State of Maryland 2013 Bond Bill Fact Sheet

1. Senate House				0 N 0 0 1				
LR#	Bill #	LR#	Bill #	2. Name of Project				
lr1426	sb0352	lr2610	hb0580	National Electronics Museum				
3. Senate	Bill Sponso	ors		House Bill Sponsors				
DeGrange	2			Beidle				
4. Jurisdi	ction (Coun	ty or Balti	more City)	5. Requested Amount				
Anne Aru	ndel County	,		\$200,000				
6. Purpos	e of Bill							
Authorizing the creation of a State Debt not to exceed \$200,000, the proceeds to be used as a grant to the Board of Directors of the National Electronics Museum, Inc. for the planning, design, construction, repair, renovation, reconstruction, and capital equipping of an exhibit at and exterior of the National Electronics Museum.								
7. Match								
Requiremen	Requirements: Type:							
Equal The matching			Γhe matching	g fund may consist of in kind contributions.				
8. Specia	l Provisions	S						
Historical Easement X Non-Sectarian								
9. Contact Name and Title				Contact Phone	Email Address			
Karen M. Footner				410-433-0354	KMFootner@aol.com			
10. Description and Purpose of Grantee Organization (Limit Length to Visible area)								
National Electronics Museum (NEM) is a 501(c)(3) museum that promotes the study of science and engineering using the nation's electronic heritage to educate and inspire students and the								

National Electronics Museum (NEM) is a 501(c)(3) museum that promotes the study of science and engineering using the nation's electronic heritage to educate and inspire students and the general public. The museum collects, preserves, exhibits and makes available for research artifacts, documents and publications related to the development of defense and other key electronics systems and the commercial products derived from them. Visitors enjoy 12 galleries on radar, radio, electronic warfare, and infrared sensing and sonar. They learn about the history of defense systems and space electronics, see cutting edge technology, and experience the wonders of electronics and magnetism. They gain an appreciation of the evolutionary milestones in electronics that led to the sophisticated products in use today as the museum honors the achievements of the pioneers who made these advances possible. See www.nationalelectronicsmuseum.org.

11. Description and Purpose of Project (Limit Length to Visible area)

Satellites: Transforming Our Lives will tell the complete story of satellite communications, space navigation, remote sensing and strategic surveillance, and weather satellites. Satellites developed for military purposes are the basis of the popular products that have transformed our daily lives. Computers, cell phones, iPods, credit card processing, GPS, household appliances and more are derived directly from satellite and space research. Glimpses of the future include new systems to reach space, tele-reach systems to provide healthcare, and solar power satellites to provide clean energy. A website/booklet will support classroom studies. NEM, located between Baltimore and Washington, with its strong ties to both the industry and to the government-based space industry, is a strategic hub, unique on the East Coast. The exhibition will 1) bring Maryland's aerospace industry the recognition it merits; 2) support STEM education by bringing the State's aerospace professionals and STEM educators to the museum to develop programming; and 3) inform, attract and promote employment in Marylands aerospace industry. In addition, NEM will improve its building exterior with new signage, lighting and other features to raise its physical visibility, landmark the site and attract passing traffic on Nursery Road, a busy commercial strip.

Round all amounts to the nearest \$1,000. The totals in Items 12 (Estimated Capital Costs) and 13 (Proposed Funding Sources) must match. The proposed funding sources must not include the value of real property unless an equivalent value is shown under Estimated Capital Costs.

12. Estimated Capital Costs						
Acquisition	0					
Design	\$45,000					
Construction	\$400,000					
Equipment	\$105,000					
Total	\$550,000					
13. Proposed Funding Sources – (List all funding sources and amounts.)						
Source	Amount					
Global SATCOM Tech., David Lee, President & CEO	\$50,000					
John Puente (Retired Chr, Hughes Network Systems)	\$50,000					
International Electronical and Electronics Engineers	\$15,000					
Mary Ann Elliott	\$5,000					
Miscellaneous small contributions	\$10,000					
BGE	\$40,000					
Clear Channel	\$30,000					
Hughes Network Systems	\$50,000					
Inmarsat	\$50,000					
Arianespace	\$50,000					
State Bond Bill	\$200,000					
Total	\$550,000					

14. Project Schedule (Enter a date or one of the following in each box. N/A, TBD or Complete)										
Begin	Begin Design Complete			sign	Begin Construction		Complete Construction			
2/2013; 3/2013 3/2013			3; 6/20	13	9/2013; 10/2013		11/2013;5/2014			
15. Total Private Funds and Pledges Raised			Peop	16. Current Number of People Served Annually at Project Site		17. Number of People to be Served Annually After the Project is Complete				
	\$175,000			75,000			150,000			
18. Othe	r State Cap	ital Gran	ts to R	to Recipients in Past 15 Years						
Legislat	tive Session	Amo	unt	nt Purpose						
none										
19. Lega	l Name and	Address	of Gra	ntee	Project Addre	ss (If Di	fferent)			
National Electronics Museum 1745 West Nursery Road Linthicum, MD 21090										
20. Legislative District in Which Project is Located 32				2 - Northwestern Anne Arundel County						
	l Status of (•								
Loc	al Govt.	F	or Profit		Non Profi	t	Federal			
22 (4:		22. If Match I relades Deal Bron outer					
Name:	tee Legal R	kepresenta	itive		23. If Match Includes Real Property: Has An Appraisal Yes/No					
Name:	Ben Roca,	Esq.			Been Done		I ES/INO			
Phone:	201 492 04	590			Deen Done	, •	no			
Phone: 301-483-0689 Address:					If Yes, List Appraisal Dates and Value					
7651 Midtown Road						PI				
Fulton, MD 20759										

24. Impact of Project of	on Staffing and Oper	ating Cost at Projec	et Site						
Current # of	Current Opera	Current Operating		Projected Operating					
Employees	Employees	Budget		Budget					
5	7	\$500,000		\$1	\$1,000,000				
25. Ownership of Property (Info Requested by Treasurer's Office for bond issuance purposes)									
A. Will the grantee own or lease (pick one) the property to be improved? lease									
B. If owned, does the grantee plan to sell within 15 years?									
C. Does the grantee intend to lease any portion of the property to others?									
D. If property is owned by grantee and any space is to be leased, provide the following:									
				Cost	Square				
Le	Terms of		vered by	Footage					
		Lease		Lease	Leased				
E. If property is lease	d by grantee – Provid	le the following:							
Name o	Length of Lease		Options to Renew						
Northrup Grumman	15	yes							
26. Building Square Footage:									
Current Space GSF					22,000				
Space to Be Renovated			22,000						
New GSF			1300						
27. Year of Constructi			1062						
Renovation, Restoration			1962						

28. Comments: (Limit Length to Visible area)

Budgeting and Dates of Work

It is not possible to fit in separate costs for both projects:

Building Improvements: Design: \$10,000; Construction: \$40,000; Total: \$50,000

Satellite Exhibit: Design: \$35,000; Construction \$360,000; Equipment: \$105,000; Total: \$500,000

Construction Dates: Dates for both projects are together. The building improvement dates are first; the exhibit dates appear second.

Exhibition Curators

Aerospace industry professionals have formed a working task force to plan the exhibit with NEM. Chair of the Satellite Gallery Task Force is Dr. Joseph N. Pelton, emeritus Director of the Space and Advanced Communications Research Institute (SACRI) at George Washington University, founder of the Society of Satellite Professionals International and the Arthur C. Clarke Foundation. Other task force members include: Denis Curtin, Former COO, XTAR; Ramesh Gupta, Satellite Consultant; Ellen Hoff, President, W. L. Pritchard Corp.; Ed Martin, Former COMSAT Executive; Maury Mechanick, Esq., Counsel, White & Case LLP; Michael Simons, Executive Director, NEM.

Senior representatives of the satellite industry are close advisors to the task force, including Pradman Kaul, Chairman/CEO, Hughes Network Systems; David Lee, President; CEO, Global SATCOM Technology, Inc.; and Chris Stott, Chairman, ManSat.

Intelsat, Lockheed Martin, Smithsonian National Air & Space Museum, Global SATCOM, and COMARA have made commitments of key artifacts, models, and interactive media display.

Exhibition content features the four cornerstones of contemporary satellite usage:

- 1. Telecommunications. The world-wide telecommunications infrastructure links every country in the world with high-quality voice, data and video services via the global internet. More than 15,000 television channels bring news, sports and entertainment to peoples around the world.
- 2. Remote sensing, weather and earth observation. Satellites provide information for detecting oil and mineral sources and monitoring pollution of the earth and seas, and diseased plants and forests. These satellites now support urban planning, bridge and other types of construction projects, archeology, flood control, disaster recovery (i.e. the Haiti earthquake and the Indian Ocean tsunami), and various geological applications including fault detection and monitoring.
- 3. Navigation & GPS. Satellites developed for military purposes such as targeting missiles have now shifted to predominantly civilian applications. Satellites are used for monitoring airplane flights, map making, GPS-enabled cars, truck and bus routing systems, ship navigation, and security verification systems.
- 4. Military Reconnaissance and Surveillance. War has forever changed with satellites allowing for new military communications, navigation, mapping, satellite tracking, anti-satellite weapons, ballistic missile defense, imagery intelligence, signals intelligence, wide area/ocean surveillance, and missile warnings.