

RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)								DATE February 1999			
BUDGET ACTIVITY 5 - Engineering and Manufacturing Development				PE NUMBER AND TITLE 0604604F Submunitions				PROJECT 3166			
COST (\$ In Thousands)		FY 1998 Actual	FY 1999 Estimate	FY 2000 Estimate	FY 2001 Estimate	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	Cost to Complete	Total Cost
3166	Joint Smart Munition Test and Evaluation Program	4,716	4,791	4,798	4,817	4,822	4,762	4,861	4,963	Continuing	Continuing
	Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0	0

(U) **A. Mission Description**
 This PE provides support for smart munitions and related technologies test and evaluation (T&E) activities, including T&E support for programs in engineering and manufacturing development. Project 3166 is a joint US Air Force/US Army project which provides RDT&E support for developmental smart munitions acquisition programs. Project 3166 (project Chicken Little) evaluates developmental smart munitions and related emerging technology with applications against vehicle targets and Theater Air Defense units by determining performance against actual foreign targets in realistic environments and in the presence of countermeasures. Data gathered is used to meet developmental decision points requiring highly reliable, realistic performance data. The project is a major focal point for joint Air Force and Army target signature collection and dissemination for development and exploitation purposes. Phase IV (FY96-98) emphasized providing best value test and evaluation support for submunition development and weaponization studies, and Phase V (FY99-01) will provide modeling and simulation capabilities to augment a limited number of measurement and open air tests of smart weapons and related technologies.

(U) **FY 1998 (\$ in Thousands):**

- (U) \$1,168 Completed Phase IV of the weapon effectiveness evaluation
- (U) \$458 Developed models and simulation tools to support engagement simulations
- (U) \$530 Continued maintenance and expansion of vulnerability/lethality and signature database
- (U) \$1,154 Planned and conducted captive carry flight tests and signature collection for seeker/sensor evaluations and algorithm development
- (U) \$706 Conducted advanced warhead effectiveness evaluations
- (U) \$700 Continued vulnerability analysis of Suppression of Enemy Air Defense (SEAD) and Theater Missile Defense (TMD) targets
- (U) \$4,716 Total

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BUDGET ACTIVITY	PE NUMBER AND TITLE	PROJECT
5 - Engineering and Manufacturing Development	0604604F Submunitions	3166
<p>(U) <u>FY 1999 (\$ in Thousands):</u></p> <ul style="list-style-type: none"> - (U) \$1,174 Initiate Phase V of the weapon effectiveness evaluation - (U) \$495 Develop and validate improved models and simulation for assessment of alternatives and force on force studies - (U) \$495 Increase utility of lethality/vulnerability and signature database through conversion to migration system and addition of new threat system data - (U) \$1,287 Plan and conduct captive carry flight tests and signature collection for seeker/sensor evaluations and algorithm development - (U) \$594 Characterize performance of advanced and programmable warheads to access potential for increasing lethality of weapons - (U) \$698 Perform vulnerability analysis of upgraded/advanced Suppression of Enemy Air Defense (SEAD) and Theater Missile Defense (TMD) targets - (U) \$48 Identified as a source for SBIR - (U) \$4,791 Total <p>(U) <u>FY 2000 (\$ in Thousands):</u></p> <ul style="list-style-type: none"> - (U) \$982 Continue Phase V of the weapon effectiveness evaluation - (U) \$491 Develop, validate, and accredit improved models and simulation for assessment of alternatives and force on force studies - (U) \$491 Increase utility of lethality/vulnerability and signature database through addition of modern threat systems and secure datalink - (U) \$1,325 Plan and conduct captive carry flight tests and signature collection for seeker/sensor evaluations and algorithm development - (U) \$723 Characterize performance of advanced and programmable warheads to access potential for increasing lethality of weapons - (U) \$786 Perform vulnerability analysis of upgraded/advanced Suppression of Enemy Air Defense (SEAD) and Theater Missile Defense (TMD) targets - (U) \$4,798 Total <p>(U) <u>FY 2001 (\$ in Thousands):</u></p> <ul style="list-style-type: none"> - (U) \$980 Continue Phase V of the weapon effectiveness evaluation - (U) \$490 Develop, validate, and accredit improved models and simulation for assessment of alternatives and force on force studies - (U) \$490 Increase utility of lethality/vulnerability and signature database through addition of modern threat systems and secure datalink - (U) \$1,345 Plan and conduct captive carry flight tests and signature collection for seeker/sensor evaluations and algorithm development - (U) \$726 Characterize performance of advanced and programmable warheads to access potential for increasing lethality of weapons - (U) \$786 Perform vulnerability analysis of upgraded/advanced Suppression of Enemy Air Defense (SEAD) and Theater Missile Defense (TMD) targets - (U) \$4,817 Total <p>(U) B. <u>Budget Activity (BA) Justification:</u></p> <p>This program is funded in BA 5 - Engineering and Manufacturing Development because this program supports development programs prior to production decision.</p>		
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BUDGET ACTIVITY 5 - Engineering and Manufacturing Development			PE NUMBER AND TITLE 0604604F Submunitions		PROJECT 3166
(U) C. <u>Program Change Summary (\$ in Thousands)</u>					
	<u>FY 1998</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>Total Cost</u>
(U) Previous President's Budget (FY 1999 PB)	4,748	4,805	4,886	4,909	Continuing
(U) Appropriated Value	4,956	4,805			
(U) Adjustments to Appropriated Value					
a. Congressional/General Reductions	-162	-14			
b. SBIR	-46				
c. Omnibus or Other Above Threshold Reprogram	-32				
d. Below Threshold Reprogramming					
(U) Adjustments to Budget Years Since FY 1999 PB			-88	-92	
(U) Current Budget Submit/FY 2000 President's Budget	4,716	4,791	4,798	4,817	Continuing
(U) Significant Program Changes:					
FY99: \$48 identified as a source for SBIR.					
(U) D. <u>Other Program Funding Summary (\$ in Thousands):</u>					
Not Applicable.					
(U) E. <u>Acquisition Strategy:</u>					
Funds are executed organically in support of test and evaluation activities including studies, analyses, flight tests, model building and simulation. There are several small contracts supporting the program office.					
(U) F. <u>Schedule Profile:</u>					
Project 3166, Joint Smart Munition Test and Evaluation Program (Project Chicken Little) does not execute in accordance with established acquisition milestones. Chicken Little is a continuing test effort (target/warhead evaluation/analysis, signature tests, captive carry flight tests, are ongoing throughout the year and continue through the FYDP). This project is also funded by the Army and others Services on a case by case basis. The type of activities is given in Section A but the timing, duration and level of effort is decided at the semi-annual Steering Committee meetings.					
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RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)										DATE February 1999	
BUDGET ACTIVITY 5 - Engineering and Manufacturing Development					PE NUMBER AND TITLE 0604604F Submunitions					PROJECT 3166	
(U) A. <u>Project Cost Breakdown (\$ in Thousands)</u>											
					<u>FY 1998</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>			
(U) Program Support					1,114	1,120	1,132	1,137			
(U) Target Support					460	463	468	470			
(U) Warhead Range Operations					308	308	313	313			
(U) Captive Flight Tests					584	588	595	596			
(U) Database Support (MILES)					265	268	270	271			
(U) Vulnerability/Effectiveness Analysis					622	625	632	638			
(U) Warhead Evaluation					335	338	342	342			
(U) Target Signature Tests					570	573	580	582			
(U) Models and Simulation Tools					458	460	466	468			
(U) Identified as a source for SBIR					0	48	0	0			
(U) Total					4,716	4,791	4,798	4,817			
(U) B. <u>Budget Acquisition History and Planning Information (\$ in Thousands)</u>											
Performing Organizations:											
Contractor or Government	Contract										
Performing <u>Activity</u>	Method/ Type or Funding <u>Vehicle</u>	Award or Obligation <u>Date</u>	Performin g Activity <u>EAC</u>	Project Office <u>EAC</u>	Total Prior to <u>FY 1998</u>	Budget <u>FY 1998</u>	Budget <u>FY 1999</u>	Budget <u>FY 2000</u>	Budget <u>FY 2001</u>	Budget to <u>Complete</u>	Total <u>Program</u>
Identified as a source for SBIR			N/A	N/A	0	0	48	0	0	0	48
<u>Product Development Organizations:</u> Not Applicable											
<u>Support and Management Organizations</u>											
Sverdrup	C/CPIF	Jun 96	N/A	N/A	7,825	1,195	1,255	1,317	1,320	Cont	Cont
ANSTEC	C/FFP	Apr 96	N/A	N/A	1,035	189	197	201	204	Cont	Cont
46 OG/OGML	N/A	Annual	N/A	N/A	4,766	532	572	610	618	Cont	Cont
<u>Test and Evaluation Organizations</u>											
46 OG/OGML		Annual	N/A	N/A	64,816	2,800	2,719	2,670	2,675	Cont	Cont
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RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)	DATE February 1999
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BUDGET ACTIVITY 5 - Engineering and Manufacturing Development	PE NUMBER AND TITLE 0604604F Submunitions	PROJECT 3166
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(U) B. Budget Acquisition History and Planning Information (\$ in Thousands) (Contd.)

<u>Item Description</u>	<u>Contract Method/Type or Funding Vehicle</u>	<u>Award or Obligation Date</u>	<u>Delivery Date</u>	<u>Total Prior to FY 1998</u>	<u>Budget FY 1998</u>	<u>Budget FY 1999</u>	<u>Budget FY 2000</u>	<u>Budget FY 2001</u>	<u>Budget to Complete</u>	<u>Total Program</u>
Government Furnished Property:										
Not Applicable										
Identified as a source for SBIR					0	48	0	0	0	48
0										
Subtotal Product Development					0	0	0	0	Cont	Cont
0										
Subtotal Support and Management					1,916	2,024	2,128	2,142	Cont	Cont
13,626										
Subtotal Test and Evaluation					2,800	2,719	2,670	2,675	Cont	Cont
64,816										
Total Project					4,716	4,791	4,798	4,817	Cont	Cont
78,442										