Exhibit R-2A, RDT&E Project Justification: PB 2012 Army										DATE: February 2011	
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 3: *Advanced Technology Development (ATD)*				R-1 ITEM NOMENCLATURE PE 0603710A: *NIGHT VISION ADVANCED TECHNOLOGY*				PROJECT K73: *NIGHT VISION SENSOR DEMONSTRATIONS (CA)*			
COST ($ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
K73: *NIGHT VISION SENSOR DEMONSTRATIONS (CA)*	32.132	-	-	-	-	-	-	-	-	Continuing	Continuing

A. Mission Description and Budget Item Justification

Congressional Interest Item funding for Night Vision advanced technology development.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
Title: Hyperspectral Sensors for Improved Force Protection (Hyper-IFP) ***Description:*** This is a Congressional Interest Item. ***FY 2010 Accomplishments:*** Integrated and tested an upgraded shortwave infrared hyperspectral system into the Cerberus architecture/platform.	1.591	-	-
Title: Brownout Situational Awareness Sensor ***Description:*** This is a Congressional Interest Item. ***FY 2010 Accomplishments:*** Matured real-time 3-D ground imagery to helicopter pilots in brownout landing and takeoff conditions (including lateral drift sensing with visual quantification and audible warning).	2.388	-	-
Title: Night Vision Advanced Technology Research ***Description:*** This is a Congressional Interest Item. ***FY 2010 Accomplishments:*** Developed and demonstrated combined midwave and longwave infrared sensor capabilities for the: Q2 airborne turret; hyperspectral sensors for tagging, tracking, and locating technologies that supported the concepts to track terrorists over a wide area once they have been identified; persistent imaging concepts for unmanned/unattended platforms; a thermal imager that can be clipped on to existing image intensifier goggles to provide dismounted forces an IR search capability while retaining night vision capability; development of a 1280 x 1024 pixel Short Wave IR (SWIR) camera with 15 micron pixels and miniaturized camera electronics; provided improved Compact Airborne Spectral Sensor (COMPASS) with enhanced real time processing of collected data as well as a man-portable ground-to-ground sensor package. Developed hyperspectral sensor for single airborne sensor system to be used with a variety of targets.	8.953	-	-
Title: Smart Sensor Supercomputing Center	7.958	-	-