

UNCLASSIFIED

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

DATE

February 2003

BUDGET ACTIVITY

07 - Operational System Development

PE NUMBER AND TITLE

0207446F Bomber Tactical Data Link

PROJECT

5041

| COST (\$ in Thousands) | FY 2002 Actual | FY 2003 Estimate | FY 2004 Estimate | FY 2005 Estimate | FY 2006 Estimate | FY 2007 Estimate | FY 2008 Estimate | FY 2009 Estimate | Cost to Complete | Total Cost |
|--------------------------------|-------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|------------|
| 5041 Bomber Tactical Data Link | 0 | 0 | 12,959 | 120,571 | 166,535 | 89,009 | 0 | 0 | Continuing | TBD |
| Quantity of RDT&E Articles | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

On 17 April, 2001 the Chief of Staff of the Air Force (CSAF) approved the management of the Tactical Data Links (TDL) as a Major System Acquisition Program. In order to effectively manage the program, the Tactical Data Links System Program Office (SPO) was stood up at Electronic Systems Center (ESC), Hanscom AFB, MA on 29 May, 2001. Funding from platform PEs was transferred to the appropriate TDL platform PE. Four new program elements were created in FY03 to consolidate the platform integration funding. This includes PE 0207445F, Fighter Tactical Data Link; PE 0207446F, Bomber Tactical Data Link; PE 0207448F, Command, Control, Intelligence, Surveillance, and Reconnaissance (C2ISR) Tactical Data Link; and PE 0401839F, Airlift/Other Tactical Data Link.

(U) A. Mission Description

Tactical Data Links (TDL) are used in a combat environment to exchange information such as messages, data, radar tracks, target information, platform status, imagery, and command assignments. TDLs provide interoperability, local and global connectivity, and situational awareness to the user when operating under rapidly changing operational conditions. TDLs are used by the Air Force, Army, Navy, and Marine Corps theater Command and Control (C2) elements, weapons platforms, and sensors. TDLs include but are not limited to: Link-16, Link-11, Situational Awareness Data Link (SADL), and Variable Message Format (VMF).

This effort adds Link 16 line-of-sight (LOS) and beyond line-of-sight (BLOS) datalink capabilities to the B1-B, B-2, and B-52s. Link 16 provides a jam-resistant, secure digital data transfer network capability with a standardized waveform and data format allowing LOS intra and inter-flight communications. Link 16 will increase mission effectiveness, provide situational awareness, provide positive identification of aircraft in the network, correlate on and off-board sensor data sharing target and threat information, and provide the datalink to accomplish time critical targeting and other mission update functions. The BLOS datalink capability works with Link 16 to extend the range beyond the LOS Link 16 network. Link 16 efforts include incorporating MIL-STD-6016 additions and changes, and applicable Interface Change Proposals (ICPs), and interoperability certification testing with the Joint Interoperability Test Center (JITC).

(U) FY 2002 (\$ in Thousands)

(U) \$0 Accomplishments/Planned Program
 (U) \$0 No Activity
 (U) \$0 Total

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DATE

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BUDGET ACTIVITY

PE NUMBER AND TITLE

PROJECT

07 - Operational System Development**0207446F Bomber Tactical Data Link****5041**(U) **A. Mission Description Continued**(U) **FY 2003 (\$ in Thousands)**

(U) \$0 Accomplishments/Planned Program

(U) \$0 No Activity

(U) \$0 Total

(U) **FY 2004 (\$ in Thousands)**

(U) \$0 Accomplishments/Planned Program

(U) \$2,500 Contract for LOS Link 16 terminals and BLOS radios for B-1 development labs and aircraft.

(U) \$2,000 Complete proposal preparation for contract award.

(U) \$8,459 Integrate of B-1 LOS and BLOS datalink capability

(U) \$12,959 Total

(U) **B. Budget Activity Justification**

Bomber Tactical Data Link program is in Budget Activity 7, Operational System Development, since it supports integration of tactical data links into operational systems.

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

| | <u>FY 2002</u> | <u>FY 2003</u> | <u>FY 2004</u> | <u>Total Cost</u> |
|---|----------------|----------------|----------------|-------------------|
| (U) Previous President's Budget | 0 | 0 | 13,198 | TBD |
| (U) Appropriated Value | | | | |
| (U) Adjustments to Appropriated Value | | | | |
| a. Congressional/General Reductions | | | | |
| b. Small Business Innovative Research | | | | |
| c. Omnibus or Other Above Threshold Reprogram | | | | |
| d. Below Threshold Reprogram | | | | |
| e. Rescissions | | | | |
| (U) Adjustments to Budget Years Since FY 2003 PBR | | | -239 | |
| (U) Current Budget Submit/FY 2004 PBR | | | 12,959 | TBD |
| (U) <u>Significant Program Changes:</u> | | | | |
| Not Applicable | | | | |

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

| | <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>FY 2008</u> | <u>FY 2009</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) AF RDT&E | | | | | | | | | | |
| (U) 27434 (Link 16 Sup & Sus) | 0 | 50,073 | 58,783 | 190,001 | 257,665 | 247,322 | 177,451 | 177,624 | | |
| (U) 27445 (Fighter TDL) | 0 | 38,168 | 42,877 | 67,617 | 41,419 | 42,032 | 39,763 | 48,149 | | |
| (U) 27448 (C2ISR TDL) | 0 | 0 | 26,927 | 26,713 | 7,254 | 745 | 0 | 0 | | |
| (U) 41839 (Airlift TDL) | 0 | 0 | 0 | 67,199 | 85,030 | 150,094 | 42,808 | 42,457 | | |
| (U) 64754 (TDL Integration) | 18,138 | 0 | 14,675 | 24,720 | 26,833 | 27,079 | 39,950 | 28,544 | | |
| (U) Other APPN | | | | | | | | | | |
| (U) Procurement (3010) | | | | | | | | | | |
| (U) 27434 (Link 16 Sup & Sus) | 0 | 36,013 | 40 | 0 | 0 | 0 | 0 | 0 | | |
| (U) 27445 (Fighter TDL) | 0 | 0 | 31,635 | 98,076 | 122,338 | 94,153 | 44,195 | 32,518 | | |
| (U) 27446 (Bomber TDL) | 0 | 0 | 0 | 86,125 | 48,254 | 33,185 | 30,570 | 28,149 | | |
| (U) 27448 (C2ISR TDL) | 0 | 0 | 0 | 16,503 | 5,769 | 1,091 | 6,025 | 6,128 | | |
| (U) 41839 (Airlift TDL) | 0 | 0 | 0 | 11,827 | 24,043 | 0 | 0 | 0 | | |
| (U) O&M (3400) | | | | | | | | | | |
| (U) 27434 (Link 16 Sup & Sus) | 10,143 | 11,494 | 13,482 | 16,535 | 21,401 | 23,521 | 24,696 | 22,753 | | |
| (U) Other Procurement (3080) | | | | | | | | | | |
| (U) 27434 (Link 16 Sup & Sus) | 0 | 0 | 0 | 1,744 | 9,602 | 21,202 | 2,785 | 2,829 | | |

(U) **E. Acquisition Strategy**

The Air Force Tactical Data Links System Program Office (SPO) provides for common development of integration and interoperability across all Air Force platforms and ensures that link 16 is procured and maintained as a joint, end-to-end, command and control system.

(U) **F. Schedule Profile**

| | <u>FY 2002</u> | | | <u>FY 2003</u> | | | <u>FY 2004</u> | | |
|--|----------------|---|---|----------------|---|---|----------------|---|--|
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | |
| (U) Link 16 Terminals | | | | | | | | X | |
| (U) Proposal Prep for Contract Award | | | | | | | | X | |
| (U) Begin Integration of B-1 Datalink Capability | | | | | | | | X | |

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| RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3) | | | | | | | | | | DATE February 2003 | |
|---|--------------------|-------------------|-------------------|----------------|---|----------------|----------------|----------------|------------------|-----------------------|--|
| BUDGET ACTIVITY | | | | | PE NUMBER AND TITLE | | | | | PROJECT | |
| 07 - Operational System Development | | | | | 0207446F Bomber Tactical Data Link | | | | | 5041 | |
| (U) <u>A. Project Cost Breakdown (\$ in Thousands)</u> | | | | | | | | | | | |
| | | | | | <u>FY 2002</u> | | <u>FY 2003</u> | | <u>FY 2004</u> | | |
| (U) Contract for LOS Link 16 terminals and BLOS radios for B-1 development labs and aircraft | | | | | | | | | 2,500 | | |
| (U) Complete proposal preparation for contract award | | | | | | | | | 2,000 | | |
| (U) Integrate B-1 LOS and BLOS datalink capability | | | | | | | | | 8,459 | | |
| (U) Total | | | | | | | | | 12,959 | | |
| (U) <u>B. Budget Acquisition History and Planning Information (\$ in Thousands)</u> | | | | | | | | | | | |
| (U) <u>Performing Organizations:</u> | | | | | | | | | | | |
| <u>Contractor or</u> | <u>Contract</u> | | | | | | | | | | |
| <u>Government</u> | <u>Method/Type</u> | <u>Award or</u> | <u>Performing</u> | <u>Project</u> | | | | | | | |
| <u>Performing</u> | <u>or Funding</u> | <u>Obligation</u> | <u>Activity</u> | <u>Office</u> | <u>Total Prior</u> | <u>Budget</u> | <u>Budget</u> | <u>Budget</u> | <u>Budget to</u> | <u>Total</u> | |
| <u>Activity</u> | <u>Vehicle</u> | <u>Date</u> | <u>EAC</u> | <u>EAC</u> | <u>to FY 2002</u> | <u>FY 2002</u> | <u>FY 2003</u> | <u>FY 2004</u> | <u>Complete</u> | <u>Program</u> | |
| <u>Product Development Organizations</u> | | | | | | | | | | | |
| Rockwell/Lockheed | FFP | 1QFY04 | | | | | | 2,500 | Continuing | TBD | |
| Martin/Viasat* | | | | | | | | | | | |
| B-1 Link 16 Development | TBD | 3QFY04 | | | | | | 9,649 | Continuing | TBD | |
| Contractor** | | | | | | | | | | | |
| Contractor Support | FFP | 1QFY04 | | | | | | 500 | Continuing | TBD | |
| MITRE | FFP | 1QFY04 | | | | | | 200 | Continuing | TBD | |
| *MIPR funding to SPAWAR to purchase terminals. **MIPR funding to B-1 SPO for development/integration efforts. | | | | | | | | | | | |
| <u>Support and Management Organizations</u> | | | | | | | | | | | |
| Program Office | | | | | | | | 110 | Continuing | TBD | |
| <u>Test and Evaluation Organizations</u> | | | | | | | | | | | |
| (U) <u>Government Furnished Property:</u> | | | | | | | | | | | |
| | <u>Contract</u> | | | | | | | | | | |
| | <u>Method/Type</u> | <u>Award or</u> | | | | | | | | | |
| <u>Item</u> | <u>or Funding</u> | <u>Obligation</u> | <u>Delivery</u> | | <u>Total Prior</u> | <u>Budget</u> | <u>Budget</u> | <u>Budget</u> | <u>Budget to</u> | <u>Total</u> | |
| <u>Description</u> | <u>Vehicle</u> | <u>Date</u> | <u>Date</u> | | <u>to FY 2002</u> | <u>FY 2002</u> | <u>FY 2003</u> | <u>FY 2004</u> | <u>Complete</u> | <u>Program</u> | |
| <u>Product Development Property</u> | | | | | | | | | | | |

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| RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3) | | | | | DATE February 2003 | | | |
|---|--|--|------------------------------------|----------------|-----------------------|----------------|------------------|----------------|
| BUDGET ACTIVITY | | | PE NUMBER AND TITLE | | | PROJECT | | |
| 07 - Operational System Development | | | 0207446F Bomber Tactical Data Link | | | 5041 | | |
| (U) <u>Government Furnished Property Continued:</u> | | | | | | | | |
| <u>Support and Management Property</u> | | | | | | | | |
| <u>Test and Evaluation Property</u> | | | | | | | | |
| | | | <u>Total Prior</u> | <u>Budget</u> | <u>Budget</u> | <u>Budget</u> | <u>Budget to</u> | <u>Total</u> |
| | | | <u>to FY 2002</u> | <u>FY 2002</u> | <u>FY 2003</u> | <u>FY 2004</u> | <u>Complete</u> | <u>Program</u> |
| <u>Subtotals</u> | | | | | | | | |
| Subtotal Product Development | | | | | | 12,849 | TBD | TBD |
| Subtotal Support and Management | | | | | | 110 | TBD | TBD |
| Subtotal Test and Evaluation | | | | | | | | |
| Total Project | | | | | | 12,959 | TBD | TBD |

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