		01/01/04	80.00%		\$9,336.00	\$41,136.00
Design and participate in observations and experiments with explosive events	\$175,000.00	10/01/03			0.00%		0	0
PROJECT TOTAL	\$250,000							

Narrative:

DATE: (sent to NSF August 17, 2004)

FROM: Tom Lucatorto, NSF Project Officer for LIGO

SUBJECT: ENS-Laser Interferometric Gravity Experiment Monthly Status Report (Please DO NOT Change the project's name)

TO: DIA/DTT-1, Mr. Miguel J. Guerra, (321) 494-6353, DSN: 854

Unclas Internet: Miguel.Guerra@aftac.patrick.af.mil or Unclassified FAX: (32) 494-2680

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The following is the monthly input for August 2004 for CLIN 001.

TASK	BUDGETED FOR TASK	PROJECTED START DATE	PROJECTED COMPLETION DATE	ACTUAL START DATE	PERCENT COMPLETE	ACTUAL COMPLETION DATE	MONTHLY EXPENDED	EXPENDED TO DATE
Characterize the response of LIGO to seismic and atmospheric impulses	\$25,000.00	10/01/03		01/01/04	30.00%		\$0.00	\$21,660.00
Examine signals from environmental monitoring channels	\$50,000.00	10/01/03		01/01/04	80.00%		\$0.00	\$41,136.00
Design and participate in observations and experiments with explosive events	\$175,000.00	10/01/03		08/01/04	6.00%		\$9,828.00	\$9,828.00
PROJECT TOTAL	\$250,000							

Narrative:

DATE: (sent to NSF September 8, 2004)

FROM: Tom Lucatorto, NSF Project Officer for LIGO

SUBJECT: ENS-Laser Interferometric Gravity Experiment Monthly Status Report (Please DO NOT Change the project's name)

TO: DIA/DTT-1, Mr. Miguel J. Guerra, (321) 494-6353, DSN: 854

Unclas Internet: Miguel.Guerra@aftac.patrick.af.mil or Unclassified FAX: (32) 494-2680

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The following is the monthly input for August 2004 for CLIN 001.

TASK	BUDGETED FOR TASK	PROJECTED START DATE	PROJECTED COMPLETION DATE	ACTUAL START DATE	PERCENT COMPLETE	ACTUAL COMPLETION DATE	MONTHLY EXPENDED	EXPENDED TO DATE
Characterize the response of LIGO to seismic and atmospheric impulses	\$25,000.00	10/01/03		01/01/04	90.00%		\$2,000.00	\$23,660.00
Examine signals from environmental monitoring channels	\$50,000.00	10/01/03		01/01/04	90.00%		\$7,828.00	\$48,964.00
Design and participate in observations and experiments with explosive events	\$175,000.00	10/01/03		08/01/04	6.00%		\$0.00	\$9,828.00
PROJECT TOTAL	\$250,000							

Narrative:

DATE: (sent to NSF October 12, 2004)

FROM: Tom Lucatorto, NSF Project Officer for LIGO

SUBJECT: ENS-Laser Interferometric Gravity Experiment Monthly Status Report (Please DO NOT Change the project's name)

TO: DIA/DTT-1, Mr. Miguel J. Guerra, (321) 494-6353, DSN: 854

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The following is the monthly input for September 2004 for CLIN 001.

TASK	BUDGETED FOR TASK	PROJECTED START DATE	PROJECTED COMPLETION DATE	ACTUAL START DATE	PERCENT COMPLETE	ACTUAL COMPLETION DATE	MONTHLY EXPENDED	EXPENDED TO DATE
Characterize the response of LIGO to seismic and atmospheric impulses	\$25,000.00	10/01/03		01/01/04	90.00%		\$0.00	\$23,660.00
Examine signals from environmental monitoring channels	\$50,000.00	10/01/03		01/01/04	90.00%		\$0.00	\$48,964.00
Design and participate in observations and experiments with explosive events	\$175,000.00	10/01/03		08/01/04	12.00%		\$9,335.00	\$19,163.00
PROJECT TOTAL	\$250,000							

Narrative: