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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)					DATE: June 2001				
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/BA-5					R-1 ITEM NOMENCLATURE Common Joint Tactical Information 0604771D8Z/P771/P773				
COST (<i>In Thousand</i>)	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Total Cost
Total Program Element (PE) Cost	29,336	16,100	16,572						Cont.
LINK-16 - P771	4,192	4,025	8,971						Cont.
Multifunctional Information Distribution System-Low Volume Terminal (MIDS-LVT) - P773	25,144	12,075	7,601						

A. Mission Description and Budget Item Justification

This program funds ongoing system level engineering of the existing Link 16 system for joint interoperability and the development of the next generation Link 16 system, the Multifunctional Information Distribution System (MIDS). System level engineering responsibilities include Link 16 spectrum issues and Link 16 joint enhancements. Spectrum issues include system engineering, testing, maintaining necessary equipment, performing DoD internal and external coordination and platform integration/certification required to coexist and operate in the Air Radio Navigation Safety frequency band. Joint enhancements planned for Link 16 include Joint Range Extension (JRE), Dynamic Network Management (DNM), Time Slot Reallocation (TSR), Gateways, Joint Interface Control Officer (JICO) Toolset, Relative Navigation, Link 16 Weapons Applications and improvements to Link 16 Track Quality, Time Slot Synchronization, Target Correlation/Decorrelation, Geodetic Data Registration, Common Time Reference, and Combat ID. MIDS is a joint and international cooperative program involving U.S., France, Italy, Germany and Spain. Designed for tactical combat applications and environments, MIDS will provide a highly jam-resistant, secure digital (voice and data) information distribution system, enabling rapid integrated communications, navigation, and identification among tactical and command and control warfare elements. The MIDS-Low Volume Terminal (LVT) will make Link 16 more affordable for a larger population of U.S. platforms and systems and will be interoperable with previously developed and produced Link 16 equipment, JTIDS Class 1 and 2. Affordability is being achieved through the implementation of open and commercial architecture standards and parts that will allow the tailoring of production configurations to the minimum needs of different U.S. platforms and missions. This program funds the U.S. cost share of MIDS development, fabrication, and test of EMD terminals and terminal level pre-operational support for U.S. platforms which are implementing MIDS.

This program is funded under BA-5, Engineering and Manufacturing Development, because it encompasses engineering and manufacturing development of new end-items prior to production approval decision.

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B. Program Change Summary - See individual project R-2 pages

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APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/BA-5						R-1 ITEM NOMENCLATURE Common Joint Tactical Information 0604771D8Z/P771			
COST (<i>In thousands</i>)	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Total Cost
LINK-16 - P771	4,192	4,025	8,971						Cont.

A. Mission Description and Budget Item Justification

This program funds ongoing system level engineering of the existing Link 16 system for joint interoperability and the development of the next generation Link 16 system, the Multifunctional Information Distribution System (MIDS). System level engineering responsibilities include Link 16 spectrum issues and Link 16 joint enhancements. Spectrum issues include system engineering, testing, maintaining necessary equipment, performing DoD internal and external coordination and platform integration/certification required to coexist and operate in the Air Radio Navigation Safety frequency band. Joint enhancements planned for Link 16 include Joint Range Extension (JRE), Dynamic Network Management (DNM), Time Slot Reallocation (TSR), Gateways, Joint Interface Control Officer (JICO) Toolset, Relative Navigation, Link 16 Weapons Applications and Improvements to Link 16 Track Quality, Time Slot Synchronization (TSS), Target Correlation/Decorrelation, Geodetic Data Registration, Common Time Reference, Time Critical Strike (TCS) and Combat ID.

PROGRAM ACCOMPLISHMENTS AND PLANS

1. FY 2000 ACCOMPLISHMENTS

Continued Link 16 (\$4.192 million)

- Closed the four remaining major Spectrum management issues.
- Continued spectrum management efforts, including testing, associated with receiving and maintaining frequency certification.
- Continued Link 16 technical support and support for international users.
- Continued Link 16 development/analysis/enhancements for increased operational requirement.
- Initiated technical oversight, planning, and Joint Service Coordination of Link 16 enhancements including Dynamic Network Management, Joint Range Extension and Joint Interface Control Officer Toolset.
- Updated/restructure STANAG 4175 incorporating approved data link change proposals and changes in support of MIDS terminal development.

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2. FY 2001 PLANS

Continue Link 16 (\$4.025 million)

- Obtain final spectrum Certification.
- Continue spectrum management efforts, including testing, associated with receiving and maintaining frequency certification.
- Continue Link 16 technical upgrade and support for international users.
- Continue technical oversight, planning, and Joint Service Coordination of Link 16 enhancements including Dynamic Network Management, Joint Range Extension and Joint Interface control Officer Toolset Support System (JSS).

3. FY 2002 PLANS

Continue Link 16 (\$8.971 million)

- Continue spectrum management efforts, including testing associated with receiving and maintaining frequency certification.
- Continue Link 16 technical upgrade and support for international users.
- Continue technical oversight, planning, and Joint Service Coordination of Link 16 enhancements including Dynamic Network Management, Joint Range Extension, Joint Interface Control Officer Toolset Support System (JSS), and Missile Tactical Terminals.
- Initiate Joint service coordination for all Link 16 track quality, Time Slot Synchronization, Target Correlation/Decorrelation, Geodetic Data Registration, Common Time Reference Time Critical Strike, Gateways and Combat ID.

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B. Program Change Summary

	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>Total Cost</u>
Previous President's Budget Submit Appropriated Value	4,192	4,047		Cont.
Adjustments to Appropriated Value				
a. Congressional Reduction		(22)		
President's Budget Submit	4,192	4,025	8,971	Cont.

Change Summary Explanation:

Funding: The decrease in FY 2001 is due to Congressional Reduction.

Schedule: N/A

Technical: N/A

C. Other Program Funding Summary

Not Applicable

D. Schedule Profile

Not Applicable

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COST (In Thousands)	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Total Cost
MIDS - P773	25,144	12,075	7,601						

A. Mission Description and Budget Item Justification

The Multifunctional Information Distribution System (MIDS) Low-Volume Terminal (LVT) is a U.S. joint and international (U.S., France, Germany, Italy, and Spain) cooperative program to develop and produce the next generation LINK-16 system. Designed for tactical combat applications and environments, MIDS will provide a highly jam-resistant, secure, digital (voice and data) information distribution system, enabling rapid integrated communications, navigation, and identification among tactical and command and control warfare elements. Affordability is being achieved through the implementation of open and commercial architecture standards and parts which will allow the tailoring of production configurations to the minimum needs of different U.S. platforms and missions. MIDS-LVT will be interoperable with the earlier generations of LINK-16 equipment, JTIDS Class 1 and 2. This Program Element will fund the U.S. cost share of development, fabrication and test of EMD terminals, and terminal level pre-operational support for U.S. platforms which are implementing MIDS. This element also funds preparations for competitive production. This element does not include the qualification and procurement of a MIDS variant for the F-15 which is called Fighter Data Link (FDL); the FDL is funded as an F-15 program element.

PROGRAM ACCOMPLISHMENTS AND PLANS:

1. FY 2000 ACCOMPLISHMENTS:

- Completed MIDS EMD (\$24.352)
 - Completed MIDS EMD Contract performance, with the exception of contract close-out activity planned through FY 01.
 - Continued F/A-18 Initial Developmental and Operational Test & Evaluation terminal support.
 - Continued F/A-18 flight testing support.

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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)		DATE June 2001
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/BA-5	R-1 ITEM NOMENCLATURE Common Joint Tactical Information 0604771D8Z/P773	

- Achieved MIDS LRIP Lot 1 DAB decision.
- Established Systems Engineering and Integration (SE&I) support capabilities for EMD terminals and platform test, installation, and integration requirements.
- Established software support capability for MIDS International Program, under SE&I contract.
- Continued management support of the International Program Office.
- Continued Electromagnetic compatibility demonstrations to support spectrum certification.
- Initiated correction of EMD deficiencies resulting from development and operational testing (contractor and government).
- Initiated retrofit of MIDS EMD terminals to -22 configuration baseline.
- Finalized and released MIDS Production RFP for the production requirements.
- Awarded and definitized two sole source letter contracts to U.S. production contractors for LRIP.
- Completed Supplement 3 negotiations.

2. FY 2001 PLANS:

- EMD Terminal and Platform Integration Support (\$12.075)
 - Complete integration, testing, and delivery of EMD terminals and refurbish CDT&E terminals.
 - Complete initial at-sea Developmental Test (DT) and Operational Assessment (OA) for MIDS on Ship.
 - Obtain LRIP Lot 2 decision.
 - Continue F/A-18 Initial Developmental and Operational Test & Evaluation terminal support.
 - Continue F/A-18 flight testing support.
 - Continue correction of EMD deficiencies resulting from operational testing.
 - Perform redesign and regression testing of EMD terminals.
 - Continue SE&I support capabilities for EMD terminals and platform test, installation, and integration requirements.
 - Complete software enhancements/upgrades for Army terminals, LVT(2).
 - Continue software support capability and technical data support for MIDS International Program.
 - Initiate first software block cycle upgrade.
 - Support development, test, and evaluation of product improvements and enhancements.
 - Initiate Developmental Test and Evaluation terminal support for F-16.

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3. FY 2002 PLANS:

- EMD Terminal and Platform Integration Support (\$7.601)
 - Continue F/A-18 MIDS Developmental Testing (DT).
 - Initiate Army Initial Operational Test and Evaluation for LVT(2).
 - Achieve Army Initial Operational Capability for LVT(2).
 - Continue correction of EMD deficiencies resulting from operational testing and evaluation.
 - Continue supporting development, test and evaluation of product improvements and enhancements.
 - Continue the SE&I support capabilities for EMD terminals and platform test, installation, and integration requirements.
 - Perform redesign and regression testing of EMD terminals.
 - Continue Developmental Testing (DT) for MIDS on Ship.
 - Continue Developmental Test and Evaluation terminal support for F-16.
 - Initiate Force Deployment Evaluation for F-16.

B. Program Change Summary

	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>Total Cost</u>
Previous President's Budget Submit	25,216	12,203	7,507	Cont.
Adjustments to Appropriated Value				
a. Congressional Adjustments	(72)	(128)		
Net			94	
President's Budget Submit	25,144	12,075	7,601	Cont.

Change Summary Explanation:

Funding: Funding adjustments reflect Congressional reductions of \$72k in FY 2000 and \$128k in FY 2001 and an increase of \$94k in FY 2002.

Schedule: N/A
Technical: N/A

RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)	DATE
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		June 2001
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/BA-5		R-1 ITEM NOMENCLATURE Common Joint Tactical Information 0604771D8Z/P773

C. Other Program Funding Summary

	<u>FY2000</u>	<u>FY2001</u>	<u>FY2002</u>	<u>Total Cost</u>
Procurement:				
APN				
BLI 052500	35,500	25,200	23,500	Cont.
BLI 014500	15,400			Cont.
OPN				
BLI 261400				Cont.
APF				
PE0207134F/PE0207130F	45,314	18,000		Cont.
PE0207133F		13,600	35,100	Cont.
Proc, DW				
PE0208864C/5C		4,700	2,900	Cont.
PE0208861C				Cont.
Related RDT&E				
PE0205604N	39,197	20,500	21,100	Cont.
PE0207133F	3,700			3,700

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D. Acquisition Strategy

USD(AT&L) approved the FY00 procurement of MIDS terminals based on the favorable LRIP DAB review on 27 April 2000. The approval included procurement of 70 MIDS terminals and associated spares and an additional 11 terminals for emergent lab and test requirements. This decision is consistent with the Acquisition Strategy Report (ASR) approved by USD(AT&L) in November 1999. The FY00 MIDS LRIP terminals were equitably split between the two US-led contracts. FY01 and out-year quantities will be competitively procured. USD(AT&L) has directed that after completion of the US-led and European-led MIDS terminal production qualification efforts, the production requirements of all MIDS participants will be combined and competed among the US and European qualified MIDS manufacturers.

E. Schedule Profile cont.

	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>
Program	LRIP Lot 1 3Q/00	Supp 3 1Q/01	
Milestones		LRIP Lot 2 Decision 3Q/01	
EMD Contract			
Deliveries:	MIDS SW V4.2 3Q/00		
	Navy Terminals 3Q/00		
	Army Terminals 3Q/00		
System Engineering & Integration	Contract Award 3Q/00		
Deliveries:			S/W BC Upgrade 2Q/02
T & E Milestones			
Ships		DT/OA 3Q/01	
F/A-18			TECHEVAL/OPEVAL Continue >>
Army			IOT&E 2Q/02
F-16			DT&E Continue >>

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EXHIBIT R-3, FY 2002/2003 RDT&E, DW PROJECT COST ANALYSIS

DATE: June 2001

BUDGET ACTIVITY: 5

PROGRAM ELEMENT: 0604771D8Z

PROJECT NUMBER: P771

PROJECT TITLE: COMMON JOINT TACTICAL

INFORMATION

Exhibit R-3 Cost Analysis (page 1)								Date: June 2001				
APPROPRIATION: RDT&E, DW BUDGET ACTIVITY : 5			PROGRAM ELEMENT: 0604771D8Z					COMMON JOINT TACTICAL INFORMATION				
Cost Categories	Contract Method & Type	Performing Activity & Location	Total Pys Cost	FY 01 Cost	FY 01 Award Date	FY 02 Cost	FY 02 Award Date	FY 03 Cost	FY 03 Award Date	Cost To Complete	Total Cost	Target Value of Contract
LINK-16 Spectrum Support		Various	9.498	.171	Various							
LINK-16 Engineering Support		Various	3,124	3.414	Various	1.800	Various			Cont.	Cont.	Cont.
LINK-16 Support		Various	3.982									
LINK-16 Enhancements		Various	.426	.200								
LINK-16 Missile Tactical Terminals						1.000	Various			Cont.	Cont.	Cont.
Gateways						2.000	Various			Cont.	Cont.	Cont.
Dynamic Network Management						1.300	Various			Cont.	Cont.	Cont.
LINK-16 Technical Upgrade		Various				2.371	Various			Cont.	Cont.	Cont.
JICO Toolset (JSS)		Various	.289	.240	Various	.500	Various			Cont.	Cont.	Cont.
Subtotal Product Development			17.319	4.025		8.971				Cont.	Cont.	Cont.
Remarks:												
Total Cost			17.319	4.025		8.971				Cont.	Cont.	Cont.

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Exhibit R-3, Project Cost Analysis

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EXHIBIT R-3, FY 2000/2001 RDT&E, DW PROJECT COST ANALYSIS

DATE: June 2001

BUDGET ACTIVITY: 5

PROGRAM ELEMENT: 0604771D8Z

PROJECT NUMBER: P773

PROJECT TITLE: COMMON JT TACTICAL INFO

Exhibit R-3 Cost Analysis (page 1)									Date: June 2001			
APPROPRIATION: RDT&E, DW BUDGET ACTIVITY : 5			PROGRAM ELEMENT: 0604771D8Z/P773						COMMON JT TACTICAL INFORMATION			
Cost Categories	Contract Method & Type	Performing Activity & Location	Total Pys Cost	FY 01 Cost	FY 01 Award Date	FY 02 Cost	FY 02 Award Date	FY 03 Cost	FY 03 Award Date	Cost To Complete	Total Cost	Target Value of Contract
Product Development												
Primary Hardware/Software Development	CPIF	MIDSCO Wayne, NJ	191.812	0		0				0	191.812	196.590
Pre-operation EMD Terminal Support	CPIF	MIDSCO Wayne, NJ	2.706	0		0				0	2.706	2.706
Software Support	FFP	BAE Systems Wayne, NJ	0	2.600	Mar 01	2.338	Nov 01			Cont.	4.938	
Subtotal Product Development			194.518	2.600		2.338				0	199.456	
Remarks: The MIDSCO EMD contract period of performance ended 30 June 2000, with the exception of contract close-out activity. A new System Engineering and Integration contract was awarded in June 2000 to complete unfinished EMD work scope and to provide continued EMD terminal support.												
Support Costs												
Production Readiness Agreements Mfg Prototyping	FFP	Allied Signal Teterboro, NJ	3.189	0		0				0	3.189	3.189
Production Readiness Agreements Mfg Prototyping	FFP	Viasat Carlsbad, CA	6.346	0		0				0	6.346	6.346
Production Readiness Agreements Mfg Prototyping	FFP	Data Link Solutions Cedar Rapids, IA	1.000	0		0				0	1.000	1.000
Production Readiness Agreements	FFP	Thompson-CSF Colombes Cedex, France	1.000	0		0				0	1.000	1.000
Production Readiness Agreements	WX	SSC SD San Diego, CA	.795	0		0				0	.795	.795
Subtotal Support			12.330	0		0				0	12.330	12.330

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Exhibit R-3, Project Cost Analysis

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EXHIBIT R-3, FY 2000/2001 RDT&E, DW PROJECT COST ANALYSIS

DATE: June 2001

BUDGET ACTIVITY: 5

PROGRAM ELEMENT: 0604771D8Z

PROJECT NUMBER: P773
PROJECT TITLE: COMMON JT TACTICAL INFO

Exhibit R-3 Cost Analysis (page 2)								Date: June 2001				
APPROPRIATION: RDT&E,DW BUDGET ACTIVITY : 5				PROGRAM ELEMENT: 0604771D8Z/P773				COMMON JOINT TACTICAL INFORMATION				
Cost Categories	Contract Method & Type	Performing Activity & Location	Total Pys Cost	FY 01 Cost	FY 01 Award Date	FY02 Cost	FY 02 Award Date	FY 03 Cost	FY 03 Award Date	Cost To Complete	Total Cost	Target Value of Contract
Test & Evaluation												
System Engineering	WX	SSC SD – Code 64 San Diego, CA	6.800	.027	Sep 01	.067	Jan 02			0	6.894	6.894
System Engineering	WX	SSC SD – Code 45 San Diego, CA	9.270	.049	Sep 01	.149	Jan 02			0	9.468	9.468
Software Support	MIPR	Warner Robins Robins AFB, GA	2.062	.017	Sep 01	.430	Jan 02			0	2.509	2.509
System Engineering	MIPR	MITRE Ft. Monmouth, NJ	1.939	.533	Oct 01	.550	Oct 02			0	3.022	3.022
System Engineering, and Integration	FFP	BAE Systems Wayne, NJ	5.933	8.349	Various	3.492	Various			0	17.774	17.774
System Engineering	Various	Various	15.182	.075	Jan 01	.200	Jan 02			0	15.457	15.457
Subtotal T&E			41.186	9.050		4.888				0	55.124	55.124
Remarks												
Management Services												
Program Management Support	FFP	Vredenburg Carlsbad, VA	2.306	0		0				0	2.306	2.306
Miscellaneous Program Support	FFP/ WX/PD	Various	9.897	.425	Jan 01	.375	Jan 02			0	10697	10.697
Contract Services	MIPR	AF Pentagon Washington, DC	1.400	0		0				0	1.400	1.400

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Exhibit R-3, Project Cost Analysis

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EXHIBIT R-3, FY 2000/2001 RDT&E, DW PROJECT COST ANALYSIS

DATE: June 2001

BUDGET ACTIVITY: 5

PROGRAM ELEMENT: 0604771D8Z

PROJECT NUMBER: P773

PROJECT TITLE: COMMON JT TACTICAL INFO

Subtotal Management			13.603	.425		.375				0	14.403	14.403
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Exhibit R-3 Cost Analysis (page 3)								Date: June 2001				
APPROPRIATION: RDT&E,DW BUDGET ACTIVITY : 5				PROGRAM ELEMENT: 0604771D8Z/P773				COMMON JOINT TACTICAL INFORMATION				
Cost Categories	Contract Method & Type	Performing Activity & Location	Total Pys Cost	FY 01 Cost	FY 01 Award Date	FY02 Cost	FY 02 Award Date	FY 03 Cost	FY 03 Award Date	Cost To Complete	Total Cost	Target Value of Contract
Total Cost			261.637	12.075		7.601						
Remarks												
AWARD FEES The award fee on contract has been reduced from \$15.7 million to \$8.2 million due to recognition that the contractor's performance does not support award fee payout at the amount originally established. After this reduction, the U.S. share of the entire Award Fee on contract is approximately \$3.4 million. Contractor performance earned one award fee payment in June 1995, of which the US share was \$471,582 and one award fee payment for the period ending November 1995, of which the US share was \$101,120. The percentage of award fee paid based on the reduced fee amount of \$8.2 million is approximately 29%. The percentage of award fee paid based on the original fee amount of \$15.7 million is 17%.												

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