

# Cost Growth & Acquisition Reform

### Dr. Nancy L. Spruill, OUSD(AT&L) May 2009



## The Washington Post

**March 31, 2009:** Development costs for the Pentagon's major weapons systems soared last year, helping drive <u>overruns</u> that are "staggering," the Government Accountability Office said in a report released yesterday. Overall, the cost overruns associated with the military's major weapons ..." total near \$300 billion, and the average program delay has stretched from 21 to 22 months,"

The figures reflect a weapons development and procurement system that is woefully broken... "Pentagon planners don't do a good enough job of analyzing those requirements to understand whether they have the technologies and designs to build to them," GAO analyst Michael J. Sullivan said.



### **Or... Sensationalism?**

The new GAO report continues to sensationalize the assessed cost growth of \$296 billion on 96 programs. This number has been cited by many people as a condemnation of the defense procurement process. I have analyzed the components of this GAO number, and I would suggest that the number is misleading, out-of-date, and largely irrelevant to the current management of DoD programs.

--Mr. John J. Young, former USD(AT&L)

### The Math Matters....



**GAO** Methodology

- GAO defines cost growth as the change in total program acquisition costs from the original estimate to the current estimate
- GAO publishes an annual report focused on cost growth
  - Summarizes 96 acquisition programs
  - Stated a \$296B cost growth for the FY08 portfolio, down from \$301B in FY07

#### • The fine print....

- 1) Procurement of additional quantities and/or required capability counts as "bad";
- 2) Differing "portfolios" compared on an annual basis;
- 3) Pre-Milestone B estimates used (i.e, before the program defined);
- 4) Poor early performers can never recover, even if they have been performing well for many years;
- 5) Acquisition painted with broad brush as though all programs are broken.



- Procurement of additional quantities and/or required capability is not cost "growth"
  - Quantity and capability enhancements due to mission requirements should not be chargeable to cost growth.
  - AT&L estimates capability enhancements alone account for \$96B of total

#### • Portfolio cost growth cannot be compared on an annual basis

- Analysis is grounded in dissimilar comparison of programs.
- 59 programs moved into or out of the portfolio between 2003 and 2008.
- Pre-Milestone B estimates should not be used
  - Pre-Milestone B estimates are incomplete and are not a reliable estimate
  - AT&L methodology uses the more reliable Milestone B estimate
  - This alone yields total cost growth of \$278B as opposed to \$296B.



#### • Past sins never forgiven (...some remorse is useful though)

- Original estimates are done many years ahead of actual production and can be greatly outdated. Examples are JSF, FCS, V-22, and C-17.
- Twelve of the current programs are 15 years or older; 41 of the programs had a MS B before 2001 (Oldest: Trident II Missile July 1987)
- Example: JSF and FCS programs are planned to be in the portfolio until 2034 and 2030, respectively. By GAO methodology, they will keep a \$78B cost growth mark even if they have no cost growth for the next 25 years!
- Portfolio cost growth over last 5 years is \$176B

#### Sinners and saints

- The top eight highest cost growth programs account for about 80% of the total cost growth.
- DDG 51, FCS, and JSF alone account for more then 45% of total
- 29 Programs have zero or negative cost growth



- AT&L proposed new set of metrics to more fairly represent weapon system cost growth
  - Performance Analysis: Total cost growth over a period of time
  - Trend Analysis: Average yearly cost growth over a period of time
- GAO, OMB and OSD(AT&L) worked together to develop new metrics to measure acquisition cost growth
  - Continue to measure cost growth from Original Estimate
  - Fair, transparent, and fact based (unbiased) metrics meant to provide total visibility
- GAO and AT&L agreed to conduct a pilot study using new metrics



### **Top 10 Cost Growth Programs**

Top 10 Programs	First Original Estimate Date	Cost Growth - GAO Method	Cost Growth - 2002 - 2007
DDG 51 Destroyer	Feb-88	48	-1
Future Combat System (FCS)	May-03	39	39
F-35 / Joint Strike Fighter	Oct-01	38	56
V-22 Joint Services Advanced Vertical Lift Aircraft	Feb-88	24	3
C-17 Globemaster III	Dec-88	23	0
Virginia Class Submarine (SSN 774)	Jun-95	23	-1
C-130J Hercules	Oct-96	11	-4
Family of Medium Tactical Vehicles	Oct-88	10	1
CH-47F Improved Cargo Helicopter (ICH)	May-98	9	5
Stryker Family of Vehicles	Nov-00	8	8
Tota	I	238	108



### What's Happened Lately? Total Portfolio Growth Last 5 Years

Jøř         183         2443         955         48         Ugn Utili Nulkoger         17         19           2 FCS         89.8         129.7         40.9         40.44%         3.1         3.3           3 CW 31         3.5         20.9         25.5         50.850.4         40.44%         3.1         3.3           4 D0G 1000         11.4         27.6         16.2         51.054.340 feplacement         1.6         1.7         1.6           8 BLACK HAWK Upgrade         3.3         10.1         6.8         54.843         1.6	Program	Estimate SAR 2002 or Later		Cost Growth 2002-2007	Program	Estimate SAR 2002 or Later	Estimate SAR 2007	Cost Growth 2002-2007
3 CM 21       35       293       265       50	-	188.3	244.8	56.5	48 Light Utility Helico	ter 1.7	1.9	0.2
4 DOD 1000       11/4       27.6       16.2       51 Cobr. Judy Reparament       1.6       1.7         5 Bryke MKK Upgrade       13.2       20.8       7.6       53 Vi+71       6.5       6.6         6 Bryke MUK Upgrade       13.0       6.8       54 RMS       1.4       55       6.6         9 CHAT       16.9       54 RMS       1.4       54 RMS       1.4       56       6.6         9 CHAT       10.1       6.8       54 RMS       1.4       56       6.6 <td>2 FCS</td> <td>89.8</td> <td>129.7</td> <td>40.0</td> <td>49 AIM-9X</td> <td>3.1</td> <td>3.3</td> <td>0.2</td>	2 FCS	89.8	129.7	40.0	49 AIM-9X	3.1	3.3	0.2
S Styler       80       15.1       8.1       52 AddBack Andrea       1.5       1.6         BLACK MUR Upgrade       33       10.1       6.5       54 PMS       1.4       1.5       1.6         S Chen De       D       PORTÉGOLIO GROWTH (\$B)       1.4       1.5       1.6       1.6         11 LONGOS       PORTÉGOLIO GROWTH (\$B)       1.4       1.6       1.6       1.6       1.6         12 MARAME       PORTÉGOLIO GROWTH (\$B)       1.6       1.6       1.6       1.6       1.6         12 MARAME       PORTÉGOLIO GROWTH (\$B)       1.6       1.6       1.6       1.6       1.6         13 Global He       PORTÉGOLIO GROWTH (\$B)       1.6       1.6       1.6       1.6       1.6         13 Global He       PORTÉGOLIO GROWTH (\$B)       1.6       1.6       1.6       1.6       1.6         14 Horses       PORTÉGOLIO GROWTH       QUOZ OR Later       Cost Growth       2.002-2007       1.2         14 Horses       Total       1,316       1,491       1.76       1.6       1.6         23 Mi-60       2.0       1.1       7.5       5.0       1.6       1.6       1.6         24 MireCONNS       3.6       4.5       1.3 </td <td>3 CVN 21</td> <td>3.5</td> <td>29.9</td> <td>26.5</td> <td>50 SSGN</td> <td>4.4</td> <td>4.5</td> <td>0.1</td>	3 CVN 21	3.5	29.9	26.5	50 SSGN	4.4	4.5	0.1
S Bryber       0.0       15.1       8.1       52 A0M-82 AACM       1.5       1.6         B BLACK KUR Upgrade       3.3       0.1       6.8       54 RMS       1.4       1.5       1.6         S Chen Do       Charp       PORTEGOIO GROWTH (\$B)       1.4       1.6       1.6       1.6         S Chen Do       Chen Do       Estimate SAR       Estimate SAR       Cost Growth       1.6       1.6         1 Chen Do       France       SAR       2002 or Later       2007       2002-2007       1.6         1 H Ugas       Total       1,31.6       1,491       176       1.6       1.6         2 AMH-dox       Sa 4.8       1.1       75 Sbs       5.1       4.9       1.6       1.6         2 AMH-dox       Sa 4.8       1.1       75 Sbs       5.1       4.9       1.6       1.6       1.6       1.6         2 AMH-dox       Sa 4.8       1.1       75 Sbs       1.8       1.5       4.9       1.6	4 DDG 1000	11.4	27.6	16.2	51 Cobra Judy Replac	ement 1.6	1.7	0.1
Normal Name       3.3       10.1       0.8       54 RMS       14       15         Chem De       Chem De       Deortfolio Growth (\$B)       14       15         11 LONGRO       Estimate SAR       Estimate SAR       Cost Growth       16         12 MRAMM       2002 or Later       2007       2002-2007       13         15 EFV       Total       1,316       1,491       176         12 Misos       13       24       15       13       74 CEC       51         18 Aci IF       2002 or Later       13       74 CEC       51       13       74 CEC       51       13       74 CEC       51       14       15         21 Misos       09       2.0       1.1       75 SPB       1.8       15       15       15       15       16	5 Stryker	8.0	16.1	8.1			1.6	0.1
1       0.1       0.8       54 RMS       1.4       1.5         8       Chem Do       0       0       0.1477       0	6 BLACK HAWK Upgrade	13.2	20.8	7.6	53 VH-71	6.5	6.6	0.1
8 CHar De 9 CHAFT       Portfolio Growth (\$B)       0       0         9 CHAFT       Process       0       0         11 LONBOR       Portfolio Growth (\$B)       0       0         13 Global He       13 Global He       Estimate SAR       Estimate SAR       Cost Growth         14 V22 OSF       15 EFV       0       0       0       0         16 Chen De       Double       10       0       0       0       0         17 SBRS He       Estimate SAR       Estimate SAR       Cost Growth       0       0       0         17 Horos       1       1,316       1,491       176       0 <td< td=""><td></td><td>3.3</td><td>10.1</td><td>6.8</td><td></td><td>1.4</td><td>1.5</td><td>0.1</td></td<>		3.3	10.1	6.8		1.4	1.5	0.1
9 CH47F 01 NPC655 2 MIRAMI 3 Global HA 14 V22 OFI 2 MIRAMI 3 Global HA 14 V22 OFI 15 EFV 16 Chem De 75 EFV 16 Chem De 75 EFV 16 Chem De 75 EFV 16 Chem De 75 EFV 16 Chem De 70 APA 14 V2 OFI 17 SBR5 HA 18 AEHF 19 ARH 2002 OF Later       Estimate SAR 2002 OF Later       Cost Growth 2007       10 10 10 10 10 10 10 10 10 10 10 10 10 1							0.6	0.1
11 LONGRO       13 Global Hi       13 Global Hi       13 Global Hi       14 V-22 OST       13 Global Hi         13 Global Hi       14 V-22 OST       15 EFV       16       16         15 EFV       Estimate SAR       Estimate SAR       Cost Growth       36         16 Chem De       Participan (100 Cost Growth)       2002-2007       12         19 ARH       2002 or Later       2007       2002-2007       12         10 FNTV       1.1,316       1,491       176       16         12 JANNAW       32 4.5       1.3       74 CEC       5.1       16         25 E-20 AH       9       2.0       1.1       75 SDB       1.8       1.5         29 ATRICANCINUWS       3.8       4.8       1.1       76 PA6 AMIA       30.0       29.6         21 THS NEW       0.9       2.0       1.1       75 SDB       1.8       1.5         29 ATRICANCINUWS       3.8       4.8       1.1       76 PA6 AMIA       30.0       29.6         31 INVERT OFB User Equipment       1.3       2.1       0.9       77 VIA/V       2.5       2.0         32 C-17A       7.5       0.6       80 PATRICITAREADS CAP Fire Unit       1.7       1.3         35 T-						<b>۱</b>	1.4	0.0
11 LONGRO       11 LONGRO       13 Global Ha       14 U 22 OS       15 EV       16 Global Ha	10 NPOESS	P	ΟΓΤΙ		Growth (SE	51	16.0	0.0
13 Global Ha       14 V22 OSP       15 EFV       6 Chem Dea       14 V22 OSP       16 Chem Dea	11 LONGBOV	-	••••		ψ-	- /	0.9	0.0
13 Global Ha       14 V22 OSP       15 EFV       6 Chem Dea       14 V22 OSP       16 Chem Dea	12 AMRAAM						3.5	0.0
14 4/20 CSP       38         15 EFV       Estimate SAR       Estimate SAR       Cost Growth       38         17 SBRS He       2002 or Later       2007       2002-2007       10         19 ARH       2002 or Later       2007       2002-2007       10         21 H-10 Upin       Total       1,316       1,491       176       10         21 H-10 Upin       1,316       1,491       176       16         25 E-20 AHF       9       20       1.1       75 SDB       5.1       16         26 SW Un       38       48       1.1       76 Pa4 MMA       300       26         26 ATRCM/CMWS       38       48       1.1       76 Pa4 MMA       300       26         20 Javelin       13       2.1       0.9       77 MP-RTIP       17       13         21 Navstar GPS Uber Equipment       13       2.1       0.9       78 UDA       26       20         31 Navstar GPS Uber Equipment       13       2.1       0.9       78 UDA       25       20         32 C-17A       77.5       0.9       77 UDA       25       20       20       20       20       20       20       20       20       20							0.4	0.0
1 S EV 16 Chem De 19 ARH 2002 or Later         Estimate SAR 2002 or Later         Estimate SAR 2007         Cost Growth 2002-2007         1.6           19 ARH 20 FNTV 21 H-1 Upgra 22 JASSM         Total         1,316         1,491         176         1.8           24 MH-005 25 E-20 AHE 26 JSOW U         Total         1,316         1,491         176         1.6           20 JASSM         1,316         1,491         176         1.6         5.3           25 E-20 AHE 26 JSOW U         9         2.0         1.1         75 SD8         1.8         5.6           27 TACTICAL TOMAHAWK AUR         3.2         4.5         1.3         74 CEC         5.1         4.9           28 JTRS NED         9         2.0         1.1         75 SD8         1.8         5.6           29 ATRCMCMWS         3.8         4.8         1.1         76 P8A MA         3.0         2.6           30 Javelin         4.9         5.8         0.9         77 MF-RTP         1.7         1.3           31 Navstar GPS User Equipment         1.3         2.1         0.9         78 VTUAV         2         2.0           32 C-130 AMP         4.7         5.4         0.8         PATRIOTMEADS CAP Fire Unit         1.5         0.6								0.0
Inc         Clear De 2002 or Later         Estimate SAR 2002 or Later         Estimate SAR 2007         Cost Growth 2002-2007         1.2           19 ARH 20 FMTV 21 H1 Uppr 22 JASSM 23 MH-608         Total         1,316         1,491         176         1.6           22 JASSM 23 MH-608         Total         1,316         1,491         176         1.6           24 MH-608         25 E-20 AH         9         2.0         1.1         75 SD8         1.8         1.6           24 MH-608         25 E-20 AH         9         2.0         1.1         75 SD8         1.8         1.5           28 JTRS MCMONS         3.8         4.8         1.1         76 PAA MMA         3.00         2.6           30 Javein         4.9         5.8         0.9         7.8         7.0         7.6         1.8         1.5           23 C-17A         7.27         7.36         0.9         7.8         7.0         1.8         1.5           32 c-17A         7.27         7.36         0.9         7.8         7.0         1.8         1.5           32 c-17A         7.27         7.36         0.9         7.8         7.0         7.6         6.8         801         PATRIOTMEADS CAP Fire Unit         1.7							3.6	0.0
17 SRIS He         ESTIMATE SAR         ESTIMATE SAR         Cost Growtn         0.7           18 AEHF         2002 or Later         2007         2002-2007         1.2           19 ARH         2002 or Later         2007         2002-2007         1.2           19 ARH         1,316         1,491         176         2.8           23 MH-60R         1,316         1,491         176         1.6           24 MH-60S         2         4.5         1.3         74 CEC         5.1         49           26 JSOV Uh         9         2.0         1.1         75 SDB         1.8         1.6           25 E-20 AHE         0.9         2.0         1.1         75 SDB         1.8         1.6           27 TACTICAL TOMAHAWK AUR         32         4.5         1.3         74 CEC         5.1         49           28 JTRS NED         0.9         2.0         1.1         75 SDB         1.8         1.5           20 Javelin         1.3         2.1         0.9         77 MTRTICH 2.6         2.0         2.0           31 Navstar GPS User Equipment         1.3         2.1         0.9         73 VTUAV         2.5         2.0           32 C-17A         7.7					Estimate CAD	Cool Onereth	1.6	0.0
18 A EHF 19 ARH 20 FMTV 21 H+1 Upgra 22 JASSM 22 JASSM 23 MH-60R       2002 or Later       2007       2002-2007       1.2 6.4 6.4         21 H+1 Upgra 22 JASSM 23 MH-60R       Total       1,316       1,491       176       8.2         23 MH-60R       Total       1,316       1,491       176       8.2         24 MH-60S       25 E-20 AH       32       4.5       1.3       74 CEC       61       4.9         28 JTR NH-00R       32       4.5       1.3       74 CEC       61       4.9       68         29 ATR CM/CMWS       38       4.8       1.1       75 SDB       1.8       1.5         29 ATR CM/CMWS       38       4.8       1.1       76 P-8A MMA       300       286         30 Javein       4.9       5.8       0.9       77 MP-RTP       1.7       1.3       1.5         20 ATR CM/CMWS       38       4.8       1.1       76 P-8A MMA       300       286         31 Navstar GPS User Equipment       1.3       2.1       0.9       77 MP-RTP       1.7       7.3         32 C130 AMP       4.7       7.7       7.6       0.8       80       PATROT MEADS CAP Fire Unit       157       0.6         35 T-ACK       2.8       3		ESI	limat	e Sak	Estimate SAR	Cost Growth	0.7	0.0
19 ARH 20 FWTV 21 H-1 Uppn 22 JASSM       2002 Or Latter Total       2002 Or Latter 1,316       2007       2002-2007       6.4         21 H-1 Uppn 23 MH-60R       Total       1,316       1,491       176       86         23 MH-60R       Total       1,316       1,491       176       86         25 E-20 AHE       0       1       74 CEC       51       4.9         28 JSC WH       32       4.5       1.3       74 CEC       51       4.9         28 JTRS NED       0.9       2.0       1.1       75 SDB       1.8       1.5         29 ATIR CMCWWS       38       4.8       1.1       76 P-8A MMA       300       296         30 Javelin       4.9       5.8       0.9       77 MP-RTP       1.7       1.3         31 Navstar GPS User Equipment       1.3       2.1       0.9       78 VTUAV       2.5       2.0         32 C-17A       7.7       7.56       0.9       79 JDAM       64       5.8         32 C-130 AMP       4.7       5.4       0.8       80 P ATRIOTMEADS CAP Fire Unit       18.7       17.9         34 FBCB2       2.8       3.5       0.7       81 ADS Increment Alpha       1.5       6.6         37			~~		0007		1.2	-0.1
20 FMTV 21 H-10 Upgn         Total         1,316         1,491         176         18.6           23 JASSM 23 MH-60R         Total         1,316         1,491         176         8.6           24 MH-60S         5 E-20 AH         1         75 SD8         18.6         1.6           25 E-20 AH         32         4.5         1.3         74 CEC         5.1         4.9           28 JTRS NED         0.9         2.0         1.1         75 SD8         18         1.5           29 ATIR CM/CMWS         3.8         4.8         1.1         76 P-8A MMA         30.0         22.6           30 Javelin         4.9         5.8         0.9         77 MP-RTIP         1.7         1.3           31 Navistar GPS User Equipment         1.3         2.1         0.9         78 VTUAV         2.5         2.0           32 C-130 AMP         4.7         5.4         0.8         80 PATRIOT/MEADS CAP Fire Unit         16.7         17.9           34 FBCB2         2.8         5.5         0.7         81 VIGNIA CLASS SUB         82.8         81.6           37 AB3         7.0         7.6         6.6         84 DO C51         77.5         75.9           38 MIDS         2.0		20	02 or	Later	2007	2002-2007	6.4	-0.1
21 H-1 Upgr       Total       1,316       1,491       176       86         23 MH-608       1,316       1,491       176       166         24 MH-608       25 E-20 AHE       20       1.1       75 SDB       1.6         25 JSUW U       0.9       2.0       1.1       75 SDB       1.8       1.5         29 ATIR CM/CMWS       3.8       4.8       1.1       76 P-8A MMA       3.0       2.96         30 Javelin       4.9       5.8       0.9       77 MP-RTP       1.7       1.3         31 Navistar GPS User Equipment       1.3       2.1       0.9       78 VTUAV       2.5       2.0         32 C-17A       72.7       73.6       0.9       79 JDAM       6.4       5.8         32 C-17A       72.7       73.6       0.9       79 JDAM       6.4       5.8         33 C-130 AMP       4.7       5.4       0.8       80 PATRIOTMEADS CAP Fire Unit       18.7       17.9         34 FBC52       2.8       5.5       0.7       81 ADS Increment Alpha       1.6       1.6         35 T-AKE       4.8       5.5       0.7       82 PATRIOTMEADS CAP Fire Unit       1.7       1.9         36 TRIDENTTI II MISSILE							10.1	-0.1
12         JASSM 23         Total         1,316         1,491         176         2.8           23         MH-60R 25         E-20 AHE 26         Image: Constraint of the state of the stat							8.6	-0.1
23 MH-60R         I OCAI         I ,S IO         I ,49 I         I /O         16.6           24 MH-60S         2         1			4 04		4 404	470		-0.1
24 MH-60S       25 E-2D AHE       1.6         25 E-2D AHE       1.6         26 JSOW Un       1.8         27 TACTICAL TOMAHAWK AUR       3.2       4.5       1.3       74 CEC       5.1       4.9         28 JTRS NED       0.9       2.0       1.1       75 SDB       1.8       1.5         29 ATR CM/CNWS       3.8       4.8       1.1       76 P-8A MMA       30.0       29.6         31 Javelin       4.9       5.8       0.9       77 MP-R.TIP       1.7       1.3         31 Navstar GPS User Equipment       1.3       2.1       0.9       78 VTUAV       2.5       2.0         32 C-130 AMP       4.7       7.6       0.8       80 PATRIOTMEADS CAP Fine Unit       18.7       17.9         34 FIGEDR2       2.8       3.5       0.7       81 ADS Increment Apha       1.5       0.6         35 T-AKE       4.8       5.5       0.7       82 PATRIOT PAC-3 Missile Segment       10.7       9.8         37 AB3       7.0       7.6       0.6       84 DO 651       77.5       75.9         38 MIDS       2.0       2.6       0.6       84 DO 651       77.5       75.9         38 MIDS       2.0       2.6			1,31	6	1,491	176		-0.1
26       JSOW Un       6.8         27       TACTICAL TOMAHAWK AUR       3.2       4.5       1.3       74       CEC       5.1       4.9         28       JTRS NED       0.9       2.0       1.1       75       SDB       1.8       1.5         29       ATR CM/CMWS       3.8       4.8       1.1       76       P-8A MMA       30.0       2.6         30       Javelin       4.9       5.8       0.9       77       MP-RTIP       1.7       1.3         31       Navstar GPS User Equipment       1.3       2.1       0.9       78       VTUAV       2.5       2.0         32       C-17A       72.7       73.6       0.9       79       JDAM       6.4       5.8         33       C-130 AMP       4.7       5.4       0.8       80       PATRIOT MEADS CAP Fire Unit       18.7       17.9         34       FBCB2       2.8       3.5       0.7       82       PATRIOT PAC-3 Missile Segment       10.7       9.8         35       T-AKE       4.8       5.5       0.7       82       PATRIOT PAC-3 Missile Segment       10.7       9.8         36       TRIDENT II MISSILE       4.9.9       0.6 <td></td> <td></td> <td>•</td> <td></td> <td></td> <td></td> <td>1.6</td> <td>-0.2</td>			•				1.6	-0.2
27 TACTICAL TOMAHAWK AUR       3.2       4.5       1.3       74 CEC       5.1       4.9         28 JTRS NED       0.9       2.0       1.1       75 SDB       1.8       1.5         29 ATIR CM/CMWS       3.8       4.8       1.1       76 P-8A MMA       30.0       29.6         30 Javelin       4.9       5.8       0.9       77 MP-RTIP       1.7       1.3         31 Navstar GPS User Equipment       1.3       2.1       0.9       78 VTUAV       2.5       2.0         32 C-17A       72.7       73.6       0.9       79 JDAM       6.4       5.8         33 C-130 AMP       4.7       5.4       0.8       80 PATRIOT/MEADS CAP Fire Unit       18.7       17.9         34 FEGE2       2.8       3.5       0.7       81 ADS Increment Apha       1.5       0.6         35 T-AKE       4.8       5.5       0.7       82 PATRIOT PAC-3 Missile Segment       10.7       9.8         36 TRIDENT II MISSILE       4.9       4.96       0.7       83 VIRGINIA CLASS SUB       82.8       81.6         37 AB3       7.0       7.6       0.6       84 DDG 51       77.5       75.9         38 MIDS       2.0       2.6       0.6       85 J	25 E-2D AHE						5.3	-0.2
28         JTRS NED         0.9         2.0         1.1         75 SDB         1.8         1.5           29         ATRCM/CMWS         3.8         4.8         1.1         76 P-8A MMA         3.00         29.6           30         Javelin         4.9         5.8         0.9         77 MP-RTIP         1.7         1.3           31         Navsta GPS User Equipment         1.3         2.1         0.9         78 VTUAV         2.6         2.0           32         C-17A         7.7         7.6         0.9         79 JDAM         64         5.8           33         C-130 AMP         4.7         5.4         0.8         80 PATRIOTMEADS CAP Fire Unit         1.6         1.7.9           34         FBCB2         2.8         3.5         0.7         81 ADS Increment Alpha         1.5         0.6           35         T-AKE         4.8         9.46         0.7         82 VENINA CLASS SUB         83.8         1.6           36         TRIDENT II IMSSILE         4.89         4.96         0.7         83 VENINA CLASS SUB         4.0         2.2           37         AB3         7.0         7.6         0.6         84 DD G 51         77.5         75.9	26 JSOW Un						6.8	-0.2
29       ATIRCM/CMWS       3.8       4.8       1.1       76       P-8A MMA       30.0       29.6         30       Javelin       4.9       5.8       0.9       77       MP-RTIP       1.7       1.3         31       Navstar GPS User Equipment       1.3       2.1       0.9       78       VTUAV       2.5       2.0         32       C-17A       72.7       73.6       0.9       79       JDAM       6.4       5.8         33       C-130 AMP       4.7       5.4       0.8       80       PATRIOTMEADS CAP Fire Unit       1.5       0.6         34       FBCB2       2.8       3.5       0.7       81 ADS Increment Alpha       1.5       0.6         35       T-AKE       4.8       5.5       0.7       82       PATRIOT PAC-3 Missile Segment       10.7       9.8         36       TRIDENT II MISSILE       48.9       49.6       0.7       83       VIRGINIA CLASS SUB       82.8       81.6         37       AB3       7.0       7.6       0.6       84       DDG 51       7.5       7.5         38       MIDS       2.9       0.5       86       HMARS       4.2       2.1	27 TACTICAL TOMAHAWK AUR	3.2	4.5	1.3	74 CEC	5.1	4.9	-0.2
30 Javelin       4.9       5.8       0.9       77 MP-RTIP       1.7       1.3         31 Navstar GPS User Equipment       1.3       2.1       0.9       78 VTUAV       2.5       2.0         32 C-17A       72.7       73.6       0.9       79 JDAM       6.4       5.8         33 C-130 AMP       4.7       5.4       0.8       80 PATRIOT/MEADS CAP Fire Unit       16.7       17.9         34 FBCB2       2.8       3.5       0.7       81 ADS Increment Alpha       1.5       0.6         35 T-AKE       4.8       5.5       0.7       82 PATRIOT PAC-3 Missile Segment       10.7       9.8         36 TRIDENT II MISSILE       48.9       49.6       0.7       83 VIRGINIA CLASS SUB       82.8       81.6         37 AB3       7.0       7.6       0.6       84 DDG 51       7.5       75.9         38 MIDS       2.0       2.6       0.6       85 JSOW Baseline/BLU-108       4.0       2.2         39 C-5 AMP       9       1.5       0.5       86 HIMARS       4.2       2.1         41 Navstar GPS Space & Control       6.7       7.1       0.5       88 LPD 17       16.8       14.4         42 CVN 68       6.4       6.8       0.9 <td>28 JTRS NED</td> <td>0.9</td> <td>2.0</td> <td>1.1</td> <td>75 SDB</td> <td>1.8</td> <td>1.5</td> <td>-0.3</td>	28 JTRS NED	0.9	2.0	1.1	75 SDB	1.8	1.5	-0.3
31       Navstar GPS User Equipment       1.3       2.1       0.9       78       VTUAV       2.5       2.0         32       C-17A       72.7       73.6       0.9       79       JDAM       6.4       5.8         33       C-130 AMP       4.7       5.4       0.8       80       PATRIOT/MEADS CAP Fire Unit       18.7       17.9         34       FBCB2       2.8       3.5       0.7       81       ADS Increment Alpha       1.5       0.6         35       T-AKE       4.8       5.5       0.7       82       PATRIOT/PAC-3 Missile Segment       10.7       9.8         36       TRIDENT II MISSILE       4.8       5.5       0.7       82       PATRIOT PAC-3 Missile Segment       10.7       9.8         37       AB3       7.0       7.6       0.6       83       VIRGINIA CLASS SUB       82.8       81.6         38       MIDS       2.0       2.6       0.6       85       JSOW Baseline/BLU-108       4.0       2.2         39       C-5 AMP       0.9       1.5       0.5       86       HIMARS       4.2       2.1         41       Navstar GPS Space & Control       6.7       7.1       0.5       88	29 ATIR CM/CMWS	3.8	4.8	1.1	76 P-8A MMA	30.0	29.6	-0.4
32 C-17A       72.7       73.6       0.9       79 JDAM       6.4       5.8         33 C-130 AMP       4.7       5.4       0.8       80 PATRIOT/MEADS CAP Fire Unit       18.7       17.9         34 FBCB2       2.8       3.5       0.7       81 ADS Increment Alpha       1.5       0.6         35 T-AKE       4.8       5.5       0.7       82 PATRIOT PAC-3 Missile Segment       10.7       9.8         36 TRIDENT II MISSILE       48.9       49.6       0.7       83 VIRGINIA CLASS SUB       82.8       81.6         37 AB3       7.0       7.6       0.6       84 DDG 51       7.5       75.9         38 MIDS       2.0       2.6       0.6       85 JSOW Baseline/BLU-108       4.0       2.2         39 C-5 AMP       0.9       1.5       0.5       86 HIMARS       4.2       2.1         40 T-45TS       8.1       8.6       0.5       87 Excalibur       4.6       2.3         41 Navstar GPS Space & Control       6.7       7.1       0.5       88 LPD 17       16.8       14.4         42 CVN 68       0.4       6.9       MRAP       26.7       22.5         43 WGS       1.7       2.1       0.4       99 C-130.J       7.	30 Javelin	4.9	5.8	0.9	77 MP-RTIP	1.7	1.3	-0.4
32 C-17A       72.7       73.6       0.9       79 JDAM       6.4       5.8         33 C-130 AMP       4.7       5.4       0.8       80 PATRIOT/MEADS CAP Fire Unit       18.7       17.9         34 FBCB2       2.8       3.5       0.7       81 ADS Increment Alpha       1.5       0.6         35 T-AKE       4.8       5.5       0.7       82 PATRIOT PAC-3 Missile Segment       10.7       9.8         36 TRIDENT II MISSILE       4.8       4.9.6       0.7       83 VIRGINIA CLASS SUB       82.8       81.6         37 AB3       7.0       7.6       0.6       84 DDG 51       77.5       75.9         38 MIDS       2.0       2.6       0.6       85 JSOW Baseline/BLU-108       4.0       2.2         39 C-5 AMP       0.9       1.5       0.5       86 HIMARS       4.2       2.1         40 T-45TS       8.1       8.6       0.5       87 Excalibur       4.6       2.3         41 Navstar GPS Space & Control       6.7       7.1       0.5       88 LPD 17       16.8       14.4         42 CVN 68       6.4       6.8       0.4       89 MRAP       26.7       22.5         43 WGS       1.7       2.1       0.4       90 C-	31 Navstar GPS User Equipment	1.3	2.1	0.9	78 VTUAV	2.5	2.0	-0.5
34 FBCB2       2.8       3.5       0.7       81 ADS Increment Alpha       1.5       0.6         35 T-AKE       4.8       5.5       0.7       82 PATRIOT PAC-3 Missile Segment       10.7       9.8         36 TRIDENT II MISSILE       48.9       49.6       0.7       83 VIRGINIA CLASS SUB       82.8       81.6         37 AB3       7.0       7.6       0.6       84 DDG 51       77.5       75.9         38 MIDS       2.0       2.6       0.6       85 JSOW Baseline/BLU-108       4.0       2.2         39 C-5 AMP       0.9       1.5       0.5       86 HIMARS       4.2       2.1         40 T-45TS       8.1       8.6       0.5       87 Excalibur       4.6       2.3         41 Navstar GPS Space & Control       6.7       7.1       0.5       88 LPD 17       16.8       14.4         42 CVN 68       6.4       6.8       0.4       89 MRAP       26.7       22.5         43 WGS       1.7       2.1       0.4       90 C-130J       17.1       12.3         44 Minuteman III PRP       2.6       2.9       0.3       91 F/A-18E/F       57.0       51.8         45 JLENS       6.4       6.7       0.3       92 GMLRS		72.7	73.6	0.9		6.4	5.8	-0.7
35 T-AKE       4.8       5.5       0.7       82 PATRIOT PAC-3 Missile Segment       10.7       9.8         36 TRIDENT II MISSILE       48.9       49.6       0.7       83 VIRGINIA CLASS SUB       82.8       81.6         37 AB3       7.0       7.6       0.6       84 DDG 51       77.5       75.9         38 MIDS       2.0       2.6       0.6       85 JSOW Baseline/BLU-108       4.0       2.2         39 C-5 AMP       0.9       1.5       0.5       86 HIMARS       4.2       2.1         40 T-45TS       8.1       8.6       0.5       87 Excalibur       4.6       2.3         41 Navstar GPS Space & Control       6.7       7.1       0.5       88 LPD 17       16.8       14.4         42 CVN 68       6.4       6.8       0.4       89 MRAP       26.7       2.5         43 WGS       1.7       2.1       0.4       90 C-130J       17.1       12.3         44 Minuteman III PRP       2.6       2.9       0.3       91 F/A-18E/F       57.0       51.8         45 JLENS       6.4       6.7       0.3       92 GMLRS       11.2       5.4         46 JPATS       5.5       5.7       0.2       93 JTRS HMS	33 C-130 AMP	4.7	5.4	0.8	80 PATRIOT/MEADS C	AP Fire Unit 18.7	17.9	-0.8
35 T-AKE       4.8       5.5       0.7       82 PATRIOT PAC-3 Missile Segment       10.7       9.8         36 TRIDENT II MISSILE       48.9       49.6       0.7       83 VIRGINIA CLASS SUB       82.8       81.6         37 AB3       7.0       7.6       0.6       84 DDG 51       77.5       75.9         38 MIDS       2.0       2.6       0.6       85 JSOW Baseline/BLU-108       4.0       2.2         39 C-5 AMP       0.9       1.5       0.5       86 HIMARS       4.2       2.1         40 T-45TS       8.1       8.6       0.5       87 Excalibur       4.6       2.3         41 Navstar GPS Space & Control       6.7       7.1       0.5       88 LPD 17       16.8       14.4         42 CVN 68       6.4       6.8       0.4       89 MRAP       26.7       2.5         43 WGS       1.7       2.1       0.4       90 C-130J       17.1       12.3         44 Minuteman III PRP       2.6       2.9       0.3       91 F/A-18E/F       57.0       51.8         45 JLENS       6.4       6.7       0.3       92 GMLRS       11.2       5.4         46 JPATS       5.5       5.7       0.2       93 JTRS HMS	34 FBCB2	2.8	3.5	0.7	81 ADS Increment Alp	na 1.5	0.6	-0.9
36 TRIDENT II MISSILE         48.9         49.6         0.7         83 VIRGINIA CLASS SUB         82.8         81.6           37 AB3         7.0         7.6         0.6         84 DDG 51         77.5         75.9           38 MIDS         2.0         2.6         0.6         85 JSOW Baseline/BLU-108         4.0         2.2           39 C-5 AMP         0.9         1.5         0.5         86 HIMARS         4.2         2.1           40 T-45TS         8.1         8.6         0.5         87 Excalibur         4.6         2.3           41 Navstar GPS Space & Control         6.7         7.1         0.5         88 LPD 17         16.8         14.4           42 CVN 68         6.4         6.8         0.4         89 MRAP         2.6         2.5           43 WGS         1.7         2.1         0.4         90 C-130J         17.1         12.3           44 Minuteman III PRP         2.6         2.9         0.3         91 F/A-18E/F         57.0         51.8           45 JLENS         6.4         6.7         0.3         92 GMLRS         11.2         5.4           46 JPATS         5.5         5.7         0.2         93 JTRS HMS         9.7         3.0 <td></td> <td></td> <td></td> <td>0.7</td> <td>*</td> <td></td> <td>9.8</td> <td>-0.9</td>				0.7	*		9.8	-0.9
37 AB37.07.60.684 DDG 5177.575.938 MIDS2.02.60.685 JSOW Baseline/BLU-1084.02.239 C-5 AMP0.91.50.586 HIMARS4.22.140 T-45TS8.18.60.587 Excalibur4.62.341 Navstar GPS Space & Control6.77.10.588 LPD 1716.614.442 C VN 686.46.80.489 MRAP26.722.543 WGS1.72.10.490 C-130J17.112.344 Minuteman III PRP2.62.90.391 F/A-18E/F57.051.845 JLENS6.46.70.293 JTRS HMS9.73.0				0.7		•		-1.3
38 MIDS       2.0       2.6       0.6       85 JSOW Baseline/BLU-108       4.0       2.2         39 C-5 AMP       0.9       1.5       0.5       86 HIMARS       4.2       2.1         40 T-45TS       8.1       8.6       0.5       87 Excalibur       4.6       2.3         41 Navstar GPS Space & Control       6.7       7.1       0.5       88 LPD 17       16.8       14.4         42 CVN 68       6.4       6.8       0.4       89 MRAP       26.7       22.5         43 WGS       1.7       2.1       0.4       90 C-130J       17.1       12.3         44 Minuteman III PRP       2.6       2.9       0.3       91 F/A-18E/F       57.0       51.8         45 JLENS       6.4       6.7       0.3       92 GMLRS       11.2       5.4         46 JPATS       5.5       5.7       0.2       93 JTRS HMS       9.7       3.0				0.6			75.9	-1.7
39 C-5 AMP0.91.50.586 HIMARS4.22.140 T-45TS8.18.60.587 Excalibur4.62.341 Navstar GPS Space & Control6.77.10.588 LPD 1716.814.442 C VN 686.46.80.489 MRAP26.722.543 WGS1.72.10.490 C-130J17.112.344 Minuteman III PRP2.62.90.391 F/A-18E/F57.051.845 JLENS6.46.70.293 JTRS HMS9.73.0		2.0	2.6	0.6		<b>J-108</b> 4.0	2.2	-1.8
40 T-45TS       8.1       8.6       0.5       87 Excalibur       4.6       2.3         41 Navstar GPS Space & Control       6.7       7.1       0.5       88 LPD 17       16.8       14.4         42 CVN 68       6.4       6.8       0.4       89 MRAP       26.7       22.5         43 WGS       1.7       2.1       0.4       90 C-130J       17.1       12.3         44 Minuteman III PRP       2.6       2.9       0.3       91 F/A-18E/F       57.0       51.8         45 JLENS       6.4       6.7       0.3       92 GMLRS       11.2       5.4         46 JPATS       5.5       5.7       0.2       93 JTRS HMS       9.7       3.0								-2.1
41 Navstar GPS Space & Control       6.7       7.1       0.5       88 LPD 17       16.8       14.4         42 CVN 68       6.4       6.8       0.4       89 MRAP       26.7       22.5         43 WGS       1.7       2.1       0.4       90 C-130J       17.1       12.3         44 Minuteman III PRP       2.6       2.9       0.3       91 F/A-18E/F       57.0       51.8         45 JLENS       6.4       6.7       0.3       92 GMLRS       11.2       5.4         46 JPATS       5.5       5.7       0.2       93 JTRS HMS       9.7       3.0								-2.3
42 CVN 68       6.4       6.8       0.4       89 MRAP       26.7       22.5         43 WGS       1.7       2.1       0.4       90 C-130J       17.1       12.3         44 Minuteman III PRP       2.6       2.9       0.3       91 F/A-18E/F       57.0       51.8         45 JLENS       6.4       6.7       0.3       92 GMLRS       11.2       5.4         46 JPATS       5.5       5.7       0.2       93 JTRS HMS       9.7       3.0					*.			-2.4
43 WGS         1.7         2.1         0.4         90 C-130J         17.1         12.3           44 Minuteman III PRP         2.6         2.9         0.3         91 F/A-18E/F         57.0         51.8           45 JLENS         6.4         6.7         0.3         92 GMLRS         11.2         5.4           46 JPATS         5.5         5.7         0.2         93 JTRS HMS         9.7         3.0					**			-4.2
44 Minuteman III PRP         2.6         2.9         0.3         91 F/A-18E/F         57.0         51.8           45 JLENS         6.4         6.7         0.3         92 GMLRS         11.2         5.4           46 JPATS         5.5         5.7         0.2         93 JTRS HMS         9.7         3.0								-4.8
45 JLENS         6.4         6.7         0.3         92 GMLRS         11.2         5.4           46 JPATS         5.5         5.7         0.2         93 JTRS HMS         9.7         3.0								-5.2
<b>46 JPATS</b> 5.5 5.7 0.2 <b>93 JTRS HMS</b> 9.7 3.0								-5.8
					•=			-6.7
TELE Reprovement 0.1 0.0 0.2 <b>341-22 raptor</b> 02.2 10.1								-8.5
Total 1,316.0 1,491.9 1		5.1	5.5	0.2	34 F-22 Kaptor	-		-0.5 <b>176.0</b>



### Mandate for Reform



#### THE WHITE HOUSE Office of the Press Secretary

For Immediate Release

March 4, 2009

Memorandum for the Heads of Executive Departments and Agencies

Subject: Government Contracting

The Federal Government has an overriding obligation to American taxpayers. It should perform its functions efficiently and effectively while ensuring that its actions result in the best value for the taxpayers...

I further direct the Director of OMB, in collaboration with the aforementioned officials and councils, and with input from the public, to develop and issue by September 30, 2009, Government-wide guidance to... "I reject the false choice between securing this nation and wasting billions of taxpayer dollars .... I recognize the real choice between investments that are designed to keep the American people safe and those that are designed to make a defense contractor rich.

"...GAO looked into 95 major defense projects and found cost overruns that totaled \$295 billion. Let me repeat: That's \$295 billion in wasteful spending. And this wasteful spending has many sources. It comes from investments and unproven technologies. It comes from a lack of oversight. It comes from influence peddling and indefensible no-bid contracts that have cost American taxpayers billions of dollars."

#### **BARACK OBAMA**



The perennial procurement and contracting cycle – going back many decades – of adding layer upon layer of cost and complexity onto fewer and fewer platforms that take longer and longer to build must come to an end. There is broad agreement on the need for acquisition and contracting reform in the Department of Defense. There have been enough studies. Enough hand-wringing. Enough rhetoric. Now is the time for action."



Robert Gates, Secretary of Defense,

Defense Budget Recommendation Statement, April 6, 2009



### **Acquisition Reform Initiatives**

#### **DEPARTMENT POSITION**

- We get it. A lot's been done.

### Hill Position...

- S. 454, Weapon Systems Acquisition Reform Act of 2009 (Levin-McCain)
- H.R. 2010, Weapons Acquisition System Reform Through Enhancing Technical Knowledge and Oversight Act of 2009 (Skelton-McHugh)

### WAY AHEAD...

- Three pronged approach:
  - Acquisition Workforce Reform
  - Tactical Acquisition Reform
  - Strategic Acquisition Reform



### **Ongoing Initiatives:**

- Increasing number of acquisition personnel by 20,000 (~15%) positions over 2010-2015 FYDP
  - 9,000 new civilian hires
  - 11,000 conversions from contractor to federal civilian positions
- Improve Training and Human Capital Planning
- Reinvigorate and Raise Certification Standards



### **Tactical Acquisition Reform**

## Building Strong Program Foundations for More Predictable Outcomes:

## The Department's recently revised acquisition policy (DoD Instruction 5000.02) emphasizes building strong program foundations.

- Starting Programs Right
  - Identifying Critical Warfighter Needs & Maintaining Requirements Stability
  - Emphasizing Cost Realism & Improving Cost Estimating

#### - Executing Programs Properly

- Integrating Test and Evaluation
- Disciplining Systems Engineering
- Integrating Life Cycle Management Principles
- Improving Dialogue with Industry & Tying Profit to Performance

#### - Improving Program Management & Oversight

- Conducting More Frequent Program Reviews to Assess Progress
- Using Information to Manage Programs Effectively
- Empowering Program Managers
- Improving Acquisition of Services Management

#### - Delivering Timely Solutions



#### Aligning Strategy, Budget, and Governance:

### • ACTIONS NEEDED:

- Align Investment Priorities to Strategic Priorities
- Balance Existing and Future Investments to Provide the Right Mix Capabilities at the Right Time
- Assign Responsibility for Fulfillment of Capability Gaps
- Establish a Fixed/Stable Investment Budget
- Create Integrated and Effective Governance



### Back up



- DoD understands cost growth is an area of concern and is working to put processes in place to adhere to these fundamental principles
- Key elements that drive successful programs are funding and requirements stability, and greater technology maturity
  - DoD policy requires configuration steering boards for all major programs
  - DoD is conducting early milestone reviews, using competitive prototyping, and increasing technology readiness levels for new programs.
  - DoD is strengthening personnel initiatives, to include tenure agreements with program managers and developing plans to improve and grow the workforce

#### Continue to update laws and policies governing acquisition process

- In 2007 Congress passed legislation requiring a Certification for Pre-MDAPs at MS A
- Skelton/McHugh Legislation and Levin/McCain Legislation



### **Example Program: V-22**

	Basic Data			FY09 Conversion			Perfomance Analysis			Trend Analysis				
	Original APB				Original APB	5 Year Prior Dec SAR			from Original	%Change from 5 year Prior Dec SAR	%Change from Prior Dec SAR		Change from 5	Average Yearly Change from Prior Dec SAR
Component:Navy														
Program: V-22														
Subprogram:														
Base Year \$M:	1986				2009	2009	2009	2009						
Reporting Year:	Dec-88		Dec-06	Dec-07										
Total Acquistion Cost (BY\$M)	18,518.8	31,233.2	50,610.5	50,472.8	30,546.0	52,017.7	54,997.6	54,781.8	79.3%	5.3%	-0.4%	3.1%	1.0%	-0.4%
RDT&E	2,471.4	7,168.5	11,526.9	11,508.2	4,233.3	12,279.0	12,621.2	12,600.7	197.7%	2.6%	-0.2%	5.9%	0.5%	-0.2%
Procurement	15,911.3	24,030.0	38,893.1	38,713.8	26,312.7	39,738.7	42,376.4	42,181.1	60.3%	6.1%	-0.5%	2.5%	1.2%	-0.5%
MILCON	136.1	34.7	190.5	250.8	233.6	59.6	207.5	273.2	16.9%	358.6%	31.7%	0.8%	35.6%	31.7%
O&M	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Procurement Quantity	682	456	456	456	682	456	456	456	-33.1%	0.0%	0.0%	-2.1%	0.0%	0.0%
Total Quantity	682	458	458	458	682	458	458	458	-32.8%	0.0%	0.0%	-2.1%	0.0%	0.0%
Program Acquistion Unit Cost (\$M)	27.2	68.2	110.5	110.2	45.1	113.7	120.5	120.2	166.3%	5.7%	-0.3%	5.3%	1.1%	-0.3%
Average Procurement Unit Cost	23.3	52.7	85.3	84.9	38.6	87.1	92.9	92.5	139.8%	6.1%	-0.5%	4.7%	1.2%	-0.5%
Schedule														
Initial Operating Test & Evaluation		Jun-06	Jun-06	Jun-08										
Initial Operating Capability	May-92	Sep-04	Jun-07	Jun-07										
Milestone B	Jun-05	Apr-86	Apr-86	Apr-86				r						
Milestone C	Dec-89	Oct-05	Oct-05	Oct-05			Only r	netrics	: reno	rted by	V GAO			
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-Total Acquisition Performance Cost Analysis:

-Pass: < 2% increase for total cost % change from prior year comparison

-Pass: <10% increase for total cost % change from 5-year comparison

-Fail: >15% increase for total cost % change from first original baseline

-Average yearly change in Total Acquisition Cost:

-Pass: Improved from prior year comparison

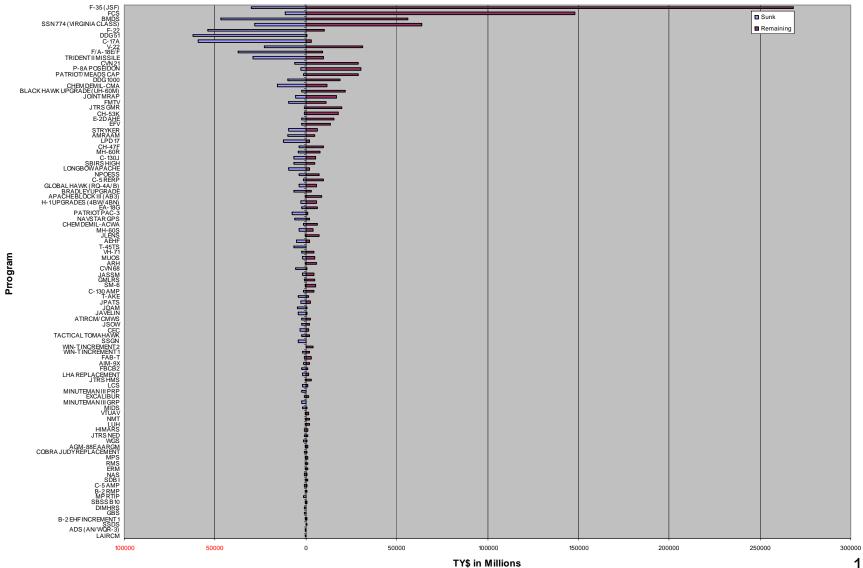
-Pass: Improved from 5 year comparison

-Notes: January 2006 Re-Baseline



### **Tornado Chart**

Program Acquisition Sunk vs. Remaining Cost





### **Older Acquisition Programs**

Program	First Original Estimate Date
Trident II (D-5) Missile UGM 133A	Jul-87
DDG 51 Destroyer	Feb-88
V-22 Joint Services Advanced Vertical Lift Aircraft	Feb-88
Family of Medium Tactical Vehicles	Oct-88
C-17 Globemaster III	Dec-88
AIM-120 Advanced Medium Range Air-to-Air Missile (AMRAAM)	Dec-88
Advanced Anti-Tank Weapon System - Medium	Jun-89
F-22A Raptor	Feb-92
Joint Standoff Weapon (JSOW) Baseline/BLU-108	Jun-92
F/A-18E/F Super Hornet	Jun-92
CVN-68 Class/Carrier Replacement Program	Jun-93
Minuteman III Guidance Replacement Program (GRP)	Aug-93



### National Security Acquisition Agenda for the New Administration

Dr. Nancy L. Spruill Director, Acquisition Resources & Analysis, OUSD(AT&L)





- Weapon System Acquisition Cost Growth
- Acquisition Reform
  - Acquisition Work Force Reform
  - Tactical Acquisition Reform
  - Strategic Acquisition Reform







### Work Force Reform Initiatives

# Managing Programs with a Robust, Qualified, Agile and Ethical Workforce:

#### - Smartly Grow the Acquisition Workforce

- Increase the contracting & oversight workforce, including DCAA.
- Enhance pricing and program-estimating capability.

#### - Balance Government and Contractor Support

• Grow organic capability while downsizing the contractor support workforce.

#### Target Training and Human Capital Planning

- Complete an enterprise-wide competency assessment of the acquisition workforce.
- Identify gaps and improve both training and human capital planning.

#### - Reinvigorate and Raise Certification Standards

- Update certification programs and raise applicable standards.
- Reward valued employees through structured recognition and incentive programs.

#### Formalize Requirements Manager Certification

- Includes several requirements-manager training courses.
- Ensure that requirements managers understand their role throughout the acquisition cycle, including controlling requirements "creep."



**Tactical Acquisition Reform Initiatives** 

#### **Establishing a Firm Foundation for More Predictable Outcomes:**

#### • Starting Programs Right

- Instituted a Materiel Development Decision (MDD) review
- Instituting a requirement for competitive prototyping at either a key sub-system or full system level to demonstrate technology maturity.

#### • Targeting Solutions Defined by the Joint Warfighter

- JROC is experimenting with the delegation of Joint Capabilities Board (JCB) authority to appropriate functional combatant commands.
- Coordination with Combatant Commands required for all Joint requirements documents that support milestone decisions.

#### • Identifying the Critical Needs of the Warfighter

 JROC approves all capabilities documents for major defense acquisition programs and a significant percentage of the capabilities in the enabling portfolios. of battlespace awareness, net-centric, command and control, and logistics.

#### Emphasizing Cost Realism

- Using Congressionally-mandated certifications before MS A and MS B to improve realistic cost estimating based on capability need and priority.
- Developing cost accounting systems for capital equipment that can provide information.



## **Tactical Acquisition Reform Initiatives**

#### **Establishing a Firm Foundation for More Predictable Outcomes:**

#### • Integrating Test and Evaluation

- Implemented new policies designed to improve the integration of developmental and operational testing throughout the system lifecycle.
- Improving the complementary relationship between developmental and operational testing, eliminate costly redundancy, and ensure that test results are a key element of the knowledge-base that informs management decisions.

#### Disciplining Systems Engineering

- Systems Engineering Plan (SEP) is required to guide each phase of the development process.
- SEPs are independently reviewed at the executive level and incorporate event-driven technical reviews to ensure that program progress is carefully monitored consistent with sound engineering business practice.

#### • Integrating Life Cycle Management (LCM) Principles

- Incorporation of LCM considerations early in the design and development of weapon systems to ensure readiness and lower operations and support costs.
- Implemented a mandatory KPP of Material Availability in the acquisition processes.

#### Improving Dialogue with Industry

 Increased emphasis on prototyping before program initiation will result in a more effective dialogue with industry that will improve their understanding of our needs and our understanding of their capabilities.



#### **Establishing a Firm Foundation for More Predictable Outcomes:**

#### Maintaining Requirements Stability

 Established Configuration Steering Boards in each DoD component to review all requirements changes and any significant technical configuration changes.

#### • Tying Profit to Performance

 Moving away from Time and Materiel and award fee contracting and instead is emphasizing the use of objective incentives tied to delivered performance, be it technical, schedule or cost.

#### Conducting More Frequent Program Reviews to Assess Progress

- Preliminary Design Review and Critical Design Review have been identified as additional acquisition process decision points to provide acquisition decision authorities the opportunity to assess progress and direct remedial action when required.
- Using Information to Manage Programs Effectively
  - Effort underway to systematically address and revamp where necessary the EVM system



### Establishing a Firm Foundation for More Predictable Outcomes:

#### • Empowering Program Managers

 Efforts underway include Tenure Agreements and Qualifications for Program Managers, Program Management Agreements (PMA), emphasis on professional civilian program manager development, use of program manager forums, and enhanced recruitment/retention and monetary/non-monetary rewards.

#### • Establishing Flexible and Rapid Response Teams to Resolve Tough Issues.

 Joint Analysis Teams set up to proactively engage all stakeholders and drive decisions that deliver resilient, joint, strategic capability at the lowest possible cost.

#### • Improving Acquisition of Services Management

 DoD has issued new policy designed to ensure comprehensive oversight and effective planning, contracting and execution for acquisition of services.

#### • Delivering Timely Solutions

 Changes have been instituted within the JCIDS Instruction that more clearly define the scope of Capability-Based Assessments and ensure they remain focused and streamlined to help quickly and clearly define the Capability gap.



#### Aligning Strategy, Budget, and Governance:

- Align Investment Priorities to Strategic Priorities
  - To properly align strategy to investment, the National Defense Strategy needs to include a top-down investment strategy. Funding top-lines, should drive what resources the Department will make available for the development of new systems.
- Balance Existing and Future Investments to Provide the Right Mix Capabilities at the Right Time
  - Requires a strategy that defines which desired strategic objective capabilities and an understanding of resource constraints to effectively identify risks and trades and produce an executable and stable investment plan.

#### • Assign Responsibility for Fulfillment of Capability Gaps

 During the 2006 Quadrennial Defense Review (QDR), the Department designed a concept—joint task assignment—intended to clearly establish responsibility for emerging tasks - operational and force development and identify the resources to support those tasks up-front before resources were executed.



#### Aligning Strategy, Budget, and Governance (continued):

#### • Establish a Fixed/Stable Investment Budget

 Department must commit to stabilizing investment funding by realistically pricing programs, fully funding them up front and maintaining that level of funding throughout by enforcing established investment priorities and strategic guidance.

#### Create Integrated and Effective Governance

 DoD has overlapping governance processes for resource allocation, acquisition and requirements development. There is a need for clear delineation of roles and/or merging of roles to ensure these governance bodies work in concert in executing the established investment strategy.