

REPORT DOCUMENTATION PAGE				Form Approved OMB No. 0704-0188	
The public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, to the Department of Defense, Executive Services and Communications Directorate (0704-0188). Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. PLEASE DO NOT RETURN YOUR FORM TO THE ABOVE ORGANIZATION.					
1. REPORT DATE (DD-MM-YYYY) 18-03-2008		2. REPORT TYPE FINAL REPORT		3. DATES COVERED (From - To) 01 JUN 2005 - 30 NOV 2006	
4. TITLE AND SUBTITLE Congressional Interest: Centered in the Universe: Inspiring the Next Generation of Scientists with Educational Uses of Defense Research and Technology				5a. CONTRACT NUMBER	
				5b. GRANT NUMBER FA9550-05-1-0352	
				5c. PROGRAM ELEMENT NUMBER	
				5d. PROJECT NUMBER	
6. AUTHOR(S) DR LOMBARDO				5e. TASK NUMBER	
				5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Camille Lombardo Executive Director Friends of the Observatory (FOTO)				8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES) AF OFFICE OF SCIENTIFIC RESEARCH 875 NORTH RANDOLPH STREET ROOM 3112 ARLINGTON VA 22203 DR KENT MILLER /NE				10. SPONSOR/MONITOR'S ACRONYM(S)	
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION/AVAILABILITY STATEMENT DISTRIBUTION STATEMENT A: Unlimited					
13. SUPPLEMENTARY NOTES					
14. ABSTRACT The Gottlieb Transit Corridor is a key educational exhibit that enhances the impact of the inspirational storytelling of the new planetarium show which was funded by the FY2004-05 grant. It provides an aha! moment to all who encounter the exhibit as the motion and nature of the sky are dramatically demonstrated literally before the visitor's very eyes. These moments are the source of inspiration for STEM workforce development as well.					
15. SUBJECT TERMS					
16. SECURITY CLASSIFICATION OF: a. REPORT b. ABSTRACT c. THIS PAGE			17. LIMITATION OF ABSTRACT		18. NUMBER OF PAGES
					19a. NAME OF RESPONSIBLE PERSON
					19b. TELEPHONE NUMBER (Include area code)

AFRL-SR-AR-TR-08-0173

(1) Department of Defense Grant Number and Title of the grant.
FA9550-05-1-0352
Completing the Educational Exhibits Supporting the Initial Planetarium Show at
Griffith Observatory

(2) Type of report.

Final Educational Activity Report

(3) Name of the principal investigator.

Camille Lombardo
Executive Director
Friends Of The Observatory (FOTO)
camillel@ix.netcom.com
626.304.0684

Other key project personnel

Mark Pine
Deputy Director
Griffith Observatory
Mark.Pine@lacity.org
213.473.0879

(4) Period covered by the report.

June 2006 through October 2007

(5) Updated Project Abstract

The Gottlieb Transit Corridor is a key educational exhibit that enhances the impact of the inspirational storytelling of the new planetarium show which was funded by the FY2004-05 grant. It provides an aha! moment to all who encounter the exhibit as the motion and nature of the sky are dramatically demonstrated literally before the visitor's very eyes. These moments are the source of inspiration for STEM workforce development as well.

From a learning standpoint, astronomy is often considered a gateway for interest in other sciences. Science literacy is imperative in this age of fast moving technology and global economy. The challenge for an institution such as Griffith Observatory comes from the fact that the public understanding of astronomy is filled with misleading information derived from science fiction, antiquated ideas and incomplete awareness of new information. This creative new outdoor exhibit reveals the actual celestial meridian and the motion of the sky using physical architecture. It is in well thought-out, distinctive, immersive environments like the Transit Corridor that visitors have the opportunity to engage in the practice and excitement of observation through real experiences and to become actual astronomical observers. Such experience is the basis for genuine educational inspiration that motivates tomorrow's scientists and educators to want to know more. Inspiration based upon actual observation is the educational objective of the Transit Corridor. None of the requested funding was used for operations.

Everyday at local noon, a trained Griffith Observatory Museum Guide is stationed by the instrument to provide commentary and explanations of what is happening in the sky and how the Transit Corridor tracks this motion, revealing that our sun is a star in a sky filled with other stars.

(6) Identify types of target audience...

The general public, defined as visitors to Griffith Observatory, is the target audience. Based upon a 1994 Visitor Survey, fifty-nine percent of visitors were identified as Caucasian, 32 percent of Latin origin, 10 percent Asian and 7 percent African-American, which matches the demographic profile of Los Angeles. It is evident that the Observatory consistently brings to its doors a diverse community of visitors of many cultures.

20080404104

(7) Transit Corridor Description

The Transit Corridor is a working, precision, public astronomical instrument and, like every other scientific instrument, its design is founded on a requirements document that details the scientific observations to be made, and the precision of the instrument.

The Transit Corridor reveals the celestial meridian through architecture, a 150-foot long corridor open to the sky and bounded by glass walls. When visitors enter the Transit Corridor, they inhabit the “Griffith Meridian”. As an astronomical instrument, it represents the process that drives the quest for more accurate, precise observation and systematic measurement and analysis—all elements of the scientific method—interestingly exposed to imaginations of all ages. A visitor’s engagement with the Transit Corridor enhances his/her understanding of the daily, monthly, and annual sky events and puts on display the reality of the rotating earth, an orbiting moon, and the sun’s path through the stars.

As a supporting element of the previously-funded planetarium show, “Centered in the Universe,” the Transit Corridor demonstrates the basic premise of the show: observation of the sky persuades us we are on flat, solid ground beneath a canopy of sky. Watching celestial events, like the daily travel of the sun and the changing height of its trajectory through the year, we may believe that we are at the center of all action. The planetarium show describes and explains this initial perception of earth and sky, but the Transit Corridor demonstrates it in real time under the real sky. The planetarium show then traces how our understanding of our place in the universe changed as our instruments of observation improved. The Transit Corridor also shows this on the accompanying ecliptic chart where the actual light of the sun is carried to a chart on the west wall to reveal the constellation of stars the sun currently inhabits. In doing so, the Transit Corridor will allow visitors to “see” the sky that is ever present above them, but unseen because the sun is so bright that stars cannot be seen during the day.

The Observatory’s initial planetarium show focuses on our emerging understanding of our place in the universe. The planetarium is among the first in the U.S. to use all-dome laser video projectors to create a stunning immersive environment to transport children and adults of all ages to the farthest reaches of the cosmos.

(8) A Project Evaluation Update: None specifically on the Transit Corridor.

(9) Problems Encountered: Ongoing slight software glitches in capturing sunlight and displaying on Ecliptic Chart.