PE NUMBER: 0207161F
PE TITLE: Tactical AIM Missiles

| Exhibit R-2, RDT&E Budget Item Justification February 2006 |                   |                     |                     |                                |                     |                     |                     |                     |       |  |
|--|-------------------|---------------------|---------------------|--------------------------------|---------------------|---------------------|---------------------|---------------------|-------|--|
| BUDGET ACTIVITY  07 Operational System Development         |                   |                     |                     | PE NUMBER AND<br>0207161F Tact |                     | siles               |                     |                     |       |  |
| Cost (\$ in Millions)                                      | FY 2005<br>Actual | FY 2006<br>Estimate | FY 2007<br>Estimate | FY 2008<br>Estimate            | FY 2009<br>Estimate | FY 2010<br>Estimate | FY 2011<br>Estimate | Cost to<br>Complete | Total |  |
| Total Program Element (PE) Cost                            | 5.346             | 15.416              | 8.850               | 7.897                          | 5.805               | 6.044               | 6.256               | Continuing          | TBD   |  |
| 4132 AIM-9 Product Improvement                             | 5.346             | 15.416              | 8.850               | 7.897                          | 5.805               | 6.044               | 6.256               | Continuing          | TBD   |  |

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

The AIM-9X is a long-term evolution of the AIM-9 series of fielded air-to-air missiles. The AIM-9X (Sidewinder) short range air-to-air missile program provides a launch and leave, air combat munition that uses passive infrared (IR) energy for acquisition and tracking of enemy aircraft and complements the Advanced Medium Range Air-to-Air Missile (AMRAAM). Air superiority in the short range air-to-air missile arena is essential and includes first-shot, first-kill opportunity against an enemy employing IR countermeasures. The AIM-9X employs several components common to the AIM-9M. Anti-Tamper features are incorporated to protect improvements inherent in the AIM-9X design. AIM-9X is an Acquisition Category 1C (ACAT 1C) joint-service program with Navy lead. As a natural course of program evolution, pre-planned product improvements (P3I) and software updates are being done to meet evolving threats and warfighter requirements.

Milestone III was approved May 2004, the first full-rate production (FRP) contract was awarded Nov 04 and the second FRP contract was awarded Dec 05.

The program is currently in budget activity 7 - Operational System Development because it modifies an existing weapon system.

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

| ı |                                      | <u>FY 2005</u> | <u>FY 2006</u> | <u>FY 2007</u> |
|---|--------------------------------------|----------------|----------------|----------------|
| ١ | (U) Previous President's Budget      | 5.509          | 15.639         | 8.899          |
| ı | (U) Current PBR/President's Budget   | 5.346          | 15.416         | 8.850          |
| ١ | (U) Total Adjustments                | -0.163         | -0.223         |                |
| ı | (U) Congressional Program Reductions |                |                |                |
| ١ | Congressional Rescissions            | -0.004         | -0.223         |                |
| ı | Congressional Increases              |                |                |                |
| ı | Reprogrammings                       | -0.082         |                |                |
| ı | SBIR/STTR Transfer                   | -0.077         |                |                |
| ı | (U) Significant Program Changes:     |                |                |                |

R-1 Shopping List - Item No. 135-2 of 135-7

|      | Exhibit R-2a, RDT&E Project Justification  Exhibit R-2a, RDT&E Project Justification  February 2006 |                   |                     |                     |                     |                     |                     |                              |                     |       |  |
|------|---|-------------------|---------------------|---------------------|---------------------|---------------------|---------------------|------------------------------|---------------------|-------|--|
|      |   |                   |                     |                     |                     |                     |                     | BER AND TITLE  Product Impro | ovement             |       |  |
|      | Cost (\$ in Millions)   | FY 2005<br>Actual | FY 2006<br>Estimate | FY 2007<br>Estimate | FY 2008<br>Estimate | FY 2009<br>Estimate | FY 2010<br>Estimate | FY 2011<br>Estimate          | Cost to<br>Complete | Total |  |
| 4132 | AIM-9 Product Improvement   | 5.346             | 15.416              | 8.850               | 7.897               | 5.805               | 6.044               | 6.256                        | Continuing          | TBD   |  |
|      | Quantity of RDT&E Articles  | 0                 | 0                   | (                   | 0                   | 0                   | 0                   | 0                            |                     |       |  |

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

The AIM-9X is a long-term evolution of the AIM-9 series of fielded air-to-air missiles. The AIM-9X (Sidewinder) short range air-to-air missile program provides a launch and leave, air combat munition that uses passive infrared (IR) energy for acquisition and tracking of enemy aircraft and complements the Advanced Medium Range Air-to-Air Missile (AMRAAM). Air superiority in the short range air-to-air missile arena is essential and includes first-shot, first-kill opportunity against an enemy employing IR countermeasures. The AIM-9X employs several components common to the AIM-9M. Anti-Tamper features are incorporated to protect improvements inherent in the AIM-9X design. AIM-9X is an Acquisition Category 1C (ACAT 1C) joint-service program with Navy lead. As a natural course of program evolution, pre-planned product improvements (P3I) and software updates are being done to meet evolving threats and warfighter requirements.

Milestone III was approved May 2004, the first full-rate production (FRP) contract was awarded Nov 04 and the second FRP contract was awarded Dec 05.

The program is currently in budget activity 7 - Operational System Development because it modifies an existing weapon system.

| ( <b>U</b> ) | B. Accomplishments/Planned Pr      | ogram (\$ in Mil   | lions)             |                     |                    |                   | FY               | <u> 2005</u>    | FY 2006         | FY 2007      |
|--------------|------------------------------------|--------------------|--------------------|---------------------|--------------------|-------------------|------------------|-----------------|-----------------|--------------|
| (U)          | Raytheon Missile Systems (RMS)     | P3I Contract       |                    |                     |                    |                   |                  | 4.910           | 11.539          | 5.414        |
| (U)          | Software/OFP Upgrade               |                    |                    |                     |                    |                   |                  | 0.000           | 2.300           | 1.030        |
| (U)          | DT&E/OT&E for P3I software up      | dates and FOT&I    | E efforts          |                     |                    |                   |                  | 0.253           | 1.127           | 1.956        |
| (U)          | In-house/CSS Support               |                    |                    |                     |                    |                   |                  | 0.183           | 0.450           | 0.450        |
| (U)          | Total Cost                         |                    |                    |                     |                    |                   |                  | 5.346           | 15.416          | 8.850        |
| (U)          | C. Other Program Funding Sum       | mary (\$ in Millio | ons)               |                     |                    |                   |                  |                 |                 |              |
|              |                                    | FY 2005            | FY 2006            | FY 2007             | FY 2008            | FY 2009           | FY 2010          | FY 2011         | Cost to         | Tatal Cast   |
|              |                                    | <u>Actual</u>      | <b>Estimate</b>    | <b>Estimate</b>     | <b>Estimate</b>    | <b>Estimate</b>   | <b>Estimate</b>  | <b>Estimate</b> | <b>Complete</b> | Total Cost   |
| (U)          | AF RDT&E                           | 5.346              | 15.416             | 8.850               | 7.897              | 5.805             | 6.044            | 6.256           | Continuing      | TBD          |
| (U)          | DOD PE (0603715D)                  |                    |                    |                     |                    |                   |                  |                 |                 | 25.000       |
| (U)          | Tactical AIM Missile               |                    |                    |                     |                    |                   |                  |                 |                 | 30.817       |
|              | Modification (BP21)                |                    |                    |                     |                    |                   |                  |                 |                 | 30.617       |
| (U)          | Tactical AIM Missile               | 61.377             | 50.639             | 49.925              | 51.018             | 79.818            | 79.532           | 62.570          | Continuina      | TBD          |
|              | Procurement                        | 01.577             | 30.039             | 49.923              | 31.016             | 79.010            | 19.332           | 02.370          | Continuing      | מפו          |
| (U)          | SEEK EAGLE                         | 0.000              | 0.000              | 0.000               | 0.000              | 0.000             | 0.000            | 0.000           | 0.000           | 10.028       |
|              | (PE_0207590F)                      | 0.000              | 0.000              | 0.000               | 0.000              | 0.000             | 0.000            | 0.000           | 0.000           | 10.026       |
|              | Congressional language directed th | e program to repo  | ort as a missile p | rocurement, star    | rting in FY02, aı  | nd not as a missi | le modification. | •               |                 |              |
| Pro          | pject 4132                         |                    | R-                 | 1 Shoppina List - I | tem No. 135-3 of 1 | 35-7              |                  |                 | Exhibit R-2a (I | PE 0207161F) |

| Exhibit R-2a, RDT&E Project Just  |                                | DATE February 2006 |                          |
|-----------------------------------|--------------------------------|--------------------|--------------------------|
| BUDGET ACTIVITY                   | PE NUMBER AND TITLE            | PROJECT            | T NUMBER AND TITLE       |
| 07 Operational System Development | 0207161F Tactical AIM Missiles | 4132 AI            | IM-9 Product Improvement |

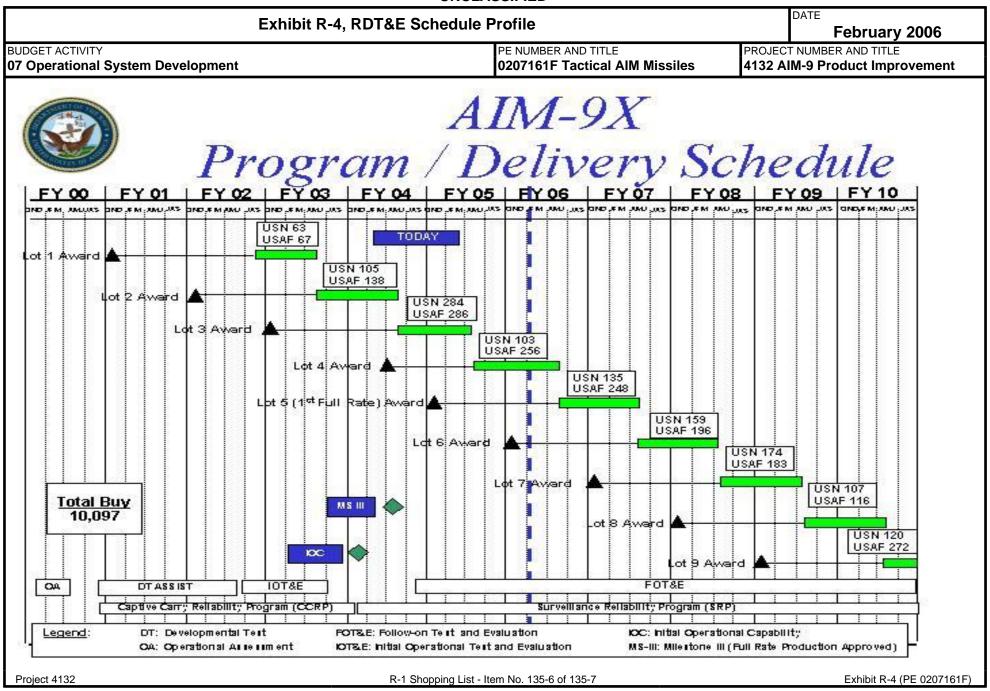
### (U) D. Acquisition Strategy

After a full and open competition, a Cost Plus Incentive Fee/Award Fee contract was awarded to Hughes Missile Systems Company (now Raytheon Systems Corp (RSC)) to complete missile system development and prepare for production. This EMD contract included three Fixed Price Options for Low Rate Initial Production (LRIP) Lots 1, 2, and 3. Per an ADM signed in May 2003, FRP Lot 4 was changed to LRIP 4 which was awarded in Apr 2004. Milestone III decision with advice from the Air Force Acquisition Executive, was approved in May 04. FRP 1, Lot 5, was awarded in Nov 04; FRP 2 Lot 6 was awarded in Dec 05, FRP 3 Lot 7 will be Firm Fixed Price (FFP) with incentives provided if the contractor meets or beats his Procurement Price Commitment Curve (PPCC), a quantity price curve provided by RSC with the EMD proposal. Lot 7 will be the last lot under the current PPCC.

Project 4132 R-1 Shopping List - Item No. 135-4 of 135-7

Exhibit R-2a (PE 0207161F)

| E   | Exhibit R-  | 3, RDT&E                       | Project Co                  | st Anal         | ysis                     |                           |                          |                         | D                        | Feb   | ruary 20  | 06                          |
|---|---|--------------------------------|-----------------------------|-----------------|--------------------------|---------------------------|--------------------------|-------------------------|--------------------------|---|---|-----------------------------|
| BUDGET ACTIVITY  07 Operational System Development  |   |                                |                             |                 | UMBER ANI<br>7161F Tac   |                           | 1 Missiles               |                         |                          | NUMBER ANI<br><b>I-9 Produc</b>   |   | ment                        |
| (U) <u>Cost Categories</u><br>(Tailor to WBS, or System/Item Requirements)<br>(\$ in Millions)  | Contract Method & Type                                | Performing Activity & Location | Total Prior to FY 2005 Cost | FY 2005<br>Cost | FY 2005<br>Award<br>Date | FY 2006<br>Cost           | FY 2006<br>Award<br>Date | FY 2007<br>Cost         | FY 2007<br>Award<br>Date | Cost to<br>Complete   | Total Cost  | Target Value<br>of Contract |
| (U) Product Development Hughes Raytheon Raytheon Raytheon Software/OFP Upgrades Raytheon P3I Contract Boeing Engineering Services Program Management* Subtotal Product Development Remarks: Note*: Based on | C/CPIF<br>C/CPIF<br>C/CPIF<br>C/CPIF<br>Various<br>PO | of A DI                        | 0.000                       | 4.910           | Dec-04                   | 2.300<br>11.539<br>13.839 | Dec-05<br>Dec-05         | 1.030<br>5.414<br>6.444 | Dec-06                   | 0.000 0.000 Continuing Continuing Continuing Continuing Continuing Continuing | 0.000<br>0.000<br>TBD<br>TBD<br>TBD<br>0.000<br>TBD<br>TBD<br>TBD | 0.000                       |
| (U) Support Various Contracts In House Support Subtotal Support Remarks:  | FFP<br>N/A  | or Agreement, RI               | OT&E program cos<br>0.000   | 0.183<br>0.183  | Dec-04                   | 0.450<br>0.450            | Nov-05                   | 0.450<br>0.450          |                          | Continuing Continuing Continuing  | TBD<br>TBD<br>TBD   | 0.000                       |
| (U) Test & Evaluation Field Activities Subtotal Test & Evaluation Remarks: (U) Management   | РО  |                                | 0.000                       | 0.253<br>0.253  | Dec-04                   | 1.127<br>1.127            | Nov-05                   | 1.956<br>1.956          |                          | Continuing<br>Continuing  | TBD<br>TBD  | 0.000                       |
| Subtotal Management   |   |                                | 0.000                       | 0.000           |                          | 0.000                     |                          | 0.000                   |                          | 0.000   | 0.000<br>0.000  | 0.000                       |
| Remarks:<br>(U) Total Cost  |   |                                | 0.000                       | 5.346           |                          | 15.416                    |                          | 8.850                   |                          | Continuing  | TBD   | 0.000                       |
|   |   |                                |                             |                 |                          |                           |                          |                         |                          |   |   |                             |
|   |   |                                |                             |                 |                          |                           |                          |                         |                          |   |   |                             |
|   |   |                                |                             |                 |                          |                           |                          |                         |                          |   |   |                             |
| Project 4132  |   |                                | R-1 Shopping Lis            | t - Item No.    | 135-5 of 13              | 5-7                       |                          |                         |                          | Exh   | ibit R-3 (PE (  | )207161F)                   |



| Exhibit R-4a, RDT&E   | DATE<br><b>Febr</b>                                | DATE <b>February 2006</b>  |                      |  |  |
|---|--|----------------------------|----------------------|--|--|
| BUDGET ACTIVITY  OF Operational System Development  | PE NUMBER AND TITLE 0207161F Tactical AIM Missiles | PROJECT NUMBER AND         |                      |  |  |
| (U) Schedule Profile (U) FRP Award (Lots 5-7) (U) DT-IIIB (U) OT-IIIB (U) OT-IIIB (U) Note: LRIP 4 Award was in 3Q 2004; RAA/IOC 2Q 2004; Milestone 3 | FY 2005<br>1Q<br>was in 3Q 2004                    | <u>FY 2006</u><br>1Q<br>3Q | FY 2007<br>1Q<br>3Q  |  |  |
|   |  |                            |                      |  |  |
|   |  |                            |                      |  |  |
|   |  |                            |                      |  |  |
|   |  |                            |                      |  |  |
| Project 4132 R-1 Sh   | nopping List - Item No. 135-7 of 135-7             | Exhibit                    | : R-4a (PE 0207161F) |  |  |