

Exhibit R-2, RDT&E Budget Item Justification	DATE February 2004
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BUDGET ACTIVITY 07 Operational System Development	PE NUMBER AND TITLE 0207253F Compass Call
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Cost (\$ in Millions)	FY 2003 Actual	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	Cost to Complete	Total
Total Program Element (PE) Cost	8.786	8.706	3.990	4.845	4.983	0.000	0.000	0.000	0.000
4804 Compass Call	8.786	8.706	3.990	4.845	4.983	0.000	0.000	0.000	0.000

(U) **A. Mission Description and Budget Item Justification**

COMPASS CALL is the USAF's airborne wide area coverage offensive counter information system. It denies, disrupts, degrades and deceives adversary voice and data communications, disrupting their ability to effectively command and control forces in the field. Although COMPASS CALL has been a fielded, operational capability since 1983, it continues to evolve and adapt to counter the constantly changing adversary tactical communications. Most recently, this is reflected in a shift from traditional military communication systems to an increasing reliance on commercial/civil capabilities.

The development to be accomplished by these funds center around the direct incorporation of advanced capabilities into the operational system to include Block 20, Block 30, Block 35 and related integration, testing, training, simulation and deploying systems. The evolution of the adversary threat requires developmental investments in a wide range of activities and ancillary subsystems. These activities include significant effort in the development and operational fielding of the Tactical Radio Acquisition and Countermeasures Subsystem (TRACS) which represents the next evolutionary capability increase in receiver/countermeasure effectivity for COMPASS CALL. Activities are also required in the related areas of human-machine interfaces, software, testing and integration, signals analysis, systems engineering integration, countermeasure development for the evolving threat, mission planning, Concept of Operations (CONOPS) development and program planning for the production of subsystems and capabilities. RDT&E articles for FY00-04 include TRACS engineering and manufacturing development units necessary for this system to evolve to counter emerging threats as well as other subsystems to counter the evolving threats.

This program is categorized as Budget Activity 7 because it provides for development of technologies and capabilities in support of operational system development.

(U) **B. Program Change Summary (\$ in Millions)**

	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
(U) Previous President's Budget	3.877	3.790	0.000
(U) Current PBR/President's Budget	8.786	8.706	3.990
(U) Total Adjustments	4.909	4.916	
(U) Congressional Program Reductions	-0.100	-0.010	
Congressional Rescissions		-0.074	
Congressional Increases	5.500	5.000	
Reprogrammings	-0.038		
SBIR/STTR Transfer	-0.453		

(U) **Significant Program Changes:**

Air Force added funds for FY05 to continue Block 35 enhancements.

Exhibit R-2a, RDT&E Project Justification

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BUDGET ACTIVITY 07 Operational System Development				PE NUMBER AND TITLE 0207253F Compass Call			PROJECT NUMBER AND TITLE 4804 Compass Call		
Cost (\$ in Millions)	FY 2003 Actual	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	Cost to Complete	Total
4804 Compass Call	8.786	8.706	3.990	4.845	4.983	0.000	0.000	0.000	0.000
Quantity of RDT&E Articles	0	0	0	0	0	0	0		

(U) A. Mission Description and Budget Item Justification

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The development to be accomplished by these funds center around the direct incorporation of advanced capabilities into the operational system to include Block 20, Block 30, Block 35 and related integration, testing, training, simulation and deploying systems. The evolution of the adversary threat requires developmental investments in a wide range of activities and ancillary subsystems. These activities include significant effort in the development and operational fielding of the Tactical Radio Acquisition and Countermeasures Subsystem (TRACS) which represents the next evolutionary capability increase in receiver/countermeasure effectivity for COMPASS CALL. Activities are also required in the related areas of human-machine interfaces, software, testing and integration, signals analysis, systems engineering integration, countermeasure development for the evolving threat, mission planning, Concept of Operations (CONOPS) development and program planning for the production of subsystems and capabilities. RDT&E articles for FY00-04 include TRACS engineering and manufacturing development units necessary for this system to evolve to counter emerging threats as well as other subsystems to counter the evolving threats.

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(U) B. Accomplishments/Planned Program (\$ in Millions)

	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
(U) Accomplishments/Planned Program	0.000	0.000	
(U) Develops and integrates classified capabilities using new technologies against emerging/evolving C3I threats	7.386		
(U) System Engineering and Integration, Ground and Flight Test	1.400		
(U) Systems Engineering, development, integration, and test of classified capabilities (to include subsystems added by Congress) such as TRACS, Analysis, and Special Purpose Emitter Array (SPEAR)		8.706	3.990
(U) Total Cost	8.786	8.706	3.990

(U) C. Other Program Funding Summary (\$ in Millions)

	<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>Complete</u>	
(U) PE 0207253F, Aircraft Modification (3010)	37.614	16.402	20.880	16.915	15.143	18.060	18.439		TBD
(U) PE 0207253F, Aircraft Initial	13.295	10.519	12.171	13.963	14.243	14.909	15.221		TBD

Exhibit R-2a, RDT&E Project Justification

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BUDGET ACTIVITY

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4804 Compass Call

(U) **C. Other Program Funding Summary (\$ in Millions)**

Spares (3010)

(U)	PE 0207253F, Other Charges (3010)	34.735	31.057	TBD
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(U)	PE 0207253F, Support Equipment, (3010)	0.262	0.254	TBD
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(U) **D. Acquisition Strategy**

Managed by BIG SAFARI program office. Program employs multiple contracting strategies.

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Exhibit R-3, RDT&E Project Cost Analysis

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BUDGET ACTIVITY				PE NUMBER AND TITLE				PROJECT NUMBER AND TITLE				
07 Operational System Development				0207253F Compass Call				4804 Compass Call				
<u>(U) Cost Categories</u> (Tailor to WBS, or System/Item Requirements) (\$ in Millions)	<u>Contract Method & Type</u>	<u>Performing Activity & Location</u>	<u>Total</u> <u>Prior to FY</u> <u>2003</u> <u>Cost</u>	<u>FY</u> <u>2003</u> <u>Cost</u>	<u>FY</u> <u>2003</u> <u>Award</u> <u>Date</u>	<u>FY</u> <u>2004</u> <u>Cost</u>	<u>FY</u> <u>2004</u> <u>Award</u> <u>Date</u>	<u>FY</u> <u>2005</u> <u>Cost</u>	<u>FY</u> <u>2005</u> <u>Award</u> <u>Date</u>	<u>Cost to</u> <u>Complete</u>	<u>Total</u> <u>Cost</u>	<u>Target</u> <u>Value of</u> <u>Contract</u>
<u>(U) Product Development</u>												
BAE Systems	MIPR/PO	BAE Systems, Nashua NH	11.892	7.386		8.706		3.990		Continuing	TBD	
Subtotal Product Development			11.892	7.386		8.706		3.990		Continuing	TBD	0.000
Remarks:												
<u>(U) Test & Evaluation</u>												
Electronic Proving Grounds (EPG)	MIPR/PO	EPG, Ft Huachuca AZ		1.400							1.400	
Subtotal Test & Evaluation			0.000	1.400		0.000		0.000		0.000	1.400	0.000
Remarks:												
<u>(U) Total Cost</u>			11.892	8.786		8.706		3.990		Continuing	TBD	0.000

Exhibit R-4, RDT&E Schedule Profile

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BUDGET ACTIVITY
07 Operational System Development

PE NUMBER AND TITLE
0207253F Compass Call

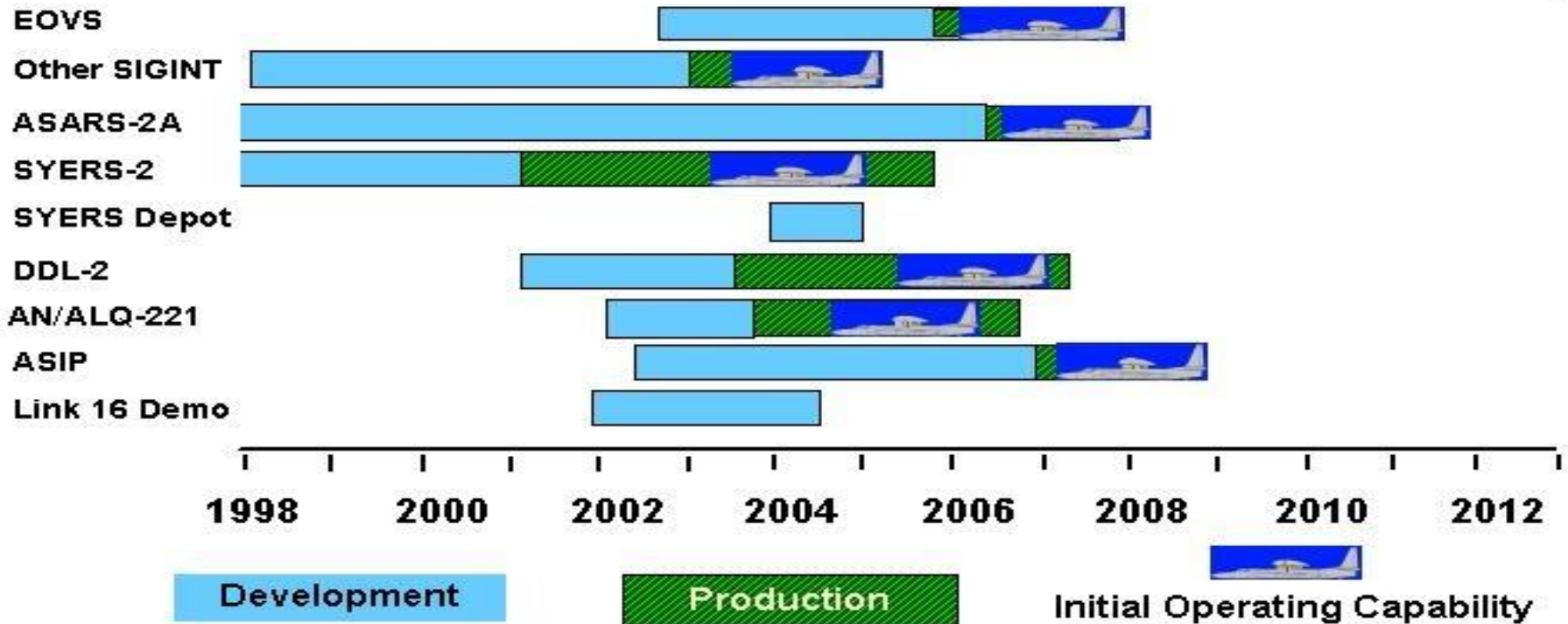
PROJECT NUMBER AND TITLE
4804 Compass Call



U.S. AIR FORCE

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OUTYEARS



Integrity - Service - Excellence

Exhibit R-4, RDT&E Schedule Profile

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PE NUMBER AND TITLE
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PROJECT NUMBER AND TITLE
4804 Compass Call

Compass Call PDM/Mod 2 Year

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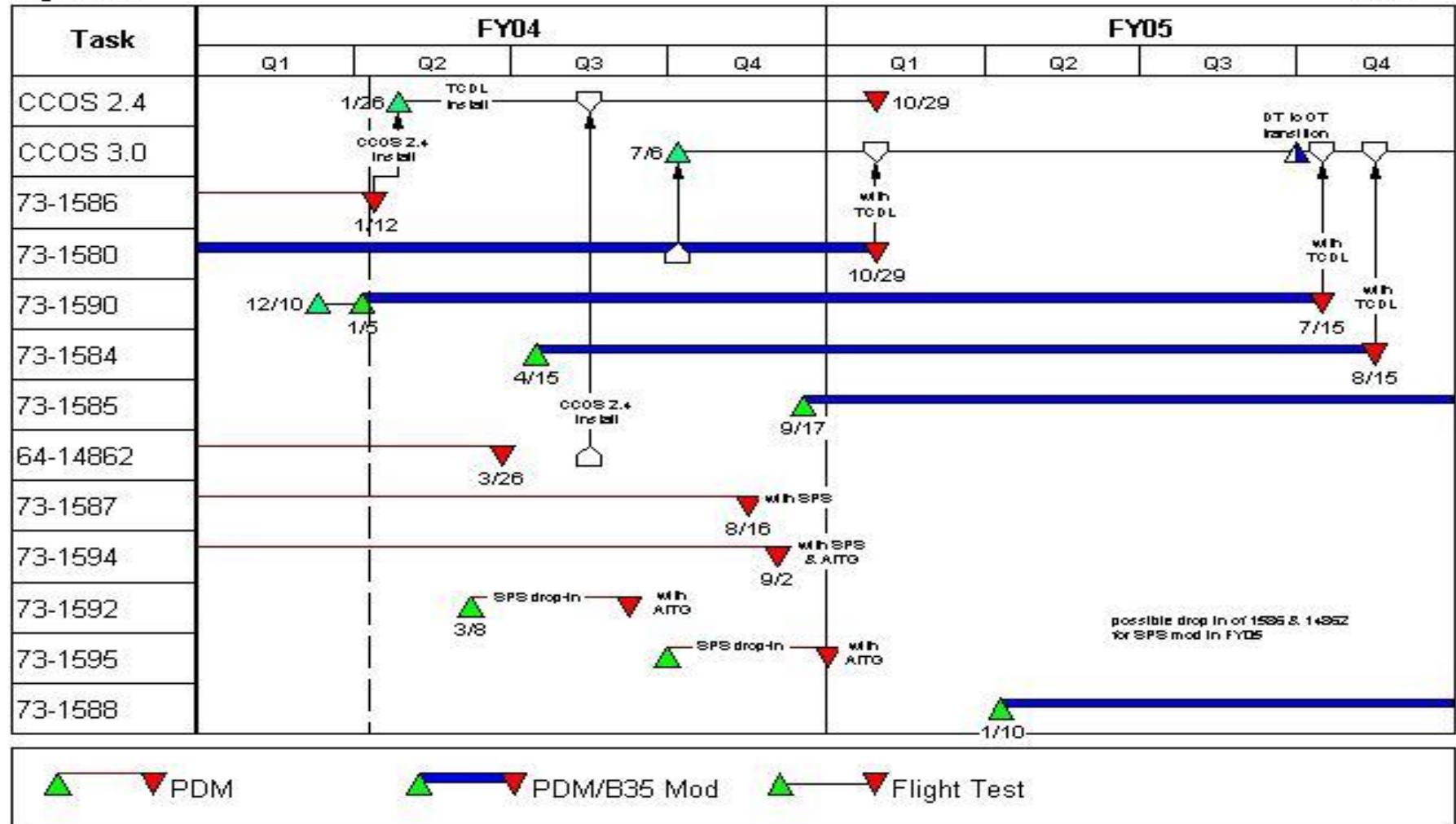


Exhibit R-4, RDT&E Schedule Profile

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BUDGET ACTIVITY
07 Operational System Development

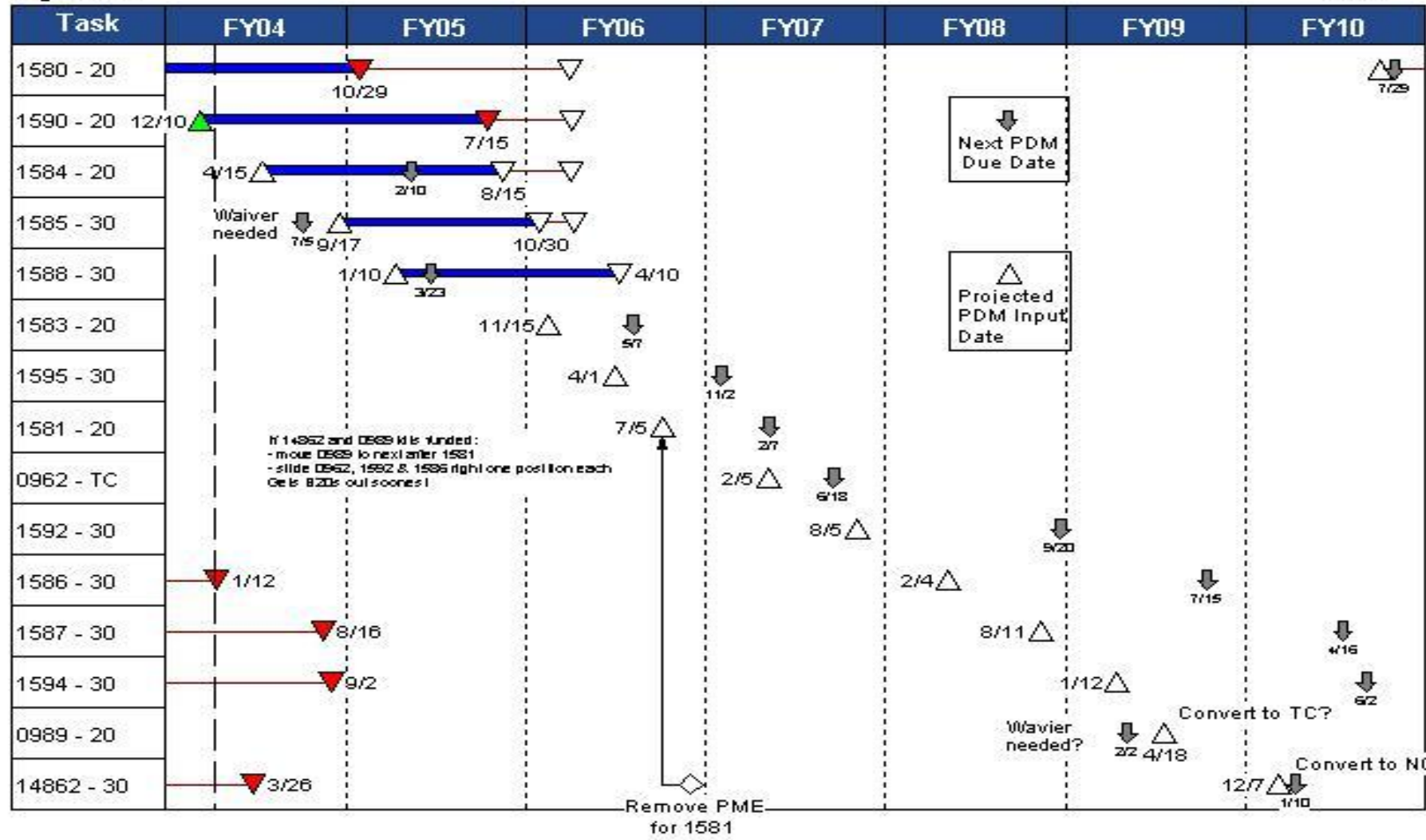
PE NUMBER AND TITLE
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Block 35 Upgrade Schedule

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Exhibit R-4a, RDT&E Schedule Detail	DATE February 2004
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	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
(U) <u>Schedule Profile</u>			
(U) TRACS-F Spiral Upgrade	2Q		
(U) TRACS-F Ground Test		3Q	
(U) TRACS-F Flight Test			3Q