



Selected Acquisition Reports

As of December 1999

The Department of Defense has announced cost and schedule changes on major defense acquisition programs based on the Selected Acquisition Reports (SAR) submitted to the Congress to cover the period from October to December 1999.

SARs summarize the latest estimates of cost, schedule, and technical status. These reports are prepared annually in conjunction with the President's budget. Subsequent quarterly exception reports are required only for those programs experiencing unit cost increases of at least 15 percent or schedule delays of at least six months. Quarterly SARs are also submitted for initial reports, final reports, and for programs that are rebaselined at major milestone decisions.

The total program cost estimates provided in the SARs include research and development, procurement, military construction, and acquisition-related operation

and maintenance. Total program costs reflect actual costs to date as well as anticipated costs for future efforts. All estimates include allowances for anticipated inflation.

The current estimate of program acquisition costs for programs covered by SARs for the prior reporting period (ending in September 1999) was \$710,149.4 million. After subtracting the costs for a final report (Sensor Fuzed Weapon (SFW) and adding the costs for a new program (Advanced Extremely High Frequency [AEHF] Satellite) plus one new component of an existing SAR (Space Based Infrared System [SBIRS] –Low) in September 1999, the adjusted current estimate of program acquisition costs was \$715,142.3 million. There was a net cost change of +\$21,685.0 million during the current reporting period (December 1999). The cost changes between September and December 1999 are summarized below:

	Current Estimate (\$ in Millions)
September 1999 (72 programs*)	\$710,149.4
Less final report on completed program (SFW)	
plus one new program, NTW (Navy Theater Wide)	-1920.9
Plus one new program (AEHF) and one new component	
of an existing SAR (SBIRS Low)	+6,913.8
September 1999 Adjusted (72 programs*)	\$715,142.3

**Excludes classified costs for the Air Force's MILSTAR program.*

Changes Since Last Report	
Economic	-\$5,379.1
Quantity	+2,117.0
Schedule	+3,086.2
Engineering	+4,493.7
Estimating	+16,926.2
Other	+502.8
Support	-61.8
Net Cost Change	+21,685.0
Plus initial procurement and construction cost estimates for National Missile Defense (NMD); previous reports were limited to development costs per Title 10, Section 2342, United States Code	+5,517.6
December 1999 (73 programs*)	\$742,344.9

For the December 1999 reporting period, there was a net cost change of +\$21,685.0 million or +3.0 percent. This increase was primarily due to higher program estimates (+\$16,926.2 million), additional engineering changes (hardware/software) (+\$4,493.7 million), and a net stretch-out of the development and procurement schedules (+\$3,086.2 million). There was also a net increase in the planned quantities to be purchased (+\$2,117.0 million). These overall increases were partially offset by the application of lower escalation indices (-\$5,379.1 million).

New SARs (As of Dec. 31, 1999)

The Department of Defense has submitted initial SARs for FBCB2 and IAV. These reports do not represent cost growth. Baselines established on these programs will be the point from which future changes will be measured. The current cost estimates are provided below:

Current Estimate

(\$ in Millions)

FBCB2 (Force XXI Battle Command Brigade & Below)	\$2,574.4
IAV (Interim Armored Vehicles)**	+352.5
Total	\$2,926.9

*Excludes classified costs for the Air Force's MILSTAR program.

**Pre-Milestone II program reporting development (RDT&E) costs only, in accordance with the provisions of Section 2432, Title 10, United States Code.

Summary Explanations of Significant SAR Cost Changes (As of Dec. 31, 1999)

Army

ABRAMS UPGRADE – Program costs increased \$1,883.7 million from \$8,092.6 to \$9,976.3 million (+23.3 percent), due primarily to the addition of the System Enhancement Package (SEP) to the M1A2 program (+\$1,982.4 million). Previously, the SEP program was budgeted separately from the M1A2 program. Additionally, a shift from the Embedded Battle Command to the Integrated Combat Command and Control for the implementation of Army Digitization resulted in an increase of \$136.3 million. These increases were partially offset by costs relating to a reduction in facilities which resulted in savings of \$247.1 million.

ATIRCM/CMWS (Advanced Threat Infrared Countermeasures/Common Missile Warning System) – Program costs decreased \$300.6 million from \$2,966.3 to \$2,665.7 million (-10.1 percent), due primarily to a reduction in Air Force quantities of 491

units from 853 to 362 units (-\$352.0 million) and a reduction in Navy quantities of 401 units from 665 to 264 units (-\$324.4 million). These decreases were partially offset by an increase in the unit costs for the remaining Army and Navy units due to the production rate effects associated with the aforementioned quantity decreases (+\$403.8 million).

CHEM DEMIL (Chemical Demilitarization) – Program costs decreased \$1,403.3 million (-9.6 percent) from \$14,586.9 million to \$13,183.6 million, due primarily to the realignment of funds from the Pueblo Chemical Agent Disposal Facility and the Blue Grass Chemical Agent Disposal Facility to the Assembled Chemical Weapons Assessment (ACWA) program, which is planned to demonstrate alternatives to the baseline incineration process of destruction of assembled chemical weapons.

CRUSADER (Artillery System) – Development costs increased \$1,397.3 million from \$2,905.0 million to \$4,302.3 million (+48.1 percent), due primarily to the restructure of the program to align itself with the Army's vision for more deployable forces (+\$955.7 million). Additionally, the program schedule was stretched to adjust for software delays (+\$492.5 million).

MCS (Maneuver Control System) – Program cost increased \$407.9 million (+24.7 percent) from \$1,648.1 million to \$2,056.0 million, due primarily to a change in Army policy on MCS computer replacement requirements. MCS is to be replaced every 10 years rather than 20 years, and the responsibility for procurement of the rebuy was transferred from operation and maintenance funding to MCS procurement funding (+\$354.6 million).

SADARM (Search and Destroy Armor) – Program costs decreased \$1,830.2 million (-71.2 percent) from \$2,570.1 million to \$739.9 million, due primarily to a quantity reduction of 48,937 munitions from 50,000 to 1,063 munitions (-\$953.9 million) and associated schedule and estimating allocations* (-\$1,068.7 million).

Navy

AAAV (Advanced Amphibious Assault Vehicle) – Development costs increased \$108.4 million (+11.6 percent) from \$934.1 million to \$1,042.5 million, due primarily to an increase of two Program Definition & Risk Reduction (PDRR) prototypes from one to three prototypes, and associated engineering, test, and support requirements. There were also increases related to additional Command, Control, Communications, and Intelligence (C4I) variant requirements, AAAV survivability, and upgrades to the 30mm cannon.

CH-60S (Utility Helicopter) – Program costs increased \$1,147.0 million (+36.0 percent) from \$3,185.8 million to \$4,332.8 million, due primarily to a quantity increase of 72 aircraft from 165 to 237 aircraft (+\$1,299.9 million) and the addition of Airborne Mine Countermeasures sensors (+\$94.3 million). The increase was partially offset by a decrease associated with production rate effects from the addition of the 72 aircraft (-\$235.8 million).

DD 21 (21st Century Destroyer) – Development costs increased \$2,028.4 million (+63.6 percent) from

\$3,191.1 million to \$5,219.5 million, due to higher development cost estimates for initial system design (+\$1,404.6 million) and additional ship capabilities, including Integrated Electric Drive, Volume Search Radar and Advanced Gun System (+\$650.3 million).

DDG 51 (Guided Missile Destroyer) – Program costs increased \$1,842.4 million (+3.4 percent) from \$53,965.2 million to \$55,807.6 million, due primarily to a quantity increase of 1 ship from 57 to 58 ships (+\$983.7 million), plus revised cost estimates for ship construction, government furnished equipment, and outfitting and post delivery (+\$837.3 million).

LHD 1 (Amphibious Assault Ship) – Program costs increased \$2,426.3 million (+31.0 percent) from \$7,826.3 million to \$10,252.6 million, due primarily to a quantity increase of 1 ship from 7 to 8 ships, plus outfitting and post delivery costs associated with the additional ship

SH-60R (Multi-Mission Helicopter) – Program costs increased by \$860.2 million (+17.3 percent) from \$4,963.7 million to \$5,823.9 million, due primarily to a quantity increase of 56 units from 185 to 241 units (+\$952.5 million). This increase was partially offset by a quantity decrease of 1 fully configured test article from 3 to 2 units (-\$18.2 million).

T45TS (Jet Pilot Training System) – Program costs decreased by \$1,628.6 million (-23.7 percent) from \$6,870.7 million to \$5,242.1 million, due primarily to a quantity decrease of 65 aircraft from 234 to 169 aircraft (-\$1,330.7 million) and a decrease in the amount of required weapons support due to the quantity decrease (-\$330.2 million).

V-22 (Vertical Lift Aircraft) – Program costs increased \$1,891.9 million (+5.1%) from \$36,220.3 million to \$38,112.2 million, due primarily to revised labor rates and material costs (+\$2,305.5 million). This increase was partially offset by the application of revised escalation indices (\$243.8 million) and a change in initial spares requirements (-\$232.6 million).

Air Force

ABL (Airborne Laser) – Development costs increased \$831.6 million (+30.6 percent) from \$2,713.9 million to \$3,545.5 million, due primarily to restructuring of the Program Definition and Risk Reduction (PDDR) phase (+\$875.2 million). This restructuring of the de-

velopment program results in a two-year delay in the lethality demonstration (from FY 2003 to FY 2005), while the delay in beginning the Engineering and Manufacturing Development (EMD) phase is to be determined. The increase was partially offset by revised escalation indices (-\$19.7 million) and execution and Congressional adjustments (-\$27.0 million).

AEHF (Advanced Extremely High Frequency) Satellite – Development costs decreased \$304.7 million (-11.3 percent) from \$2,690.6 million to \$2,385.9 million. Since this is a pre-Milestone II program, the SAR reflects only development funding. The cost decrease is due primarily to the application of revised escalation indices (-\$23.2 million), and the differing mix of development and procurement funding between the Service Cost Position and the FY 2001 President's Budget (-\$287.0 million). This mix will be addressed at Milestone II/Milestone III, scheduled for February 2001.

B-1 CMUP (Conventional Mission Upgrade Program) – Program costs increased \$201.8 million (+9.3 percent) from \$2,162.7 million to \$2,364.5 million, due primarily to the restructuring of the Defensive Systems Upgrade (DSUP) portion of the program. Specifically, there were delays in GFE deliveries from the Navy's Integrated Defensive Electronic Countermeasures (IDECM) program, which include a techniques generator and a fiber optic towed decoy. The DSUP Engineering and Manufacturing Development (EMD) program will be stretched 14 months, and the production program will be delayed until FY 2004. The cost of the additional 14 months of EMD as well as cost increases in GFE and installation resulted in Nunn-McCurdy unit cost breaches of 39 percent to the Program Acquisition Unit Cost and 50 percent to the Average Procurement Unit Cost.

GBS (Global Broadcast Service) – Program costs increased \$67.4 million (+14.7 percent) from \$457.7 million to \$525.1 million, due primarily to rephrasing the Army procurement for receive suites (+\$27.3 million) and a net increase of 31 receive suites and Theater Injection Points (TIPs) from 272 to 304 (+\$30.6 million), which were offset by associated schedule and estimating allocations* (-\$14.6 million). There were also increases related to a refinement of the estimate for transponder lease and support activities (+\$23.0 million).

NAS (National Airspace System) – Program costs increased \$217.4 million (+27.6 percent) from \$787.1 million to \$1,004.5 million, due primarily to a quantity increase of 12 operational suites from 53 to 65 suites (+\$99.8 million) and changes required to site-specific configurations (+\$114.5 million).

NAVSTAR GPS (Global Positioning System)/Satellite Portion – Program costs increased \$1,398.1 million (+13.8%) from \$10,151.4 million to \$11,549.5 million, due primarily to the addition of development and procurement funding for the GPS modernization program (+\$1,119.0 million), and a revised estimate for the operational control system based on a better understanding of the complexity of effort (+\$236.4 million).

DoD

NMD (National Missile Defense) – Development program costs increased \$3,153.1 million (+35.8 percent) from \$8,808.4 million to \$11,961.5 million, due primarily to increased system capability, which includes additional weapons for flight tests and additional production facility capability to handle increased missile quantity requirements (+\$822.4 million), additional weapon system sustaining engineering, production verification testing, system-level sustaining engineering, and program management attributable to additional quantities and expanded delivery schedule (+\$1,175.5 million), added test infrastructure requirements and additional flight tests to support the expanded capability (+\$734.0 million), cost growth because government furnished assets were less mature than the Lead System Integrator contractor had anticipated (+\$407.0 million), additional ground-based X-Band radar hardware and software design requirements (+\$91.0 million), upgraded battle management command, control and communications (+\$47.2 million). These increases were partially offset by the application of revised development escalation indices (-\$21.1 million) and a revised cost estimate (-\$97.4 million).

As a result of the Department's approval of the Deployment Readiness Review Criteria and Single Acquisition Management Plan in June 1999, \$5,035.0 million of procurement and \$482.6 million of military construction (MILCON) have been added to the SAR. Previously, the NMD SAR was limited to development costs only (per Title 10, Section 2432, United States Code).

A subsequent Defense Acquisition Executive decision resulted in the expansion of the NMD program. The program has been revised to an "Expanded Capability 1." There were procurement cost increases associated with an increase of 80 deployed missiles (from 20 to 100) (+\$1,507.1 million), Ground Based X-Band Radar component quantity increases to support control of increased number of engagements (+\$494.0 million), an increase in production support (+ \$484.2 million), and additional program management and award fee resulting from expanded system capability (+\$382.6 million). These increases were partially offset by a revision in procurement and MILCON escalation indices (-\$41.9 million), a revised estimate for initial spares (-\$41.6 million), and a rephase of annual missile procurements (-\$20.9 million). Total program costs are now estimated at \$20,252.2 million.

NTW TBMD (Navy Theater Wide Theater Ballistic Missile Defense) – Development costs increased \$589.8 million (+13.2 percent) from \$4,464.3 million to \$5,054.1 million, due primarily to additional scope that was incorporated as part of the evolutionary acquisition strategy (+\$611.7 million). That is, the Department's guidance on Upper Tier programs directed the Navy to continue the evolutionary block approach, through the initial system flight test program, followed by three developmental increments of the Block I system (First Unit Equipped for NTW Block IA in FY 2006, Block IB in FY 2008, and Block IC in FY 2010). The existing NTW budget provides for completion of AEGIS Lightweight Exo-Atmospheric Projectile Intercept (ALI) flight demonstration through FY 2002 and minimally sustains industrial base capability through FY 2005. This aforementioned cost increase was partially offset by the application of revised escalation indices (-\$24.8 million).

PATRIOT PAC-3 (Patriot Advanced Capability) – Program costs in the previous SAR were \$7,775.8 million, and only one end-item, a Fire Unit, was shown. This SAR splits the program into two end-items, Fire Unit and Missile Segment. The \$7,775.8 million in the previous SAR was comprised of \$2,866.7 million for Fire Unit and \$4,909.1 million for Missile Segment. For this SAR, Fire Unit costs increased \$101.9 million (+3.6 percent) from \$2,866.7 million to \$2,968.6 million, due primarily to a revised estimate for Reliability, Availability, and Maintainability (RAM) modifications (+\$93.5 million), and an increase in

Army modification spares funding (+\$9.4 million). These increases were partially offset by the application of revised escalation indices (-\$2.3 million). Missile Segment costs increased \$2,262.2 million (+46.1 percent) from \$4,909.1 million to \$7,171.3 million, due primarily to an increase of 452 missiles from 560 to 1,012 missiles (+\$1,141.0 million) and associated schedule, engineering, and estimating allocations* (+\$443.2 million), a stretch-out of annual procurement buy profile (+\$640.5 million), additional funding to cover EMD cost growth (+\$50.0 million), and a congressional supplemental to restore Procurement funding from a FY 1999 reprogramming action (+\$45.0 million). These increases were partially offset by the application of revised escalation indices (\$23.2 million).

THAAD (Theater High Altitude Area Defense) – Development costs increased \$897.8 million (+10.3 percent) from \$8,692.8 million to \$9,590.6 million, due primarily to revised estimating methodology to reflect an increase in fee structure to sufficiently cover the EMD contract, and additional revisions to the engineering development estimates (+\$417.8 million). There were also increases related to an engineering effort to incorporate cost reduction initiatives into missile design (+\$408.0 million), 15 additional flight tests to incorporate lessons-learned and evolutionary development approach (+\$230.2 million), and an extended EMD period of performance (by 22 months) as part of risk-reduction program restructuring (+\$211.8 million). These increases were partially offset due to elimination of use and support of User Evaluation System ground equipment in THAAD test program (-\$331.5 million), and the application of revised escalation indices (-\$42.9 million).

**Quantity changes are estimated based on the original SAR baseline cost-quantity relationship. Cost changes since the original baseline are separately categorized as schedule, engineering, or estimating "allocations." The total impact of a quantity change is the identified "quantity" change plus all associated "allocations."*

Editor's Note: This information is in the public domain at <http://www.defenselink.mil/news>.

Third International Acquisition/Procurement Seminar - Pacific

IAPS-P



September 18-21, 2000

**Sponsored jointly by the
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**Singapore Ministry of Defence,
DSMC, New Zealand Ministry of
Defence, ADFA, and KIDA to
Conduct International Seminar**

The Third International Acquisition/Procurement Seminar — Pacific (IAPS-P) focuses on international acquisition practices and cooperative programs. The seminar is sponsored by defense educational and related institutions in Singapore, the United States, New Zealand, Australia, and South Korea.

The seminar will be held Sept. 18-21, at the Regent Hotel, Singapore.

Those eligible to attend are Defense Department/Ministry and defense industry employees from the five sponsoring nations, who are actively engaged in international defense acquisition programs. Other nations may participate by invitation. PACRIM nations participating in previous seminars were Canada, Japan, and Thailand.

The IAPS-P is by invitation only. Those desiring an invitation who have not attended past seminars, should submit a letter of request, on government or business letterhead, to DSMC by fax.

Visit the seminar registration Internet Web site at **<http://www.dsmc.dsm.mil/international/international.htm>** for additional seminar information. *Qualified participants pay a small seminar expenses charge of \$50 per day.* Invitations, confirmations, and joining instructions will be issued after June 1.

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