

## UNCLASSIFIED

## RDT&amp;E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)

DATE

June 2001

BUDGET ACTIVITY

**06 - Management and Support**

PE NUMBER AND TITLE

**0605306F Ranch Hand II Epidemiology Study**

PROJECT

**2767**

COST (\$ in Thousands)	FY 2000 Actual	FY 2001 Estimate	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	Cost to Complete	Total Cost
2767 Ranch Hand II Epidemiology Study	4,183	4,315	10,952	11,338	4,837	4,966	4,330	0	Continuing	TBD
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0	0

Note: FY 2003-FY 2007 budget numbers do not reflect the DoD strategy review results.

(U) **A. Mission Description**

As a result of Presidential direction, PE 0605306F was established to conduct a 20-year epidemiology investigation of approximately 1,200 Air Force personnel who were involved with aerial spraying of herbicides in Vietnam from 1962 to 1971 (Operation Ranch Hand). The objective of this investigation is to determine whether long-term health effects exist and can be attributed to occupational exposure to phenoxy herbicides and their associated dioxins.

This project involves a 20-year study, which was initiated in 1982, that compares United States Air Force (USAF) Ranch Hand personnel to a control group of USAF crew members and support personnel who were not exposed to herbicides while serving in Southeast Asia. Approximately 20,000 individuals (exposed personnel group plus control group) are participating in the annual mortality study, with approximately 2,200 (exposed personnel group plus control group) of these participating in the detailed morbidity study during each physical examination cycle. The detailed physical examination cycle includes follow-up health examinations at the 3-, 5-, 10-, 15-, and 20-year time periods. The study includes examination of the possible occurrence of birth defects in children as determined from children's medical records and family medical histories. The Congressionally-established Ranch Hand Advisory Committee has directed that all study findings be reported to the scientific community as peer-reviewed journal articles. Note: This program is comprised of six cycles and each cycle consists of participant physical examinations followed by data analysis and report generation. The largest expenditure of funds occurs during the physical exam years of 1982-1983, 1985-1986, 1987-1988, 1992-1993, 1997-1998, and 2002-2003. The program is currently at the end of Cycle 5 and in the preparation phase for Cycle 6, therefore, significantly more funds will be required in FY 2002 and FY 2003 than were required in FY 2000 and FY 2001.

(U) **FY 2000 (\$ in Thousands)**

- (U) \$1,035 Completed statistical analysis of examination data. Documented all analyses and findings in 4,000 page, fifth cycle final report. Conducted analyses as directed by the Congressionally-established Ranch Hand Advisory Committee. Analyses were based on current morbidity data trends and findings.
- (U) \$386 Conducted other agency/university studies supporting scientific effort. Started Center for Disease Control study to test for the presence of other forms of dioxin than found in Agent Orange. Conducted morbidity and mortality mathematical modeling. Conducted dioxin half-life and serum dioxin analyses.

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BUDGET ACTIVITY	PE NUMBER AND TITLE	PROJECT
<b>06 - Management and Support</b>	<b>0605306F Ranch Hand II Epidemiology Study</b>	<b>2767</b>
(U) <u><b>A. Mission Description Continued</b></u>		
(U) <u>FY 2000 (\$ in Thousands) Continued</u>		
(U) \$2,762	Processed and documented examination data to include updating of the participant database. Conducted medical records coding. Performed the annual mortality analysis of approximately 1,200 Ranch Hand personnel and 19,000 comparison personnel. Conducted data analysis for articles to be submitted to peer-reviewed journals as directed.	
(U) \$4,183	Total	
(U) <u>FY 2001 (\$ in Thousands)</u>		
(U) \$1,095	Conducted analyses as directed by the Congressionally-established Ranch Hand Advisory Committee. Conducted process review prior to final examination cycle to determine potential participation rates, requirements for in-house or regional examination sites, and statistical, schedule, and cost implications of the aging study population.	
(U) \$567	Conducted other agency/university studies supporting scientific effort. Completed Center for Disease Control study to test for the presence of other forms of dioxin than found in Agent Orange. Completed morbidity and mathematical modeling. Completed dioxin half-life and serum dioxin analyses. Started semen DNA study.	
(U) \$2,653	Processed and documented examination data to include updating of the participant database. Conducted medical records coding. Performed the annual mortality analysis of approximately 1,200 Ranch Hand personnel and 19,000 comparison personnel. Conducted data analysis for articles to be submitted to peer-reviewed journals as directed.	
(U) \$4,315	Total	
(U) <u>FY 2002 (\$ in Thousands)</u>		
(U) \$7,800	Initiate the sixth and final cycle of physical examinations, questionnaires, and participant database.	
(U) \$1,694	Continue to process and document examination data to include continuing to verify the physical examination database. Conduct new coding and verify the coding of existing medical records. Perform the annual mortality analysis of approximately 1,200 Ranch Hand personnel and 19,000 comparison personnel. Conduct data analysis for articles to be submitted to peer-reviewed journals as directed. Process and document Cycle 6 examination data to include updating of the participant database. Continue to conduct medical records coding.	
(U) \$1,458	Process and document examination data. Continue archiving previous cycles' examination data and digitize and archive the Cycle 6 data as received. Conduct medical records coding and verification of examination database and Cycles 1 through 5 coding. Perform annual mortality analysis. Conduct data analysis for journals and reports.	
(U) \$10,952	Total	
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**2767**(U) **B. Budget Activity Justification**

This program is in Budget Activity 6, Management and Support, since it includes research and development efforts directed towards support of installations or operations required for general research and development use.

(U) **C. Program Change Summary (\$ in Thousands)**

	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>Total Cost</u>
(U) Previous President's Budget (FY 2001 PBR)	4,408	4,356	11,318	TBD
(U) Appropriated Value	4,510	4,356		
(U) Adjustments to Appropriated Value				
a. Congressional/General Reductions	-10			
b. Small Business Innovative Research	-100			
c. Omnibus or Other Above Threshold Reprogram				
d. Below Threshold Reprogram	-170			
e. Rescissions	-47	-41		
(U) Adjustments to Budget Years Since FY 2001 PBR			-366	
(U) Current Budget Submit/FY 2002 PBR	4,183	4,315	10,952	TBD

(U) **Significant Program Changes:**

None. The increase in FY 2002 and FY 2003 funding is due to the physical exams scheduled in these years. The increase is a normal part of the cyclical nature of funding in this program.

(U) **D. Other Program Funding Summary (\$ in Thousands)**

	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>Cost to</u>	<u>Total Cost</u>
	<u>Actual</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Complete</u>	
(U) Not Applicable.										

(U) **E. Acquisition Strategy**

Not Applicable.

(U) **F. Schedule Profile**

	<u>FY 2000</u>				<u>FY 2001</u>				<u>FY 2002</u>			
	1	2	3	4	1	2	3	4	1	2	3	4
(U) Not Applicable.												

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