

UNCLASSIFIED

FY 2000 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

DATE: February 1999

BUDGET ACTIVITY: 7

PROGRAM ELEMENT: 0305207N

PROGRAM ELEMENT TITLE: Manned Reconnaissance Systems

(U) COST: (Dollars in Thousands)

PROJECT NUMBER & TITLE	FY 1998 ACTUAL	FY 1999 ESTIMATE	FY 2000 ESTIMATE	FY 2001 ESTIMATE	FY 2002 ESTIMATE	FY 2003 ESTIMATE	FY 2004 ESTIMATE	FY 2005 ESTIMATE	TO COMPLETE	TOTAL PROGRAM
*R0117	Reef Point 327	295	400	2,261	2,313	2,365	2,420	2,475	CONT.	CONT.
R2673	FA 18F Tactical Reconnaissance (SHARP) **2,817	29,845	30,558	25,588	22,632	1,966	0	0	0	113,406
Total	3,144	30,140	30,958	27,849	24,945	4,331	2,420	2,475	CONT.	CONT.

*Executed at a higher level of classification--no project R2.

** Was executed under P.E. 0204136N in FY 1998.

A. (U) MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: Provides funds for the development of a podded dual-spectral-band reconnaissance camera system capable of being deployed on several tactical aircraft. The camera will have simultaneous visible and infrared imaging capability and provide digital images in national standard formats. The system will be capable of collecting imagery, recording on-board, and transmitting simultaneously to a ground receiving station. Cameras operating in multiple spectral bands will be introduced as the technology evolves. The target aircraft are the F/A-18E/F, Joint Strike Fighter (JSF), S-3, P-3, F-14, and F-16. A prototype system will be flight demonstrated by June 2001. Provision will be made to accommodate transmission of Search and Rescue (SAR) data. The system will operate autonomously from the aircraft operating software in order to be compatible with multiple aircraft. Emphasis will be placed on using commercially available subsystems and components in an open architecture so that evolutionary designs in cameras, processors, transmitters, and recorders can be introduced seamlessly via competitive procurement procedures. An aggressive development schedule will be embraced driving toward an operational capability by May 2003. The purpose of the aggressive development schedule is to have an operational capability ready to replace the F-14 Tactical Air Recce System (TARPS) due to retire beginning in 2003.

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PROGRAM ELEMENT: 0305207N

PROGRAM ELEMENT TITLE: Manned Reconnaissance Systems

(U) This program is funded under OPERATIONAL SYSTEMS DEVELOPMENT because it encompasses engineering and manufacturing development for upgrade of existing, operational systems.

(U) Program Change Summary for total P.E.

	<u>FY 1998</u>	<u>FY 1999</u>	<u>FY 2000</u>
(U) FY 1999 President's Budget:	*3,245	342	405
(U) Appropriated Value:	-	30,342	-
(U) Adjustments from FY 1999 PRESBDG:	-101	+29,798	+30,553
(U) FY 2000 PRESBDG Submission:	*3,144	30,140	30,958

*\$2,817 was executed under P.E. 0204136N in FY 1998.

(U) CHANGE SUMMARY EXPLANATION:

(U) Funding: FY 1998 adjustment is due to SBIR assessment (-101). FY 1999 adjustments due to Congressional Undistributed Reductions (-202), and FY99 Congressional realignment of funds from F-18 (PE 0204136N) for Shared Reconnaissance Pod (+30,000). FY 2000 adjustments due to Civilian Pay Rates (+1), Non Pay Inflation (-448), and additional funds to continue development of SHARP (+31,000).

(U) Schedule: Not applicable.

(U) Technical: Not applicable.

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PROGRAM ELEMENT: 0305207N

PROGRAM ELEMENT TITLE: Manned Reconnaissance Systems

(U) COST: (Dollars in Thousands)

PROJECT NUMBER & TITLE	FY 1998 ACTUAL	FY 1999 ESTIMATE	FY 2000 ESTIMATE	FY 2001 ESTIMATE	FY 2002 ESTIMATE	FY 2003 ESTIMATE	FY 2004 ESTIMATE	FY 2005 ESTIMATE	TO COMPLETE	TOTAL PROGRAM
R2637 F/A 18E/F Tactical Reconnaissance (SHARP)	*2,817	29,845	30,558	25,588	22,632	1,966	0	0	0.	113,406

* Was executed under P.E. 0204136N in FY 1998.

A. (U) MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: Provides funds for the development of a podded dual-spectral-band reconnaissance camera system capable of being deployed on several tactical aircraft. The camera will have simultaneous visible and infrared imaging capability and provide digital images in national standard formats. The system will be capable of collecting imagery, recording on-board, and transmitting simultaneously to a ground receiving station. Cameras operating in multiple spectral bands will be introduced as the technology evolves. The target aircraft are the F/A-18E/F, Joint Strike Fighter (JSF), S-3, P-3, F-14, and F-16. A prototype system will be flight demonstrated by June 2001. Provision will be made to accommodate transmission of Search and Rescue (SAR) data. The system will operate autonomously from the aircraft operating software in order to be compatible with multiple aircraft. Emphasis will be placed on using commercially available subsystems and components in an open architecture so that evolutionary designs in cameras, processors, transmitters, and recorders can be introduced seamlessly via competitive procurement procedures. An aggressive development schedule will be embraced driving toward an operational capability by May 2003.

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FY 2000 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

DATE: February 1999

BUDGET ACTIVITY: 7

PROGRAM ELEMENT: 0305207N

PROJECT NUMBER: R2673

PROGRAM ELEMENT TITLE: Manned Reconnaissance Systems

PROJECT TITLE: F/A 18E/F

Tactical Reconnaissance

(U) PROGRAM ACCOMPLISHMENTS AND PLANS:

1. (U) FY 1998 ACCOMPLISHMENTS:

- (U) (\$1,000) Solicit and evaluate industry input.
- (U) (\$1,817) Develop draft ORD and program plans.

2. (U) FY 1999 PLAN:

- (U) (\$14,000) Begin development of pod structure for multiple aircraft use.
- (U) (\$3,000) Risk reduction camera assessment, airborne vibration tests, dual band window development.
- (U) (\$4,500) Dual band camera development.
- (U) (\$4,000) Reconnaissance Management Systems (RMS) development.
- (U) (\$1,700) Begin systems software development.
- (U) (\$1,900) Begin subsystem and component procurement.
- (U) (\$745) Begin integration and testing.

3. (U) FY 2000 PLAN:

- (U) (\$600) Complete risk reduction efforts.
- (U) (\$2,500) Complete prototype integration and testing.
- (U) (\$900) Begin preparation for flight demonstration.
- (U) (\$3,000) Begin Integrated Logistics Support (ILS) program.
- (U) (\$4,200) Continue Software operational flight program.
- (U) (\$5,558) Procure Engineering, Development and Manufacturing (EDM) pods.
- (U) (\$8,800) Procure payloads.
- (U) (\$5,000) Continue Software development.

B. (U) PROGRAM CHANGE SUMMARY: See total program change summary for P.E.

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DATE: February 1999

BUDGET ACTIVITY: 7

PROGRAM ELEMENT: 0305207N

PROGRAM ELEMENT TITLE: Manned Reconnaissance Systems

PROJECT NUMBER: R2673

PROJECT TITLE: F/A 18E/F

Tactical Reconnaissance

C. (U) OTHER PROGRAM FUNDING SUMMARY:

(U) PROCUREMENT FUNDING: APN F-18E/F starting in FY 2001

(U) RELATED RDT&E:

(U) PE 0305206N (Airborne Reconnaissance Advance Development)

(U) PE 0204136N F/A-18

(U) PE 0305208N JSIPS

D. (U) SCHEDULE PROFILE:

(U) Program Milestones

FY 1998

FY 1999

FY 2000

MS II
EMD development

(U) Engineering Milestones

Pod structure CDR
Vibration Tests
Window Tests

Reconnaissance
management system
delivery

(U) T&E Milestones

Camera flight tests First system flight tests

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FY 2000 RDT&E,N PROGRAM ELEMENT/PROJECT COST BREAKDOWN

DATE: February 1999

BUDGET ACTIVITY: 7

PROGRAM ELEMENT: 0305207N
PROGRAM ELEMENT TITLE: Manned Reconnaissance
Systems

PROJECT NUMBER: R2673
PROJECT TITLE: F/A 18
Tactical Reconnaissance

A. (U) PROJECT COST BREAKDOWN: (\$ in thousands)

Project Cost Categories	<u>FY 1998</u>	<u>FY 1999</u>	<u>FY 2000</u>
a. Preliminary Design Review/Concept Review	2,817	0	0
b. SHARP pod structure	0	14,000	5,558
c. Dual band cameras	0	4,500	8,800
d. Subsystems components FFP	0	1,900	0
e. Risk reduction WX	0	3,000	600
f. Reconnaissance management	0	4,000	0
g. Software development	0	1,700	9,200
h. Integration and testing	0	745	3,400
i. Integrated Logistics Support	0	0	3,000
Total	2,817	29,845	30,558

B. (U) BUDGET ACQUISITION HISTORY AND PLANNING INFORMATION (\$ in thousands)

PERFORMING ORGANIZATIONS

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FY 2000 RDT&E,N PROGRAM ELEMENT/PROJECT COST BREAKDOWN

DATE: February 1999

BUDGET ACTIVITY: 7

PROGRAM ELEMENT: 0305207N
 PROGRAM ELEMENT TITLE: Manned Reconnaissance
 Systems

PROJECT NUMBER: R2673
 PROJECT TITLE: F/A 18
 Tactical Reconnaissance

Contractor/ Government Performing Activity	Contract Method Fund Vehicle	Award/ Oblig Date	Perform Activity EAC	Project Office EAC	Total FY 1998 & Prior	FY 1999 Budget	FY 2000 Budget	To Complete	Total Program
Product Development									
Raytheon	IDIQ	Mar 99	14,000	14,000	0	14,000	5,558	12,986	32,544
TBD	CPFF	Mar 99	4,500	4,500	0	4,500	8,800	18,188	31,488
TBD	FFP	Jun 99	1,900	1,900	0	1,900	0	2,000	3,900
Miscellaneous	WX	Various	N/A	N/A	2,074	8,700	12,800	9,400	32,974
Various	Various	Various	Various	Various	743	0	0	0	743
Support and Management: Not Applicable									
Test and Evaluation:									
Miscellaneous	WX	Oct 99	N/A	N/A	0	745	3,400	7,612	11,757
TOTAL:					*2,817	29,845	30,558	50,186	113,406

GOVERNMENT FURNISHED PROPERTY: Not Applicable

	FY 1998 & Prior	FY 1999 Budget	FY 2000 Budget	To Complete	Total Program
Subtotal Product Development	*2,817	29,100	27,158	42,574	101,649

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FY 2000 RDT&E,N PROGRAM ELEMENT/PROJECT COST BREAKDOWN

DATE: February 1999

BUDGET ACTIVITY: 7

PROGRAM ELEMENT: 0305207N
PROGRAM ELEMENT TITLE: Manned Reconnaissance
Systems

PROJECT NUMBER: R2673
PROJECT TITLE: F/A 18
Tactical Reconnaissance

Subtotal Support and Management:	0	0	0	0	0
Subtotal Test and Evaluation:	0	745	3,400	7,612	11,757
Total Project	0	29,845	30,558	50,186	113,406

*Was executed under P.E. 0204136N in FY 1998.

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Budget Item Justification
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