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Fact Sheet for the Chairman,
Subcommittee on National Security
Economics, Joint Economic Committee
U.S. Senate

November 1988

WEAPONS COST

Analysis of Major Weapon Systems Cost and Quantity Changes



137535

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Washington, D.C. 20548

National Security and
International Affairs Division

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November 30, 1988

The Honorable William Proxmire
Chairman, Subcommittee on National
Security Economics
Joint Economic Committee
United States Senate

Dear Mr. Chairman:

In response to your January 28, 1988, letter, and subsequent discussions with your Office, we are providing updates on the status of acquisition programs within the Department of Defense (DOD) as of December 31, 1987. In developing this information we used DOD's Selected Acquisition Reports (SAR) dated December 31, 1987.

Appendix I provides an overall summary for the three services. Appendixes II, III, and IV deal with Army, Navy, and Air Force programs, respectively. In preparing this report, we used data as presented in the SARs and did not perform additional work to verify the accuracy of the data. While we believe SARs provide a valuable tool for the Congress' use in performing its oversight role, we have expressed reservations about the quality of the data contained in the SARs. Appendix V contains a brief summary of some of the problems that have been identified in the past.

As arranged with your Office, unless you publicly announce its contents earlier, we plan no further distribution of this report until 30 days from the date of the report. If you have any questions about the matters discussed in this report, please call me on 275-8400. The major contributors to this fact sheet are listed in appendix VI.

Sincerely yours,

Paul F. Math
Senior Associate Director

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ABBREVIATIONS

CIS	Combat Identification System
DMSP	Defense Meteorological Satellite Program
DOD	Department of Defense
DSCS III	Defense Satellite Communications System
DSP	Defense Support Program
GPS	Global Positioning Satellite
SARs	Selected Acquisition Reports

OVERALL SUMMARY OF THE COST CHANGES REPORTED
IN THE SARS AS OF DECEMBER 31, 1987

Table I.1 is an overall summary of the cost changes reported in the SARs from the base year estimate¹ to the December 31, 1987, estimate. For the three services, the combined total program cost estimate (in current dollars) for all of the systems was \$751.6 billion. This represented an increase of approximately \$216.8 billion over the base year estimates for these programs. Army programs reported an increase of approximately \$51.1 billion, Navy programs reported an increase of approximately \$82.9 billion, and Air Force programs reported an increase of approximately \$82.7 billion.

¹Base year cost as used in this report represents the cost shown on the initial SARs. The year in which the base year estimate is made is the year in which constant dollars are expressed.

TABLE I. 1.

DOD SELECTED ACQUISITION REPORTS
COST CHANGE FROM BASE YEAR TO DECEMBER 31, 1987
DOLLARS IN MILLIONS

SERVICE	DATE OF ESTIMATE	PROGRAM COST		DIFFERENCE BY REPORTED CAUSE								
		CURRENT DOLLARS		ECONOMIC	QUANTITY	SCHEDULE	ENGRG	ESTIMATE	OTHER	SUPPORT	TOTAL	
TOTAL ARMY	12/31/87	\$102824.0										
	BASE YEAR	51685.20		CURRENT \$	3965.80	\$12301.70	\$ 7174.00	\$ 4301.60	\$19464.80	\$ 97.60	\$ 3833.30	\$51138.80
	DIFFERENCE \$	51138.80		CURRENT %	8%	24%	14%	8%	38%	0.2%	7%	99%
			99%									
TOTAL NAVY	12/31/87	359920.1										
	BASE YEAR	277006.4		CURRENT \$	-17468.6	\$82126.80	\$12499.90	\$11796.50	\$-15004.0	\$-2174.30	\$11137.40	\$82913.70
	DIFFERENCE \$	82913.70		CURRENT %	-6%	30%	5%	4%	-5%	-0.8%	4%	30%
			30%									
TOTAL AIRFORCE	12/31/87	288843.9										
	BASE YEAR	206099.5		CURRENT \$	-14953.8	\$49489.60	\$11867.30	\$21516.40	\$-2966.80	\$ 50.10	\$17741.60	\$82744.40
	DIFFERENCE \$	82744.40		CURRENT %	-7%	24%	6%	10%	-1%	0.02%	9%	40%
			40%									
TOTAL SERVICES	12/31/87	751588.0										
	BASE YEAR	534791.1		CURRENT \$	-28456.6	\$143918.1	\$31541.20	37614.50	1494.00	-2026.60	32712.30	216796.9
	DIFFERENCE \$	\$216796.9		CURRENT %	-5%	27%	6%	7%	0.3%	-0.4%	6%	41%
			41%									

Table I.1 also shows the causes for the cost changes as reported in the SARs. The table shows that costs associated with quantity changes accounted for approximately \$143.9 billion of the \$216.8 billion increase. Cost changes associated with economic factors resulted in a decrease of approximately \$28.5 billion. These decreases resulted from either inflation being less than anticipated or having lowered the rates for future expected inflation. While both the Navy and the Air Force have reported decreases due to economic factors, the Army is reporting an expected increase of approximately \$4 billion.

Table I.2 shows similar data for the changes that have been reported between December 31, 1986, and December 31, 1987, for systems common to both reporting periods. Between these two dates, the total program acquisition cost decreased by approximately \$7.4 billion (in current dollars). The largest decrease was reported for Navy programs--approximately \$9.7 billion, the Army programs reported almost no change and the Air Force reported an increase of approximately \$2.3 billion.

TABLE I. 2. DOD SELECTED ACQUISITION REPORTS
COST CHANGE FROM DECEMBER 31, 1986 TO DECEMBER 31, 1987
Dollars in Millions

SERVICES*	DATE OF ESTIMATE	TOTAL PROGRAM ESTIMATES		DIFFERENCE BY REPORTED CAUSE									
		PROGRAM COST		UNIT COST		ECONOMIC	QUANTITY	SCHEDULE	ENGRG	ESTIMATE	OTHER	SUPPORT	TOTAL
		CURRENT	DIFFERENCE	CURRENT	DIFFERENCE								
TOTAL ARMY	12/31/87	\$ 97601.7	\$ 281.9007	561145	\$ 3874.60	\$ 12301.70	\$ 7190.10	\$ 4301.60	\$ 19508.40	\$ 97.60	\$ 3833.30	\$ 51107.30	
	12/31/86	97654.2	294.7	563434.0	3752.00	12137.70	7266.20	4155.60	20209.90	97.60	3540.80	51159.80	
	DIFFERENCE	-52.50	-12.77	-4289.00	122.60	164.00	-76.10	146.00	-701.50	0.00	292.50	-52.50	
		0%	-4%	-1%									
TOTAL NAVY	12/31/87	294262.4	11430.08	34779	-18413.9	87818.4	10952.0	11545.9	-15147.7	-2174.3	10806.8	85387.2	
	12/31/86	303779.9	11925.69	38608	-20876.5	90848.1	10461.3	11573.0	-8055.2	-2174.3	13328.3	95104.7	
	DIFFERENCE	-9717.5	-495.61	-3829.00	2462.60	3029.7	490.70	-27.10	-7082.5	0.00	-2521.50	-9717.5	
		-3%	-4%	-10%									
TOTAL AIR FORCE	12/31/87	278058.0	3577.14	142754.0	-15131.6	49211.60	11968.00	21516.40	-3180.10	50.10	17753.30	82217.70	
	12/31/86	275748.6	3087.81	143197.0	-15343.8	49510.00	10821.20	20446.60	-4469.80	1034.30	17900.80	79908.30	
	DIFFERENCE	2309.40	489.33	-443.00	212.20	-298.40	1176.80	1069.80	1280.70	-984.20	-147.50	2309.40	
		1%	16%	0%									
TOTAL SERVICES	12/31/87	669922.1			-24670.9	149331.7	30140.1	37363.9	1180.6	-2026.6	32393.4	218712.2	
	12/31/86	677382.7			-32468.3	152495.8	28548.7	36175.2	7693.9	-1042.4	34769.9	226172.8	
	DIFFERENCE	-7460.6			\$ 2797.40	\$ -3164.1	\$ 1591.4	\$ 1188.7	\$ 6513.30	\$ -984.20	\$ -2376.50	\$ -7460.6	
		-1%											

* INCLUDES ONLY THOSE SYSTEMS ON BOTH THE 1986 AND 1987 SARs.
DOES NOT INCLUDE SYSTEMS THAT HAD CHANGES IN THE BASE YEAR ESTIMATES BETWEEN 1986 & 1987.

The definitions for the reported causes in tables I.1 and I.2 and subsequent tables and figures are as follows:

- Economic changes: Changes due solely to price level changes in the economy. Includes cost changes resulting from actual escalation different from that previously assumed and from revisions to assumptions about future inflation.
- Quantity changes: Changes in the number of units of an end item to be procured.
- Schedule changes: Changes in a procurement or delivery schedule, completion date, or intermediate milestone for development or production.
- Engineering changes: Changes in the physical or functional characteristics of a system or item delivered, to be delivered, or under development after such characteristics have been established.
- Estimating changes: Changes in program cost due to the correction of an error in preparing the baseline cost estimate, refinement of a prior estimate, or changes in program or cost estimating assumptions and techniques not provided for in the quantity, engineering, schedule, or support categories.
- Other changes: Changes in program cost due to natural disasters, work stoppages, or unforeseeable events not covered in the other cost categories.
- Support changes: Changes in items necessary to support the primary items being procured, such as initial spares, repair parts, training, training equipment, peculiar support equipment, data, and site activation.

ARMY:SARS STATUS AS OF DECEMBER 31, 1987

Table II.1 and figures II.1 and II.2 provide overall summary information on program cost and program quantity changes from the base years on Army major acquisitions as reported in the SARs as of December 31, 1987. Table II.1 shows total program and unit cost changes between the base year program estimates and the current program estimates by major classes of weapon systems as of December 31, 1987. The major classes of systems are aircraft, missiles, combat vehicles, ships, and other systems that do not fall into the preceding categories. The table also provides an estimated annual average growth rate between the base year and December 31, 1987, for each class. This rate varies between classes of systems. Despite this, the rate may be useful for comparing weapon systems within the same class. Figures II.1 and II.2 show the causes--as reported by DOD--for the cost changes, first in terms of current dollars, and then in terms of the percent change from the base year. Table II.2 shows the cost changes that have occurred between December 31, 1987, and December 31, 1986.

TABLE II. I. ARMY SELECTED ACQUISITION REPORTS
COST CHANGE FROM BASE YEAR TO DECEMBER 31, 1987
Dollars in Millions

CATEGORY	DATE OF ESTIMATE	PROGRAM COST		UNIT COST		DIFFERENCE BY REPORTED CAUSE												
		CURRENT	12/31/87	CURRENT	12/31/87	ECONOMIC	QUANTITY	SCHEDULE	ENGRS	ESTIMATE	OTHER	SUPPORT	TOTAL					
TOTAL AIRCRAFT	12/31/87	\$23961.60	\$ 34.54	2444.00														
	BASE YEARS	12324.50	17.64	2515.00														
	DIFFERENCE	\$ 11637.10	\$ 16.90	-171.00														
	ANNUAL AVERAGE GROWTH RATE	95%	96%	-7%														
		6%	6%	-1%														
TOTAL COMBAT VEHICLES	12/31/87	37155.90	\$ 19.56	16089.00														
	BASE YEARS	10407.10	17.70	5951.00														
	DIFFERENCE	\$ 26748.80	\$ 1.86	10238.00														
	ANNUAL AVERAGE GROWTH RATE	257%	11%	175%														
		15%	1%	8%														
TOTAL MISSILES	12/31/87	22188.70	\$ 125.70	227238.0														
	BASE YEARS	13929.00	41.94	190853.0														
	DIFFERENCE	\$ 13259.70	\$ 83.76	36385.00														
	ANNUAL AVERAGE GROWTH RATE	95%	200%	19%														
		2%	10%	0.4%														
TOTAL OTHER	12/31/87	14497.80	\$ 117.42	316703.0														
	BASE YEARS	15024.60	141.51	426109.0														
	DIFFERENCE	\$ -526.80	\$ -24.09	-109406														
	ANNUAL AVERAGE GROWTH RATE	-3%	-17%	-26%														
		-3%	-12%	-1%														

----- TOTAL PROGRAM ESTIMATES -----

----- DIFFERENCE BY REPORTED CAUSE -----

CATEGORY	DATE OF ESTIMATE	TOTAL PROGRAM ESTIMATES			DIFFERENCE BY REPORTED CAUSE								
		CURRENT	CURRENT	QUANTITY	ECONOMIC	QUANTITY	SCHEDULE	ENGRG	ESTIMATE	OTHER	SUPPORT	TOTAL	
TOTAL													
ARMY	12/31/87	102824.0											
	BASE YEARS	51685.20			CURRENT \$	\$ 3965.80	\$12301.70	\$ 7174.00	\$ 4301.60	\$19464.80	\$ 97.60	\$ 3833.30	\$51138.80
	DIFFERENCE - \$	\$51138.80			CURRENT %	8%	24%	14%	8%	38%	0.2%	7%	99%
	- %	99%											

More specifically, table II.1 shows the current total program cost estimate (in current dollars) for all Army SAR programs was \$102.8 billion. This represented an increase of approximately \$51.1 billion (in current dollars), or 99 percent, when compared with the baseline estimates. Three of the categories--aircraft, combat vehicles, and missiles--report total program cost increases. These increases ranged (in current dollars) from \$11.7 billion for aircraft programs to \$26.7 billion for combat vehicle programs. One class--other programs--reported a total program cost decrease of approximately \$0.5 billion (in current dollars).

Table II.1 also displays the reported causes for the cost changes. For example:

- Costs (in current dollars) associated with estimating changes amounted to \$19.5 billion out of the \$51.1 billion in cost growth.
- Costs (in current dollars) associated with quantity changes were approximately \$12.3 billion in cost growth.
- Costs (in current dollars) associated with economic changes amounted to approximately \$4 billion in cost growth.
- Within the aircraft class, costs (in current dollars) associated with estimating changes were approximately \$7.3 billion out of \$11.7 billion in cost growth.
- Within the combat vehicle class, costs (in current dollars) associated with quantity changes--approximately \$11 billion--and estimating changes--\$8.9 billion, together contributed \$19.9 billion of the \$26.7 billion in cost growth.
- Within the missile class, costs (in current dollars) associated with scheduling changes--\$3.8 billion, economic changes--\$3.2 billion, and estimating changes--\$3 billion--together contributed approximately \$10 billion of the \$13.3 billion in cost growth.

Figure II.1 shows the overall Army program cost changes, as given in table II.1, in current dollars between the base year and the current year estimates. Figure II.2 shows the same data as a percent of the base year estimate. Both figures show that the costs associated with estimating changes were the biggest cause of cost growth for these programs. Costs associated with quantity changes also contributed significantly as a reported cause of cost growth.

Figure II.1: Army SARs Program Cost Change By Cause For Weapon Systems From Base Year Estimates to December 31, 1987

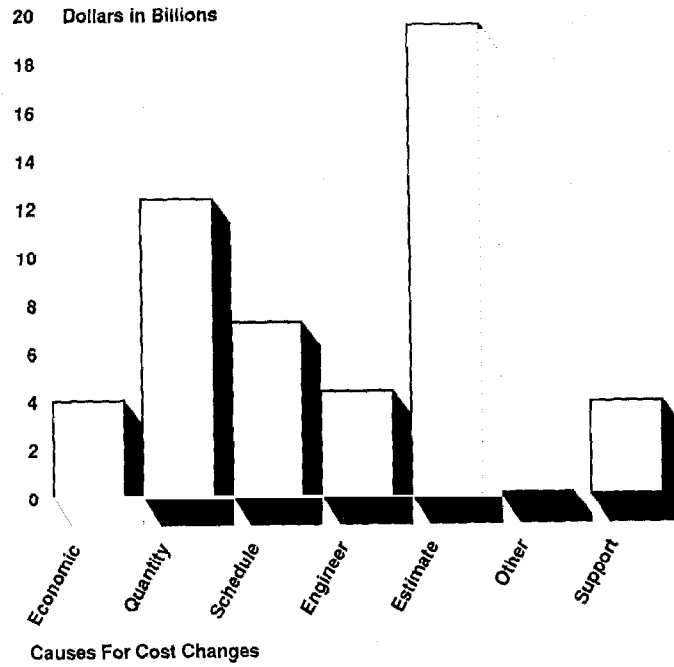


Figure II.2: Army SARs Program Cost Change By Cause For Weapon Systems From Base Year Estimates To December 31, 1987

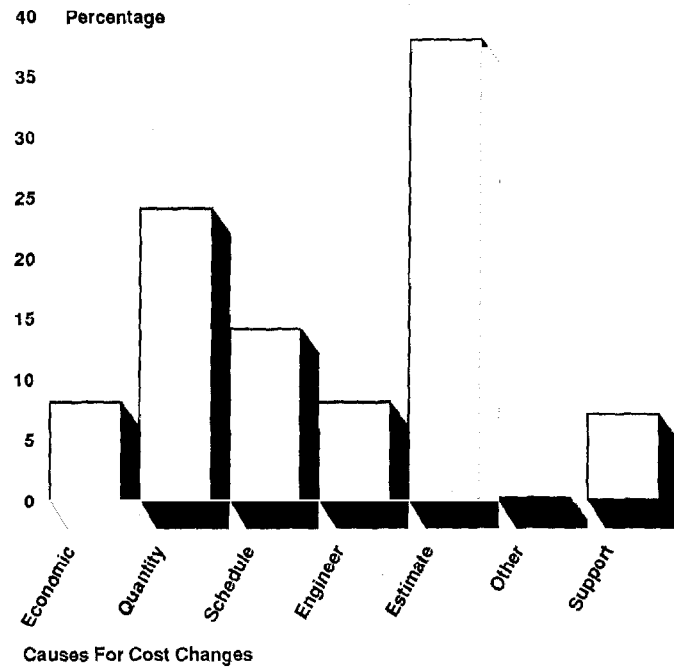


Table II.2 shows that the Army's SAR systems experienced an overall program cost decrease of approximately \$52.5 million between December 31, 1986, and December 31, 1987, for the systems common to both reports. The table also shows that the increases reported for the aircraft and the combat vehicle categories were offset by decreases in the missiles and the other procurement categories. In looking at the reported causes for the cost changes, the table indicates that the increases associated with economic changes, quantity changes, engineering changes, and support changes were offset by decreases in the schedule and estimate cause categories.

ARMY SELECTED ACQUISITION REPORTS
 COST CHANGE FROM DECEMBER 31, 1986 TO DECEMBER 31, 1987
 Dollars in Millions

CATEGORY*	DATE OF ESTIMATE	TOTAL PROGRAM ESTIMATES			DIFFERENCE BY REPORTED CAUSE								
		PROGRAM COST		UNIT COST	ECONOMIC	QUANTITY	SCHEDULE	ENGRG	ESTIMATE	OTHER	SUPPORT	TOTAL	
		CURRENT	CURRENT	QUANTITY									
TOTAL AIRCRAFT	12/31/87	\$ 23981.6	\$34,53925	2444	CURRENT 87	\$ 1612.3	\$ 173.8	\$ 734	\$ 622.6	\$ 7322.9	\$ 19.9	\$ 1171.6	\$ 11657.1
	12/31/86	23100.8	35,56578	2302	CURRENT 86	1634.4	-594.8	669	416.6	7742.1	19.9	889.1	10776.3
	DIFFERENCE \$	880.8	-1,02652	142	DIFFERENCE	-22.1	768.6	65	206	-419.2	0	282.5	880.8
	%	4%	-3%	6%									
TOTAL COMBAT VEHICLES	12/31/87	31933.6	4,239086	14760	CURRENT 87	-182.6	11001.9	1764.1	3416.1	8921.5	17.9	1778.4	26717.3
	12/31/86	31578.1	14,63924	4530	CURRENT 86	-232.2	10992.2	1862.6	3266.1	8774.4	17.9	1690.8	26361.8
	DIFFERENCE - \$	355.5	-10,4001	10230	DIFFERENCE	49.6	9.7	-98.5	150	147.1	0	97.6	355.5
	%	1%	-71%	226%									
TOTAL MISSILES	12/31/87	27188.7	125,7023	227238.0	CURRENT 87	3243.4	1132.8	3763.3	657.2	3003.8	53.5	1405.7	13259.7
	12/31/86	27392.6	126,5622	227238.0	CURRENT 86	3186.3	1119.3	3778.8	695.5	3166.8	53.5	1463.4	13463.6
	DIFFERENCE \$	-203.9	-0,85990	0	DIFFERENCE	57.1	13.5	-15.5	-38.3	-163	0	-57.7	-203.9
	%	-1%	-1%	0%									
TOTAL OTHER	12/31/87	14497.8	117,4200	316703.0	CURRENT 87	-798.5	-6.8	928.7	-394.3	260.2	6.3	-522.4	-526.8
	12/31/86	15582.7	117,9037	331364.0	CURRENT 86	-836.5	621	955.8	-222.6	526.6	6.3	-492.5	558.1
	DIFFERENCE \$	-1084.9	-0,48368	-14661	DIFFERENCE	39	-627.8	-97.1	-171.7	-266.4	0	29.9	-1084.9
	%	-7%	0%	-4%									
TOTAL ARMY	12/31/87	97601.7	281,9007	561145	CURRENT 87	3874.60	12301.70	7190.10	4301.60	19508.40	97.60	3833.30	51107.30
	12/31/86	97654.2	294.7	565434.0	CURRENT 86	3752.00	12137.70	7266.20	4155.60	20209.90	97.60	3540.80	51159.80
	DIFFERENCE \$	\$ -52.50	\$ -12.77	-4289.00	DIFFERENCE	\$ 122.60	\$ 164.00	\$ -76.10	\$ 146.00	\$ -701.50	\$ 0.00	\$ 292.50	\$ -52.50
	%	0%	-4%	-1%									

*INCLUDES ONLY THOSE SYSTEMS ON BOTH THE 1986 AND 1987 SARs.
 DOES NOT INCLUDE SYSTEMS THAT HAD CHANGES IN THE BASE YEAR ESTIMATES BETWEEN 1986 & 1987.

The remaining discussion of the Army programs focuses on the individual classes of systems. Each class is discussed separately.

AIRCRAFT PROGRAMS

Table II.3 shows the Army's current estimate for its five aircraft programs contained in its SARs. These programs are estimated to cost \$24 billion (in current dollars). This represents an increase of approximately \$11.7 billion (in current dollars), or 95 percent, when compared with the baseline estimates.

TABLE II. 3. ARMY SELECTED ACQUISITION REPORTS
 COST CHANGE FROM BASE YEAR TO DECEMBER 31, 1987
 Dollars in Millions

AIRCRAFT	DATE OF ESTIMATE	PROGRAM COST		UNIT COST		DIFFERENCE BY REPORTED CAUSE								
		CONSTANT	CURRENT	CONSTANT	CURRENT	ECONOMIC	QUANTITY	SCHEDULE	ENGRG	ESTIMATE	OTHER	SUPPORT	TOTAL	
AH-64 (APACHE)	12/31/87(DE)	\$ 3520.90	\$ 10015.40	\$ 5.15	\$ 14.64									
	BASE YEAR (72)	1892.40	3789.80	3.47	6.95									
	DIFFERENCE	-\$ 1628.50	6225.60	\$ 1.68	7.69	\$ 654.20	\$ 206.90	\$ 140.80	\$ 90.00	\$ 882.40	\$ 0.00	\$ 308.40	\$ 1628.50	
	ANNUAL AVERAGE GROWTH RATE	86%	164%	48%	111%	17%	11%	7%	5%	47%	0%	16%	86%	
CH-47D (CHINOOK)	12/31/87(PE)	\$ 1314.00	3037.60	\$ 2.99	6.92									
	BASE YEAR (75)	882.50	1562.80	2.42	4.29									
	DIFFERENCE	-\$ 431.50	1474.80	\$ 0.57	2.63	\$ 164.40	154.70	41.40	0.00	206.00	0.00	29.40	431.50	
	ANNUAL AVERAGE GROWTH RATE	4%	94%	23%	61%	11%	18%	5%	0%	23%	0%	3%	49%	
LHX	12/31/87(DE)	\$ 2376.90	2954.00											
	BASE YEAR (84)	1756.20	2133.00											
	DIFFERENCE	-\$ 620.70	821.00			\$ -17.00	0.00	0.00	0.00	620.70	0.00	0.00	620.70	
	ANNUAL AVERAGE GROWTH RATE	11%	11%			11%	0%	0%	0%	33%	0%	0%	35%	
OH-58D (AHIP)	12/31/87(DE)	\$ 1198.60	1427.40	\$ 5.99	7.14									
	BASE YEAR (82)	1667.90	2531.60	2.86	4.34									
	DIFFERENCE	-\$ 469.30	-1104.20	\$ 3.15	2.79	\$ -410.20	-694.00	73.00	77.80	232.30	0.00	-158.40	-469.30	
	ANNUAL AVERAGE GROWTH RATE	-28%	-44%	10%	64%	-16%	-42%	4%	5%	14%	0%	-9%	-28%	

One program, AHIP, reported a total program cost decrease of approximately \$1.1 billion (in current dollars). Total program quantities for this program decreased by 66 percent and the total program unit costs (in current dollars) increased by approximately 64 percent. The remaining four programs--AH-64, CH47D, LHX, and UH-60A--reported total program cost increases. These increases ranged (in current dollars) from approximately \$821 million on the LHX to \$6.2 billion on the AH-64. A closer look at the AH-64 program shows that total program quantities have increased by 26 percent and the total program unit cost has increased by approximately 111 percent. The UH-60A program reported the next largest total program cost increase--approximately \$4.2 billion (in current dollars). On this program, the total program quantities were almost the same as the baseline estimate and the total program unit cost (in current dollars) increased by approximately 184 percent.

Overall, the table shows that the costs associated with estimating changes were the biggest cause of cost growth on these five programs. These cost differences are reported to total approximately \$7.3 billion (in current dollars). The second largest reported cause of cost growth on these programs was the cost differences associated with economic factors. This totaled \$1.6 billion (in current dollars) on these five programs.

Figure II.3 shows the overall Army aircraft program cost changes in constant and current dollars between the base year estimates and the current year estimates. Figure II.4 shows the same data as a percentage of the base year estimates. Both figures show that costs associated with estimates were the biggest cause of cost growth on these programs.

Figure II.3: Army SARs Program Cost Change By Cause For Aircraft Systems From Base Year Estimates To December 31, 1987

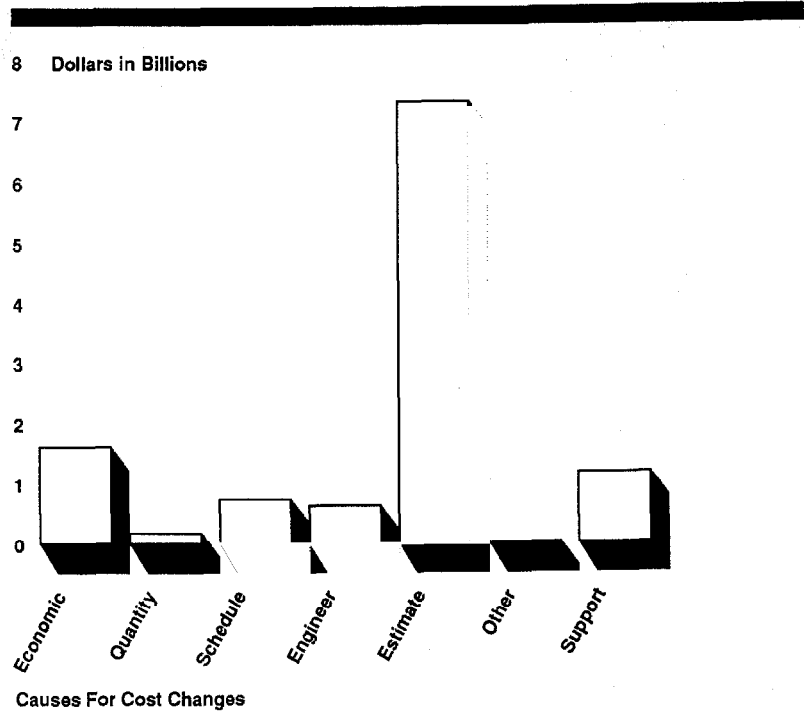


Figure II.4: Army SARs Program Cost Change By Cause For Aircraft Systems From Base Year Estimates To December 31, 1987

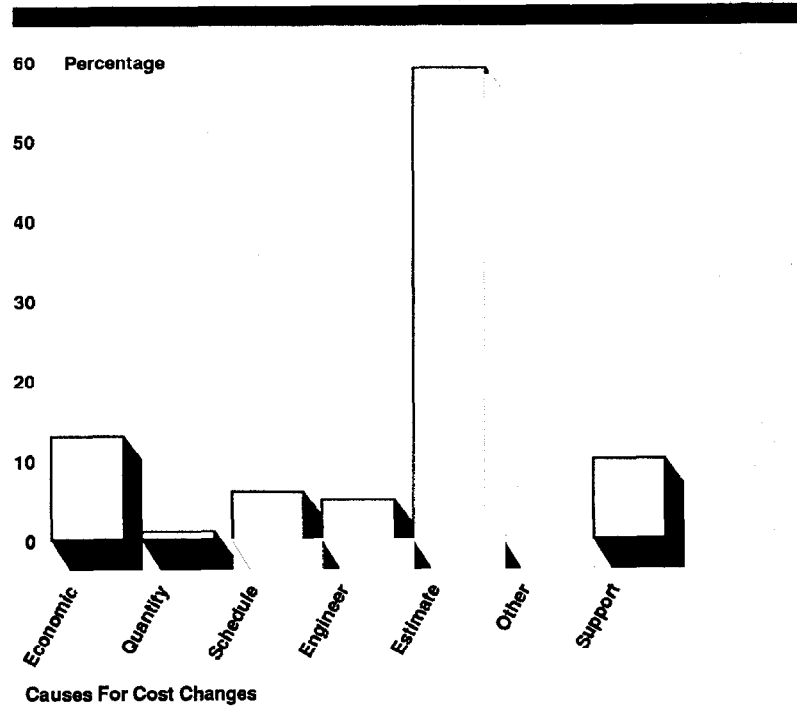


Table II.4 shows the difference in total program cost estimates between December 31, 1986, and December 31, 1987. The Army aircraft programs have increased by approximately \$880 million (in current dollars). The Apache program reported the largest increase--\$1.2 billion--and the LHX program reported the largest decrease--\$688 million. This table also shows that costs associated with quantity changes accounted for most--approximately \$769 million--of the \$880 million increase.

TABLE II. 4.

ARMY SELECTED ACQUISITION REPORTS
COST CHANGE FROM DECEMBER 31, 1986 TO DECEMBER 31, 1987
Dollars in Millions

AIRCRAFT	DATE OF ESTIMATE	TOTAL PROGRAM ESTIMATES					DIFFERENCE BY REPORTED CAUSE								
		PROGRAM COST		UNIT COST		QUANTITY	ECONOMIC	QUANTITY	SCHEDULE	ENGRG	ESTIMATE	OTHER	SUPPORT	TOTAL	
		CONSTANT	CURRENT	CONSTANT	CURRENT										

AH-64															
(APACHE)	12/31/87(DF)	\$ 3520.90	\$10015.40	\$ 5.15	\$ 14.64	684.00	CONSTANT 87	\$ 206.90	\$ 140.80	\$ 90.00	\$ 882.40	\$ 0.00	\$ 308.40	\$ 1628.50	
	12/31/86	3108.30	8943.60	5.16	14.69	602.00	CONSTANT 86	72.80	105.80	76.90	721.10	0.00	239.30	1215.90	
	DIFFERENCE --	\$ 412.60	1171.80	\$ -0.02	-0.05	82.00	DIFFERENCE	\$ 134.10	\$ 35.00	\$ 13.10	\$ 161.30	\$ 0.00	\$ 69.10	\$ 412.60	
		-- % 13%	15%	0%	0%	14%	CURRENT 87	\$ 654.20	655.90	607.60	256.10	2841.80	0.00	1210.00	6225.60
							CURRENT 86	629.50	173.30	538.90	217.70	2474.40	0.00	1020.00	5053.80
							DIFFERENCE	24.70	482.60	68.70	38.40	367.40	0.00	190.00	1171.80

CH-47D															
(CHINOOK)	12/31/87(DF)	\$ 1314.00	3037.60	\$ 2.99	6.92	439.00	CONSTANT 87	\$ 154.70	\$ 41.40	\$ 0.00	\$ 206.00	\$ 0.00	\$ 29.40	\$ 431.50	
	12/31/86	1333.20	3070.60	3.04	6.99	439.00	CONSTANT 86	154.70	41.40	0.00	222.90	0.00	31.70	450.70	
	DIFFERENCE --	\$ -19.20	-33.00	\$ -0.04	-0.08	0.00	DIFFERENCE	\$ 0.00	\$ 0.00	\$ 0.00	\$ -16.90	\$ 0.00	\$ -2.30	\$ -19.20	
		-- % -1%	-1%	-1%	-1%	0%	CURRENT 87	164.40	545.50	-7.60	0.00	718.50	0.00	54.00	1474.80
							CONSTANT 86	151.40	545.50	-7.60	0.00	757.20	0.00	61.30	1507.80
							DIFFERENCE	13.00	0.00	0.00	0.00	-38.70	0.00	-7.30	-33.00

LHX															
	12/31/87(PE)	\$ 2376.90	2954.00				CONSTANT 87	\$ 0.00	\$ 0.00	\$ 0.00	\$ 620.70	\$ 0.00	0.00	\$ 620.70	
	12/31/86	2971.50	3642.30				CONSTANT 86	0.00	0.00	0.00	1215.30	0.00	0.00	1215.30	
	DIFFERENCE --	\$ -594.60	-688.30				DIFFERENCE	\$ 0.00	\$ 0.00	\$ 0.00	\$ -594.60	\$ 0.00	0.00	\$ -594.60	
		-- % -20%	-19%				CURRENT 87	-17.00	0.00	0.00	0.00	838.00	0.00	0.00	821.00
							CURRENT 86	-24.00	0.00	0.00	0.00	1533.30	0.00	0.00	1509.30
							DIFFERENCE	7.00	0.00	0.00	0.00	-695.30	0.00	0.00	-688.30

OH-58D (AHIP)															
	12/31/87(DF)	\$ 1190.60	1427.40	\$ 5.99	7.14	200.00	CONSTANT 87	\$ -694.00	\$ 73.00	\$ 77.80	\$ 232.30	\$ 0.00	-158.40	\$ -469.30	
	12/31/86	917.10	1144.00	6.55	8.17	140.00	CONSTANT 86	-857.00	73.00	32.10	159.80	0.00	-158.70	-750.80	
	DIFFERENCE --	\$ 281.50	283.40	\$ -0.56	-1.03	60.00	DIFFERENCE	\$ 163.00	\$ 0.00	\$ 45.70	\$ 72.50	\$ 0.00	0.30	\$ 281.50	
		-- % 31%	25%	-9%	-13%	43%	CURRENT 87	-410.20	-1016.10	177.00	113.80	237.90	0.00	-206.60	-1104.20
							CURRENT 86	-330.40	-1302.10	177.00	47.10	227.10	0.00	-206.30	-1387.60
							DIFFERENCE	-79.80	286.00	0.00	66.70	10.80	0.00	-0.30	283.40

----- TOTAL PROGRAM ESTIMATES -----							----- DIFFERENCE BY REPORTED CAUSE -----								
AIRCRAFT	DATE OF ESTIMATE	PROGRAM COST		UNIT COST		QUANTITY	ECONOMIC	QUANTITY	SCHEDULE	ENGRG	ESTIMATE	OTHER	SUPPORT	TOTAL	
		CONSTANT	CURRENT	CONSTANT	CURRENT										
UH-60A (BLK HAWK)	12/31/87 (DE)	\$ 2446.80	6547.20	\$ 2.18	5.84	1121.00	CONSTANT 87	\$ -17.00	\$ -99.10	\$ 60.50	\$ 605.90	\$ 13.40	\$ -58.90	\$ 504.80	
	12/31/86	2350.60	6400.30	2.10	5.71	1121.00	CONSTANT 86	-17.00	-99.10	28.60	576.30	13.40	-93.60	408.60	
	DIFFERENCE	-- \$ 96.20	146.90	\$ 0.09	0.13	0.00	DIFFERENCE	\$ 0.00	\$ 0.00	\$ 31.90	\$ 29.60	\$ 0.00	\$ 34.70	\$ 96.20	
		-- % 4%	2%	4%	2%	0.0%	CURRENT 87	1220.90	-11.50	43.00	252.70	2686.70	19.90	114.20	4239.90
							CURRENT 86	1207.90	-11.50	39.30	151.80	2750.10	19.90	14.10	4093.00
							DIFFERENCE	13.00	0.00	-3.70	100.90	-63.40	0.00	100.10	146.90
TOTAL AIRCRAFT	12/31/87		23981.60		34.54	2444.00	CURRENT 87	1612.30	173.80	734.00	622.60	7322.90	19.90	1171.60	11657.10
	12/31/86		25100.80		35.57	2502.00	CURRENT 86	1634.40	594.80	669.00	416.60	7742.10	19.90	889.10	10776.30
	DIFFERENCE	-- \$	\$ 890.80	\$ -1.03	142.00		DIFFERENCE	\$ -22.10	\$ 768.60	\$ 65.00	\$ 206.00	\$ -419.20	\$ 0.00	\$ 282.50	\$ 880.80
		-- %	4%	3%	6%										

*INCLUDES ONLY THOSE SYSTEMS ON BOTH THE 1986 AND 1987 SARs.

COMBAT VEHICLES

Table II.5 shows the Army's current total program estimate for its six combat vehicle programs contained in its SARs. These programs are currently estimated to cost approximately \$37.2 billion (in current dollars). This represents an increase of approximately \$26.7 billion (in current dollars), or 257 percent, over the baseline estimate.

TABLE II. 5. ARMY SELECTED ACQUISITION REPORTS
COST CHANGE FROM BASE YEAR TO DECEMBER 31, 1987
Dollars in Millions

COMBAT VEHICLES	DATE OF ESTIMATE	PROGRAM COST		UNIT COST		DIFFERENCE BY REPORTED C							
		CONSTANT	CURRENT	CONSTANT	CURRENT	ECONOMIC	QUANTITY	SCHEDULE	ENGRG	ESTIMATE	OTHER	SUPPORT	TOTAL
BRADLEY FVS	12/31/87(0E)	\$ 3258.80	\$ 9934.10	\$ 0.47	\$ 1.44								
	BASE YEAR (72)	325.60	436.90	0.27	0.36								
	DIFFERENCE	2933.20	9497.20	0.20	1.07	919.40	73.20	945.60	11.00	412.10	2933.20		
		901%	2174%	75%	296%	2675.80	694.10	3521.10	17.90	1274.30	9497.20		
ANNUAL AVERAGE GROWTH RATE		17%	23%	4%	10%	-102%	282%	22%	176%	290%	3%	127%	901%
							612%	159%	402%	806%	4%	292%	2174%
FAADS 021	12/31/87(PE)	\$ 1511.40	1758.60										
	BASE YEAR (87)	1516.80	1707.50										
	DIFFERENCE	-5.40	51.10			48.30	-15.60	10.20	0.00	0.00	0.00	0.00	-5.40
		-0.4%	3%				-16.10	18.90	0.00	0.00	0.00	0.00	51.10
ANNUAL AVERAGE (DID NOT CALCULATE DUE TO SAME BASE AND CURRENT)													
FAADS LOS-F-H	12/31/87(PE)	\$ 1381.70	1625.90	\$ 12.12	14.26								
	BASE YEAR (87)	1453.60	1683.30	12.75	14.85								
	DIFFERENCE	-71.90	-67.40	-0.63	-0.59								
		-5%	-4%	-5%	-4%								
ANNUAL AVERAGE (DID NOT CALCULATE DUE TO SAME BASE AND CURRENT)													
FAADS LOS-R	12/31/87(PE)	\$ 1056.60	1276.30	\$ 0.88	1.06								
	BASE YEAR (87)	1057.60	1257.60	0.88	1.04								
	DIFFERENCE	-1.00	18.70	0.00	0.02								
		-0.1%	1%	0%	1%								
ANNUAL AVERAGE (DID NOT CALCULATE DUE TO SAME BASE AND CURRENT)													

COMBAT VEHICLES	DATE OF ESTIMATE	PROGRAM COST		UNIT COST		DIFFERENCE BY REPORTED C													
		CONSTANT	CURRENT	CONSTANT	CURRENT	ECONOMIC	QUANTITY	SCHEDULE	ENGRG	ESTIMATE	OTHER	SUPPORT	TOTAL						
FAADS	12/31/87(PE)	\$ 491.60	561.50																
WLOS-R	BASE YEAR (87)	485.80	532.40																
	DIFFERENCE	-- %	5.80	29.10	5%														
	ANNUAL AVERAGE (DID NOT CALCULATE DUE TO GROWTH RATE SAME BASE AND CURRENT)																		
M1 TANK	12/31/87(DE)	\$ 6846.60	21999.50	\$ 0.87	2.80	7857.00													
	BASE YEAR (72)	2392.80	4779.40	0.72	1.44	3325.00													
	DIFFERENCE	-- %	4453.80	17220.10	21%	4532.00													
	ANNUAL AVERAGE																		
	GROWTH RATE	7%	11%	1%	5%	6%													
TOTAL COMBAT VEHICLES	12/31/87	37155.90	16089.00																
	BASE YEARS	10407.10	5851.00																
	DIFFERENCE	-- %	\$ 26748.80	\$ 1.86	10238.00														
	ANNUAL GROWTH RATE																		

*INCLUDES BRADLEY VEHICLE AND M-1 TANK ONLY.

Five of the programs--Bradley, FAADS C2I, FAADS LOS-R, FAADS NLOS-R, and M-1--reported total program cost increases. These increases (in current dollars) ranged from approximately \$29 million on the FAADS NLOS-R to \$17.2 billion on the M-1 program. The increase (in current dollars) on the M-1 program represented approximately 360 percent over the baseline estimate. The total program quantities increased by approximately 136 percent and total program unit costs (in current dollars) increased by approximately 95 percent. The remaining program--FAADS LOS-F-H--reported a total program cost decrease (in current dollars) of approximately \$67.4 million.

The table also shows that the costs (in current dollars) associated with quantity changes--\$11 billion--and estimating changes--\$8.9 billion--together amounted to approximately \$19.9 billion of the \$26.7 billion in cost growth for these systems. Costs decreases associated with economic changes were reported to be approximately \$91 million.

Figure II.5 shows the overall program cost changes for Army combat vehicles in current dollars between the base year estimates and the current year estimates. Figure II.6 shows the same data as a percentage of the base year estimates. Both figures show that the costs associated with quantity changes and estimating changes were the biggest causes of overall total program cost growth. In addition, the figures show that cost decreases associated with economic changes had a relatively small impact in offsetting total program cost growth on these programs.

Figure II.5: Army SARs Program Cost Change By Cause For Combat Vehicle Systems From Base Year Estimates To December 31, 1987

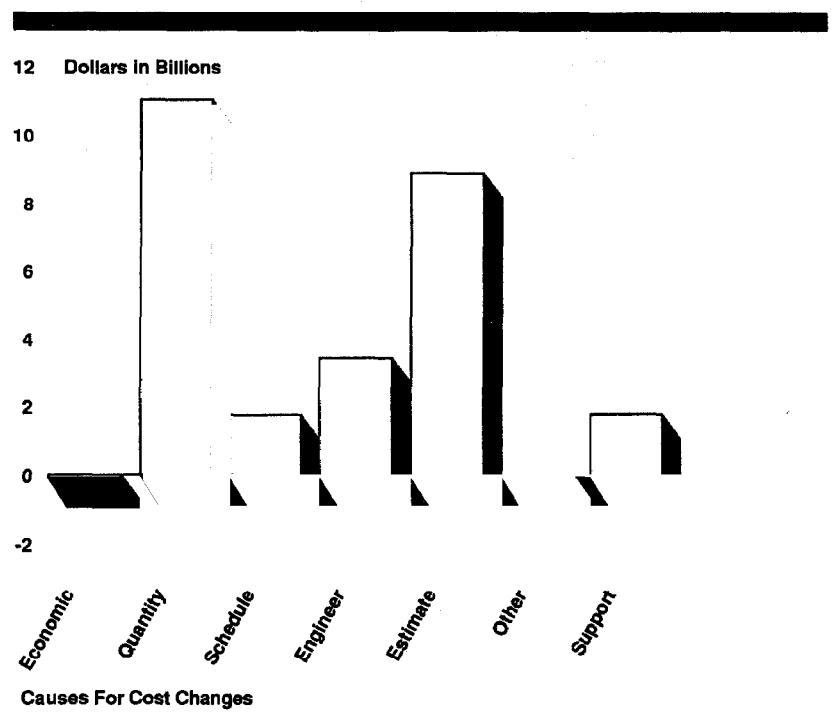


Figure II.6: Army SARs Program Cost Change By Cause For Combat Vehicle Systems From Base Year Estimates To December 31, 1987

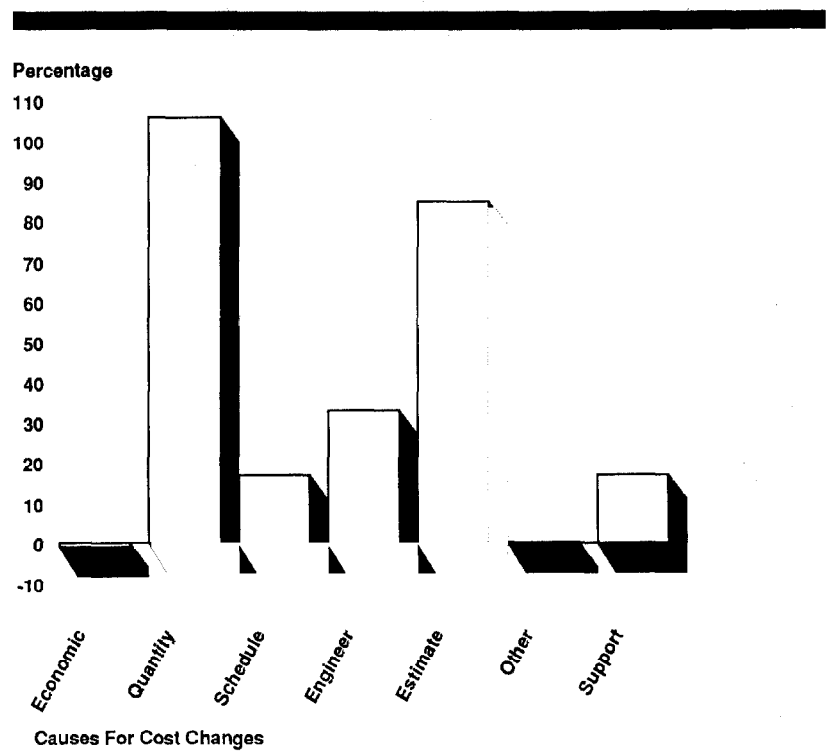


Table II.6 shows the difference in total program cost estimates between December 31, 1986, and December 31, 1987. These programs show an increase of approximately \$355.5 million (in current dollars). Most of the reported increase--\$216 million--was attributed to the Bradley FVS program.

TABLE II. 6.

ARMY SELECTED ACQUISITION REPORTS
COST CHANGE FROM DECEMBER 31, 1986 TO DECEMBER 31, 1987

Dollars in Millions

COMBAT VEHICLES*	DATE OF ESTIMATE	TOTAL PROGRAM ESTIMATES				QUANTITY	DIFFERENCE BY REPORTED CAUSE											
		PROGRAM COST		UNIT COST			ECONOMIC	QUANTITY	SCHEDULE	ENGRG	ESTIMATE	OTHER	SUPPORT	TOTAL				
		CONSTANT	CURRENT	CONSTANT	CURRENT													
BRADLEY																		
FVS	12/31/87(DF)	\$ 3258.80	\$ 9934.10	\$ 0.47	\$ 1.44	6903.00	CONSTANT 87	\$ 919.40	\$ 73.20	\$ 571.90	\$ 945.60	\$ 11.00	\$ 412.10	\$ 2933.20				
	12/31/86	3198.50	9718.10	2.65	9.06	1205.00	CONSTANT 86	916.90	73.20	571.90	948.40	11.00	351.50	2872.90				
	DIFFERENCE	\$ 60.30	216.00	\$ -2.18	\$ -6.63	5698.00	DIFFERENCE	\$ 2.50	\$ 0.00	\$ 0.00	\$ -2.80	\$ 0.00	\$ 60.60	\$ 60.30				
		2%	2%	-82%	-82%	473%	CURRENT 87	\$ -443.60	2675.80	694.10	1757.60	\$ 3521.10	17.90	1274.30	9497.20			
							CURRENT 86	-456.10	2666.10	686.80	1757.60	3539.30	17.90	1069.60	9281.20			
							DIFFERENCE	12.50	9.70	7.30	0.00	\$ -18.20	0.00	204.70	216.00			
MI TANK	12/31/87(DF)	\$ 6846.60	21999.50	\$ 0.87	2.80	7857.00	CONSTANT 87	\$ 2409.30	\$ 102.30	\$ 460.50	1386.60	\$ 0.00	\$ 95.10	\$ 4453.80				
	12/31/86	6801.80	21860.00	2.05	6.57	3325.00	CONSTANT 86	2409.30	123.10	422.90	1332.60	0.00	121.10	4409.00				
	DIFFERENCE	\$ 44.80	139.50	\$ -1.17	\$ -3.77	4532.00	DIFFERENCE	\$ 0.00	\$ -20.80	\$ 37.60	54.00	\$ 0.00	\$ -26.00	\$ 44.80				
		1%	1%	-57%	-57%	136%	CURRENT 87	261.00	8326.10	1070.00	1658.50	5400.40	0.00	504.10	17220.10			
							CURRENT 86	223.90	8326.10	1175.80	1508.50	5235.10	0.00	611.20	17080.60			
							DIFFERENCE	37.10	0.00	-105.80	150.00	165.30	0.00	-107.10	139.50			
TOTAL COMBAT VEHICLES	12/31/87		31933.60		4.24	14760.00	CURRENT 87	-182.60	11001.90	1764.10	3416.10	8921.50	17.90	1778.40	26717.30			
	12/31/86		31578.10		14.64	4530.00	CURRENT 86	-232.20	10992.20	1862.60	3266.10	8774.40	17.90	1680.80	26361.80			
	DIFFERENCE	\$	\$ 355.50	\$	\$ -10.40	10230.00	DIFFERENC	\$ 49.60	\$ 9.70	\$ -98.50	\$ 150.00	\$ 147.10	\$ 0.00	\$ 97.60	\$ 355.50			
		1%	1%	-71%	-71%	226%												

*INCLUDES ONLY THOSE SYSTEMS ON BOTH THE 1986 AND 1987 SARs.
DOES NOT INCLUDE FAADS C-21 DUE TO CHANGE IN BASE YEAR ESTIMATES BETWEEN 1986 & 1987.

MISSILE PROGRAMS

Table II.7 shows the Army's current total program estimate for its seven missile programs contained in SARs. These programs are currently estimated to cost \$27.2 billion (in current dollars). This represents an increase of approximately \$13.3 billion (in current dollars), or 95 percent, over the baseline estimate.

TABLE II. 7. ARMY SELECTED ACQUISITION REPORTS
COST CHANGE FROM BASE YEAR TO DECEMBER 31, 1987
Dollars in Millions

MISSILES	DATE OF ESTIMATE	PROGRAM COST			UNIT COST			DIFFERENCE BY REPORTED CAUSE							
		CONSTANT	CURRENT	DIFFERENCE	CONSTANT	CURRENT	DIFFERENCE	ECONOMIC	QUANTITY	SCHEDULE	ENGRG	ESTIMATE	OTHER	SUPPORT	TOTAL
ATACMS	12/31/87(DE)	\$ 1049.70	\$ 1144.30	\$ 1.00	\$ 1.09	1050.00									
	BASE YEAR (87)	1135.90	1222.30	1.08	1.16	1050.00									
	DIFFERENCE	-\$ 86.20	-\$ 78.00	-0.08	-0.07	0									
		7%	-6%	-8%	-6%	0%									
ANNUAL AVERAGE (DID NOT CALCULATE DUE TO GROWTH RATE SAME BASE AND CURRENT YEAR)															
HELLFIRE	12/31/87(DE)	\$ 1017.10	2420.70	0.021	0.05	48925.00									
	BASE YEAR (75)	488.60	703.40	0.020	0.03	24841.00									
	DIFFERENCE	-\$ 528.50	1717.30	0.001	0.02	24084.00									
		108%	244%	6%	75%	97%									
ANNUAL AVERAGE															
	GROWTH RATE	6%	11%	0.5%	5%	6%									
MLRS	12/31/87(PE)	\$ 2574.40	5108.40	4.28	8.49	602.00									
	BASE YEAR (78)	2232.30	3454.00	12.20	18.87	183.00									
	DIFFERENCE	-\$ 342.10	1654.40	-7.92	-10.39	419.00									
		15%	48%	-6%	-5%	22%									
ANNUAL AVERAGE															
	GROWTH RATE	2%	4%	-1%	-9%	14%									
MLRS - IGVW (DEV COST ONLY)	12/31/87(PE)	\$ 265.80	314.60												
	BASE YEAR (84)	190.70	211.20												
	DIFFERENCE	-\$ 75.10	103.40												
		39%	49%												
ANNUAL AVERAGE															
	GROWTH RATE	12%	14%												

----- TOTAL PROGRAM ESTIMATES -----							----- DIFFERENCE BY REPORTED CAUSE -----								
MISSILES	DATE OF ESTIMATE	PROGRAM COST		UNIT COST		QUANTITY	ECONOMIC	QUANTITY	SCHEDULE	ENGRG	ESTIMATE	OTHER	SUPPORT	TOTAL	
		CONSTANT	CURRENT	CONSTANT	CURRENT										
PATRIOT	12/31/87(DE)	\$ 4947.20	12527.30	\$ 45.81	115.99	108.00									
	BASE YEAR (72)	4267.40	5240.50	17.78	21.84	240.00									
	DIFFERENCE --	\$ 679.80	7286.80	\$ 28.03	94.16	-132.00	CONSTANT \$								
	-- %	16%	139%	158%	431%	-55%	CURRENT \$	2073.20	-816.50	2349.70	-103.20	2374.40	24.50	495.60	679.80
	ANNUAL AVERAGE GROWTH RATE	1%	6%	7%	12%	-5%	CONSTANT %		-26%	16%	-7%	21%	1%	12%	16%
							CURRENT %	40%	-16%	45%	-2%	45%	1%	26%	139%
STINGER	12/31/87(DE)	\$ 1089.30	3279.20	\$ 0.021	0.06	50854.00									
	BASE YEAR (72)	410.90	473.80	0.018	0.02	23202.00									
	DIFFERENCE --	\$ 678.40	2805.40	\$ 0.004	0.04	27652.00	CONSTANT \$								
	-- %	165%	592%	21%	216%	119%	CURRENT \$	437.20	84.70	178.90	84.30	299.00	6.00	25.50	678.40
	ANNUAL AVERAGE GROWTH RATE	7%	14%	1%	8%	5%	CONSTANT %		21%	44%	9%	7%	1%	6%	165%
							CURRENT %	92%	60%	178%	45%	20%	2%	14%	592%
TOW 2	12/31/87(PdE)	\$ 2215.50	2394.20	\$ 0.0176	0.0190	125969.0									
	BASE YEAR (84)	2302.10	2623.80	0.0163	0.0186	141337.0									
	DIFFERENCE --	\$ -86.60	-229.60	\$ 0.0013	0.0004	-15368.0	CONSTANT \$								
	-- %	-4%	-9%	8%	2%	-11%	CURRENT \$	-150.80	-140.80	33.80	181.90	-130.00	0.00	-31.50	-86.60
	ANNUAL AVERAGE GROWTH RATE	-1%	-3%	3%	1%	-4%	CONSTANT %		-6%	1%	8%	-6%	0%	-1%	-4%
							CURRENT %	-6%	-8%	4%	9%	-7%	0%	-1%	-9%
TOTAL MISSILES	12/31/87		27188.70		125.70	227508.0									
	BASE YEARS		13929.00		41.94	190853.0									
	DIFFERENCE --	\$	\$13259.70	\$	83.76	36655.00	CURRENT \$	\$ 3243.40	\$ 1132.80	\$ 3763.30	\$ 657.20	\$ 3003.80	\$ 53.50	\$ 1405.70	\$13259.70
	-- %		95%		200%	19%	CURRENT %	23%	8%	27%	5%	22%	0.4%	10%	95%
	ANNUAL AVERAGE GROWTH RATE		2%*		10%	0.4%	CURRENT %								

*DOES NOT INCLUDE ATTACKS.

Five of the missile programs--Hellfire, MLRS, MLRS TGW, Patriot, and Stinger--reported total program cost increases. These increases ranged (in current dollars) from approximately \$103 million on the MLRS TGW to approximately \$7.3 billion on the Patriot program. On the Patriot program, the total program increase associated with estimating changes--\$2.4 billion, scheduling changes--\$2.3 billion, economic changes--\$2.1 billion, and support changes--\$1.4 billion, combined to cause approximately \$8.2 billion in cost growth. This cost growth was partially offset by decreases (in current dollars) associated with quantity changes and engineering changes.

The remaining two programs--ATACMS and TOW 2--reported total program cost decreases (in current dollars). Combined, these decreases amounted to approximately \$307 million (in current dollars).

Table II.7 also shows that costs (in current dollars) associated with scheduling changes--\$3.8 billion, economic changes--\$3.2 billion, and estimating changes--\$3 billion, together contributed approximately \$10 billion of the overall \$13.3 billion in reported cost growth for these missile programs. Figure II.7 shows the overall program cost changes for Army missile programs in current dollars between the base year estimates and the current year estimates. Figure II.8 shows the same data as a percentage of the base year estimates. Both figures show that costs (in current dollars) associated with scheduling changes, economic changes, and estimating changes were the main causes of cost growth on these missile programs.

Figure II.7: Army SARs Program Cost Change By Causes For Missile Systems From Base Year Estimates To December 31, 1987

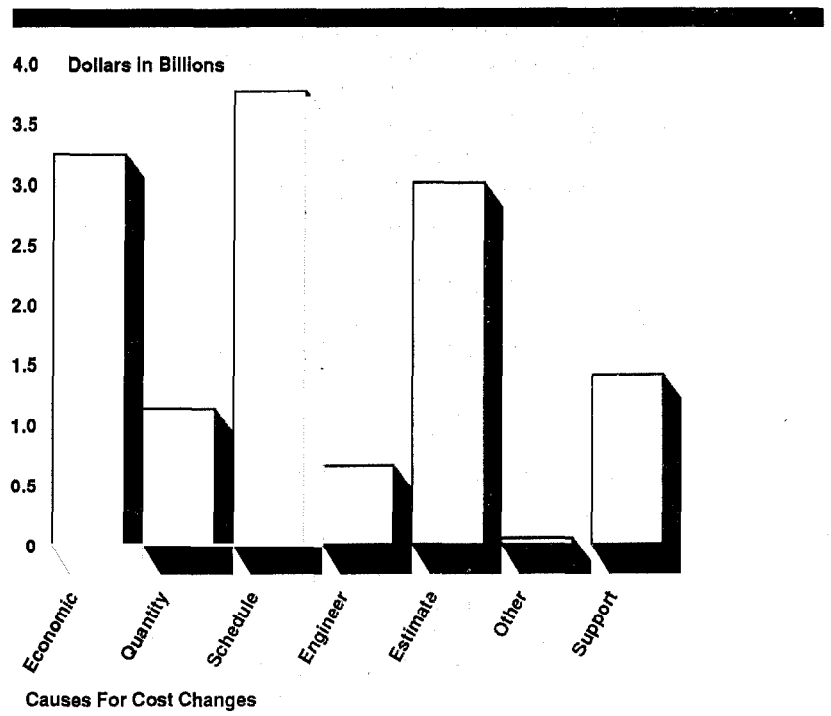


Figure II.8: Army SARs Program Cost Change By Cause For Missile Systems From Base Year Estimates To December 31, 1987

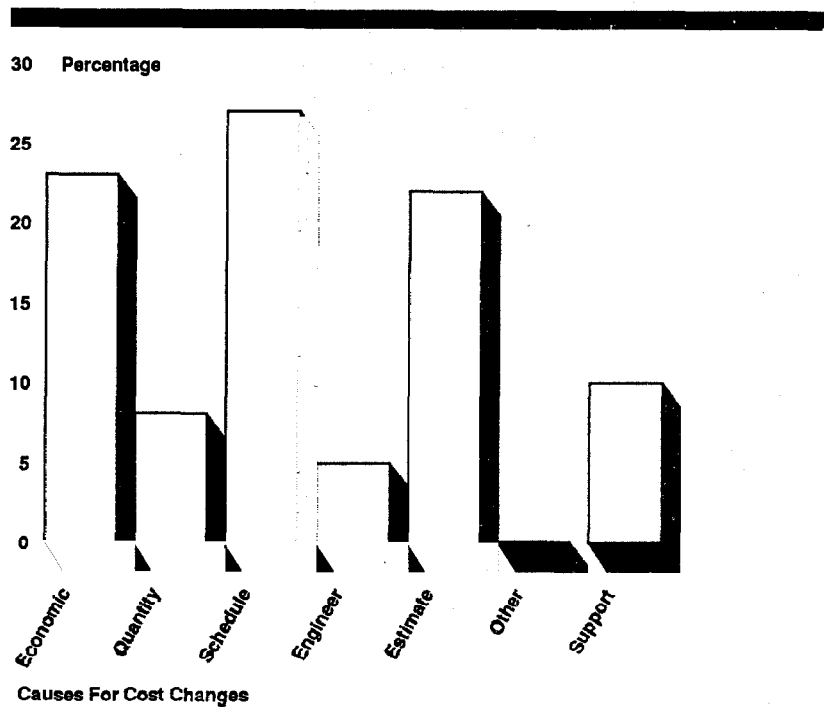


Table II.8 shows the difference in total program cost estimates between December 31, 1986, and December 31, 1987. The Army missile programs have decreased by approximately \$203 million (in current dollars). The table shows that of the reported causes for the cost changes, costs associated with quantity factors and economic factors accounted for increases that were offset by decreases in the schedule, engineering, estimate, and other categories.

TABLE II. 8.

ARMY SELECTED ACQUISITION REPORTS
COST CHANGE FROM DECEMBER 31, 1986 TO DECEMBER 31, 1987

Dollars in Millions

MISSILES*	DATE OF ESTIMATE	TOTAL PROGRAM ESTIMATES				QUANTITY	DIFFERENCE BY REPORTED CAUSE									
		PROGRAM COST		UNIT COST			ECONOMIC	QUANTITY	SCHEDULE	ENGRG	ESTIMATE	OTHER	SUPPORT	TOTAL		
		CONSTANT	CURRENT	CONSTANT	CURRENT											
ATACMS	12/31/87(DE)	\$ 1049.70	\$ 1144.30	\$ 1.00	\$ 1.09	1050.00	CONSTANT 87	\$ 0.00	\$ 0.00	\$ 0.00	\$ -86.20	\$ 0.00	\$ 0.00	\$ -86.20		
	12/31/86	1079.20	1163.30	1.03	1.11	1050.00	CONSTANT 86	0.00	0.00	0.00	-56.70	0.00	0.00	-56.70		
							DIFFERENCE	\$ 0.00	\$ 0.00	\$ 0.00	\$ -29.50	\$ 0.00	\$ 0.00	\$ -29.50		
		DIFFERENCE --	\$ -29.50	-19.00	\$ -0.03	-0.02	0	CURRENT 87	\$ -2.90	\$ 0.00	\$ 0.00	\$ -75.10	\$ 0.00	\$ 0.00	\$ -78.00	
		-- %	-3%	-2%	-3%	-2%	0%	CURRENT 86	-2.90	0.00	0.00	0.00	0.00	0.00	-59.00	
								DIFFERENCE	0.00	0.00	0.00	-19.00	0.00	0.00	-19.00	
HELLFIRE	12/31/87(DE)	\$ 1017.10	2420.70	\$ 0.021	0.05	48925.00	CONSTANT 87	150.90	\$ 65.40	\$ 127.70	\$ 186.00	\$ 0.00	\$ -1.50	\$ 528.50		
	12/31/86	1013.70	2407.60	0.021	0.05	48925.00	CONSTANT 86	150.90	66.30	127.70	182.00	0.00	-1.80	525.10		
							DIFFERENCE	0.00	\$ -0.90	\$ 0.00	\$ 4.00	\$ 0.00	\$ 0.30	\$ 3.40		
		DIFFERENCE --	\$ 3.40	13.10	\$ 0.000	0.00	0.00	CURRENT 87	138.00	462.30	449.90	317.30	348.70	0.00	1.10	1717.30
		-- %	0%	1%	0%	1%	0%	CURRENT 86	131.90	462.30	455.50	317.30	337.40	0.00	-0.20	1704.20
								DIFFERENCE	6.10	0.00	-5.60	0.00	11.30	0.00	1.30	13.10
MLRS	12/31/87(PE)	\$ 2574.40	5108.40	\$ 4.28	8.49	602.00	CONSTANT 87	\$ 605.30	\$ -27.50	\$ 0.00	\$ -219.20	\$ 10.00	\$ -26.50	\$ 342.10		
	12/31/86	2604.90	5180.90	4.33	8.61	602.00	CONSTANT 86	598.80	-27.50	0.00	-181.20	10.00	-27.50	372.60		
							DIFFERENCE	\$ 6.50	\$ 0.00	\$ 0.00	\$ -38.00	\$ 0.00	\$ 1.00	\$ -30.50		
		DIFFERENCE --	\$ -30.50	-72.50	\$ -0.05	-0.12	0.00	CURRENT 87	759.70	1405.60	-2.00	0.00	-503.90	18.60	-23.60	1654.40
		-- %	-1%	-1%	-1%	-1%	0%	CURRENT 86	749.00	1392.10	-2.00	0.00	-405.40	18.60	-25.40	1726.90
								DIFFERENCE	10.70	13.50	0.00	0.00	-98.50	0.00	1.80	-72.50
MLRS - T&W (DEV COST ONLY)	12/31/87(PE)	\$ 265.80	314.60				CONSTANT 87	\$ 0.00	\$ 14.30	\$ 1.30	\$ 59.50	\$ 0.00	\$ 0.00	\$ 75.10		
	12/31/86	267.60	314.60				CONSTANT 86	0.00	14.30	1.30	61.30	0.00	0.00	76.90		
							DIFFERENCE	\$ 0.00	\$ 0.00	\$ 0.00	\$ -1.80	\$ 0.00	\$ 0.00	\$ -1.80		
		DIFFERENCE --	\$ -1.80	0.00				CURRENT 87	-11.00	0.00	22.30	1.50	90.60	0.00	0.00	103.40
	-- %	-1%	0%				CURRENT 86	-12.00	0.00	22.30	1.50	91.60	0.00	0.00	103.40	
							DIFFERENCE	1.00	0.00	0.00	0.00	-1.00	0.00	0.00	0.00	

----- TOTAL PROGRAM ESTIMATES -----

----- DIFFERENCE BY REPORTED CAUSE -----

MISSILES	DATE OF ESTIMATE	PROGRAM COST		UNIT COST		QUANTITY	DIFFERENCE BY REPORTED CAUSE								
		CONSTANT	CURRENT	CONSTANT	CURRENT		ECONOMIC	QUANTITY	SCHEDULE	ENGRG	ESTIMATE	OTHER	SUPPORT	TOTAL	
Patriot	12/31/87(DE)	\$ 4947.20	12527.30	\$ 45.81	115.99	108.00	CONSTANT 87	\$ -1100.20	\$ 674.70	\$ -290.20	\$ 875.40	\$ 24.50	\$ 495.60	\$ 679.80	
	12/31/86	4813.50	12605.20	44.57	116.71	108.00	CONSTANT 86	-1100.20	674.70	-290.20	726.90	24.50	510.40	546.10	
							DIFFERENCE	\$ 0.00	\$ 0.00	\$ 0.00	\$ 148.50	\$ 0.00	\$ -14.80	\$ 133.70	
	DIFFERENCE	-- \$ 133.70	-77.90	\$ 1.24	-0.72	0.00	CURRENT 87	2073.20	-816.50	2349.70	-103.20	2374.40	27.60	1381.60	7266.80
		-- % 3%	-1%	3%	-1%	0%	CURRENT 86	2055.90	-816.50	2349.70	-103.20	2418.10	27.60	1433.10	7364.70
						DIFFERENCE	17.30	0.00	0.00	0.00	-43.70	0.00	-51.50	-77.90	
Stinger	12/31/87(DE)	\$ 1089.30	3279.20	\$ 0.022	0.06	50584.00	CONSTANT 87	\$ 84.70	\$ 178.90	\$ 84.30	\$ 299.00	\$ 6.00	\$ 25.50	\$ 678.40	
	12/31/86	1094.20	3276.50	0.022	0.06	50584.00	CONSTANT 86	84.70	178.90	82.90	305.30	6.00	25.50	683.30	
							DIFFERENCE	\$ 0.00	\$ 0.00	\$ 1.40	\$ -6.30	\$ 0.00	\$ 0.00	\$ -4.90	
	DIFFERENCE	-- \$ -4.90	2.70	\$ 0.000	0.00	0.00	CURRENT 87	437.20	283.70	841.00	205.10	963.40	7.30	67.70	2805.40
		-- % 0%	0%	0%	0%	0%	CURRENT 86	419.80	283.70	841.00	201.30	981.90	7.30	67.70	2802.70
						DIFFERENCE	17.40	0.00	0.00	3.80	-18.50	0.00	0.00	2.70	
TOW 2	12/31/87(PdE)	\$ 2215.50	2394.20	\$ 0.0176	0.0190	125969.0	CONSTANT 87	\$ -140.80	\$ 33.80	\$ 181.90	\$ -130.00	\$ 0.00	\$ -31.50	\$ -86.60	
	12/31/86	2257.00	2444.50	0.0179	0.0194	125969.0	CONSTANT 86	-140.80	37.30	212.90	-131.20	0.00	-23.30	-45.10	
							DIFFERENCE	\$ 0.00	\$ -3.50	\$ -31.00	\$ 1.20	\$ 0.00	\$ -8.20	\$ -41.50	
	DIFFERENCE	-- \$ -41.50	-50.30	\$ -0.0003	-0.0004	0.0	CURRENT 87	-150.80	-202.30	102.40	236.50	-194.30	0.00	-21.10	-229.60
		-- % -2%	-2%	-2%	-2%	0%	CURRENT 86	-155.40	-202.30	112.30	278.60	-200.70	0.00	-11.80	-179.30
						DIFFERENCE	4.60	0.00	-9.90	-42.10	6.40	0.00	-9.30	-50.30	
TOTAL MISSILES	12/31/87		27188.70		125.70	227238.0	CURRENT 87	3243.4	1132.8	3763.3	657.2	3003.8	53.5	1405.7	13259.70
	12/31/86		27392.60		126.56	227238.0	CURRENT 86	3186.3	1119.3	3778.8	695.5	3166.8	53.5	1463.4	13463.60
	DIFFERENCE	- \$	\$ -203.90		\$ -0.86	0.00	DIFFERENCE	\$ 57.10	\$ 13.50	\$ -15.50	\$ -38.30	\$ -163.00	\$ 0.00	\$ -57.70	\$ -203.90
	- %	-1%		-1%	0%										

*INCLUDES ONLY THOSE SYSTEMS ON BOTH THE 1986 AND 1987 SARS.

OTHER PROGRAMS

Table II.9 shows the Army's current total program estimate for its four programs listed in the SARs' other programs. These programs are estimated to cost \$14.5 billion (in current dollars). This represents a decrease of approximately \$0.5 billion (in current dollars), or 4 percent, from the baseline estimate.

TABLE II. 9. ARMY SELECTED ACQUISITION REPORTS
COST CHANGE FROM BASE YEAR TO DECEMBER 31, 1987
Dollars in Millions

OTHER	DATE OF ESTIMATE	PROGRAM COST			UNIT COST			DIFFERENCE BY REPORTED CAUSE							
		CONSTANT	CURRENT	%	CONSTANT	CURRENT	%	ECONOMIC	QUANTITY	SCHEDULE	ENGRG	ESTIMATE	OTHER	SUPPORT	TOTAL
ADDS	12/31/87 (PE)	\$ 2470.30	\$ 3402.90	\$ 17.65	\$ 24.31	140.00									
	BASE YEAR (83)	1981.50	3038.20	22.52	34.53	88.00									
	DIFFERENCE	-\$ 488.80	\$ 364.70	-4.87	-10.22	52.00	CONSTANT \$	\$ 482.60	\$ 0.00	\$ -312.00	\$ 318.20	\$ 0.00	\$ 0.00	\$ 488.80	
		25%	12%	-22%	-30%	59%	CURRENT \$	716.10	0.00	-437.40	476.60	0.00	0.00	364.70	
	ANNUAL AVERAGE GROWTH RATE	6%	3%	-6%	-8%	12%	CONSTANT %	24%	0%	-16%	16%	0%	0%	25%	
							CURRENT %	24%	0%	-14%	16%	0%	0%	12%	
COPPERHEAD	12/31/87 (OE)	\$ 706.00	1237.70	\$ 0.03	0.05	24866.00									
	BASE YEAR (75)	847.30	1240.70	0.01	0.01	133058.0									
	DIFFERENCE	-\$ 141.30	-3.00	\$ 0.02	0.04	-108192	CONSTANT \$	-583.90	149.40	16.20	261.50	4.60	10.90	-141.30	
		-17%	-0.2%	346%	434%	-81%	CURRENT \$	-1044.90	330.70	26.80	609.90	6.30	14.70	-3.00	
	ANNUAL AVERAGE GROWTH RATE	-2%	0.00%	13%	15%	-13%	CONSTANT %	-69%	18%	2%	31%	0.4%	1%	-17%	
							CURRENT %	-84%	27%	2%	49%	1%	1%	-0.2%	
MSE	12/31/87 (P/E)	\$ 4039.90	4652.30	\$ 80.80	93.05	50.00									
	BASE YEAR (86)	4428.50	5134.00	92.26	106.96	48.00									
	DIFFERENCE	-\$ 388.60	-481.70	-11.46	-13.91	2.00	CONSTANT \$	293.40	0.00	0.00	-682.00	0.00	0.00	-388.60	
		-9%	-9%	-12%	-13%	4%	CURRENT \$	-360.00	0.00	0.00	-814.90	0.00	0.00	-481.70	
	ANNUAL AVERAGE GROWTH RATE	-9%	-9%	-12%	-13%	4%	CONSTANT %	7%	0%	0%	-15%	0%	0%	-9%	
							CURRENT %	7%	0%	0%	-16%	0%	0%	-9%	
CRPV (ABUJILA)	12/31/87 (OE)	\$ 857.20	811.80	\$ 612.29	579.86	1.40									
	(TERMINATED; BASE YEAR (84)	2148.10	2410.00	123.45	138.51	17.40									
NOT INCLUDED															
IN TOTALS)	DIFFERENCE	-\$ 1290.90	-1598.20	\$ 488.83	441.35	-16.00	CONSTANT \$	-1107.50	19.00	-16.70	-51.40	-90.20	-44.10	-1290.90	
		-60%	-66%	396%	319%	-92%	CURRENT \$	-1311.00	62.60	-110.60	5.70	-110.10	-51.60	-1598.20	
	ANNUAL AVERAGE GROWTH RATE	-26%	-30%	71%	61%	-57%	CONSTANT %	-52%	1%	-1%	-2%	-4%	-2%	-60%	
							CURRENT %	-54%	3%	-5%	0%	-5%	-2%	-66%	

Three of the programs--Copperhead, MSE, and SINCGARS--reported total program cost decreases. These decreases range (in current dollars) from approximately \$4 million on the Copperhead program to approximately \$482 million on the MSE program. One program, ADDS, reported a total program cost increase (in current dollars) of approximately \$365 million.

The table also shows that reported cost increases (in current dollars) associated with scheduling, estimating, and other changes were offset by reported cost decreases (in current dollars) associated with economic, support, and engineering changes.

Figure II.9 shows the overall program cost changes for the Army's other programs in current dollars between the base year estimates and the current year estimates. Figure II.10 shows the same data as a percentage of the base year estimates. Both figures show that the costs (in current dollars) associated with scheduling changes were the main cause of cost growth on these programs. In addition, the figures show that the costs (in current dollars) associated with economic changes decreased.

Figure II.9: Army SARs Program Cost Change By Cause For Other Systems From Base Year Estimates To December 31, 1987

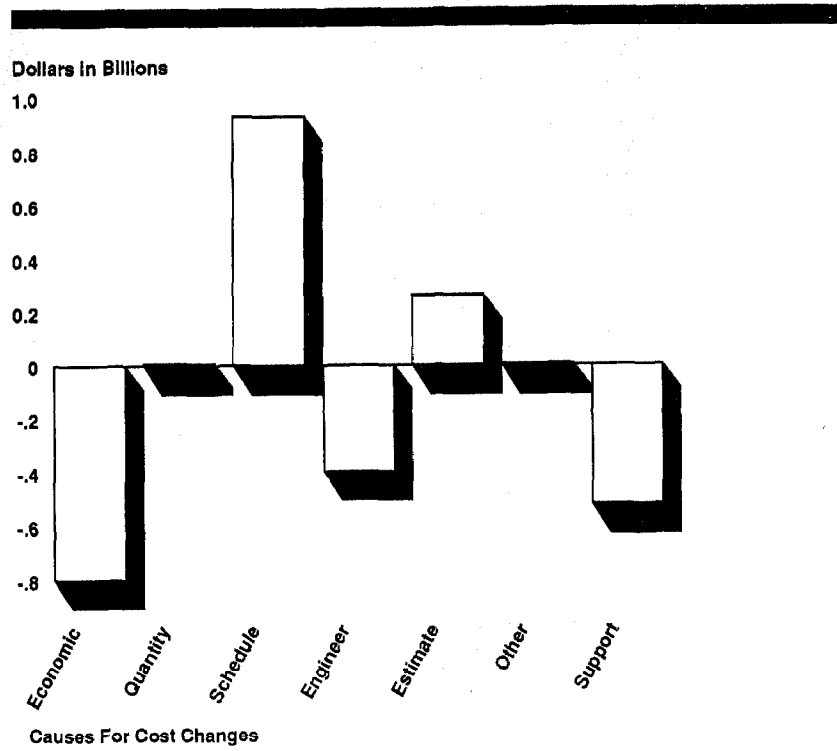


Figure II.10: Army SARs Program Cost Change By Cause For Other Systems From Base Year Estimates To December 31, 1987

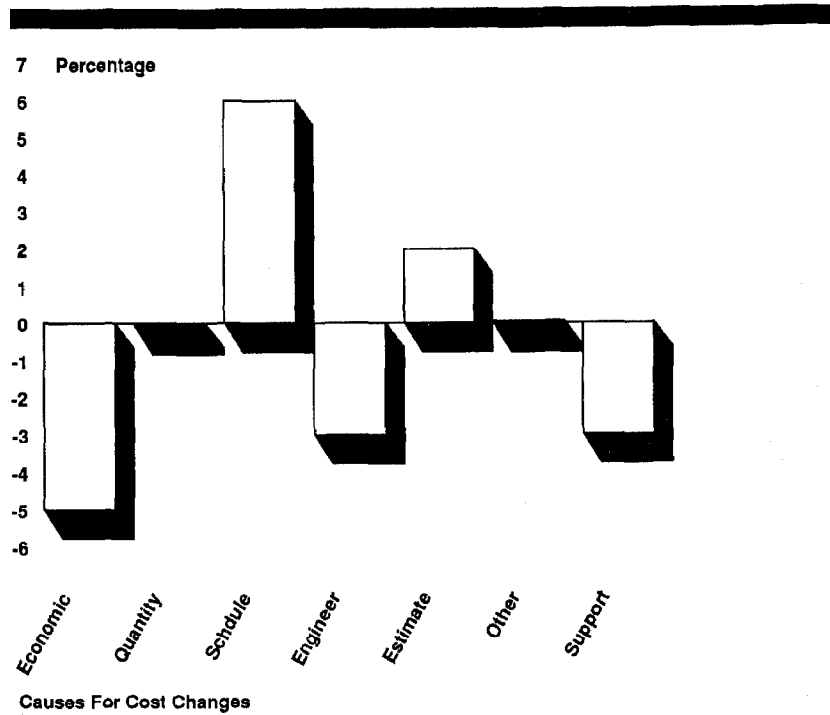


Table II.10 shows the difference in total program cost estimates between December 31, 1986, and December 31, 1987. For the programs common to both reports--ADDS, Copperhead, MSE, and SINGARS--the total cost estimate decreased by approximately \$1.1 billion (in current dollars). Two programs--SINGARS and Copperhead--reported decreases of approximately \$448 million and \$423 million, respectively. On the SINGARS program, estimating changes caused most of the decrease, while on the Copperhead program, quantity changes accounted for all of the decreases.

ARMY SELECTED ACQUISITION REPORTS
 COST CHANGE FROM DECEMBER 31, 1986 TO DECEMBER 31, 1987
 Dollars in Millions

TABLE II. 10.

OTHER*	DATE OF ESTIMATE	PROGRAM COST			UNIT COST			DIFFERENCE BY REPORTED CAUSE							
		CONSTANT	CURRENT	%	CONSTANT	CURRENT	%	ECONOMIC	QUANTITY	SCHEDULE	ENGRG	ESTIMATE	OTHER	SUPPORT	TOTAL
ADDS	12/31/87(PE)	\$ 2470.30	\$ 3402.90	17.45	\$ 24.31	140.00									
	12/31/86	2644.40	3615.30	18.11	24.76	146.00									
	DIFFERENCE	-174.10	-212.40	-8%	-0.47	-6.00									
		-1	-7%	-3%	-2%	-4%									
COPPERHEAD	12/31/87(PE)	\$ 706.00	1237.70	0.03	0.05	24866.00									
	12/31/86	879.30	1661.00	0.02	0.04	39521.00									
	DIFFERENCE	-173.30	-423.30	-28%	-0.01	-14655									
		-20%	-25.5%	28%	18%	-37%									
MSE	12/31/87(PE)	\$ 4039.90	4652.30	80.80	95.05	50.00									
	12/31/86	4061.20	4654.00	81.22	93.08	50.00									
	DIFFERENCE	-21.30	-1.70	-0.43	-0.03	0.00									
		-1%	0%	-1%	0%	0%									
CRPV (ABORTIA) (TERMINATED; NOT INCLUDED IN TOTALS)	12/31/87(PE)	\$ 857.20	811.80	612.29	579.86	1.40									
	12/31/86	1887.20	2119.50	157.27	176.63	12.00									
	DIFFERENCE	-1030.00	-1307.70	455.02	403.23	-10.60									
		-1	-62%	282%	228%	-88%									

----- TOTAL PROGRAM ESTIMATES -----

----- DIFFERENCE BY REPORTED CAUSE -----

OTHER	DATE OF ESTIMATE	PROGRAM COST		UNIT COST		QUANTITY	DIFFERENCE BY REPORTED CAUSE								
		CONSTANT	CURRENT	CONSTANT	CURRENT		ECONOMIC	QUANTITY	SCHEDULE	ENGRG	ESTIMATE	OTHER	SUPPORT	TOTAL	
SINGARS	12/31/87(PdE)	\$ 3864.90	5204.90	\$ 0.013	0.018	291647.0	CONSTANT 87	\$ -23.60	\$ 20.30	\$ 13.80	\$ 82.20	\$ 0.00	\$ -395.50	\$ -302.80	
	12/31/86	4170.10	5652.40	0.014	0.019	291647.0	CONSTANT 86	-23.60	20.30	7.00	368.90	0.00	-370.20	2.40	
	DIFFERENCE --	\$ -305.20	-447.50	\$ -0.001	-0.002	0.00	DIFFERENCE	\$ 0.00	\$ 0.00	\$ 6.80	\$ -286.70	\$ 0.00	\$ -25.30	\$ -305.20	
	-- %	-7%	-8%	-7%	-8%	0.000	CURRENT 87	-434.60	-38.00	598.00	16.30	-11.40	0.00	-537.10	-406.80
TOTAL OTHER	12/31/87		14497.80		117.42	316703.0	CURRENT 86	-445.20	-38.00	625.10	8.70	397.30	0.00	-507.20	40.70
	12/31/86		15582.70		117.90	331364.0	DIFFERENCE	10.60	0.00	-27.10	7.60	-408.70	0.00	-29.90	-447.50
	DIFFERENCE --	\$	\$ -1084.90	\$	-0.48	-14661	CURRENT 87	-798.50	-6.80	928.70	-394.30	260.20	6.30	-522.40	-526.80
	-- %		-7%	0%	-4%		CURRENT 86	-836.50	621.00	955.80	-222.60	526.60	6.30	-492.50	558.10
						DIFFERENCE	\$ 38.00	\$ -627.80	\$ -27.10	\$ -171.70	\$ -266.40	\$ 0.00	\$ -29.90	\$ -1064.90	

*INCLUDES ONLY THOSE SYSTEMS ON BOTH THE 1986 AND 1987 SARS.

NAVY SARSSTATUS AS OF DECEMBER 31, 1987

Table III.1 and figures III.1 and III.2 contain overall summary information on program cost and program quantity changes on Navy major acquisitions as reported in the SARS. The table shows total program and unit cost changes between the base year program estimates and the current program estimates by major class of weapon system as of December 31, 1987. The major classes of weapon systems used are aircraft, missiles, ships, and other systems. The table also shows an estimated annual average growth rate from the base year to December 31, 1987, for each class. This rate varies between classes of systems. Despite this, the rate may be useful for comparing weapon systems within the same class. Figures III.1 and III.2 show the reported causes for the cost changes, first in terms of current dollars, and then in terms of the percent change from the base year.

TABLE III.1. NAVY SELECTED ACQUISITION REPORT
 COST CHANGE FROM BASE YEAR TO DECEMBER 31, 1987
 Dollars in Millions

CATEGORY	DATE OF ESTIMATE	PROGRAM COST		UNIT COST		DIFFERENCE BY REPORTED CAUSE											
		CURRENT	ESTIMATE	CURRENT	ESTIMATE	ECONOMIC	QUANTITY	SCHEDULE	ENBRG	ESTIMATE	OTHER	SUPPORT	TOTAL				
TOTAL AIRCRAFT	12/31/87	\$129412.4	\$99999.90	\$492.78	\$3971.00												
BASE YEAR				533.02	3396.00												
DIFFERENCE - \$		29412.50		-40.74	575.00												
- %		29%		-8%	17%												
ANNUAL AVERAGE GROWTH RATE		8%		-4%	12%												
TOTAL MISSILES	12/31/87	85349.00	68597.60	\$47.43	\$49244.00												
BASE YEAR				56.98	41880.00												
DIFFERENCE - \$		16755.40		-7.55	7364.00												
- %		24%		-13%	18%												
ANNUAL AVERAGE GROWTH RATE		3%		-18%	2%												
TOTAL SHIPS	12/31/87	125688.4	84888.10	\$10391.12	\$338.00												
BASE YEAR				13462.76	282.00												
DIFFERENCE - \$		40866.30		-3081.64	56.00												
- %		48%		-23%	20%												
ANNUAL AVERAGE GROWTH RATE		4%		-3%	2%												
TOTAL OTHER	12/31/87	19590.30	23524.80	\$1556.13	\$857.00												
BASE YEAR				1661.95	825.00												
DIFFERENCE - \$		-3934.50		-105.81	32.00												
- %		-17%		-6%	4%												
ANNUAL AVERAGE GROWTH RATE		-2%		-1%	1%												
DIFFERENCE BY REPORTED CAUSE																	
ECONOMIC						5%	11%	8%	5%	-5%	0.81%	6%	29%				
QUANTITY																	
SCHEDULE																	
ENBRG																	
ESTIMATE																	
OTHER																	
SUPPORT																	
TOTAL																	

----- TOTAL PROGRAM ESTIMATES -----

----- DIFFERENCE BY REPORTED CAUSE -----

CATEGORY	DATE OF ESTIMATE	PROGRAM COST			DIFFERENCE BY REPORTED CAUSE								
		CURRENT	CURRENT	QUANTITY	ECONOMIC	QUANTITY	SCHEDULE	ENGRG	ESTIMATE	OTHER	SUPPORT	TOTAL	
TOTAL													
NAVY	12/31/87	359920.1											
	BASE YEAR	277006.4			CURRENT \$	\$-17468.6	\$82126.80	\$12499.90	\$11796.50	\$-15004.0	\$-2174.30	\$11137.40	\$82913.70
	DIFFERENCE - \$	\$82913.70			CURRENT %	-6%	30%	5%	4%	-5%	-0.8%	4%	30%
	- %	30%											

More specifically, table III.1 shows that the current total program cost estimate (in current dollars) for all Navy SAR programs is approximately \$359.9 billion. This represents an increase of approximately \$82.9 billion (in current dollars), or 30 percent, when compared with the baseline estimates. Three of the classes--aircraft, missiles, and ships--reported total program cost increases. These increases (in current dollars) ranged from approximately \$16.8 billion for missiles to approximately \$40.7 billion for ships. One class--other programs--reports a total program cost decrease of approximately \$3.9 billion (in current dollars).

Table III.1 also shows the reported causes for the cost changes. For example:

- Costs associated with quantity changes account for approximately \$82.1 billion (in current dollars) of total program cost growth.
- Overall cost growth is offset in part by decreases due to economic factors, estimating, and other factors. These three factors, when combined, reduced overall total program cost growth by approximately \$34.7 billion (in current dollars).
- Within the ship class, costs associated with quantity changes accounted for approximately \$52.6 billion in cost increases (in current dollars) which was offset, in part, by a decrease of approximately \$10.9 billion (in current dollars) due to economic factors.
- Within the aircraft class, costs associated with quantity changes caused the largest increase--approximately \$10.9 billion (in current dollars), and the overall increase was offset in part by a decrease of approximately \$5 billion (in current dollars) associated with estimating factors. Also, costs associated with economic factors increased the total program cost by approximately \$4.7 billion (in current dollars).
- Within the other class, costs associated with changes in quantity accounted for approximately \$1.3 billion (in current dollars) of the \$3.9 billion decrease reported.

Figure III.1 shows the overall Navy program cost changes, as given in table III.1, in current dollars between the base year and the current year estimates. Figure III.2 shows the same data as a percent of the base year estimate. Both figures show that

costs associated with quantity changes were the biggest cause of cost growth and that economic, estimate, and other factors have resulted in cost decreases.

Figure III.1: Navy SARs Program Cost Change By Cause For Weapon Systems From Base Year Estimates To December 31, 1987

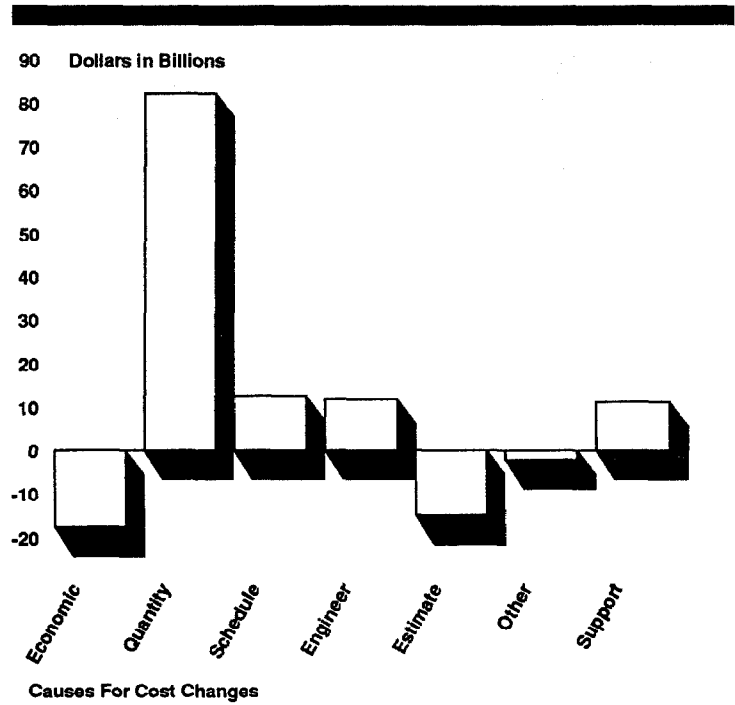


Figure III.2: Navy SARs Program Cost Change By Cause For Weapon Systems From Base Year Estimates To December 31, 1987

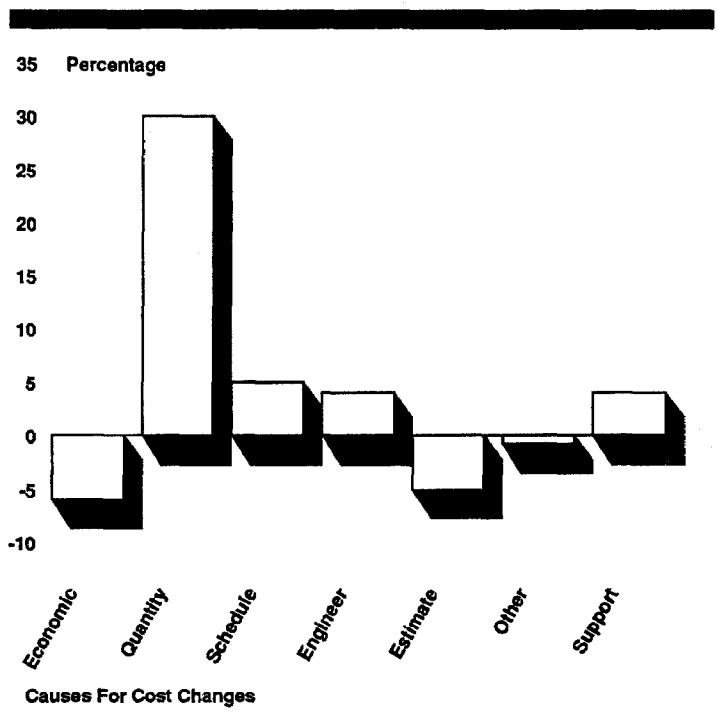


Table III.2 shows that the Navy's SAR systems have reported an overall program cost decrease of approximately \$9.7 billion (in current dollars), or 4 percent, between December 31, 1986, and December 31, 1987, for the systems common to both reporting periods. In looking at the reported causes for the cost changes, the table shows that cost increases caused by economic and schedule factors were offset by decreases in the other categories.

TABLE III.2. NAVY SELECTED ACQUISITION REPORTS
 COST CHANGE FROM DECEMBER 31, 1986 TO DECEMBER 31, 1987
 Dollars in Millions

CATEGORY#	DATE OF ESTIMATE	TOTAL PROGRAM ESTIMATES			DIFFERENCE BY REPORTED CAUSE								
		PROGRAM COST		UNIT COST	ECONOMIC	QUANTITY	SCHEDULE	ENGRG	ESTIMATE	OTHER	SUPPORT	TOTAL	
		CURRENT	CURRENT	QUANTITY									
TOTAL AIRCRAFT	12/31/87	\$105746.1	\$ 458.38	\$ 3283.0	CURRENT 87	\$ 4481.60	\$17235.60	\$ 7536.90	\$ 5353.00	\$ -5155.80	\$ 9.50	\$ 5947.70	\$135408.50
	12/31/86	109452.1	485.36	3310.0	CURRENT 86	2437.40	17872.70	7761.10	5384.10	-2306.40	9.50	7956.10	39114.50
	DIFFERENCE \$	-3706	-26.9779	-27	DIFFERENCE	2044.2	-637.1	-224.2	-31.1	-2849.4	0	-2008.4	-3706.0
	%	-3%	-6%	-1%									
TOTAL MISSILES	12/31/87	77606.90	48.53	38501.00	CURRENT 87	-10527.0	19314.80	2708.70	2590.70	-3803.30	41.00	2356.40	12681.30
	12/31/86	82302.30	49.23	34351.00	CURRENT 86	-10970.8	21661.90	1899.80	2585.00	-703.70	41.00	2863.50	17376.70
	DIFFERENCE - \$	-4695.4	-0.69401	-3850	DIFFERENCE	443.8	-2347.1	808.9	5.7	-3099.6	0	-507.1	-4695.4
	%	-6%	-1%	-11%									
TOTAL SHIPS	12/31/87	95757.10	9377.34	138.00	CURRENT 87	-11051.7	52559.90	426.20	3025.90	-6439.40	412.80	2095.00	41028.70
	12/31/86	96889.00	9951.31	104.00	CURRENT 86	-10983.1	52559.90	527.00	3025.90	-5474.50	412.80	2092.60	42160.60
	DIFFERENCE \$	-1131.90	-573.98	34.00	DIFFERENCE	-68.60	0.00	-100.80	0.00	-964.90	0.00	2.40	-1131.90
	%	-1%	-6%	33%									
TOTAL OTHER	12/31/87	15152.30	1545.84	857.00	CURRENT 87	-1316.80	-1291.90	280.20	576.30	250.80	-2637.60	407.70	-3731.3
	12/31/86	15336.50	1439.80	843.00	CURRENT 86	-1360.00	-1246.40	273.40	578.00	429.40	-2637.60	416.10	-3547.1
	DIFFERENCE \$	-184.20	106.04	14.00	DIFFERENCE	43.20	-45.50	6.80	-1.70	-178.60	0.00	-8.40	-184.2
	%	-1%	7%	2%									
TOTAL NAVY	12/31/87	294262.4	11430.08	34779	CURRENT 87	-18413.9	87818.4	10952.0	11545.9	-15147.7	-2174.3	10806.8	85387.2
	12/31/86	303979.9	11925.69	38608	CURRENT 86	-20876.5	90848.1	10461.3	11573.0	-8055.2	-2174.3	13328.3	95104.7
	DIFFERENCE \$	\$ -9717.5	\$ -495.61	\$ -3829.00	DIFFERENCE	\$ 2462.60	\$ -3029.7	\$ 490.70	\$ -27.10	\$ -7092.5	\$ 0.00	\$ -2521.50	\$ -9717.5
	%	-3%	-4%	-10%									

*INCLUDES ONLY THOSE SYSTEMS ON BOTH THE 1986 AND 1987 SARS.
 DOES NOT INCLUDE SYSTEMS THAT HAD CHANGES IN THE BASE YEAR ESTIMATES BETWEEN 1986 & 1987.

The remaining discussion of the Navy programs focuses on the individual classes of systems. Each class is discussed separately.

AIRCRAFT PROGRAMS

Table III.3 shows the Navy's current estimate for its 12 aircraft programs contained in its SARs. These programs are currently estimated to cost \$129.4 billion (in current dollars). This represents an increase of approximately \$29.4 billion (in current dollars), or 29 percent, over the baseline estimate.

TABLE III. 3.

NAVY SELECTED ACQUISITION REPORT
COST CHANGE FROM BASE YEAR TO DECEMBER 31, 1987

Dollars in Millions

AIRCRAFT =====	----- TOTAL PROGRAM ESTIMATES -----						----- DIFFERENCE BY REPORTED CAUSE -----								
	DATE OF ESTIMATE =====	PROGRAM COST		UNIT COST		QUANTITY	ECONOMIC	QUANTITY	SCHEDULE	ENGRG	ESTIMATE	OTHER	SUPPORT	TOTAL	
		CONSTANT	CURRENT	CONSTANT	CURRENT										
A-6E/A-6 UPGRADE	12/31/87(P&E)	\$ 8729.10	\$ 8464.60	\$ 24.32	\$ 23.58	359.00									
	BASE YEAR (84)	3102.20	3224.40	17.93	18.64	173.00									
	DIFFERENCE --	\$ 5626.90	5240.20	\$ 6.38	4.94	186.00	CONSTANT \$	\$ 3118.70	\$ 0.00	\$ 763.10	\$ 354.60	\$ 0.00	\$ 1390.50	\$ 5626.90	
	-- %	181%	163%	36%	27%	108%	CURRENT \$	\$ 145.70	3426.80	0.00	834.90	-588.90	0.00	1421.70	5240.20
	ANNUAL AVERAGE						CONSTANT %		101%	0%	25%	11%	0%	45%	181%
	GROWTH RATE	41%	38%	11%	8%	28%	CURRENT %	5%	106%	0%	26%	-18%	0%	44%	163%
AV-8B	12/31/87(DE)	\$ 4756.60	8269.40	\$ 16.87	29.32	282.00									
	BASE YEAR (79)	5740.60	9125.50	16.79	26.68	342.00									
	DIFFERENCE --	\$ -984.00	-856.10	\$ 0.08	2.64	-60.00	CONSTANT \$		-580.50	714.20	346.20	-1510.50	0.00	46.60	-984.00
	-- %	-17%	-9%	0.5%	10%	-18%	CURRENT \$	-743.70	-1473.70	1410.80	732.50	-938.80	0.00	156.80	-856.10
	ANNUAL AVERAGE						CONSTANT %		-10%	12%	6%	-26%	0%	1%	-17%
	GROWTH RATE	-2%	-1%	0.1%	1%	-2.4%	CURRENT %	-8%	-16%	15%	8%	-10%	0%	2%	-9%
C/MH-53E	12/31/87(DE)	\$ 1265.70	3001.10	\$ 8.27	19.62	153.00									
	BASE YEAR (73)	464.40	578.40	6.28	7.82	74.00									
	DIFFERENCE --	\$ 801.30	2422.70	\$ 2.00	11.80	79.00	CONSTANT \$		606.90	34.80	173.20	-199.40	2.40	183.40	801.30
	-- %	173%	419%	32%	151%	107%	CURRENT \$	-151.70	2169.60	65.40	457.30	-693.80	3.00	572.90	2422.70
	ANNUAL AVERAGE						CONSTANT %		131%	7%	37%	-43%	0%	39%	173%
	GROWTH RATE	7%	12%	2%	7%	5%	CURRENT %	-26%	375%	11%	79%	-120%	174%	99%	419%
E-2C	12/31/87(P&E)	\$ 6266.70	6824.30	\$ 43.78	47.72	143.00									
	BASE YEAR (85)	5398.00	5921.50	42.50	46.63	127.00									
	DIFFERENCE --	\$ 862.70	902.80	\$ 1.28	1.10	16.00	CONSTANT \$		534.30	0.00	61.70	158.70	0.00	108.00	862.70
	-- %	16%	15%	3%	2%	13%	CURRENT \$	-105.30	622.70	0.00	39.40	216.30	0.00	129.70	902.80
	ANNUAL AVERAGE						CONSTANT %		10%	0%	1%	3%	0%	2%	16%
	GROWTH RATE	8%	7%	1%	1%	6%	CURRENT %	-2%	11%	0%	1%	4%	0%	2%	15%

AIRCRAFT	DATE OF ESTIMATE	TOTAL PROGRAM ESTIMATES				DIFFERENCE BY REPORTED CAUSE															
		PROGRAM COST		UNIT COST		ECONOMIC	QUANTITY	SCHEDULE	EMBRG	ESTIMATE	OTHER	SUPPORT	TOTAL								
		CONSTANT	CURRENT	CONSTANT	CURRENT																
E-6A	12/31/87 (DE)	\$ 1432.60	1900.20	\$ 89.54	118.76																
	BASE YEAR (82)	1584.70	2251.70	105.65	150.11																
	DIFFERENCE -- %	-152.10	-551.50	-16.11	-31.35																
	ANNUAL AVERAGE GROWTH RATE	-2%	-3%	-3%	-5%																
	CONSTANT \$					-223.70	41.10	-5.30	-9.50	26.30	0.00	-198.70	-152.10								
CURRENT \$						61.20	-5.50	47.60	88.60	0.00	-519.70	-351.50									
CONSTANT %					-10%	3%	-0.3%	-1%	1%	0%	-13%	-10%									
CURRENT %						3%	-0.2%	2%	4%	0%	-14%	-16%									
E-68	12/31/87 (PDE)	\$ 3876.10	4587.20	\$ 44.61	53.34																
	BASE YEAR (84)	2239.60	2747.80	58.74	72.31																
	DIFFERENCE -- %	-1576.50	-1839.40	-14.33	-18.97																
	ANNUAL AVERAGE GROWTH RATE	26%	19%	-9%	-10%																
	CONSTANT \$					577.80	1551.80	53.20	0.00	-608.40	0.00	299.90	1596.50								
CURRENT \$						2369.40	67.80	0.00	-1593.20	0.00	417.60	1839.40									
CONSTANT %					21%	83%	2%	0%	-27%	0%	13%	71%									
CURRENT %						86%	2%	0%	-58%	0%	15%	67%									
F-14D	12/31/87 (DE)	\$ 17798.30	22994.60	\$ 33.60	43.63																
	BASE YEAR (86)	15103.20	19219.80	47.68	63.22																
	DIFFERENCE -- %	2605.10	3774.80	-16.88	-19.59																
	ANNUAL AVERAGE GROWTH RATE	18%	19%	-32%	-31%																
	CONSTANT \$					164.80	6852.80	-487.70	174.40	-3842.60	0.00	-91.80	2605.10								
CURRENT \$						9361.80	-881.80	221.80	-5200.50	0.00	-91.30	3774.80									
CONSTANT %					1%	45%	-3%	1%	-25%	0%	-1%	17%									
CURRENT %						50%	-5%	1%	-27%	0%	0%	20%									
F-14B	12/31/87 (DE)	\$ 14077.10	37265.40	\$ 12.05	31.91																
	BASE YEAR (75)	8016.80	12875.30	7.89	15.88																
	DIFFERENCE -- %	6060.30	24390.10	2.17	16.03																
	ANNUAL AVERAGE GROWTH RATE	5%	9%	2%	6%																
	CONSTANT \$					6190.50	1768.10	784.30	742.80	1505.60	4.50	1155.20	6060.30								
CURRENT \$						2471.70	5661.10	2221.70	4338.70	6.50	3459.40	24390.10									
CONSTANT %					48%	22%	10%	9%	20%	0.1%	14%	76%									
CURRENT %						19%	44%	18%	34%	86%	27%	189%									

AIRCRAFT	TOTAL PROGRAM ESTIMATES				DIFFERENCE BY REPORTED CAUSE								
	DATE OF ESTIMATE	PROGRAM COST		UNIT COST		ECONOMIC	QUANTITY	SCHEDULE	ENGRG	ESTIMATE	OTHER	SUPPORT	TOTAL
		CONSTANT	CURRENT	CONSTANT	CURRENT								
LAMPS MK III	12/31/87 (BE)	\$ 2734.80	\$ 5840.60	\$ 15.09	27.95								
	BASE YEAR (76)	2396.70	3907.60	11.47	18.70								
	DIFFERENCE -- %	14%	49%	14%	47%								
	ANNUAL AVERAGE GROWTH RATE	1%	4%	1%	4%								
P-3C	12/31/87 (PE)	\$ 1578.80	\$ 1769.40	\$ 41.55	46.56								
	BASE YEAR (84)	3735.90	5073.50	46.70	62.80								
	DIFFERENCE -- %	-58%	-65%	-11%	-26%								
	ANNUAL AVERAGE GROWTH RATE	-25%	-29%	-4%	-9.5%								
T45TS	12/31/87 (PE)	\$ 3720.00	\$ 4829.30	\$ 12.32	15.97								
	BASE YEAR (84)	3754.60	5462.00	12.35	17.97								
	DIFFERENCE -- %	-1%	-12%	-0.3%	-11%								
	ANNUAL AVERAGE GROWTH RATE	-0.3%	-4%	-0.1%	-4%								
V-22 (GVK)	12/31/87 (BE)	\$ 18518.80	\$ 23666.30	\$ 26.92	34.40								
	BASE YEAR (84)	23073.00	29662.30	25.11	32.28								
	DIFFERENCE -- %	-20%	-20%	7%	7%								
	ANNUAL AVERAGE GROWTH RATE	-7%	-7%	7%	7%								

----- TOTAL PROGRAM ESTIMATES -----						----- DIFFERENCE BY REPORTED CAUSE -----									
AIRCRAFT	DATE OF ESTIMATE	PROGRAM COST		UNIT COST		QUANTITY	ECONOMIC	QUANTITY	SCHEDULE	ENGRG	ESTIMATE	OTHER	SUPPORT	TOTAL	
		CONSTANT	CURRENT	CONSTANT	CURRENT										
TOTAL															
AIRCRAFT	12/31/87	\$129412.4		\$ 492.78	3971.00										
	BASE YEARS	99999.90		533.02	3396.00										
	DIFFERENCE - \$	\$29412.50		\$ -40.24	575.00										
	- %	29%		-8%	17%	CURRENT \$	\$ 4698.70	\$10927.40	\$ 7537.50	\$ 5353.00	\$-5023.90	\$ 9.50	\$ 5910.30	\$29412.50	
	ANNUAL AVERAGE GROWTH RATE		8%		-4%	12%	CURRENT %	5%	11%	6%	5%	-5%	0.01%	6%	29%

Five programs, the AV-8B, E-6A, P-3C, T45TS, and the V-22(JVX) had total cost decreases ranging from \$351 million for the E-6A to nearly \$6 billion for the V-22(JVX).

Seven programs--A-6, C/MH-53, E-2C, E-6B, F-14, F/A-18, and LAMPS MK III--reported total program cost increases. These increases range (in current dollars) from approximately \$0.9 billion on the E-2C program to approximately \$24.4 billion on the F/A-18 program. The F/A-18 program data showed that although the total program quantities have increased by approximately 44 percent, the total program unit costs (in current dollars) have increased by approximately 101 percent. In addition, costs on this program associated with economic and schedule factors accounted for approximately \$11.8 billion of the \$24.4 billion total program cost increase (in current dollars).

Overall, the table shows that the overall increase was offset, in part, by a decrease of approximately \$5 billion (in current dollars) associated with estimating changes.

Figure III.3 shows the overall program cost changes for the Navy in current dollars between the base year estimate and the current year estimates. Figure III.4 portrays the same data as a percentage of the base year estimates. Both figures show that quantity changes are the main cause for cost growth. The figures also suggest that costs associated with all factors, except estimating, have contributed to overall program cost growth for Navy aircraft programs. In addition, the figures show that the overall increase was offset, in part, by a decrease of approximately \$5 billion (in current dollars) associated with estimating factors.

Figure III.3: Navy SARs Program Cost Change By Cause For Aircraft Systems From Base Year Estimates To December 31, 1987

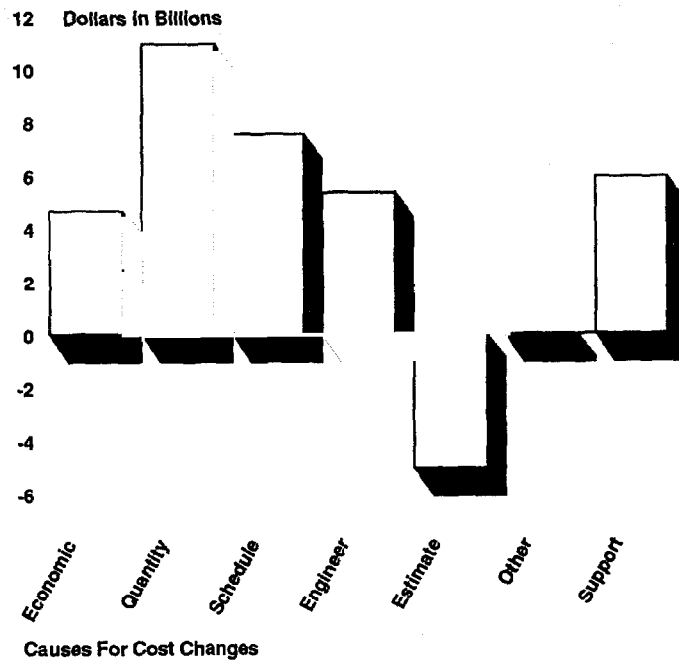


Figure III.4: Navy SARs Program Cost Change By Cause For Aircraft Systems From Base Year Estimates To December 31, 1987

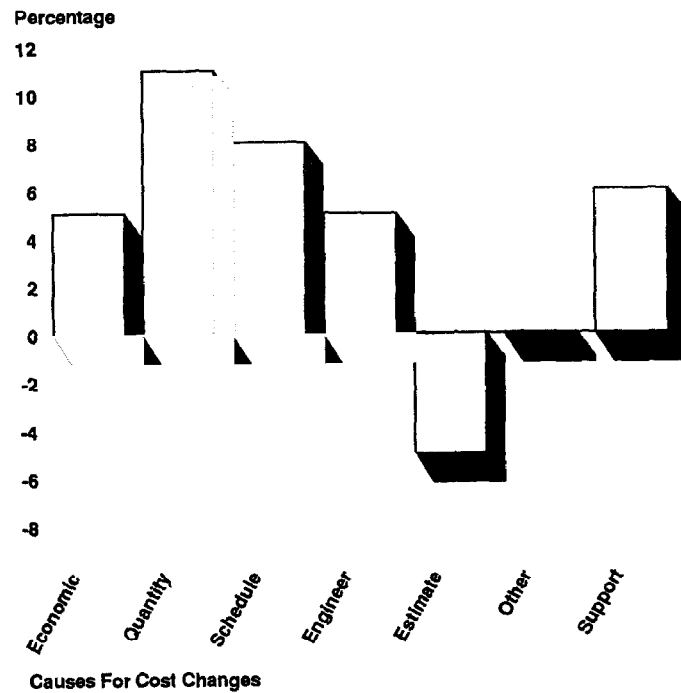


Table III.4 shows that the Navy's aircraft systems have incurred an overall program cost decrease of approximately \$3.7 billion (in current dollars) between December 31, 1986, and December 31, 1987, for the systems common to both reporting periods. The programs reporting the largest decreases were the A-6 program--\$2.2 billion, and the AV-8B program--\$1.2 billion. For the AV-8B program costs associated with changes in quantities accounted for most of the decrease. For the A-6 program, costs associated with estimating changes accounted for most of the decrease. In looking at the reported causes for cost changes, the table shows that costs (in current dollars) associated with economic changes --\$2 billion--were offset by decreases in the other categories.

TABLE III. 4.

NAVY SELECTED ACQUISITION REPORT
 COST CHANGE FROM DECEMBER 31, 1986 TO DECEMBER 31, 1987
 Dollars in Millions

AIRCRAFT#	DATE OF ESTIMATE	TOTAL PROGRAM ESTIMATES					DIFFERENCE BY REPORTED CAUSE								
		PROGRAM COST		UNIT COST		QUANTITY	ECONOMIC	QUANTITY	SCHEDULE	ENGRG	ESTIMATE	OTHER	SUPPORT	TOTAL	
		CONSTANT	CURRENT	CONSTANT	CURRENT										
A-6E/A-6 UPGRADE	12/31/87(PdE)	\$ 8729.10	\$ 8464.60	\$ 24.32	\$ 23.58	359.00	CONSTANT 87	\$ 3118.70	\$ 0.00	\$ 763.10	\$ 354.60	\$ 0.00	\$ 1390.50	\$ 5626.90	
	12/31/86	10574.70	10659.40	30.65	30.90	345.00	CONSTANT 86	2940.10	0.00	872.50	2219.30	0.00	1440.60	7472.50	
	DIFFERENCE	-- \$ -1845.60	-2194.80	\$ -6.34	-7.32	14.00	DIFFERENCE	\$ 178.60	\$ 0.00	\$ -109.40	\$ -1864.70	\$ 0.00	\$ -50.10	\$ -1845.60	
		-- % -17%	-21%	-21%	-24%	4%	CURRENT 87	\$ 145.70	\$ 3426.80	\$ 0.00	\$ 834.90	\$ -588.90	\$ 0.00	\$ 1421.70	\$ 5240.20
							CURRENT 86	-1189.80	3056.30	0.00	997.60	2237.10	0.00	2333.80	7435.00
						DIFFERENCE	1335.50	370.50	0.00	-162.70	-2826.00	0.00	-912.10	-2194.80	
AV-8B	12/31/87(PdE)	\$ 4756.60	8269.40	\$ 16.87	29.32	292.00	CONSTANT 87	\$ -580.50	\$ 714.20	\$ 346.20	\$ -1510.50	\$ 0.00	\$ 46.60	\$ -984.00	
	12/31/86	5300.90	9486.10	15.87	28.40	334.00	CONSTANT 86	-77.60	794.80	365.00	-1683.50	0.00	161.60	-439.70	
	DIFFERENCE	-- \$ -544.30	-1216.70	\$ 1.00	0.92	-52.00	DIFFERENCE	\$ -502.90	\$ -80.60	\$ -18.80	\$ 173.00	\$ 0.00	\$ -115.00	\$ -544.30	
		-- % -10%	-13%	6.3%	3%	-16%	CURRENT 87	-743.70	-1473.70	1410.80	732.50	-938.80	0.00	156.80	-856.10
							CURRENT 86	-952.20	-171.00	1565.50	733.10	-1205.50	0.00	450.70	360.60
						DIFFERENCE	208.50	-1302.70	-94.70	-0.60	266.70	0.00	-293.90	-1216.70	
C/MH-53E	12/31/87(PdE)	\$ 1265.70	3001.10	\$ 8.27	19.62	153.00	CONSTANT 87	\$ 606.90	\$ 34.80	\$ 173.20	\$ -199.40	\$ 2.40	\$ 183.40	\$ 801.30	
	12/31/86	1318.40	3181.10	8.40	20.26	157.00	CONSTANT 86	638.90	34.80	173.20	-191.80	2.40	196.50	854.00	
	DIFFERENCE	-- \$ -52.70	-180.00	\$ -0.12	-0.65	-4.00	DIFFERENCE	\$ -32.00	\$ 0.00	\$ 0.00	\$ -7.60	\$ 0.00	\$ -13.10	\$ -52.70	
		-- % -4%	-6%	-1%	-3%	-3%	CURRENT 87	-151.70	2169.60	65.40	457.30	-693.80	3.00	572.90	2422.70
							CURRENT 86	-157.70	2306.20	65.40	457.30	-696.90	3.00	625.40	2602.70
						DIFFERENCE	6.00	-136.60	0.00	0.00	3.10	0.00	-52.50	-180.00	
E-2C	12/31/87(PdE)	\$ 6260.70	6824.30	\$ 43.78	47.72	143.00	CONSTANT 87	\$ 534.30	\$ 0.00	\$ 61.70	\$ 158.70	\$ 0.00	\$ 108.00	\$ 862.70	
	12/31/86	6297.00	6825.90	44.03	47.73	143.00	CONSTANT 86	534.30	0.00	49.80	217.30	0.00	97.60	899.00	
	DIFFERENCE	-- \$ -36.30	-1.60	\$ -0.25	-0.01	0.00	DIFFERENCE	\$ 0.00	\$ 0.00	\$ 11.90	\$ -58.60	\$ 0.00	\$ 10.40	\$ -36.30	
		-- % -1%	0%	-1%	0%	0%	CURRENT 87	-105.30	622.70	0.00	39.40	216.30	0.00	129.70	902.80
							CURRENT 86	-130.30	622.70	0.00	24.60	285.20	0.00	102.20	904.40
						DIFFERENCE	25.00	0.00	0.00	14.80	-68.90	0.00	27.50	-1.60	

AIRCRAFT	DATE OF ESTIMATE	TOTAL PROGRAM ESTIMATES				DIFFERENCE BY REPORTED CAUSE									
		PROGRAM COST		UNIT COST		ECONOMIC	QUANTITY	SCHEDULE	ENGRG	ESTIMATE	OTHER	SUPPORT	TOTAL		
		CONSTANT	CURRENT	CONSTANT	CURRENT									QUANTITY	ESTIMATE
E-6A	12/31/87(OE)	\$ 1432.60	\$ 1900.20	\$ 89.54	118.76	16.00	\$ 41.10	\$ -5.30	\$ -9.50	\$ 20.30	\$ 0.00	\$ -198.70	\$ -152.10		
	12/31/86	1444.60	1927.90	90.29	120.49	16.00	41.10	-5.30	-9.50	10.40	0.00	-176.80	-140.10		
	DIFFERENCE	-- \$ -12.00	-27.70	-0.75	-1.73	0.00	0.00	0.00	0.00	9.90	0.00	-21.90	-12.00		
		-- % -1%	-1%	-1%	-1%	0%									
E-6B	12/31/87(OE)	\$ 3836.10	4587.20	44.61	53.34	86.00	\$ 1851.80	\$ 53.20	\$ 0.00	\$ -608.40	\$ 0.00	\$ 299.90	\$ 1596.50		
	12/31/86	3749.60	4442.80	46.81	55.54	80.00	1661.30	122.70	0.00	-574.60	0.00	295.60	1505.00		
	DIFFERENCE	-- \$ 91.50	144.40	-2.20	-2.20	6.00	190.50	-69.50	0.00	-33.80	0.00	4.30	91.50		
		-- % 2%	3%	-5%	-4%	8%									
F-14D	12/31/87(OE)	\$ 17708.30	22994.60	33.60	43.63	527.00	\$ 6852.80	\$ -467.70	\$ 174.40	\$ -3842.60	\$ 0.00	\$ -91.80	\$ 2605.10		
	12/31/86	17860.80	22940.00	33.89	43.53	527.00	6852.80	-457.80	174.40	-4332.90	0.00	521.10	2757.60		
	DIFFERENCE	-- \$ -152.50	54.60	-0.29	0.10	0.00	0.00	-29.90	0.00	490.30	0.00	-612.90	-152.50		
		-- % -1%	0%	-1%	0%	0%									
F/A-18	12/31/87(OE)	\$ 14877.10	37255.40	12.05	31.91	1168.00	\$ 1768.10	\$ 784.30	\$ 742.80	\$ 1695.60	\$ 4.50	\$ 1155.20	\$ 6060.50		
	12/31/86	14204.70	37475.40	12.16	32.09	1168.00	1768.10	784.30	726.30	1782.50	4.50	1122.40	6188.10		
	DIFFERENCE	-- \$ -127.60	-210.00	-0.11	-0.18	0.00	0.00	0.00	16.50	-176.90	0.00	32.80	-127.60		
		-- % -1%	-1%	-1%	-1%	0%									

		TOTAL PROGRAM ESTIMATES				DIFFERENCE BY REPORTED CAUSE															
		PROGRAM COST		UNIT COST		ECONOMIC		QUANTITY		SCHEDULE		ENGRG		ESTIMATE		OTHER		SUPPORT		TOTAL	
AIRCRAFT	DATE OF ESTIMATE	CONSTANT	CURRENT	CONSTANT	CURRENT	CONSTANT	CURRENT	CONSTANT	CURRENT	CONSTANT	CURRENT	CONSTANT	CURRENT	CONSTANT	CURRENT	CONSTANT	CURRENT	CONSTANT	CURRENT	CONSTANT	CURRENT
LAMPS MK III	12/31/87(PE)	\$ 2734.80	\$ 5840.60	\$ 13.09	27.95	209.00															
	12/31/86	2720.10	5782.80	13.20	28.07	206.00															
	DIFFERENCE	\$ 14.70	\$ 57.80	\$ -0.12	\$ -0.13	3.00															
		1%	1%	-1%	-1%	1%															
P-30	12/31/87(PE)	\$ 1578.80	\$ 1769.40	\$ 41.55	46.56	38.00															
	12/31/86	1783.60	2006.60	55.74	62.71	32.00															
	DIFFERENCE	\$ -204.80	\$ -237.20	\$ -14.19	\$ -16.14	6.00															
		-11%	-12%	-25%	-26%	19%															
F4UITS	12/31/87(PE)	\$ 3720.00	\$ 4824.30	\$ 12.32	15.99	302.00															
	12/31/86	3689.90	4724.10	12.15	15.64	302.00															
	DIFFERENCE	\$ 30.10	\$ 100.20	\$ 0.17	\$ 0.35	0.00															
		1%	2%	1.4%	2%	0%															
TOTAL AIRCRAFT	12/31/87	105746.1	105746.1	458.4	458.4	3283.0															
	12/31/86	109452.1	109452.1	485.4	485.4	3310.0															
	DIFFERENCE	\$ -3706.00	\$ -3706.00	\$ -26.98	\$ -26.98	-27.00															
		-3%	-3%	-6%	-6%	-1%															

*INCLUDES ONLY THOSE SYSTEMS ON BOTH THE 1986 AND 1987 SARCS.
 DOES NOT INCLUDE V-22 (JAV) DUE TO CHANGE IN BASE YEAR ESTIMATES BETWEEN 1986 & 1987.

MISSILE PROGRAMS

Table III.5 shows the Navy's current total program estimate for its 10 missile programs contained in its SARs. These programs are currently estimated to cost \$85.3 billion (in current dollars). This represents an increase of approximately \$16.8 billion (in current dollars), or 24 percent, over the baseline estimate.

TABLE III. 5. NAVY SELECTED ACQUISITION REPORTS
COST CHANGE FROM BASE YEAR TO DECEMBER 31, 1987
Dollars in Millions

MISSILES	DATE OF ESTIMATE	PROGRAM COST		UNIT COST		DIFFERENCE BY REPORTED CAUSE											
		CONSTANT	CURRENT	CONSTANT	CURRENT	ECONOMIC	QUANTITY	SCHEDULE	ENGRG	ESTIMATE	OTHER	SUPPORT	TOTAL				
		\$	\$	\$	\$	\$	%	\$	%	\$	%	\$	%	\$	%	\$	%
HARM	12/31/87(DE)	\$ 2562.00	\$ 4983.50	\$ 0.34	\$ 0.66												
	BASE YEAR (78)	1681.80	2409.90	0.25	0.36												
	DIFFERENCE	\$ 880.20	2573.60	\$ 0.09	0.30												
		-- %	52%	107%	35%	83%											
	ANNUAL AVERAGE GROWTH RATE	5%	8%	3%	7%												
HARPOON	12/31/87(DE)	\$ 1563.90	3824.60	\$ 0.39	0.95												
	BASE YEAR (78)	795.00	1031.80	0.27	0.35												
	DIFFERENCE	\$ 768.90	2792.80	\$ 0.12	0.60												
		-- %	97%	271%	43%	169%											
	ANNUAL AVERAGE GROWTH RATE	4%	8%	2%	6%												
MK-48 ABCAP	12/31/87(DE)	\$ 5192.70	5981.40	\$ 1.53	1.76												
	BASE YEAR (86)	5584.50	6314.00	1.84	1.86												
	DIFFERENCE	\$ -371.80	-332.60	\$ -0.11	-0.10												
		-- %	-7%	-5%	-7%	-5%											
	ANNUAL AVERAGE GROWTH RATE	-7%	-5%	-7%	-5%												
MK-50 (ALMT)	12/31/87(DE)	\$ 5107.00	6446.50														
	BASE YEAR (79)	4735.70	6653.70														
	DIFFERENCE	\$ 371.30	-7.20														
		-- %	8%	-0.1%													
	ANNUAL AVERAGE GROWTH RATE	1%	-0.01%														

APPENDIX III

APPENDIX III

MISSILES	DATE OF ESTIMATE	PROGRAM COST		UNIT COST		DIFFERENCE BY REPORTED CAUSE							
		CONSTANT	CURRENT	CONSTANT	CURRENT	ECONOMIC	QUANTITY	SCHEDULE	ENGRG	ESTIMATE	OTHER	SUPPORT	TOTAL
PHOENIX (AIM-54C)	12/31/87(0E)	\$ 1709.40	\$ 1671.10	\$ 0.50	1.08								
	BASE YEAR (77)	372.00	464.30	0.51	0.63								
	DIFFERENCE -- %	36%	26%	-1%	71%	-58s.20	1539.40	63.30	159.90	-854.00	20.50	108.30	1337.40
	ANNUAL AVERAGE GROWTH RATE	16%	23%	-0.1%	6%	17%	414%	17%	43%	-149%	6%	29%	360%
SEA LANCE (AGM-80B)	12/31/87(0E)	\$ 1955.20	\$ 2472.70										
	BASE YEAR (85)	1883.20	2341.00										
	DIFFERENCE -- %	4%	29%			-12.80	-16.50	166.30	0.00	-77.80	0.00	0.00	72.00
	ANNUAL AVERAGE GROWTH RATE	2%	3%			-1%	-1%	254.00	0.00	-91.10	0.00	0.00	131.70
SPARRROW (AIM-7M)-N	12/31/87(0E)	\$ 1489.90	\$ 2758.60	\$ 0.13	0.25								
	BASE YEAR (78)	913.70	1258.10	0.06	0.08								
	DIFFERENCE -- %	53%	19%	124%	202%	128.30	211.50	79.10	0.00	210.40	0.00	75.20	576.20
	ANNUAL AVERAGE GROWTH RATE	6%	9%	9%	13%	10%	23%	9%	0%	23%	0%	8%	63%
STD MSL (SM-2)	12/31/87(0E)	\$ 7706.20	\$ 8838.20	\$ 0.52	0.60								
	BASE YEAR (84)	6571.50	8052.80	0.60	0.74								
	DIFFERENCE -- %	17%	10%	-14%	-19%	-860.80	1848.70	-107.60	319.70	-837.60	0.00	-88.50	1134.70
	ANNUAL AVERAGE GROWTH RATE	5%	3%	-5%	-7%	-11%	28%	-2%	5%	-13%	0%	-1%	17%

Three of the missile programs--MK-48, MK-50, and Trident--reported total program cost decreases. The remaining seven programs reported total program cost increases. These increases (in current dollars) ranged from approximately \$132 million on the Sea Lance to approximately \$8.9 billion on the Tomahawk program. On the Tomahawk program, the total program quantity increased by approximately 250 percent, but the total program unit cost increased by approximately 33 percent (in current dollars). In addition, table III.5 shows that the increased costs associated with quantity changes on the Tomahawk program amounted to approximately \$7.6 billion (in current dollars). This increase was offset, in part, by a total program cost reduction of approximately \$1.9 billion (in current dollars) associated with economic factors.

The table also shows that costs associated with quantity changes accounted for approximately \$19.9 billion (in current dollars) of the total program cost growth for missile programs. This increase was offset, in part, by total program cost decreases of approximately \$10 billion (in current dollars) associated with economic factors and estimating changes.

Figure III.5 shows the overall program cost changes for Navy missiles in current dollars between the base year estimate and the current year estimates. Figure III.6 shows the same data as a percentage of the base year estimates. Both figures show that the changes associated with quantities were the main cause of overall total program cost growth. In addition, the figures show that the total program cost increases were offset, in part, by cost reductions associated with economic factors and estimating changes.

Figure III.5: Navy SARs Program Cost Change By Cause For Missile Systems From Base Year Estimates To December 31, 1987

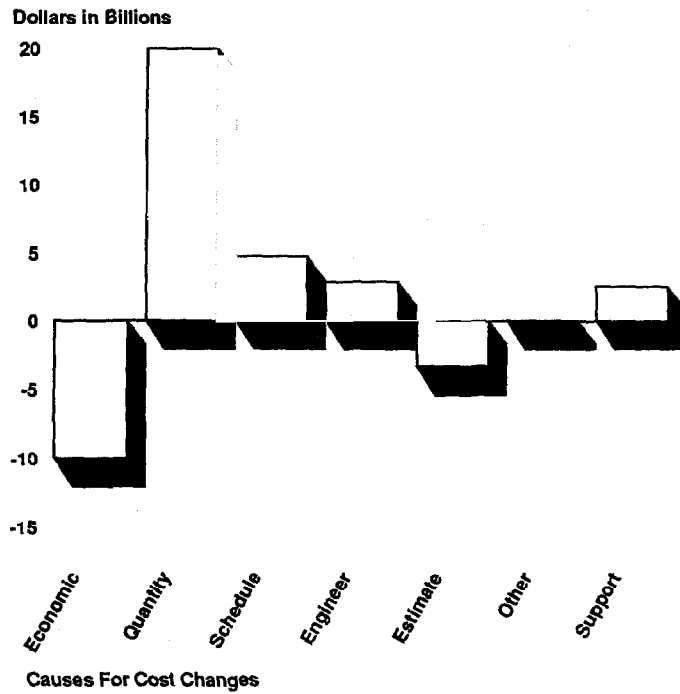


Figure III.6: Navy SARs Program Cost Change By Cause For Missile Systems From Base Year Estimates To December 31, 1987

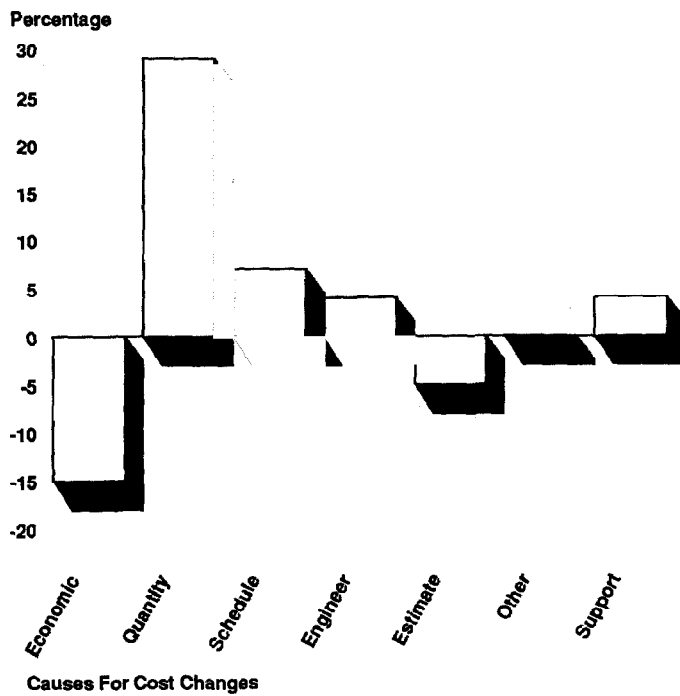


Table III.6 shows that the Navy's missile systems have incurred an overall program cost decrease of approximately \$4.7 billion (in current dollars) between December 31, 1986, and December 31, 1987, for the systems common to both reports. The programs reporting the largest increases (in current dollars) were the Harpoon--\$43 million, the MK-50--\$133 million, and the Sea Lance--\$22 million. These increases were offset by decreases (in current dollars) reported for other programs such as the PHOENIX--\$3.1 billion, and Trident II--\$617 million. In looking at the reported causes for the cost changes, the table shows that cost increases associated with economic factors, scheduling changes, and engineering changes were offset by decreases in the other categories.

TABLE III. 6.

NAVY SELECTED ACQUISITION REPORTS
COST CHANGE FROM DECEMBER 31, 1986 TO DECEMBER 31, 1987

Dollars in Millions

MISSILES	DATE OF ESTIMATE	TOTAL PROGRAM ESTIMATES				QUANTITY	DIFFERENCE BY REPORTED CAUSE								
		PROGRAM COST		UNIT COST			ECONOMIC	QUANTITY	SCHEDULE	ENGRG	ESTIMATE	OTHER	SUPPORT	TOTAL	
		CONSTANT	CURRENT	CONSTANT	CURRENT										
HARPDM	12/31/87(DE)	\$ 1563.90	\$ 3824.60	\$ 0.39	\$ 0.95	4023.00	CONSTANT 87	\$ 280.40	\$ 0.00	\$ 14.90	\$ 301.40	\$ 0.00	\$ 172.20	\$ 768.90	
	12/31/86	1553.20	3781.30	0.39	0.94	4023.00	CONSTANT 86	280.40	0.00	14.30	296.60	0.00	172.90	758.20	
	DIFFERENCE	-- \$ 10.70	43.30	\$ 0.00	0.01	0.00	DIFFERENCE	\$ 0.00	\$ 0.00	\$ 0.60	\$ 10.80	\$ 0.00	\$ -0.70	\$ 10.70	
		-- % 1%	1%	1%	1%	0%	CURRENT 87	\$ 127.70	\$ 852.50	\$ -5.80	\$ 75.40	\$ 1224.10	\$ 0.00	\$ 518.90	\$ 2792.80
							CURRENT 86	119.90	852.50	0.00	73.30	1184.80	0.00	519.00	2749.50
							DIFFERENCE	7.80	0.00	-5.80	2.10	39.30	0.00	-0.10	43.30
MK-4B ADCAP	12/31/87(DE)	\$ 5192.70	5981.40	\$ 1.53	1.76	3401.00	CONSTANT 87	\$ 0.00	\$ 300.70	\$ 0.00	\$ -636.50	\$ 0.00	\$ -36.00	\$ -371.80	
	12/31/86	5280.30	6026.70	1.55	1.77	3401.00	CONSTANT 86	0.00	300.70	0.00	-552.50	0.00	-32.40	-284.20	
	DIFFERENCE	-- \$ -87.60	-45.30	\$ -0.03	-0.01	0.00	DIFFERENCE	\$ 0.00	\$ 0.00	\$ 0.00	\$ -84.00	\$ 0.00	\$ -3.60	\$ -87.60	
		-- % -2%	-1%	-2%	-1%	0%	CURRENT 87	10.30	0.00	404.30	0.00	-702.80	0.00	-44.40	-332.60
							CURRENT 86	-38.30	0.00	404.30	0.00	-613.10	0.00	-40.20	-287.30
							DIFFERENCE	48.60	0.00	0.00	0.00	-89.70	0.00	-4.20	-45.30
MK-50 (ALWT)	12/31/87(DE)	\$ 5107.00	6648.50				CONSTANT 87	\$ 23.10	\$ 545.90	\$ 25.70	\$ -172.40	\$ 0.00	\$ -51.00	\$ 371.30	
	12/31/86	5091.00	6514.00				CONSTANT 86	-21.20	327.00	25.70	23.60	0.00	0.20	355.30	
	DIFFERENCE	-- \$ 16.00	132.50				DIFFERENCE	\$ 44.30	\$ 218.90	\$ 0.00	\$ -196.00	\$ 0.00	\$ -51.20	\$ 16.00	
		-- % 0%	2.0%				CURRENT 87	-651.00	26.50	946.20	28.10	-276.70	0.00	-80.30	-7.20
							CURRENT 86	-718.10	-23.10	570.80	28.10	2.60	0.00	0.00	-139.70
							DIFFERENCE	67.10	49.60	375.40	0.00	-279.30	0.00	-80.30	132.50
PHOENIX (AIM-54C)	12/31/87(DE)	\$ 1709.40	3671.10	\$ 0.50	1.08	3401.00	CONSTANT 87	\$ 1539.40	\$ 63.30	\$ 159.90	\$ -554.00	\$ 20.50	\$ 108.30	\$ 1337.40	
	12/31/86	2863.30	6815.10	0.39	0.94	7249.00	CONSTANT 86	2371.40	57.30	158.10	-315.20	20.50	199.20	2491.30	
	DIFFERENCE	-- \$ -1153.90	-3144.00	\$ 0.108	0.14	-3848.00	DIFFERENCE	\$ -832.00	\$ 6.00	\$ 1.80	\$ -238.80	\$ 0.00	\$ -90.90	\$ -1153.90	
		-- % -40%	-46%	27%	15%	-53%	CURRENT 87	-586.20	4750.00	428.70	351.60	-2109.70	41.00	331.40	3206.80
							CURRENT 86	-608.50	7098.70	390.70	347.60	-1507.60	41.00	588.90	6350.80
							DIFFERENCE	22.30	-2348.70	38.00	4.00	-602.10	0.00	-257.50	-3144.00

APPENDIX III

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		TOTAL PROGRAM ESTIMATES				DIFFERENCE BY REPORTED CAUSE										
		PROGRAM COST		UNIT COST												
DATE OF ESTIMATE		CONSTANT	CURRENT	CONSTANT	CURRENT	CONSTANT	CURRENT	QUANTITY	ECONOMIC	QUANTITY	SCHEDULE	ENGRG	ESTIMATE	OTHER	SUPPORT	TOTAL
MISSILES																
SEA LANCE																
(ASMSOW)																
12/31/87 (BE)		\$ 1955.20	2472.70													
12/31/86		1957.90	2450.90													
DIFFERENCE	-- %	-2.70	21.80													
		0%	1%													
STD MSL																
(SM-2)																
12/31/87 (BE)		\$ 7706.20	8633.20	\$ 0.52	0.60	14765.00										
12/31/86		8175.00	9381.20	0.55	0.64	14765.00										
DIFFERENCE	-- %	-468.80	-543.00	-0.03	-0.04	0.00										
		-6%	-6%			0%										
TOMAHAWK																
12/31/87 (BE)		\$ 5424.30	11300.80	1.34	2.78	4068.00										
12/31/86		5669.80	11814.80	1.39	2.90	4068.00										
DIFFERENCE	-- %	-235.50	-513.80	-0.06	-0.13	0.00										
		-4%	-4%			0%										
TRIDENT																
(II NSL)																
12/31/87 (BE)		\$ 25939.50	34871.80	30.77	41.37	843.00										
BASE YEAR (83)		26556.30	35518.50	31.43	42.03	845.00										
DIFFERENCE	-- %	-616.80	-646.90	-0.66	-0.67	-2.00										
		-2%	-2%			0%										

----- TOTAL PROGRAM ESTIMATES -----						----- DIFFERENCE BY REPORTED CAUSE -----									
MISSILES	DATE OF ESTIMATE	PROGRAM COST		UNIT COST		QUANTITY	ECONOMIC	QUANTITY	SCHEDULE	ENERG	ESTIMATE	OTHER	SUPPORT	TOTAL	
		CONSTANT	CURRENT	CONSTANT	CURRENT										
TOTAL															
MISSILES	12/31/87		77606.90	48.53	30501.00		CURRENT 87	-10527.0	19314.80	2708.70	2590.70	-3803.30	41.00	2356.40	12681.30
	12/31/86		82302.30	49.23	34351.00		CURRENT 86	-10970.8	21661.90	1899.80	2585.00	-703.70	41.00	2863.50	17376.70
	DIFFERENCE - \$		\$-4695.40	\$ -0.69	-3850.00		DIFFERENCE	\$ 443.80	\$-2347.10	\$ 808.90	\$ 5.70	\$-3099.60	\$ 0.00	\$ -507.10	\$-4695.40
	- %		-6%	-1%	-11%										

*INCLUDES ONLY THOSE SYSTEMS ON BOTH THE 1986 AND 1987 SARs.
 DOES NOT INCLUDE THE HARM OR THE SPARROW DUE TO CHANGE IN BASE YEAR ESTIMATES BETWEEN 1986 & 1987.

SHIPS

Table III.7 shows the Navy's current estimate for its 11 ship programs contained in its SARs. These programs are currently estimated to cost \$125.6 billion (in current dollars). This represents an increase of approximately \$40.7 billion (in current dollars), or 48 percent, over the baseline estimate.

SHIPS	TOTAL PROGRAM ESTIMATES				DIFFERENCE BY REPORTED CAUSE							
	DATE OF ESTIMATE	PROGRAM COST	UNIT COST	QUANTITY	ECONOMIC	QUANTITY	SCHEDULE	ENGRG	ESTIMATE	OTHER	SUPPORT	TOTAL
EWN-74/75	12/31/87(OE)	\$ 5786.90	\$ 2893.45	2.00								
	BASE YEAR (88)	5911.00	2955.50	2.00								
	DIFFERENCE --	\$ -124.10	\$ -67.05	0.00	3.40	0.00	-124.10	0.00	0.00	0.00	0.00	-124.10
	-- %	-2%	-9%	0%	3.40	0.00	-644.40	0.00	0.00	0.00	0.00	-641.00
ANNUAL AVERAGE (NOT CALCULATED DUE TO SAME BASE AND CURRENT YEAR.)												
DDG-51	12/31/87(OE)	\$1673.80	\$ 727.12	23.00								
	BASE YEAR (87)	16953.70	737.12	23.00								
	DIFFERENCE --	\$ -229.90	\$ -10.00	0.00	221.70	0.00	0.00	0.00	-211.20	0.00	-18.70	-229.90
	-- %	-1%	-1%	0%	1%	0.00	144.10	0.00	-149.60	0.00	-21.20	195.00
ANNUAL AVERAGE (NOT CALCULATED DUE TO SAME BASE AND CURRENT YEAR.)												
LHD	12/31/87(OE)	\$ 4120.00	\$ 824.00	5.00								
	BASE YEAR (82)	2931.80	977.27	3.00								
	DIFFERENCE --	\$ 1188.20	\$ -153.27	2.00	-1475.20	1872.90	-187.40	0.00	-589.90	0.00	92.60	1188.20
	-- %	41%	-18%	67%	-35%	64%	-23%	0%	-20%	0%	3%	41%
ANNUAL AVERAGE (NOT CALCULATED DUE TO SAME BASE AND CURRENT YEAR.)												
SSN-21	12/31/87(OE)	\$ 7651.20	\$ 1526.24	5.00								
	BASE YEAR (85)	3149.60	3149.60	1.00								
	DIFFERENCE --	\$ 4481.60	\$ -1623.36	4.00	-297.80	3935.40	0.00	0.00	380.80	0.00	165.40	4681.60
	-- %	142%	-52%	400%	-8%	586%	0.00	0.00	357.00	0.00	237.70	5377.70
ANNUAL AVERAGE (NOT CALCULATED DUE TO SAME BASE AND CURRENT YEAR.)												
ANNUAL AVERAGE (NOT CALCULATED DUE TO SAME BASE AND CURRENT YEAR.)												

Four programs--Battleship Reactivation, CVN-72/73, CVN-74/75, and TAO Fleet Oiler--reported total program cost decreases. These decreases ranged (in current dollars) from \$0.1 billion on the Battleship Reactivation Program to \$1.3 billion on the CVN-72/73 program. These program decreases total approximately \$2.5 billion (in current dollars). The remaining seven programs--CG-47, CVN HELO, DDG-51, LHD, SSN-21, SSN-688, and Trident--reported total program cost increases. These increases range (in current dollars) from approximately \$0.1 billion on the CVN HELO to approximately \$24.3 billion on the SSN-688 program. A closer look at the SSN-688 program shows that although the total program quantities have increased by 106 percent, the total program unit cost has increased by 154 percent. On the SSN-688 program, costs associated with quantity changes accounted for approximately \$25.1 billion (in current dollars) in program cost increases, which were offset, in part, by program cost decreases associated with economic factors of approximately \$4.4 billion (in current dollars).

Table III.7 also shows that overall, the main cause for program cost increases was associated with changes in quantity. These changes accounted for approximately \$52.6 billion (in current dollars) in cost growth. Such program cost increases were partially offset by decreases due to economic factors and estimating changes. Overall, these decreases amounted to approximately \$17.6 billion (in current dollars).

Figure III.7 shows the overall program cost changes for the ship programs in current dollars between the base year estimates and the current year estimates. Figure III.8 shows the same data as a percentage of the base year estimates. Both figures show that program costs associated with quantity changes were the main cause of cost growth. In addition, both figures show that overall program cost increases were partially offset by reductions associated with economic and estimating changes.

Figure III.7: Navy SARs Program Cost Change By Cause For Ship Systems From Base Year Estimates To December 31, 1987

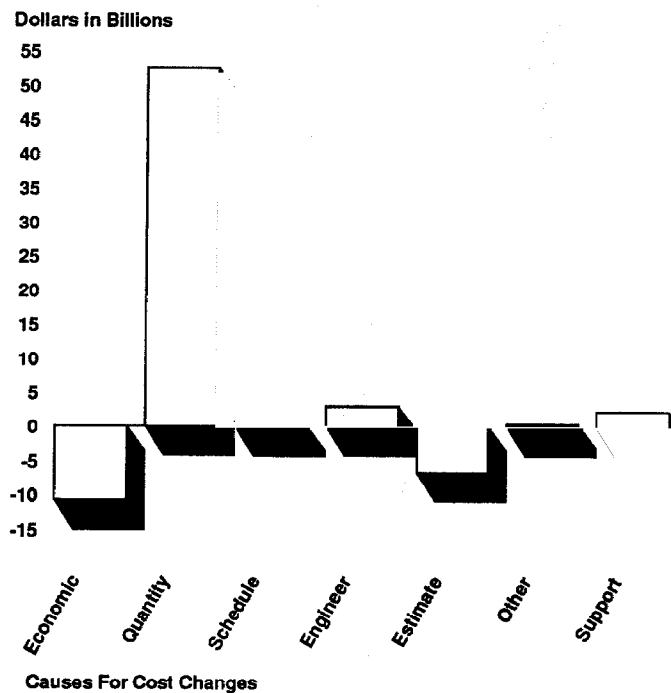


Figure III.8: Navy SARs Program Cost Change By Cause For Ship Systems From Base Year Estimates To December 31, 1987

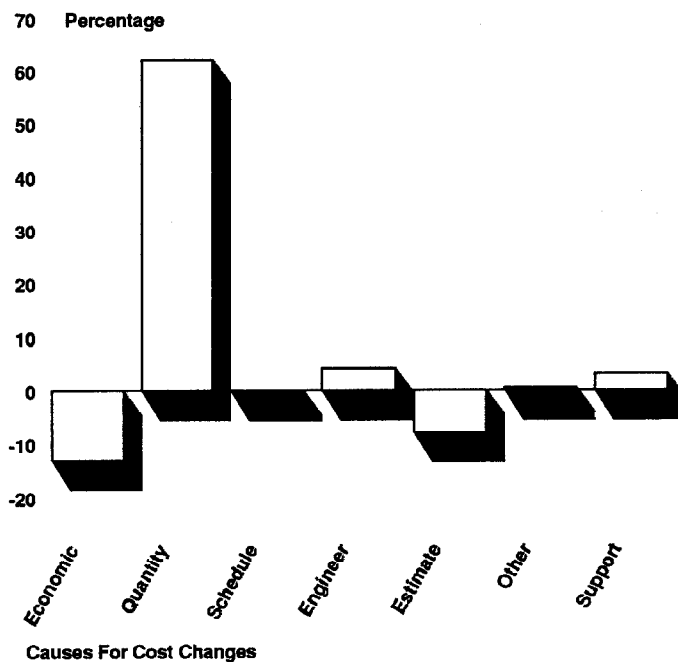


Table III.8 shows that the Navy's ship programs have incurred an approximate \$1.1 billion decrease (in current dollars) between December 31, 1986, and December 31, 1987, for the programs common to both reports. This decrease is primarily due to a decrease of approximately \$642 million (in current dollars) in the CG-47 AEGIS program.

TABLE III. 8.

NAVY SELECTED ACQUISITION REPORTS
 COST CHANGE FROM DECEMBER 31, 1986 TO DECEMBER 31, 1987

Dollars in Millions

SHIPS	DATE OF ESTIMATE	TOTAL PROGRAM ESTIMATES					DIFFERENCE BY REPORTED CAUSE								
		PROGRAM COST		UNIT COST		QUANTITY	ECONOMIC	QUANTITY	SCHEDULE	ENGRG	ESTIMATE	OTHER	SUPPORT	TOTAL	
		CONSTANT	CURRENT	CONSTANT	CURRENT										
=====															
BATTLESHIP															
REACT	12/31/87(PdE)	\$ 1552.30	\$ 1763.30	\$ 388.08	\$ 440.83	4.00	CONSTANT 87	\$ 0.00	\$ 105.50	\$ 0.00	\$ -41.30	\$ 0.00	\$ 11.40	\$ 75.60	
	12/31/86	1571.20	1789.40	392.80	447.35	4.00	CONSTANT 86	0.00	101.20	0.00	-6.70	0.00	0.00	94.50	
	DIFFERENCE	-- \$ -18.90	-26.10	\$ -4.73	-6.53	0.00	DIFFERENCE	\$ 0.00	\$ 4.30	\$ 0.00	\$ -34.60	\$ 0.00	\$ 11.40	\$ -18.90	
		-- X -1X	-1X	-1X	-1X	0Z	CURRENT 87	\$ -198.00	0.00	137.40	0.00	-66.30	0.00	13.60	-113.30
		=====	=====	=====	=====	=====	CURRENT 86	-193.60	0.00	132.20	0.00	-25.80	0.00	0.00	-87.20
							DIFFERENCE	-4.40	0.00	5.20	0.00	-40.50	0.00	13.60	-26.10
							=====								
CG-47 AEGIS	12/31/87(PdE)	\$14364.80	24227.00	\$ 532.03	897.30	27.00	CONSTANT 87	\$ 5491.40	\$ -2.60	\$ 593.60	\$ -954.90	\$ 0.00	\$ 223.60	\$ 5351.10	
	12/31/86	14632.80	24869.20	541.96	921.08	27.00	CONSTANT 86	5491.40	-2.60	593.60	-686.20	0.00	222.90	5619.10	
	DIFFERENCE	-- \$ -268.00	-642.20	\$ -9.93	-23.79	0.00	DIFFERENCE	\$ 0.00	\$ 0.00	\$ 0.00	\$ -268.70	\$ 0.00	\$ 0.70	\$ -268.00	
		-- X -2X	-3X	-2X	-3X	0Z	CURRENT 87	-776.40	11739.00	435.40	980.60	-2707.80	0.00	472.70	10143.50
		=====	=====	=====	=====	=====	CURRENT 86	-679.30	11739.00	541.40	980.60	-2266.80	0.00	470.80	10785.70
							DIFFERENCE	-97.10	0.00	-106.00	0.00	-441.00	0.00	1.90	-642.20
							=====								
CVN-72/73	12/31/87(DE)	\$ 5153.60	6120.00	\$ 2576.80	3060.00	2.00	CONSTANT 87	\$ 0.00	\$ 0.00	\$ 0.00	\$ -116.30	\$ 0.00	\$ 4.40	\$ -111.90	
	12/31/86	5130.20	6150.00	2565.10	3075.00	2.00	CONSTANT 86	0.00	0.00	0.00	-144.30	0.00	9.00	-135.30	
	DIFFERENCE	-- \$ 23.40	-30.00	\$ 11.70	-15.00	0.00	DIFFERENCE	\$ 0.00	\$ 0.00	\$ 0.00	\$ 28.00	\$ 0.00	\$ -4.60	\$ 23.40	
		-- X 0Z	0Z	0Z	0Z	0Z	CURRENT 87	-836.00	0.00	0.00	0.00	-462.70	0.00	-0.20	-1298.90
		=====	=====	=====	=====	=====	CURRENT 86	-805.00	0.00	0.00	0.00	-469.00	0.00	5.10	-1268.90
							DIFFERENCE	-31.00	0.00	0.00	0.00	6.30	0.00	-5.30	-30.00
							=====								
LHD	12/31/87(DE)	\$ 4120.00	5131.00	\$ 824.00	1026.20	5.00	CONSTANT 87	\$ 1872.90	\$ -187.40	\$ 0.00	\$ -589.90	\$ 0.00	\$ 92.60	\$ 1188.20	
	12/31/86	4137.60	5161.70	827.52	1032.34	5.00	CONSTANT 86	1872.90	-187.40	0.00	-574.20	0.00	94.50	1205.80	
	DIFFERENCE	-- \$ -17.60	-30.70	\$ -3.52	-6.14	0.00	DIFFERENCE	\$ 0.00	\$ 0.00	\$ 0.00	\$ -15.70	\$ 0.00	\$ -1.90	\$ -17.60	
		-- X 0Z	-1X	0Z	-1X	0Z	CURRENT 87	-1475.20	3075.00	-233.90	0.00	-832.10	0.00	146.20	680.00
		=====	=====	=====	=====	=====	CURRENT 86	-1469.20	3075.00	-233.90	0.00	-809.80	0.00	148.60	710.70
							DIFFERENCE	-6.00	0.00	0.00	0.00	-22.30	0.00	-2.40	-30.70
							=====								

----- TOTAL PROGRAM ESTIMATES -----

----- DIFFERENCE BY REPORTED CAUSE -----

SHIPS	DATE OF ESTIMATE	PROGRAM COST		UNIT COST		QUANTITY	DIFFERENCE BY REPORTED CAUSE								
		CONSTANT	CURRENT	CONSTANT	CURRENT		ECONOMIC	QUANTITY	SCHEDULE	ENGRG	ESTIMATE	OTHER	SUPPORT	TOTAL	
SSN-21	12/31/87(DE)	\$ 7631.20	9252.70	\$ 1526.24	1850.54	5.00	CONSTANT 87	\$ 3935.40	\$ 0.00	\$ 0.00	\$ 380.80	\$ 0.00	\$ 165.40	\$ 4481.60	
	12/31/86	7621.70	9256.40	1524.34	1851.28	5.00	CONSTANT 86	3935.40	0.00	0.00	372.30	0.00	164.40	4472.10	
	DIFFERENCE --	\$ 9.50	-3.70	\$ 1.90	-0.74	0.00	DIFFERENCE	\$ 0.00	\$ 0.00	\$ 0.00	\$ 8.50	\$ 0.00	\$ 1.00	\$ 9.50	
	-- %	0%	0%	0%	0%	0%	CURRENT 87	-297.80	5080.80	0.00	0.00	357.00	0.00	237.70	5377.70
	=====	=====	=====	=====	=====	=====	CURRENT 86	-363.00	5080.80	0.00	0.00	427.30	0.00	236.30	5381.40
							DIFFERENCE	65.20	0.00	0.00	-70.30	0.00	1.40	-3.70	
SSN-688	12/31/87(DE)	\$12517.80	30095.60	\$ 189.66	455.99	66.00	CONSTANT 87	\$ 6412.00	\$ 14.60	\$ 559.60	\$ -124.10	\$ 298.50	\$ 230.40	\$ 7391.00	
	12/31/86	12495.90	30094.10	390.50	940.44	32.00	CONSTANT 86	6412.00	14.60	559.60	-148.50	298.50	232.90	7369.10	
	DIFFERENCE --	\$ 21.90	1.50	\$ -200.83	-484.45	34.00	DIFFERENCE	\$ 0.00	\$ 0.00	\$ 0.00	\$ 24.40	\$ 0.00	\$ -2.50	\$ 21.90	
	-- %	0%	0%	-51%	-52%	106%	CURRENT 87	-4394.40	25089.50	87.30	2045.30	-117.40	412.80	1225.00	24346.10
	=====	=====	=====	=====	=====	=====	CURRENT 86	-4386.30	25089.50	87.30	2045.30	-133.80	412.80	1231.80	24346.60
							DIFFERENCE	-8.10	0.00	0.00	16.40	0.00	-6.60	1.50	
TAG FLEET BILER	12/31/87(PdE)	\$ 2391.30	2716.00	\$ 132.85	150.69	18.00	CONSTANT 87	\$ 166.40	\$ 0.00	\$ 0.00	\$ -382.80	\$ 0.00	\$ 0.00	\$ -216.40	
	12/31/86	2354.90	2690.20	130.83	149.46	18.00	CONSTANT 86	166.40	0.00	0.00	-419.20	0.00	0.00	-252.80	
	DIFFERENCE --	\$ 36.40	25.80	\$ 2.02	1.43	0.00	DIFFERENCE	\$ 0.00	\$ 0.00	\$ 0.00	\$ 36.40	\$ 0.00	\$ 0.00	\$ 36.40	
	-- %	2%	1%	2%	1%	0%	CURRENT 87	-153.80	177.60	0.00	0.00	-498.50	0.00	0.00	-474.70
	=====	=====	=====	=====	=====	=====	CURRENT 86	-163.10	177.60	0.00	0.00	-515.00	0.00	0.00	-500.50
							DIFFERENCE	9.30	0.00	0.00	16.50	0.00	0.00	25.80	
TRIDENT II SUB	12/31/87(PdE)	\$13886.40	16451.50	\$ 1262.40	1495.59	11.00	CONSTANT 87	\$ 5013.80	\$ 0.00	\$ 0.00	\$ -1676.30	\$ 0.00	\$ 0.00	\$ 3337.50	
	12/31/86	14256.90	16878.00	1296.26	1534.36	11.00	CONSTANT 86	5013.80	0.00	0.00	-1503.80	0.00	0.00	3710.00	
	DIFFERENCE --	\$ -372.50	-426.50	\$ -33.86	-38.77	0.00	DIFFERENCE	\$ 0.00	\$ 0.00	\$ 0.00	\$ -372.50	\$ 0.00	\$ 0.00	\$ -372.50	
	-- %	-3%	-3%	-3%	-3%	0%	CURRENT 87	-2920.10	7398.00	0.00	0.00	-2111.60	0.00	0.00	2366.30
	=====	=====	=====	=====	=====	=====	CURRENT 86	-2923.60	7398.00	0.00	0.00	-1681.60	0.00	0.00	2792.80
							DIFFERENCE	3.50	0.00	0.00	-430.00	0.00	0.00	-426.50	

SHIPS	DATE OF ESTIMATE	TOTAL PROGRAM ESTIMATES					DIFFERENCE BY REPORTED CAUSE							
		PROGRAM COST		UNIT COST		QUANTITY	ECONOMIC	QUANTITY	SCHEDULE	ENBRG	ESTIMATE	OTHER	SUPPORT	TOTAL
		CONSTANT	CURRENT	CONSTANT	CURRENT									
TOTAL SHIPS	12/31/87		95757.1	9377.3	138.0	CURRENT 87	-11051.7	52559.9	426.2	3025.9	-6439.4	412.8	2095.0	41028.7
	12/31/86		96889.0	9951.3	104.0	CURRENT 86	-10983.1	52559.9	527.0	3025.9	-5474.5	412.8	2092.6	42160.6
	DIFFERENCE - \$		\$-1131.90	\$-573.98	34.00	DIFFERENCE	\$-68.60	\$ 0.00	\$-100.80	\$ 0.00	\$-984.90	\$ 0.00	\$ 2.40	\$-1131.90
	- %		-1%	-6%	33%									

*INCLUDES ONLY THOSE SYSTEMS ON BOTH THE 1986 AND 1987 SARS.
 DOES NOT INCLUDE THE DDG-51 DUE TO CHANGE IN BASE YEAR ESTIMATES BETWEEN 1986 & 1987.

OTHER PROGRAMS

Table III.9 shows the Navy's current estimate for its 10 SAR programs listed in the other class. These programs are currently estimated to cost \$19.6 billion (in current dollars). This represents a decrease of approximately \$3.9 billion (in current dollars), or 17 percent, when compared to the base year estimate.

TABLE III. 9.

NAVY SELECTED ACQUISITION REPORTS
COST CHANGE FROM BASE YEAR TO DECEMBER 31, 1987

Dollars in Millions

OTHER	DATE OF ESTIMATE	TOTAL PROGRAM ESTIMATES				QUANTITY	DIFFERENCE BY REPORTED CAUSE							
		PROGRAM COST		UNIT COST			ECONOMIC	QUANTITY	SCHEDULE	ENGRG	ESTIMATE	OTHER	SUPPORT	TOTAL
		CONSTANT	CURRENT	CONSTANT	CURRENT									
AN/BSY-1 (SUBACS)	12/31/87(PE) BASE YEAR (84)	\$ 1454.40 2972.40	\$ 1619.10 3827.60											
	DIFFERENCE --	\$ -1518.00	-2208.50			CONSTANT \$	\$ 25.10	\$ 25.60	\$ 67.00	\$ -27.30	\$ -1918.00	\$ 309.60	\$ -1518.00	
	-- %	-51%	-58%			CURRENT \$	\$ -85.40	46.80	25.00	83.70	-27.60	-2637.60	386.60	-2208.50
	ANNUAL AVERAGE GROWTH RATE	-21%	-25%			CONSTANT %		1%	1%	2%	-1%	-65%	10%	-51%
						CURRENT %	-2%	1%	1%	2%	-1%	-69%	10%	-58%
AN/BSY-2	12/31/87(PE) BASE YEAR (86)	\$ 2385.30 2522.70	2854.00 2989.90											
	DIFFERENCE --	\$ -137.40	-135.90			CONSTANT \$		0.00	0.00	0.00	-137.40	0.00	0.00	-137.40
	-- %	-5%	-5%			CURRENT \$	31.90	0.00	0.00	0.00	-167.80	0.00	0.00	-135.90
	ANNUAL AVERAGE GROWTH RATE	-3%	-4%			CONSTANT %		0%	0%	0%	-5%	0%	0%	-5%
						CURRENT %	1%	0%	0%	0%	-6%	0%	0%	-5%
AN/SQQ-89	12/31/87(PdE) BASE YEAR (85)	\$ 4385.30 4663.80	4923.40 5100.30	\$ 19.88 21.02	\$ 23.78 24.92	120.00 120.00								
	DIFFERENCE --	\$ -278.50	-176.90	\$ -1.14	-1.13	0.00								
	-- %	-6%	-3%	-5%	-5%	0%								
	ANNUAL AVERAGE GROWTH RATE	-3%	-2%	-3%	-2%	0%								
ASPJ	12/31/87(PdE) BASE YEAR (85)	\$ 538.40 227.70	571.70 236.40	\$ 365.44 388.65	410.28 425.03	12.00 12.00								
	DIFFERENCE --	\$ 310.70	335.30	\$ -23.21	-14.74	0.00								
	-- %	136%	142%	-6%	-3%	0%								
	ANNUAL AVERAGE GROWTH RATE	54%	56%	-3%	-2%	0%								

OTHER	DATE OF ESTIMATE	PROGRAM COST			UNIT COST			DIFFERENCE BY REPORTED CAUSE							
		CONSTANT	CURRENT	DIFFERENCE	CONSTANT	CURRENT	DIFFERENCE	ECONOMIC	QUANTITY	SCHEDULE	ENGRS	ESTIMATE	OTHER	SUPPORT	TOTAL
FDS	12/31/87(PE) \$ 674.70	779.70	\$ 674.70	779.70	1.00										
	BASE YEAR (86) 674.70	777.00	674.70	777.00	1.00										
	DIFFERENCE -- \$ 0.00	2.70	\$ 0.00	2.70	0.00										
	ANNUAL AVERAGE GROWTH RATE	0.3%	0%	0.3%	0%										
HFAO (TERMINATED; NOT INCLUDED)	12/31/87(PE) \$ 110.20	109.80	\$ 0.00	0.00	0.00										
	BASE YEAR (87) 3366.80	4540.30	1.36	1.83	2479.00										
	DIFFERENCE -- \$ -3256.60	-4430.50	-1.36	-1.83	-2479.00										
	ANNUAL AVERAGE GROWTH RATE	-98%	-100%	-100%	-100%										
LCAC	12/31/87(PE) \$ 1736.50	2165.80	\$ 22.26	27.77	78.00										
	BASE YEAR (82) 1193.30	1610.70	18.39	26.85	60.00										
	DIFFERENCE -- \$ 633.20	555.10	\$ 3.87	0.92	18.00										
	ANNUAL AVERAGE GROWTH RATE	57%	34%	21%	30%										
LSD-41	12/31/87(PE) \$ 2065.20	2484.10	\$ 258.15	310.51	8.00										
	BASE YEAR (82) 3223.90	4849.90	268.66	404.16	12.00										
	DIFFERENCE -- \$ -1158.70	-2365.80	-10.51	-93.65	-4.00										
	ANNUAL AVERAGE GROWTH RATE	-36%	-49%	-4%	-33%										

OTHER	DATE OF ESTIMATE	PROGRAM COST		UNIT COST		DIFFERENCE BY REPORTED CAUSE													
		CONSTANT	CURRENT	CONSTANT	CURRENT	ECONOMIC	QUANTITY	SCHEDULE	ENRGS	ESTIMATE	OTHER	SUPPORT	TOTAL						
LSD-41CV	12/31/87 (PE) \$	1350.70	1584.00																
	BASE YEAR (88)	1426.60	1551.30																
	DIFFERENCE - \$	-75.90	-67.30																
	- %	-5%	-4%																
	ANNUAL AVERAGE (NOT INCLUDED IN CALCULATIONS DUE TO GROWTH RATE DATE OF BASE AND CURRENT YEARS.)																		
PHALANX	12/31/87 (PE) \$	2644.80	2608.50	\$	4.23	4.17	625.00												
CIWS	BASE YEAR (84)	2176.20	2481.70		3.51	4.00	620.00												
	DIFFERENCE -- \$	468.60	126.80	\$	0.72	0.17	5.00												
	-- %	22%	5%		21%	4%	1%												
	ANNUAL AVERAGE																		
	GROWTH RATE	7%	2%		6%	1%	0%												
TOTAL	12/31/87	19590.30	1556.22		844.00														
OTHER	BASE YEARS	23524.80	1661.95		825.00														
	DIFFERENCE - \$	-3934.50	-105.73		19.00														
	- %	-17%	-6%		2%														
	ANNUAL AVERAGE																		
	GROWTH RATE	-2%	-1%		1%		1%		2%		1%		2%		-1%		2%		-17%

FIGURES INCLUDE LSD-41CV.

Five of the programs reported total program cost decreases. These decreases range (in current dollars) from approximately \$0.07 billion on the LSD-41CV to approximately \$2.4 billion on the LSD-41 program and total about \$5 billion. The remaining four programs--ASPJ, FDS, LCAC, and PHALANX--reported total program cost increases ranging (in current dollars) from about \$3 million on the FDS program to approximately \$555 million on the LCAC program.

The table also shows that overall costs associated with quantity changes accounted for approximately \$1.3 billion of the overall decrease of \$3.9 billion (in current dollars). Program costs associated with economic changes accounted for an additional \$1.3 billion (in current dollars) decrease.

Figure III.9 shows the overall program cost changes in current dollars between the base year estimates and the current year estimates. Figure III.10 shows the same data as a percentage of the base year estimates. Both figures show that costs associated with changes in economic, quantity, and other factors have caused the largest program cost reductions.

Figure III.9: Navy SARs Program Cost Change By Cause For Other Systems From Base Year Estimates To December 31, 1987

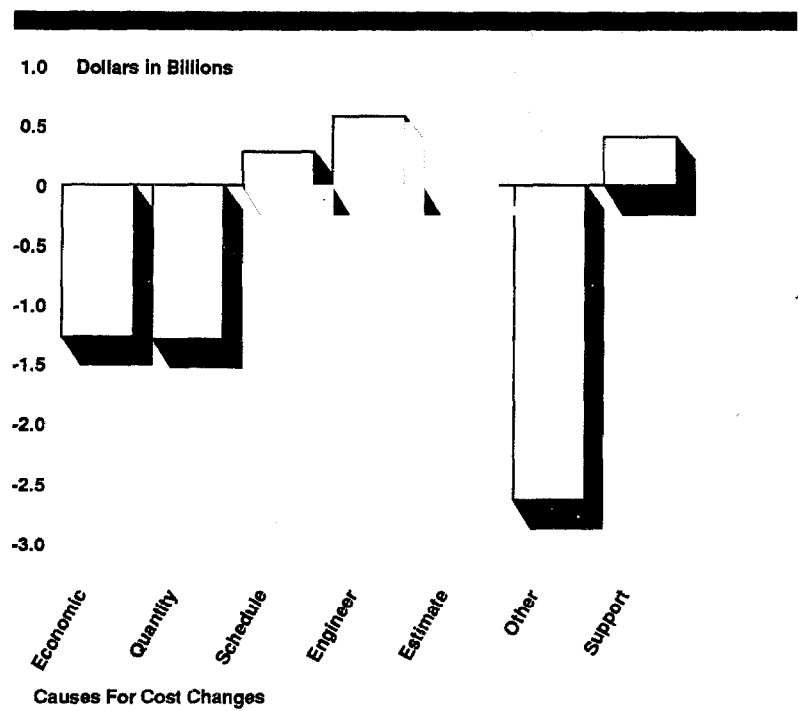


Figure III.10: Navy SARs Program Cost Change By Cause For Other Systems From Base Year Estimates To December 31, 1987

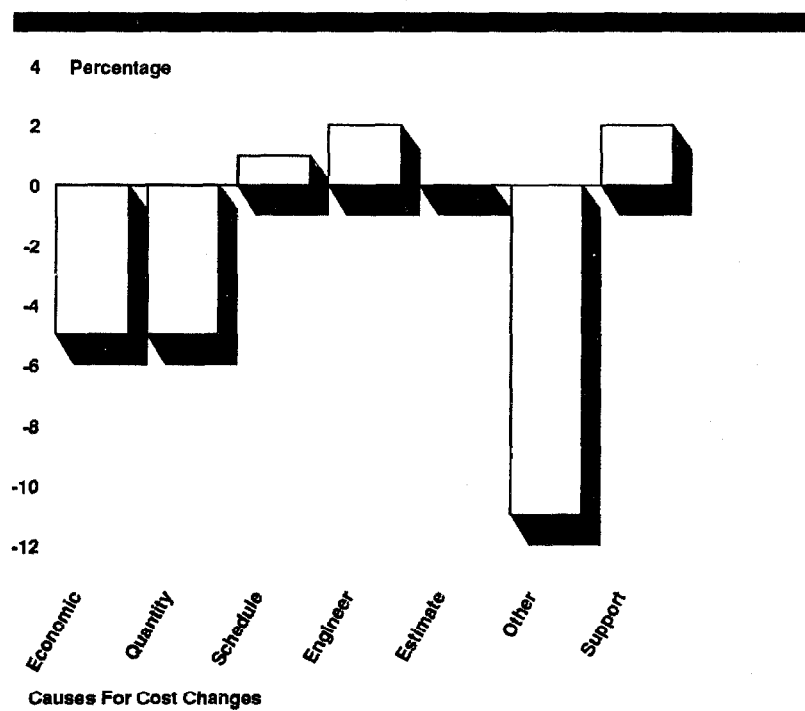


Table III.10 shows that the Navy's other systems have incurred an overall total cost decrease of approximately \$184 million (in current dollars) between December 31, 1986, and December 31, 1987, for systems that are common to both reporting periods.

AIR FORCE SARS STATUS AS OF DECEMBER 31, 1987

Table IV.1 and figures IV.1 and IV.2 provide overall summary information on program cost and program quantity changes on Air Force major acquisitions as reported in the SARs. The table shows total program and unit cost changes between the base year program estimates and the current program estimates by major class of weapon system as of December 31, 1987. The major classes of weapon systems used are aircraft, missiles, satellites and other systems. The table also shows an estimated annual average growth rate from the base year to December 31, 1987, for each class. This rate varies between classes of systems. Despite this, the rate may be useful for comparing weapon systems within the same class. Figures IV.1 and IV.2 show the causes--as reported by DOD--of the cost changes, first in terms of current dollars, and then in terms of the percent change from the base year.

TABLE IV. 1.

AIR FORCE SELECTED ACQUISITION REPORTS
COST CHANGE FROM BASE YEAR TO DECEMBER 31, 1987

Dollars in Millions

CATEGORY	DATE OF ESTIMATE	TOTAL PROGRAM ESTIMATES			DIFFERENCE BY REPORTED CAUSE								
		PROGRAM COST	UNIT COST		ECONOMIC	QUANTITY	SCHEDULE	ENGRG	ESTIMATE	OTHER	SUPPORT	TOTAL	
		CURRENT	CURRENT	QUANTITY									
TOTAL AIRCRAFT	12/31/87	\$181225.6	\$ 2054.81	5031.00									
	BASE YEARS	115491.6	1994.09	2114.00									
	DIFFERENCE - \$	65734.00	60.72	2917.00									
	- %	57%	3%	138%	CURRENT \$	\$-10475.7	\$40814.20	\$ 6318.80	\$19385.80	\$-9226.10	\$ 824.10	\$18094.90	\$65734.00
	ANNUAL AVERAGE GROWTH RATE	6%	3%	9%	CURRENT %	-9%	35%	5%	17%	-8%	1%	16%	57%
TOTAL MISSILES	12/31/87	68800.20	486.59	107546.0									
	BASE YEARS	61039.60	529.02	72339.00									
	DIFFERENCE - \$	7760.60	-42.40	35207.00									
	- %	13%	-8%	49%	CURRENT \$	-3050.40	2134.50	4438.70	322.20	6756.70	-851.40	-1989.70	7760.60
	ANNUAL AVERAGE GROWTH RATE	5%	-3%	5%	CURRENT %	-5%	3%	7%	0.5%	11%	-1%	-3%	13%
TOTAL SATELLITES	12/31/87	12267.30	392.47	27127.00									
	BASE YEARS	9955.10	330.45	27402.00									
	DIFFERENCE - \$	2312.20	62.02	-275.00									
	- %	23%	19%	-1%	CURRENT \$	-363.20	1076.50	816.90	1096.50	-537.80	77.40	145.90	2312.20
	ANNUAL AVERAGE GROWTH RATE	3%	3%	-0.1%	CURRENT %	-4%	11%	8%	11%	-5%	1%	1%	23%
TOTAL OTHER	12/31/87	26550.80	812.30	3100.00									
	BASE YEARS	19613.20	773.56	2444.00									
	DIFFERENCE - \$	6937.60	38.74	656.00									
	- %	35%	4%	27%	CURRENT \$	-1064.50	5464.40	292.90	711.90	42.40	0.00	1490.50	6937.60
	ANNUAL AVERAGE GROWTH RATE	9%	2%	6%	CURRENT %	-11%	28%	1%	4%	0.2%	0%	9%	35%

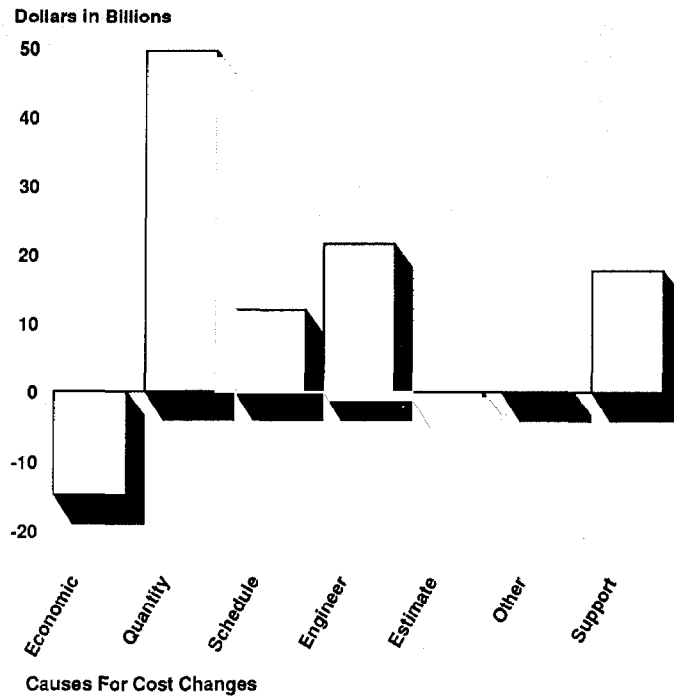
More specifically, table IV.1 shows that current overall total program acquisition cost estimate for Air Force major acquisition programs is \$289 billion (in current dollars). This represents an increase of approximately \$82.7 billion (in current dollars), or 40 percent, when compared with the baseline estimates. All of the classes reported cost increases. These increases (in current dollars) range from approximately \$2.3 billion for satellites to approximately \$65.7 billion for aircraft.

Table IV.1 also shows the reasons for the reported cost changes. For example:

- Quantity changes caused the largest program cost increase-- approximately \$49.5 billion (in current dollars).
- Economic changes resulted in the largest decrease-- approximately \$15 billion (in current dollars).
- Within the aircraft class, quantity changes accounted for approximately \$40.8 billion (in current dollars) of the estimated \$65.7 billion in cost growth.
- Within the missile class, changes associated with estimates, scheduling, and quantities accounted for approximately \$13.3 billion (in current dollars) in total program cost growth. This cost growth was partially offset by a decrease-- approximately \$3.1 billion (in current dollars)--associated with economic factors.

Figure IV.1 shows the overall Air Force program cost changes, as given in table IV.1., in current dollars between the base year estimates and the current year estimates. Figure IV.2 shows the same data as a percentage of the base year estimates. Both figures suggest that quantity and engineering changes are the main causes for total program cost increases in current dollars. Both figures also suggest that economic factors have offset some of the program cost growth on these Air Force programs.

**Figure IV.1: Air Force SARs Program
Cost Change By Cause For Weapon
Systems From Base Year Estimates To
December 31, 1987**



**Figure IV.2: Air Force SARs Program
Cost Change By Cause For Weapon
Systems From Base Year Estimates To
December 31, 1987**

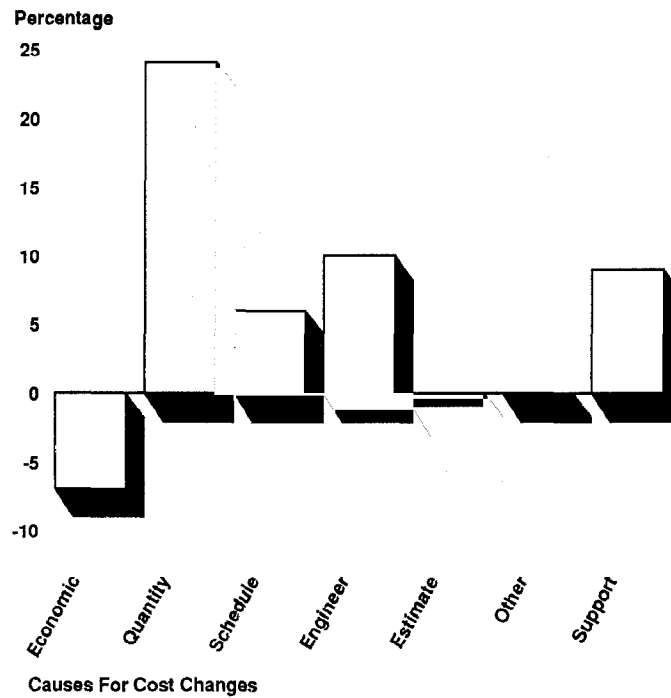


Table IV.2 shows that the Air Force's SAR programs have incurred a net increase of approximately \$2.3 billion (in current dollars) between December 31, 1986, and December 31, 1987, for the systems common to both reporting periods. The table shows that most of the increase--approximately \$2.2 billion (in current dollars) occurred in satellite programs. All of the other changes, both increases and decreases, were within 2 percent of the 1986 estimate. The table also shows that costs associated with scheduling changes--\$1.2 billion, engineering changes--\$1.1 billion, and estimating changes--\$1.3 billion, accounted for all of the reported increases.

The remaining discussion of the Air Force programs focuses on the individual classes of systems. Each class is discussed separately.

AIRCRAFT PROGRAMS

Table IV.3 shows the Air Force's current estimate for its seven aircraft programs contained in its SARs. These programs are currently estimated to cost about \$181.2 billion (in current dollars). This represents an increase of approximately \$65.7 billion (in current dollars) over the baseline estimate.

TABLE IV. 3.

AIR FORCE SELECTED ACQUISITION REPORTS
COST CHANGE FROM BASE YEAR TO DECEMBER 31, 1987

Dollars in Millions

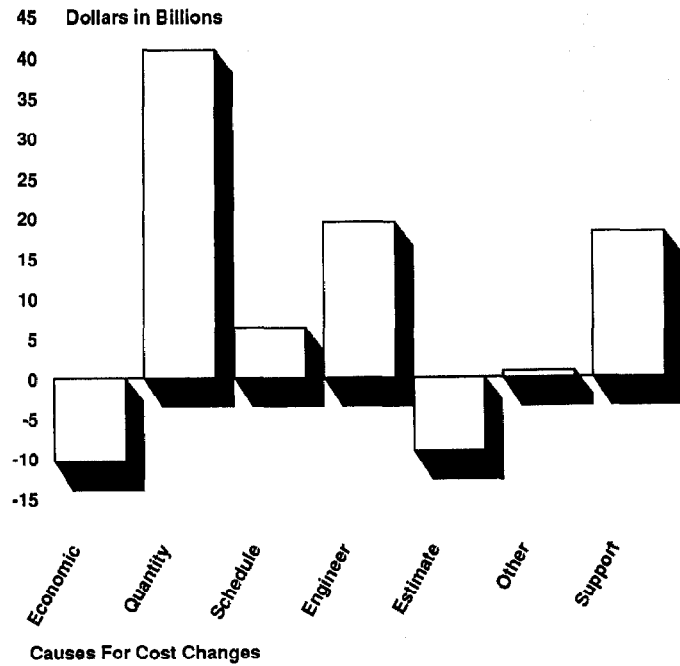
AIRCRAFT =====	DATE OF ESTIMATE =====	TOTAL PROGRAM ESTIMATES				QUANTITY	DIFFERENCE BY REPORTED CAUSE											
		PROGRAM COST		UNIT COST			ECONOMIC	QUANTITY	SCHEDULE	ENGRS	ESTIMATE	OTHER	SUPPORT	TOTAL				
		CONSTANT	CURRENT	CONSTANT	CURRENT													
ATF (DEV COST ONLY)	12/31/87(PE)	\$10057.20	\$12670.00	\$ 1117.47	\$ 1407.78	5.00												
	BASE YEAR (85)	11785.50	15294.00	982.13	1274.50	12.00												
	DIFFERENCE --	\$ -1728.30	-2624.00	\$ 135.34	133.28	-3.00	CONSTANT \$	\$ -369.00	\$ 0.00	\$ 0.00	\$ -1577.90	\$ 0.00	\$ 218.60	\$ -1728.30				
	-- %	-15%	-17%	14%	10%	-25%	CURRENT \$	\$ -616.20	-467.70	407.10	0.00	-2229.20	0.00	282.00	-2624.00			
	ANNUAL AVERAGE						CONSTANT %		-3%	0%	0%	-13%	0%	2%	-15%			
	GROWTH RATE	-8%	-9%	7%	5%	-13%	CURRENT %	-4%	-3%	3%	0%	-15%	0%	2%	-17%			
	=====	=====	=====	=====	=====	=====												
R-1B	12/31/87(PE)	\$20100.20	27042.70	\$ 201.00	270.43	100.00												
	BASE YEAR (81)	20500.00	29537.60	205.00	295.38	100.00												
	DIFFERENCE --	\$ -399.80	-2494.90	\$ -4.00	-24.95	0.00	CONSTANT \$		0.00	0.00	0.00	-29.60	0.00	-370.20	-399.80			
	-- %	-2%	-8%	-2%	-8%	0%	CURRENT \$	-1792.80	0.00	0.00	0.00	-453.00	0.00	-249.10	-2494.90			
	ANNUAL AVERAGE						CONSTANT %		0%	0%	0%	-0.1%	0%	-2%	-2%			
	GROWTH RATE	-0.3%	-1%	-0.3%	-1%	0%	CURRENT %	-6%	0%	0%	0%	-2%	0%	-1%	-8%			
	=====	=====	=====	=====	=====	=====												
C-17A	12/31/87(PE)	\$20633.20	35695.10	\$ 97.79	169.17	211.00												
	BASE YEAR (81)	19544.60	39753.80	92.63	188.41	211.00												
	DIFFERENCE --	\$ 1088.60	-4058.70	\$ 5.16	-19.24	0.00	CONSTANT \$		0.00	186.60	137.50	-195.20	0.00	959.70	1088.60			
	-- %	6%	-10%	6%	-10%	0%	CURRENT \$	-5840.80	0.00	546.90	246.70	-626.10	0.00	1614.60	-4058.70			
	ANNUAL AVERAGE						CONSTANT %		0%	1%	1%	-1%	0%	5%	6%			
	GROWTH RATE	1%	-2%	1%	-2%	0%	CURRENT %	-15%	0%	1%	1%	-2%	0%	4%	-10%			
	=====	=====	=====	=====	=====	=====												
C-5B	12/31/87(PE)	\$ 4435.60	7021.10	\$ 88.71	140.42	50.00												
	BASE YEAR (80)	5845.70	9667.30	116.91	193.35	50.00												
	DIFFERENCE --	\$ -1410.10	-2646.20	\$ -28.20	-52.92	0.00	CONSTANT \$		0.00	0.00	0.00	-1001.30	0.00	-408.80	-1410.10			
	-- %	-24%	-27%	-24%	-27%	0%	CURRENT \$	-280.70	0.00	36.00	0.00	-1751.10	0.00	-650.40	-2646.20			
	ANNUAL AVERAGE						CONSTANT %		0%	0%	0%	-17%	0%	-7%	-24%			
	GROWTH RATE	-4%	-4%	-4%	-4%	0%	CURRENT %	-3%	0%	0.4%	0%	-18%	0%	-7%	-27%			
	=====	=====	=====	=====	=====	=====												

----- TOTAL PROGRAM ESTIMATES -----							----- DIFFERENCE BY REPORTED CAUSE -----								
AIRCRAFT	DATE OF ESTIMATE	PROGRAM COST		UNIT COST		QUANTITY	ECONOMIC	QUANTITY	SCHEDULE	ENGRG	ESTIMATE	OTHER	SUPPORT	TOTAL	
		CONSTANT	CURRENT	CONSTANT	CURRENT										
F-15	12/31/87(DE)	\$13304.90	38694.00	\$ 10.35	30.09	1286.00									
	BASE YEAR (70)	5991.00	7355.20	8.00	9.82	749.00									
	DIFFERENCE --	\$ 7313.90	31338.80	\$ 2.35	20.27	537.00	CONSTANT \$	3365.70	513.90	1223.00	138.90	619.10	1453.30	7313.90	
	-- %	122%	426%	29%	206%	72%	CURRENT \$	639.30	14749.20	3308.30	4050.60	1096.80	767.70	6726.90	31338.80
	ANNUAL AVERAGE GROWTH RATE	5%	10%	2%	7%	3%	CONSTANT %	56%	9%	20%	2%	10%	24%	122%	
							CURRENT %	9%	201%	45%	55%	15%	10%	426%	
F-16	12/31/87(DE)	\$19147.60	47656.00	\$ 7.00	17.41	2737.00									
	BASE YEAR (75)	4376.80	6054.50	6.65	9.20	658.00									
	DIFFERENCE --	\$14770.80	41601.50	\$ 0.34	8.21	2079.00	CONSTANT \$	7285.70	297.30	4894.40	-1361.60	40.10	3614.90	14770.80	
	-- %	337%	687%	5%	89%	316%	CURRENT \$	-2073.10	20357.70	1723.50	15088.50	-3397.90	56.40	9846.40	41601.50
	ANNUAL AVERAGE GROWTH RATE	13%	19%	0%	5%	13%	CONSTANT %	166%	7%	112%	-31%	1%	83%	337%	
							CURRENT %	-34%	336%	28%	249%	-56%	1%	687%	
KC-135R	12/31/87(PdE)	\$ 7567.70	12446.70	\$ 11.86	19.51	638.00									
	BASE YEAR (81)	5229.10	7829.20	15.66	23.44	334.00									
	DIFFERENCE --	\$ 2338.60	4617.50	\$ -3.79	-3.93	304.00	CONSTANT \$	3295.80	0.00	0.00	-1204.90	0.00	247.70	2338.60	
	-- %	45%	59%	-24%	-17%	91%	CURRENT \$	-511.40	6175.00	297.00	0.00	-1867.60	0.00	524.50	4617.50
	ANNUAL AVERAGE GROWTH RATE	6%	8%	-5%	-3%	11%	CONSTANT %	63%	0%	0%	-23%	0%	5%	45%	
							CURRENT %	-7%	79%	4%	0%	-24%	0%	59%	
TOTAL AIRCRAFT	12/31/87		181225.6		2054.81	5031.00									
	BASE YEARS		115491.6		1994.09	2114.00									
	DIFFERENCE - \$		\$65734.00		\$ 60.72	2917.00	CURRENT \$	\$-10475.7	\$40814.20	\$ 6318.80	\$19385.80	\$-9228.10	\$ 824.10	\$18094.90	\$65734.00
	- %		57%		3%	138%									
	ANNUAL AVERAGE GROWTH RATE		6%		3%	9%	CURRENT %	-9%	35%	5%	17%	-8%	1%	16%	57%

Four programs--ATF, B-1B, C-17A, and C-5B--reported decreases, and the remaining three programs--F-15, F-16, and KC-135R--reported increases. The F-15 and the F-16 programs combined accounted for approximately \$72.9 billion (in current dollars) of total program cost increases. The F-15 program data showed that although the total program quantities have increased by approximately 82 percent over the baseline estimate, the total program unit cost has increased by 206 percent. Changes in quantities accounted for approximately \$14.7 billion of the \$31.3 billion total program cost increase (in current dollars) on the program. On the F-16 program, total program quantities increased by 316 percent over the baseline estimate, and the total program unit cost increased by 89 percent. Changes in quantity and engineering accounted for approximately \$35.4 billion of the total cost increase of \$41.6 billion (in current dollars) on this program.

Figure IV.3 shows the overall program cost changes for Air Force aircraft (in current dollars) between the base year estimate and the current year estimates. Figure IV.4 shows the same data as a percentage of the base year estimates. Both figures show that quantity changes were the main causes for cost increases. The two figures also suggest that economic and estimate factors offset some of the total program cost increases.

**Figure IV.3: Air Force SARs Program
Cost Change By Cause For Aircraft
Systems From Base Year Estimates To
December 31, 1987**



**Figure IV.4: Air Force SARs Program
Cost Change By Cause For Aircraft
Systems From Base Year Estimates To
December 31, 1987**

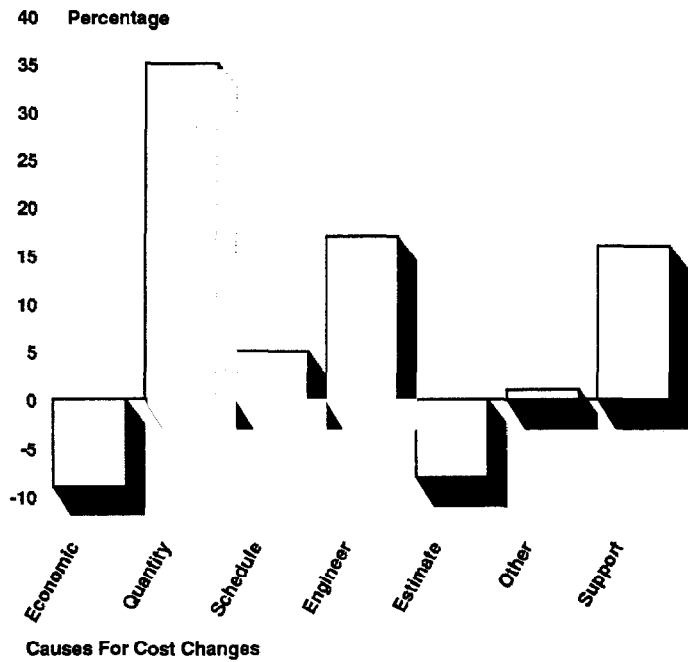


Table IV.4 shows that the Air Force aircraft programs have incurred an overall program cost increase of approximately \$994 million (in current dollars) between December 31, 1986, and December 31, 1987, for the systems common to both reporting periods. The largest increase--\$1.6 billion (in current dollars)--was reported on the F-15 program. Three programs--B-1B, C-5B, and KC-135--reported program cost decreases for this period which offset, in part, the increases reported on the other programs.

TABLE IV. 4.

AIR FORCE SELECTED ACQUISITION REPORTS
COST CHANGE FROM DECEMBER 31, 1986 TO DECEMBER 31, 1987

Dollars in Millions

AIRCRAFT#	DATE OF ESTIMATE	TOTAL PROGRAM ESTIMATES				QUANTITY	DIFFERENCE BY REPORTED CAUSE								
		PROGRAM COST		UNIT COST			ECONOMIC	QUANTITY	SCHEDULE	ENGRG	ESTIMATE	OTHER	SUPPORT	TOTAL	
		CONSTANT	CURRENT	CONSTANT	CURRENT										
ATF (DEV COST ONLY)	12/31/87(PE)	\$10057.20	\$12670.00	\$ 1117.47	\$ 1407.79	9.00	CONSTANT 87	\$ -369.00	\$ 0.00	\$ 0.00	\$ -1577.90	\$ 0.00	\$ 218.60	\$ -1728.30	
	12/31/86	10072.00	12643.40	839.33	1053.62	12.00	CONSTANT 86	-369.00	0.00	0.00	-1563.10	0.00	218.60	-1713.50	
	DIFFERENCE --	\$ -14.80	26.60	\$ 278.13	354.16	-3.00	DIFFERENCE	\$ 0.00	\$ 0.00	\$ 0.00	\$ -14.80	\$ 0.00	\$ 0.00	\$ -14.80	
	-- %	0%	0%	33%	34%	-25%	CURRENT 87	\$ -616.20	\$ -467.70	\$ 407.10	\$ 0.00	\$ -2229.20	\$ 0.00	\$ 282.00	\$ -2624.00
							CURRENT 86	-665.80	-467.70	407.10	0.00	-2206.20	0.00	282.00	-2650.60
							DIFFERENCE	49.60	0.00	0.00	0.00	-23.00	0.00	0.00	26.60
B-1B	12/31/87(PE)	\$20100.20	27042.70	\$ 201.00	270.43	100.00	CONSTANT 87	\$ 0.00	\$ 0.00	\$ 0.00	\$ -29.60	\$ 0.00	\$ -370.20	\$ -399.80	
	12/31/86	20178.90	27293.40	201.79	272.93	100.00	CONSTANT 86	0.00	0.00	0.00	-96.40	0.00	-224.70	-321.10	
	DIFFERENCE --	\$ -78.70	-250.70	\$ -0.79	-2.51	0.00	DIFFERENCE	\$ 0.00	\$ 0.00	\$ 0.00	\$ 66.80	\$ 0.00	\$ -145.50	\$ -78.70	
	-- %	0%	-1%	0%	-1%	0%	CURRENT 87	-1792.80	0.00	0.00	0.00	-453.00	0.00	-249.10	-2494.90
							CURRENT 86	-1650.50	0.00	0.00	0.00	-549.50	0.00	-44.40	-2244.20
							DIFFERENCE	-142.50	0.00	0.00	0.00	96.50	0.00	-204.70	-250.70
C-17A	12/31/87(PE)	\$20633.20	35695.10	\$ 97.79	169.17	211.00	CONSTANT 87	\$ 0.00	\$ 186.60	\$ 137.50	\$ -195.20	\$ 0.00	\$ 959.70	\$ 1088.60	
	12/31/86	20537.90	35411.20	97.34	167.83	211.00	CONSTANT 86	0.00	172.30	123.90	-355.50	0.00	1052.60	993.30	
	DIFFERENCE --	\$ 95.30	283.90	\$ 0.45	1.35	0.00	DIFFERENCE	\$ 0.00	\$ 14.30	\$ 13.60	\$ 160.30	\$ 0.00	\$ -92.90	\$ 95.30	
	-- %	0%	1%	0%	1%	0%	CURRENT 87	-5840.80	0.00	546.90	246.70	-626.10	0.00	1614.60	-4058.70
							CURRENT 86	-5919.90	0.00	496.20	228.60	-961.20	0.00	1813.70	-4342.60
							DIFFERENCE	79.10	0.00	50.70	18.10	335.10	0.00	-199.10	283.90
C-5B	12/31/87(PE)	\$ 4435.60	7021.10	\$ 88.71	140.42	50.00	CONSTANT 87	\$ 0.00	\$ 0.00	\$ 0.00	\$ -1001.30	\$ 0.00	\$ -408.80	\$ -1410.10	
	12/31/86	4653.00	7427.70	93.06	148.55	50.00	CONSTANT 86	0.00	0.00	0.00	-816.80	0.00	-375.90	-1192.70	
	DIFFERENCE --	\$ -217.40	-406.60	\$ -4.35	-8.13	0.00	DIFFERENCE	\$ 0.00	\$ 0.00	\$ 0.00	\$ -184.50	\$ 0.00	\$ -32.90	\$ -217.40	
	-- %	-5%	-5%	-5%	-5%	0%	CURRENT 87	-280.70	0.00	36.00	0.00	-1751.10	0.00	-650.40	-2646.20
							CURRENT 86	-231.20	0.00	36.00	0.00	-1445.90	0.00	-598.50	-2239.60
							DIFFERENCE	-49.50	0.00	0.00	0.00	-305.20	0.00	-51.90	-406.60

----- TOTAL PROGRAM ESTIMATES -----							----- DIFFERENCE BY REPORTED CAUSE -----								
AIRCRAFT	DATE OF ESTIMATE	PROGRAM COST		UNIT COST		QUANTITY		ECONOMIC	QUANTITY	SCHEDULE	ENGRG	ESTIMATE	OTHER	SUPPORT	TOTAL
		CONSTANT	CURRENT	CONSTANT	CURRENT										
F-15	12/31/87(DE)	\$13304.90	38694.00	\$ 10.35	30.09	1286.00	CONSTANT 87	\$ 3365.70	\$ 513.90	\$ 1223.00	\$ 138.90	\$ 619.10	\$ 1453.30	\$ 7313.90	
	12/31/86	13027.90	37070.20	10.13	28.83	1286.00	CONSTANT 86	3365.70	513.90	1213.20	-67.10	619.10	1392.10	7036.90	
	DIFFERENCE --	\$ 277.00	1623.80	\$ 0.22	1.26	0.00	DIFFERENCE	\$ 0.00	\$ 0.00	\$ 9.80	\$ 206.00	\$ 0.00	\$ 61.20	\$ 277.00	
	-- %	2%	4%	2%	4%	0%	CURRENT 87	639.30	14749.20	3308.30	4050.60	1096.80	767.70	6726.90	31338.80
							CURRENT 86	657.20	14749.20	3022.40	4024.30	114.90	767.70	6379.30	29715.00
						DIFFERENCE	-17.90	0.00	285.90	26.30	981.90	0.00	347.60	1623.80	
F-16	12/31/87(DE)	\$19147.60	47656.00	\$ 7.00	17.41	2737.00	CONSTANT 87	\$ 7285.70	\$ 297.30	\$ 4894.40	\$ -1361.60	\$ 40.10	\$ 3614.90	\$ 14770.80	
	12/31/86	19122.80	47528.80	6.99	17.37	2737.00	CONSTANT 86	7285.70	297.30	4919.00	-1420.50	40.10	3624.40	14746.00	
	DIFFERENCE --	\$ 24.80	127.20	\$ 0.01	0.05	0.00	DIFFERENCE	\$ 0.00	\$ 0.00	\$ -24.60	\$ 58.90	\$ 0.00	\$ -9.50	\$ 24.80	
	-- %	0%	0%	0%	0%	0%	CURRENT 87	-2073.10	20357.70	1723.50	15088.50	-3397.90	56.40	9846.40	41601.50
							CURRENT 86	-2124.60	20357.70	1723.50	15155.90	-3559.50	56.40	9864.90	41474.30
						DIFFERENCE	51.50	0.00	0.00	-67.40	161.60	0.00	-18.50	127.20	
KC-135R	12/31/87(PdE)	\$ 7567.70	12446.70	\$ 11.86	19.51	638.00	CONSTANT 87	\$ 3295.80	\$ 0.00	\$ 0.00	\$ -1204.90	\$ 0.00	\$ 247.70	\$ 2338.60	
	12/31/86	7768.20	12857.20	12.12	20.06	641.00	CONSTANT 86	3327.20	0.00	0.00	-979.50	0.00	191.40	2539.10	
	DIFFERENCE --	\$ -200.50	-410.50	\$ -0.26	-0.55	-3.00	DIFFERENCE	\$ -31.40	\$ 0.00	\$ 0.00	\$ -225.40	\$ 0.00	\$ 56.30	\$ -200.50	
	-- %	-3%	-3%	-2%	-3%	0%	CURRENT 87	-511.40	6175.00	297.00	0.00	-1867.60	0.00	524.50	4617.50
							CURRENT 86	-506.00	6240.50	376.90	0.00	-1507.80	0.00	424.40	5028.00
						DIFFERENCE	-5.40	-65.50	-79.90	0.00	-359.80	0.00	100.10	-410.50	
TOTAL AIRCRAFT	12/31/87		181225.6		2054.81	5031.00	CURRENT 86	-10475.7	40814.20	6318.80	19385.80	-9228.10	824.10	18094.90	65734.00
	12/31/86		180231.9		1709.18	5037.00	CURRENT 87	-10440.6	40879.70	6062.10	19408.80	-10115.2	824.10	18121.40	64740.30
	DIFFERENCE -	\$	\$ 993.70		\$ 345.63	-6.00	DIFFERENCE \$	\$ -35.10	\$ -65.50	\$ 256.70	\$ -23.00	\$ 887.10	\$ 0.00	\$ -26.50	\$ 993.70
	- %		1%		20%	0%									

*INCLUDES ONLY THOSE SYSTEMS ON BOTH THE 1986 AND 1987 SARs.

MISSILE PROGRAMS

Table IV.5 shows that the Air Force's current total program estimate for its 11 missile programs contained in its SARs. These programs are currently estimated to cost \$68.8 billion (in current dollars). This represents an increase of approximately \$7.8 billion (in current dollars) over the baseline estimate.

TABLE IV. 5. AIR FORCE SELECTED ACQUISITION REPORTS
COST CHANGE FROM BASE YEAR TO DECEMBER 31, 1987
Dollars in Millions

MISSILES	DATE OF ESTIMATE	PROGRAM COST				UNIT COST				DIFFERENCE BY REPORTED CAUSE									
		CONSTANT		CURRENT		CONSTANT		CURRENT		ECONOMIC	QUANTITY	SCHEDULE	ENGRS	ESTIMATE	OTHER	SUPPORT	TOTAL		
		CONSTANT	CURRENT	CONSTANT	CURRENT	CONSTANT %	CURRENT %	CONSTANT %	CURRENT %										
ARRAM	12/31/87 (DE)	\$ 5102.30	\$ 11199.20	\$ 0.21	\$ 0.46	24431.00													
	BASE YEAR (78)	4761.80	11591.60	0.19	0.47	24504.00													
	DIFFERENCE - \$	340.50	-392.40	0.01	-0.01	-73.00													
	%	7%	-3%	7%	-3%	-0.30%													
ASAT (SPACE DEF)	12/31/87 (DE)	1032.20	1675.50																
	BASE YEAR (77)	1872.50	3687.40																
	DIFFERENCE - \$	-840.30	-2211.90																
	%	-45%	-57%																
BLCM	12/31/87 (DE)	1856.90	3442.40	3.29	6.09	565.00													
	BASE YEAR (77)	1053.60	1527.20	1.50	2.18	702.00													
	DIFFERENCE - \$	803.30	1915.20	1.79	3.92	-137.00													
	%	76%	125%	180%	-20%														
IR MIV 60H-65	12/31/87 (DE)	2719.00	7620.80	0.04	0.13	60697.00													
	BASE YEAR (75)	995.10	1592.90	0.03	0.05	31113.00													
	DIFFERENCE - \$	1723.90	6027.90	0.01	0.07	29584.00													
	%	173%	378%	40%	145%	95%													
TOTAL	12/31/87 (DE)	9%	14%	3%	8%	6%													
	BASE YEAR (77)	9%	14%	3%	8%	6%													
	DIFFERENCE - \$	0.00	0.00	0.00	0.00	0.00													
	%	0%	0%	0%	0%	0%													

----- TOTAL PROGRAM ESTIMATES -----

----- DIFFERENCE BY REPORTED CAUSE -----

MISSILES	DATE OF ESTIMATE	PROGRAM COST		UNIT COST		QUANTITY	DIFFERENCE BY REPORTED CAUSE											
		CONSTANT	CURRENT	CONSTANT	CURRENT		ECONOMIC	QUANTITY	SCHEDULE	ENGRG	ESTIMATE	OTHER	SUPPORT	TOTAL				
PEACEKEEPER	12/31/87 (DE)	16593.50	21946.10	65.07	86.06	255.00												
	BASE YEAR (82)	16634.90	21680.20	68.46	89.22	243.00												
	DIFFERENCE - \$	-41.40	265.90	-3.38	-3.16	12.00	CONSTANT \$		236.40	17.60	-72.50	839.90	0.00	-1062.80	-41.40			
	- %	-0.2%	1%	-5%	-4%	5%	CURRENT \$	-882.50	377.60	935.00	-97.10	1369.40	0.00	-1436.50	265.90			
	ANNUAL AVERAGE GROWTH RATE	-0.05%	0.2%	-1%	-1%	1%	CONSTANT %		1%	0.1%	-0.4%	5%	0%	-6%	-0.2%			
							CURRENT %	-4%	2%	4%	-0.4%	6%	0%	-7%	1%			
PEACEKEEPER RAIL	12/31/87 (PE)	5785.70	8451.50	115.71	169.03	50.00												
GARRISON	BASE YEAR (82)	6328.50	9106.80	126.57	182.14	50.00												
	DIFFERENCE - \$	-542.80	-655.30	-10.86	-13.11	0.00	CONSTANT \$		0.00	0.00	0.00	-499.70	0.00	-43.10	-542.80			
	- %	-9%	-7%	-9%	-7%	0%	CURRENT \$	52.30	0.00	0.00	0.00	-650.20	0.00	-57.40	-655.30			
	ANNUAL AVERAGE GROWTH RATE	-2%	-1%	-2%	-1%	0%	CONSTANT %		0%	0%	0%	-8%	0%	-1%	-9%			
							CURRENT %	1%	0%	0%	0%	-7%	0%	-1%	-7%			
SFW	12/31/87 (DE)	1568.10	3212.70	0.08	0.16	19892.00												
	BASE YEAR (79)	1219.80	2405.80	0.09	0.17	14084.00												
	DIFFERENCE - \$	348.30	806.90	-0.01	-0.01	5808.00	CONSTANT \$		342.00	0.00	0.00	3.10	0.00	3.20	348.30			
	- %	29%	34%	-9%	-5%	41%	CURRENT \$	11.10	765.70	16.00	0.00	6.60	0.00	7.50	806.90			
	ANNUAL AVERAGE GROWTH RATE	3%	4%	-1%	-1%	7%	CONSTANT %		28%	0%	0%	0.3%	0%	0.3%	29%			
							CURRENT %	0.5%	32%	1%	0%	0.3%	0%	0.3%	34%			
SMALL ICBM (TERMINATED; NOT INCLUDED IN TOTAL)	12/31/87 (PE)	3040.30	3352.00	1013.43	1117.33	3.00												
	BASE YEAR (84)	33711.00	44727.90	52.27	69.35	645.00												
	DIFFERENCE - \$	-30670.7	-41375.9	961.17	1047.99	-642.00	CONSTANT \$		-9044.40	0.00	0.00	23.00	-8486.50	-13162.9	-30670.7			
	- %	-91%	-93%	183%	151%	-100%	CURRENT \$	232.20	-12604.8	0.00	0.00	25.80	-10721.4	-18307.7	-41375.9			
	ANNUAL AVERAGE GROWTH RATE	-55%	-58%	167%	153%	-83%	CONSTANT %		-27%	0%	0%	0.07%	-25%	-39%	-91%			
							CURRENT %	1%	-26%	0%	0%	0.06%	-24%	-41%	-93%			

APPENDIX IV

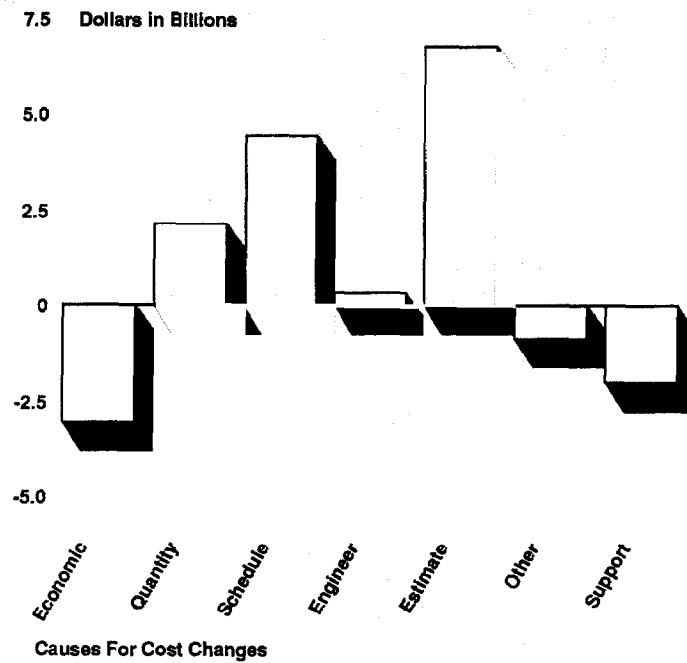
APPENDIX IV

MISSILES	DATE OF ESTIMATE	PROGRAM COST		UNIT COST		DIFFERENCE BY REPORTED CAUSE															
		CONSTANT	CURRENT	CONSTANT	CURRENT	QUANTITY	SCHEDULE	ENBRG	ESTIMATE	OTHER	SUPPORT	TOTAL	ECONOMIC	QUANTITY	SCHEDULE	ENBRG	ESTIMATE	OTHER	SUPPORT	TOTAL	
SRAM II	12/31/87 (PE)	1720.50	2393.40	1.05	1.47	1633.00															
	BASE YEAR (83)	2231.10	3064.50	1.37	1.88	1633.00															
	DIFFERENCE - \$	-510.60	-671.10	-0.31	-0.41	0.00															
	- %	-23%	-22%	-23%	-22%	0%															
TACIT RAINBOW	12/31/87 (DE)	2812.10	3725.10																		
	BASE YEAR (85)	2786.50	3654.00																		
	DIFFERENCE - \$	25.60	71.10																		
	- %	1%	2%																		
TITAN IV (DELV)	12/31/87 (BE)	4402.90	5133.50	191.43	223.20	23.00															
	BASE YEAR (85)	2150.50	2529.70	215.05	252.92	10.00															
	DIFFERENCE - \$	2252.40	2604.30	-23.62	-29.72	13.00															
	- %	105%	103%	-11%	-12%	130%															
TOTAL MISSILES	12/31/87		\$68800.20		\$486.59	107546.0															
	BASE YEARS		61039.80		529.02	73339.00															
	DIFFERENCE - \$		\$7760.60		\$-42.43	35207.00															
	- %		13%		-8%	49%															
ANNUAL AVERAGE GROWTH RATE																					
			5%		-3%	5%															

Five of the missile programs--AMRAAM, ASAT, PEACEKEEPER (rail garrison), small ICBM, and SRAM II--report a total program cost decrease. The largest total program decrease--approximately \$41 billion--occurred on the small ICBM program, primarily because the program is being terminated; therefore, we did not include it in our totals. The remaining six programs reported total program cost increases ranging from approximately \$6 billion for the IR Maverick and \$1.9 billion on the GLCM to \$71 million for TACIT Rainbow. For the Maverick program, schedule changes and estimating changes accounted for approximately \$4.3 billion of the reported \$6 billion in total program cost increases. The total program unit cost for the IR Maverick increased 145 percent, and the total program quantity increased 95 percent. For the GLCM program, estimating changes accounted for approximately \$992 million of the total program cost increase. Total program unit costs on the GLCM program increased 180 percent, and the total program quantities decreased 20 percent.

Figure IV.5 shows the overall program cost changes for Air Force missiles in current dollars between the base year estimate and the current year estimates. Figure IV.6 shows the same data as a percentage of the base year estimates. Both figures show that changes associated with estimates are the main cause for overall program cost increases. The figures also show that costs associated with economic, support, and other factors have partially offset overall total program cost increases (in current dollars).

**Figure IV.5: Air Force SARs Program
Cost Change By Cause For Missile
Systems From Base Year Estimates To
December 31, 1987**



**Figure IV.6: Air Force SARs Program
Cost Change By Cause For Missile
Systems From Base Year Estimates To
December 31, 1987**

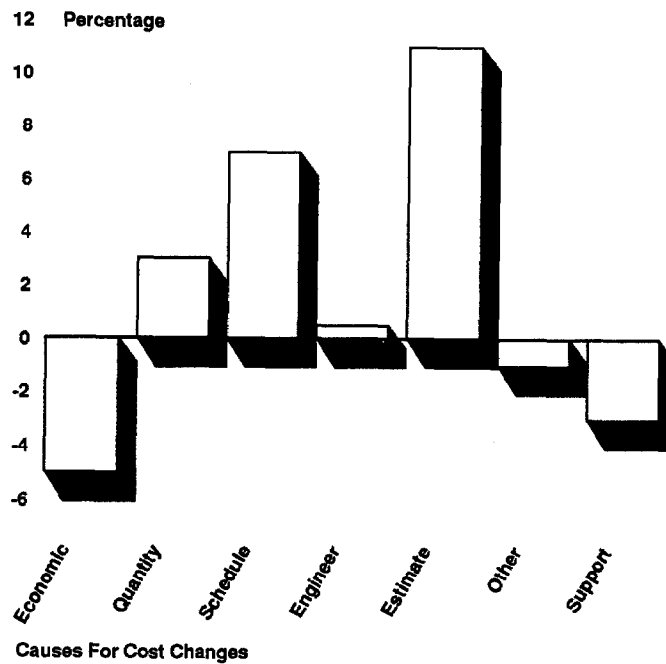


Table IV.6 shows that the Air Force missile programs had an overall cost decrease of approximately \$700 million (in current dollars) between December 31, 1986, and December 31, 1987, for the programs common to both periods.

TABLE IV. 6.

AIR FORCE SELECTED ACQUISITION REPORTS
 COST CHANGE FROM DECEMBER 31, 1986 TO DECEMBER 31, 1987

Dollars in Millions

MISSILES#	DATE OF ESTIMATE	TOTAL PROGRAM ESTIMATES					DIFFERENCE BY REPORTED CAUSE								
		PROGRAM COST		UNIT COST		QUANTITY	ECONOMIC	QUANTITY	SCHEDULE	ENGRG	ESTIMATE	OTHER	SUPPORT	TOTAL	
		CONSTANT	CURRENT	CONSTANT	CURRENT										
ANRAAM	12/31/87(DE)	\$ 5102.30	\$11199.20	\$ 0.21	\$ 0.46	24431.00	CONSTANT 87	\$ -18.70	\$ -158.20	\$ 66.60	\$ 712.00	\$ 0.00	\$ -261.20	\$ 340.50	
	12/31/86	4868.20	10461.70	0.20	0.43	24431.00	CONSTANT 86	-18.70	-158.20	66.60	367.40	0.00	-150.70	106.40	
	DIFFERENCE	-- \$ 234.10	737.50	\$ 0.01	0.03	0.00	DIFFERENCE	\$ 0.00	\$ 0.00	\$ 0.00	\$ 344.60	\$ 0.00	\$ -110.50	\$ 234.10	
		-- % 5%	7%	5%	7%	0.00%	CURRENT 87	\$-2046.20	\$ -39.20	\$ 374.80	\$ 175.40	\$ 1701.70	\$ 0.00	\$ -558.90	\$ -392.40
							CURRENT 86	-2109.30	-39.20	258.10	175.40	888.70	0.00	-303.60	-1129.90
							DIFFERENCE	63.10	0.00	116.70	0.00	813.00	0.00	-255.30	737.50
ASAT (SPACE DEF)	12/31/87(DE)	\$ 1032.20	1675.50				CONSTANT 87	\$ -832.60	\$ 209.90	\$ 152.80	\$ 259.50	\$ -483.80	\$ -146.10	\$ -840.30	
	12/31/86	2177.50	4211.50				CONSTANT 86	-292.90	209.90	152.80	259.50	0.00	-24.30	305.00	
	DIFFERENCE	-- \$ -1145.30	-2536.00				DIFFERENCE	\$ -539.70	\$ 0.00	\$ 0.00	\$ 0.00	\$ -483.80	\$ -121.80	\$ -1145.30	
		-- % -53%	-60%				CURRENT 87	-279.00	-2109.80	660.50	311.40	552.10	-988.10	-359.00	-2211.90
							CURRENT 86	-279.00	-849.30	660.50	311.40	552.10	0.00	-71.60	324.10
							DIFFERENCE	0.00	-1260.50	0.00	0.00	0.00	-988.10	-287.40	-2536.00
SLCM	12/31/87(DE)	\$ 1856.90	3442.40	\$ 3.29	6.09	565.00	CONSTANT 87	\$ -129.60	\$ 16.00	\$ 35.70	\$ 534.80	\$ 75.60	\$ 270.80	\$ 803.30	
	12/31/86	1927.20	3596.70	3.20	5.97	602.00	CONSTANT 86	-108.00	16.20	35.80	566.00	73.90	289.70	873.60	
	DIFFERENCE	-- \$ -70.30	-154.30	\$ 0.09	0.12	-37.00	DIFFERENCE	\$ -21.60	\$ -0.20	\$ -0.10	\$ -31.20	\$ 1.70	\$ -18.90	\$ -70.30	
		-- % -4%	-4%	3%	2%	-6%	CURRENT 87	280.20	-216.30	135.90	61.60	992.70	136.70	524.40	1915.20
							CURRENT 86	282.20	-168.00	136.40	61.90	1058.10	132.80	566.10	2069.50
							DIFFERENCE	-2.00	-48.30	-0.50	-0.30	-65.40	3.90	-41.70	-154.30
IR MAV AGM-65	12/31/87(DE)	\$ 2719.00	7620.80	\$ 0.04	0.13	60697.00	CONSTANT 87	\$ 512.00	\$ 416.60	\$ 10.60	\$ 717.00	\$ 0.00	\$ 67.70	\$ 1723.90	
	12/31/86	2577.10	7083.70	0.04	0.12	60697.00	CONSTANT 86	512.00	450.00	10.60	537.90	0.00	71.50	1582.00	
	DIFFERENCE	-- \$ 141.90	537.10	\$ 0.00	0.01	0.00	DIFFERENCE	\$ 0.00	\$ -33.40	\$ 0.00	\$ 179.10	\$ 0.00	\$ -3.80	\$ 141.90	
		-- % 6%	8%	6%	8%	0%	CURRENT 87	-135.10	1563.30	2275.90	30.00	2066.80	0.00	227.00	6827.90
							CURRENT 86	-170.70	1563.30	2364.30	30.00	1466.00	0.00	237.90	5490.80
							DIFFERENCE	35.60	0.00	-88.40	0.00	600.80	0.00	-10.90	537.10

----- TOTAL PROGRAM ESTIMATES -----

----- DIFFERENCE BY REPORTED CAUSE -----

MISSILES	DATE OF ESTIMATE	PROGRAM COST		UNIT COST		QUANTITY	DIFFERENCE BY REPORTED CAUSE								
		CONSTANT	CURRENT	CONSTANT	CURRENT		ECONOMIC	QUANTITY	SCHEDULE	ENGRG	ESTIMATE	OTHER	SUPPORT	TOTAL	
PEACEKEEPER	12/31/87(DE)	\$16593.50	21946.10	\$ 65.07	86.06	255.00	CONSTANT 87	\$ 236.40	\$ 17.60	\$ -72.50	\$ 839.90	\$ 0.00	\$ -1062.80	\$ -41.40	
	12/31/86	16790.00	22020.20	65.84	86.35	255.00	CONSTANT 86	236.40	17.60	-72.50	1107.50	0.00	-1133.90	155.10	
	DIFFERENCE	-- \$ -196.50	-74.10	\$ -0.77	-0.29	0.00	DIFFERENCE	\$ 0.00	\$ 0.00	\$ 0.00	\$ -267.60	\$ 0.00	\$ 71.10	\$ -196.50	
		-- % -1.2%	0%	-1%	0%	0%	CURRENT 87	-882.50	377.60	935.00	-97.10	1369.40	0.00	-1436.50	265.90
							CURRENT 86	-921.40	377.60	767.70	-97.10	1774.80	0.00	-1561.60	340.00
							DIFFERENCE	38.90	0.00	167.30	0.00	-405.40	0.00	38.90	-74.10
SWF	12/31/87(DE)	\$ 1568.10	3212.70	\$ 0.08	0.16	19892.00	CONSTANT 87	\$ 342.00	\$ 0.00	\$ 0.00	\$ 3.10	\$ 0.00	\$ 3.20	\$ 348.30	
	12/31/86	1569.50	3163.90	0.08	0.16	19892.00	CONSTANT 86	342.00	0.00	0.00	4.00	0.00	3.70	349.70	
	DIFFERENCE	-- \$ -1.40	48.80	\$ 0.00	0.00	0.00	DIFFERENCE	\$ 0.00	\$ 0.00	\$ 0.00	\$ -0.90	\$ 0.00	\$ -0.50	\$ -1.40	
		-- % 0%	2%	0%	2%	0%	CURRENT 87	11.10	765.70	16.00	0.00	6.60	0.00	7.50	806.90
							CURRENT 86	-13.20	765.70	-9.00	0.00	6.40	0.00	8.20	758.10
							DIFFERENCE	24.30	0.00	25.00	0.00	0.20	0.00	-0.70	48.80
SMALL ICBM (TERMINATED; NOT INCLUDED IN TOTAL)	12/31/87(PE)	\$ 3040.30	3352.00	\$ 1013.43	1117.33	3.00	CONSTANT 87	\$-9044.40	\$ 0.00	\$ 0.00	\$ 23.00	\$-8486.50	\$-13162.8	\$-30670.7	
	12/31/86	9776.60	11649.80	444.39	529.54	22.00	CONSTANT 86	0.00	0.00	0.00	-808.90	0.00	0.00	-808.90	
	DIFFERENCE	-- \$ -6736.3	-8297.8	\$ 569.04	587.80	-19.00	DIFFERENCE	\$-9044.40	\$ 0.00	\$ 0.00	\$ 831.90	\$-8486.50	\$-13162.8	\$-29861.8	
		-- % -69%	-71%	128%	111%	-86%	CURRENT 87	232.20	-12604.8	0.00	0.00	25.80	-10721.4	-18307.7	-41375.9
							CURRENT 86	-114.20	0.00	0.00	0.00	-936.00	0.00	0.00	-1050.20
							DIFFERENCE	346.40	-12604.8	0.00	0.00	961.80	-10721.4	-18307.7	-40325.7
SRAM II	12/31/87(PE)	\$ 1720.50	2393.40	\$ 1.05	1.47	1633.00	CONSTANT 87	\$ 0.00	\$ 0.00	\$ 0.00	\$ -476.20	\$ 0.00	\$ -34.40	\$ -510.60	
	12/31/86	1783.90	2465.00	1.09	1.51	1633.00	CONSTANT 86	0.00	0.00	0.00	-372.00	0.00	-75.20	-447.20	
	DIFFERENCE	-- \$ -63.40	-71.60	\$ -0.04	-0.04	0.00	DIFFERENCE	\$ 0.00	\$ 0.00	\$ 0.00	\$ -104.20	\$ 0.00	\$ 49.80	\$ -63.40	
		-- % -4%	-3%	-4%	-3%	0%	CURRENT 87	-32.90	0.00	87.60	0.00	-659.90	0.00	-65.90	-671.10
							CURRENT 86	-43.10	0.00	87.60	0.00	-519.40	0.00	-124.60	-599.50
							DIFFERENCE	10.20	0.00	0.00	0.00	-140.50	0.00	58.70	-71.60

----- TOTAL PROGRAM ESTIMATES -----							----- DIFFERENCE BY REPORTED CAUSE -----								
MISSILES	DATE OF ESTIMATE	PROGRAM COST		UNIT COST		QUANTITY	ECONOMIC	QUANTITY	SCHEDULE	ENGRG	ESTIMATE	OTHER	SUPPORT	TOTAL	
		CONSTANT	CURRENT	CONSTANT	CURRENT										
TITAN IV	12/31/87 (DE)	\$ 4402.90	5133.50	\$ 191.43	223.20	23.00	CONSTANT 87	\$ 1466.40	\$ 0.00	\$ -116.70	\$ 1055.90	\$ 0.00	\$ -153.20	\$ 2252.40	
(CELV)	12/31/86	3720.60	4334.60	161.77	188.46	23.00	CONSTANT 86	1466.40	0.00	-310.80	752.20	0.00	-337.70	1570.10	
	DIFFERENCE --	\$ 682.30	798.90	\$ 29.67	34.73	0.00	DIFFERENCE	\$ 0.00	\$ 0.00	\$ 194.10	\$ 303.70	\$ 0.00	\$ 184.50	\$ 682.30	
	-- %	18%	18%	18%	18%	0%	CURRENT 87	-45.20	1793.20	-36.20	-159.10	1302.60	0.00	-251.00	2604.30
							CURRENT 86	-56.80	1793.20	-36.20	-381.10	948.80	0.00	-462.50	1805.40
							DIFFERENCE	11.60	0.00	0.00	222.90	353.80	0.00	211.50	798.90
TOTAL	12/31/87		56623.6		317.6	107496.0	CURRENT 87	-3129.60	2134.50	4449.50	322.20	7332.00	-851.40	-1912.40	8344.80
MISSILES	12/31/86		57337.3		283.0	107533.0	CURRENT 86	-3311.30	3443.30	4229.40	100.50	6175.30	132.80	-1711.70	9058.50
	DIFFERENCE -	\$	-713.70	\$	34.56	-37.00	DIFFERENCE \$	181.70	\$ -1308.8	\$ 220.10	\$ 221.70	\$ 1156.50	\$ -984.2	\$ -200.7	\$ -713.7
	- %		-1%		12%	0%									

*INCLUDES ONLY THOSE SYSTEMS ON BOTH THE 1986 AND 1987 SARS.

SATELLITE PROGRAMS

Table IV.7 shows the Air Force's current estimate for its four satellite programs contained in the SARs. These programs are currently estimated to cost \$12.3 billion (in current dollars). This represents an increase of approximately \$2.3 billion (in current dollars) over the baseline estimates.

TABLE VI. 7. AIR FORCE SELECTED ACQUISITION REPORTS
COST CHANGE FROM BASE YEAR TO DECEMBER 31, 1987
Dollars in Millions

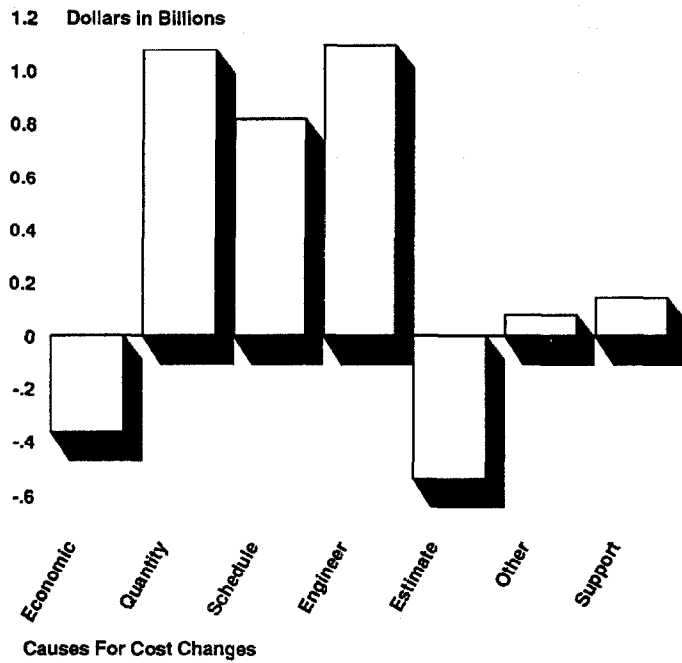
SATELLITES	DATE OF ESTIMATE	PROGRAM COST		UNIT COST		DIFFERENCE BY REPORTED CAUSE													
		CONSTANT	CURRENT	CONSTANT	CURRENT	ECONOMIC	QUANTITY	SCHEDULE	ENRMB	ESTIMATE	OTHER	SUPPORT	TOTAL						
		\$	\$	\$	\$	\$	%	%	%	%	%	%	%						
DMSP	12/31/87(PDE)	746.30	1872.40	74.63	187.24														
	BASE YEAR (75)	718.70	1879.00	79.86	208.78														
	DIFFERENCE	27.60	-6.60	-5.23	-21.54														
	ANNUAL AVERAGE GROWTH RATE	4%	-0.4%	-7%	-10%														
DSIS III	12/31/87(OE)	1865.10	2006.10	71.01	133.74														
	BASE YEAR (77)	631.10	893.60	45.08	63.83														
	DIFFERENCE	434.00	1112.50	25.93	69.91														
	ANNUAL AVERAGE GROWTH RATE	8%	12%	58%	110%														
NAVSTAR GPS	12/31/87(OE)	2454.00	4286.20	39.88	71.34														
	BASE YEAR (79)	1599.40	2306.70	39.99	57.57														
	DIFFERENCE	854.60	1973.50	-0.10	13.57														
	ANNUAL AVERAGE GROWTH RATE	5%	8%	-0.03%	3%														
NAVSTAR EQUIPMENT	12/31/87(OE)	2231.40	4108.60	0.08	0.15														
	BASE YEAR (79)	2554.90	4875.80	0.09	0.18														
	DIFFERENCE	-323.50	-767.20	-0.01	-0.03														
	ANNUAL AVERAGE GROWTH RATE	-2%	-2%	-12%	-15%														

----- TOTAL PROGRAM ESTIMATES -----						----- DIFFERENCE BY REPORTED CAUSE -----									
SATELLITES	DATE OF ESTIMATE	PROGRAM COST		UNIT COST		QUANTITY	ECONOMIC	QUANTITY	SCHEDULE	ENBRG	ESTIMATE	OTHER	SUPPORT	TOTAL	
		CONSTANT	CURRENT	CONSTANT	CURRENT										
TOTAL															
SATELLITES	12/31/87		12267.30		392.47	27127.00									
BASE YEARS			9955.10		330.45	27402.00									
DIFFERENCE - \$			\$ 2312.20		62.02	-275.00									
- %			23%		19%	-1%	CURRENT \$	\$ -363.20	\$ 1076.50	\$ 816.90	\$ 1096.50	\$ -537.80	\$ 77.40	\$ 145.90	\$ 2312.20
ANNUAL AVERAGE GROWTH RATE			3%		3%	-0.1%	CURRENT %	-4%	11%	6%	11%	-5%	1%	1%	23%

Two programs--Defense Meteorological Satellite Program (DMSP) and the NAVSTAR Equipment--reported total program cost decreases. The remaining two programs--the Defense Satellite Communications System (DSCS III) and NAVSTAR Global Positioning Satellite (GPS)--reported program cost increases. These two programs accounted for approximately \$3.1 billion (in current dollars) in program cost increases. For the DSCS III program, engineering changes were the single largest contributor to cost growth. For the NAVSTAR GPS program, costs (in current dollars) associated with changes in quantities were the single largest contributor to cost growth.

Figure IV.7 shows the overall program cost changes for Air Force satellite programs in current dollars between the base year estimate and the current year estimate. Figure IV.8 shows the same data as a percentage of the base year estimates. Both figures show that changes in quantity and engineering are the main causes for total program cost growth. The figures also show that program costs associated with economic and estimate changes have partially offset overall total program cost increases (in current dollars).

**Figure IV.7: Air Force SARs Program
Cost Change By Cause For Satellite
Systems From Base Year Estimates To
December 31, 1987**



**Figure IV.8: Air Force SARs Program
Cost Change By Cause For Satellite
Systems From Base Year Estimates To
December 31, 1987**

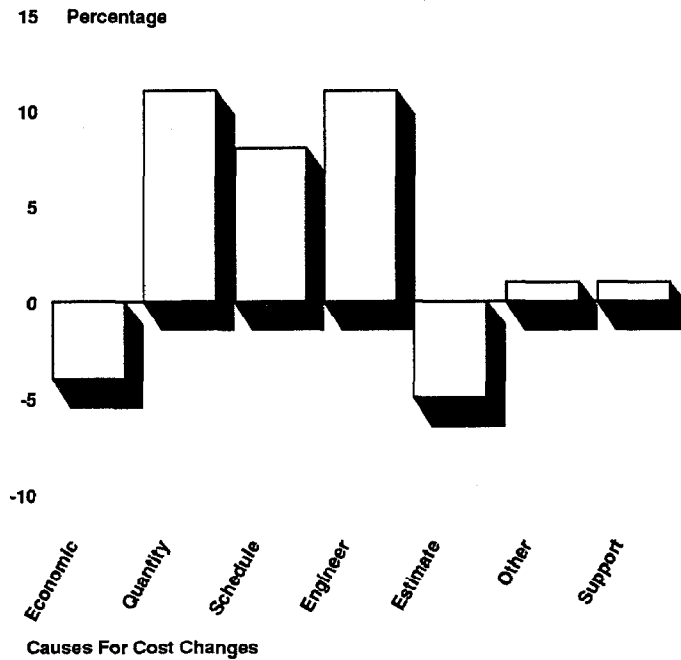


Table IV.8 shows that the Air Force satellite programs have incurred an overall cost increase of approximately \$2.2 billion (in current dollars) between December 31, 1986, and December 31, 1987, for the programs common to both reporting periods. The largest increase--\$1.9 billion (in current dollars)--was reported on the NAVSTAR GPS program. On this program, the total program quantity was increased by 50 percent.

TABLE IV. 8.

AIR FORCE SELECTED ACQUISITION REPORTS
COST CHANGE FROM DECEMBER 31, 1986 TO DECEMBER 31, 1987

Dollars in Millions

SATELLITES*	DATE OF ESTIMATE	TOTAL PROGRAM ESTIMATES					DIFFERENCE BY REPORTED CAUSE								
		PROGRAM COST		UNIT COST		QUANTITY	ECONOMIC	QUANTITY	SCHEDULE	ENGRS	ESTIMATE	OTHER	SUPPORT	TOTAL	
		CONSTANT	CURRENT	CONSTANT	CURRENT										
DNSSP	12/31/87(PdE)	\$ 746.30	\$ 1872.40	\$ 74.63	\$ 187.24	10.00	CONSTANT 87	\$ 61.20	\$ 0.00	\$ -23.60	\$ -39.30	\$ 0.00	\$ 29.30	\$ 27.60	
	12/31/86	775.10	1931.10	77.51	193.11	10.00	CONSTANT 86	61.20	0.00	3.20	-38.30	0.00	30.30	56.40	
	DIFFERENCE --	\$ -28.80	-58.70	\$ -2.88	-5.87	0.00	DIFFERENCE	\$ 0.00	\$ 0.00	\$ -26.80	\$ -1.00	\$ 0.00	\$ -1.00	\$ -28.80	
	-- %	-4%	-3.0%	-4%	-3%	0%	CURRENT 87	\$ -164.10	\$ 190.20	\$ 0.00	\$ -65.60	\$ -58.20	\$ 0.00	\$ 91.10	\$ -6.60
							CURRENT 86	-170.60	190.20	0.00	4.10	-65.40	0.00	93.80	-52.10
						DIFFERENCE	6.50	0.00	0.00	-69.70	7.20	0.00	-2.70	-58.70	
DSCS III	12/31/87(DE)	\$ 1065.10	2006.10	\$ 71.01	133.74	15.00	CONSTANT 87	\$ 21.30	\$ 50.30	\$ 259.00	\$ 65.00	\$ 38.40	\$ 0.00	\$ 434.00	
	12/31/86	900.00	1610.30	64.29	115.02	14.00	CONSTANT 86	0.00	50.30	119.50	60.70	38.40	0.00	268.90	
	DIFFERENCE --	\$ 165.10	395.80	\$ 6.72	18.72	1.00	DIFFERENCE	\$ 21.30	\$ 0.00	\$ 139.50	\$ 4.30	\$ 0.00	\$ 0.00	\$ 165.10	
	-- %	18%	25%	10%	16%	7%	CURRENT 87	86.80	55.30	123.70	549.00	220.30	77.40	0.00	1112.50
							CURRENT 86	85.70	0.40	123.70	225.50	204.00	77.40	0.00	716.70
						DIFFERENCE	1.10	54.90	0.00	323.50	16.30	0.00	0.00	395.80	
NAVSTAR GPS	12/31/87(DE)	\$ 2454.00	4280.20	\$ 39.88	71.34	60.00	CONSTANT 87	\$ 376.00	\$ 4.50	\$ 388.40	\$ -70.90	\$ 0.00	\$ 156.60	\$ 854.60	
	12/31/86	1595.00	2378.10	39.88	59.45	40.00	CONSTANT 86	0.00	4.50	89.90	-236.10	0.00	137.30	-4.40	
	DIFFERENCE --	\$ 859.00	1902.10	\$ 0.01	11.88	20.00	DIFFERENCE	\$ 376.00	\$ 0.00	\$ 298.50	\$ 165.20	\$ 0.00	\$ 19.30	\$ 859.00	
	-- %	54%	80%	0.0%	20%	50%	CURRENT 87	-101.70	844.90	636.00	613.10	-343.50	0.00	324.70	1973.50
							CURRENT 86	-101.30	0.00	73.90	143.10	-321.00	0.00	276.70	71.40
						DIFFERENCE	-0.40	844.90	562.10	470.00	-22.50	0.00	48.00	1902.10	
NAVSTAR EQUIPMENT	12/31/87(DE)	\$ 2231.40	4108.60	\$ 0.08	0.15	27042.00	CONSTANT 87	\$ -6.00	\$ 0.00	\$ 0.00	\$ -183.00	\$ 0.00	\$ -134.50	\$ -323.50	
	12/31/86	2289.10	4160.00	0.08	0.15	27339.00	CONSTANT 86	0.00	0.00	0.00	-106.00	0.00	-159.80	-265.80	
	DIFFERENCE --	\$ -57.70	-51.40	\$ 0.00	0.00	-297.00	DIFFERENCE	\$ -6.00	\$ 0.00	\$ 0.00	\$ -77.00	\$ 0.00	\$ 25.30	\$ -57.70	
	-- %	-3%	-1%	-1%	0%	-1%	CURRENT 87	-164.20	-13.90	57.20	0.00	-356.40	0.00	-269.90	-767.20
							CURRENT 86	-191.50	0.00	0.00	0.00	-202.10	0.00	-322.20	-715.80
						DIFFERENCE	7.30	-13.90	57.20	0.00	-154.30	0.00	52.30	-51.40	

----- TOTAL PROGRAM ESTIMATES -----						----- DIFFERENCE BY REPORTED CAUSE -----									
SATELLITES	DATE OF ESTIMATE	PROGRAM COST		UNIT COST		QUANTITY		ECONOMIC	QUANTITY	SCHEDULE	ENGRS	ESTIMATE	OTHER	SUPPORT	TOTAL
		CONSTANT	CURRENT	CONSTANT	CURRENT										
TOTAL SATELLITES	12/31/87		12267.30	392.47	27127.00										
	12/31/86		10079.50	367.74	27403.00										
	DIFFERENCE - \$		\$ 2187.80	\$ 24.73	-276.00		DIFFERENCE \$	\$ 14.50	\$ 885.90	\$ 619.30	\$ 723.80	\$ -153.30	\$ 0.00	\$ 97.60	\$ 2187.80
	- %		22%	7%	-1%										

*INCLUDES ONLY THOSE SYSTEMS ON BOTH THE 1986 AND 1987 SARG.

OTHER PROGRAMS

Table IV.9 shows the Air Force's current estimate for the 12 systems in the other programs class. This includes the major Air Force acquisitions that do not fall into one of the other classes and for which reports are required. Although the Combat Identification System (CIS) and I-S/A are shown on the table, they are not included in the totals because they are being terminated. The remaining 10 programs are currently estimated to cost \$26.6 billion (in current dollars). This represents an increase of approximately \$6.9 billion (in current dollars) over the baseline estimate.

APPENDIX IV

APPENDIX IV

OTHER =====	TOTAL PROGRAM ESTIMATES				DIFFERENCE BY REPORTED CAUSE									
	DATE OF ESTIMATE =====	PROGRAM COST		UNIT COST		QUANTITY	ECONOMIC	QUANTITY	SCHEDULE	ENRG	ESTIMATE	OTHER	SUPPORT	TOTAL
		CONSTANT	CURRENT	CONSTANT	CURRENT									
IUS (SPACE SHUTTLE)	12/31/87 (DE)	\$ 734.30	1355.60	\$ 91.79	189.45	8.00								
	BASE YEAR (75)	963.00	2012.30	53.50	53.50	18.00								
	DIFFERENCE	-\$ 228.70	-\$ 656.70	\$ 38.29	115.95	-10.00	CONSTANT \$	-241.40	0.00	20.10	-7.90	0.00	0.50	-228.70
		-\$ 24%	-33%	72%	217%	-56%	CURRENT \$	-675.50	0.00	46.30	-7.30	0.00	-2.60	-656.70
	ANNUAL AVERAGE						CONSTANT %	-25%	0%	2%	-1%	0%	0.1%	-24%
	GROWTH RATE						CURRENT %	-34%	0%	2%	-0.4%	0%	-0.1%	-33%
JSTARS	12/31/87 (PE)	\$ 3069.00	4058.80	\$ 29.80	39.41	103.00								
	BASE YEAR (83)	1185.30	1388.20	148.16	173.53	8.00								
	DIFFERENCE	-\$ 1883.70	2679.60	-\$ 118.37	-134.12	95.00	CONSTANT \$	1052.30	0.70	23.60	323.70	0.00	483.20	1883.70
		-\$ 159%	192%	-80%	-77%	1188%	CURRENT \$	1478.30	55.20	29.40	466.80	0.00	767.50	2679.60
	ANNUAL AVERAGE						CONSTANT %	89%	6.1%	2%	27%	0%	41%	159%
	GROWTH RATE						CURRENT %	106%	4%	2%	34%	0%	51%	192%
JTUS	12/31/87 (DE)	\$ 961.50	1323.70	\$ 7.45	19.26	129.00								
	BASE YEAR (81)	309.00	382.50	5.62	6.95	55.00								
	DIFFERENCE	-\$ 652.50	941.20	1.84	3.31	74.00	CONSTANT \$	481.30	-1.50	243.80	-109.70	0.00	38.60	652.50
		-\$ 211%	246%	33%	48%	135%	CURRENT \$	701.80	22.80	352.70	-145.80	0.00	56.10	941.20
	ANNUAL AVERAGE						CONSTANT %	156%	-0.5%	79%	-36%	0%	17%	211%
	GROWTH RATE						CURRENT %	183%	6%	52%	-38%	0%	15%	246%
LANTIRN	12/31/87 (DE)	\$ 2470.40	4122.70	\$ 1.75	2.92	1412.00								
	BASE YEAR (80)	2102.10	1823.20	1.58	2.88	1328.00								
	DIFFERENCE	-\$ 368.30	299.50	0.17	0.04	84.00	CONSTANT \$	35.40	19.80	-29.90	259.70	0.00	82.30	368.30
		-\$ 18%	8%	11%	1%	6%	CURRENT \$	71.40	32.80	-27.00	434.40	0.00	147.50	299.50
	ANNUAL AVERAGE						CONSTANT %	22%	1%	-1%	12%	0%	4%	18%
	GROWTH RATE						CURRENT %	2%	1%	-1%	11%	0%	4%	8%

OTHER	DATE OF ESTIMATE	TOTAL PROGRAM ESTIMATES				DIFFERENCE BY REPORTED CAUSE							
		PROGRAM COST		UNIT COST		ECONOMIC	QUANTITY	SCHEDULE	ENGRS	ESTIMATE	OTHER	SUPPORT	TOTAL
		CONSTANT	CURRENT	CONSTANT	CURRENT								
MLS	12/31/87 (PE)	\$ 232.00	338.30	\$ 0.32	0.47								
	BASE YEAR (82)	105.50	144.00	0.21	0.28								
	DIFFERENCE	-- \$ 126.50	194.30	\$ 0.12	0.19	CONSTANT \$	109.70	0.00	0.00	-31.70	0.00	48.50	126.50
	-- % 120%	135%	135%	55%	66%	CURRENT \$	157.00	13.60	0.00	-45.90	0.00	74.00	194.30
	ANNUAL AVERAGE					CONSTANT %	104%	0%	0%	-30%	0%	46%	120%
	GROWTH RATE	17%	19%	9%	11%	CURRENT %	109%	9%	0%	-32%	0%	51%	135%
OTH-B	12/31/87 (OE)	\$ 1881.90	2459.20	\$ 156.83	204.93								
	BASE YEAR (82)	1145.30	1419.40	143.16	177.43								
	DIFFERENCE	-- \$ 736.60	1039.80	\$ 13.66	27.51	CONSTANT \$	487.50	5.10	174.00	10.40	0.00	56.60	736.60
	-- % 64%	73%	73%	10%	16%	CURRENT \$	687.80	55.20	259.70	24.20	0.00	90.70	1039.80
	ANNUAL AVERAGE					CONSTANT %	43%	1%	15%	1%	0%	5%	64%
	GROWTH RATE	10%	12%	2%	3%	CURRENT %	48%	4%	18%	2%	0%	6%	73%
TRI-TRC	12/31/87 (PE)	\$ 1034.90	1995.10	\$ 1.86	3.59								
	BASE YEAR (76)	1127.00	2225.20	3.10	6.13								
	DIFFERENCE	-- \$ -92.10	-230.10	\$ -1.24	-2.54	CONSTANT \$	125.60	0.00	9.20	-173.90	0.00	-53.00	-92.10
	-- % -8%	-10%	-10%	-40%	-41%	CURRENT \$	312.30	37.50	19.90	-401.50	0.00	-102.50	-230.10
	ANNUAL AVERAGE					CONSTANT %	11%	0%	1%	-15%	0%	-5%	-8%
	GROWTH RATE	-0.8%	-1.0%	-5%	-5%	CURRENT %	14%	2%	1%	-18%	0%	-5%	-10%
#15 (WHN-CCS SYS)	12/31/87 (OE)	\$ 1478.00	1980.70	\$ 42.23	56.59								
	BASE YEAR (82)	1427.00	1857.00	40.77	53.06								
	DIFFERENCE	-- \$ 51.00	123.70	\$ 1.46	3.53	CONSTANT \$	0.00	0.00	25.70	77.20	0.00	-1.90	51.00
	-- % 4%	7%	7%	4%	7%	CURRENT \$	0.00	23.20	30.90	272.20	0.00	-2.40	123.70
	ANNUAL AVERAGE					CONSTANT %	0%	0%	2%	2%	0%	-0.1%	4%
	GROWTH RATE	7%	1%	1%	1%	CURRENT %	0%	1%	2%	15%	0%	-0.1%	7%

DATE OF ESTIMATE	TOTAL PROGRAM ESTIMATES			DIFFERENCE BY REPORTED CAUSE								
	PROGRAM COST	UNIT COST		ECONOMIC	QUANTITY	SCHEDULE	ENGRG	ESTIMATE	OTHER	SUPPORT	TOTAL	
OTHER	CONSTANT	CURRENT	CONSTANT	CURRENT	QUANTITY							
TOTAL OTHER 12/31/87	26550.80	812.30	3100.00									
BASE YEARS	19633.20	773.56	2444.00									
DIFFERENCE - \$	\$ 6937.60	\$ 38.74	656.00									
- %	35%	5%	27%									
ANNUAL AVERAGE GROWTH RATE	8%	2%	6%									
				CURRENT \$	\$ -1064.50	\$ 5464.40	\$ 292.90	\$ 711.90	\$ 42.40	\$ 0.00	\$ 1490.50	\$ 6937.60
				CURRENT %	-5%	28%	1%	4%	0.2%	0%	8%	35%

Four programs--CIS, CSRL, IUS, and TRI-TAC--reported program decreases. The remaining seven programs--DSP, JSTARS, JTIDS, LANTIRN, MLS, OTH-B, and WIS--reported program cost increases. Four programs--Defense Support Program (DSP), JSTARS, OTH-B, and JTIDS--account for approximately \$8 billion (in current dollars) in program cost increases. For each of these programs, changes in quantity were identified as the single largest cause of cost growth. Overall, the costs associated with quantity changes accounted for approximately \$5.5 billion (in current dollars) of the reported \$6.9 billion total program cost increase.

Figure IV.9 shows the overall program cost changes for the Air Force's other programs in current dollars between the base year estimate and the current year estimates. Figure IV.10 shows the same data as a percentage of the base year estimates. Both figures show that changes in quantities are the main cause for cost increases. The figures also show that costs associated with economic factors partially offset some of the total program cost growth (in current dollars).

Figure IV.9: Air Force SARs Program Cost Change By Cause For Other Systems From Base Year Estimates To December 31, 1987

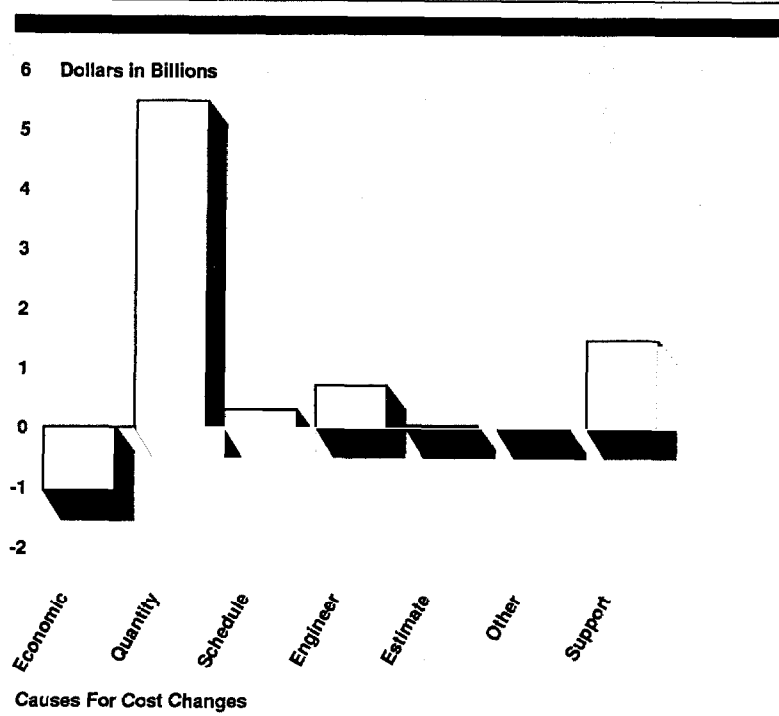


Figure IV.10: Air Force SARs Program Cost Change By Cause For Other Systems From Base Year Estimates To December 31, 1987

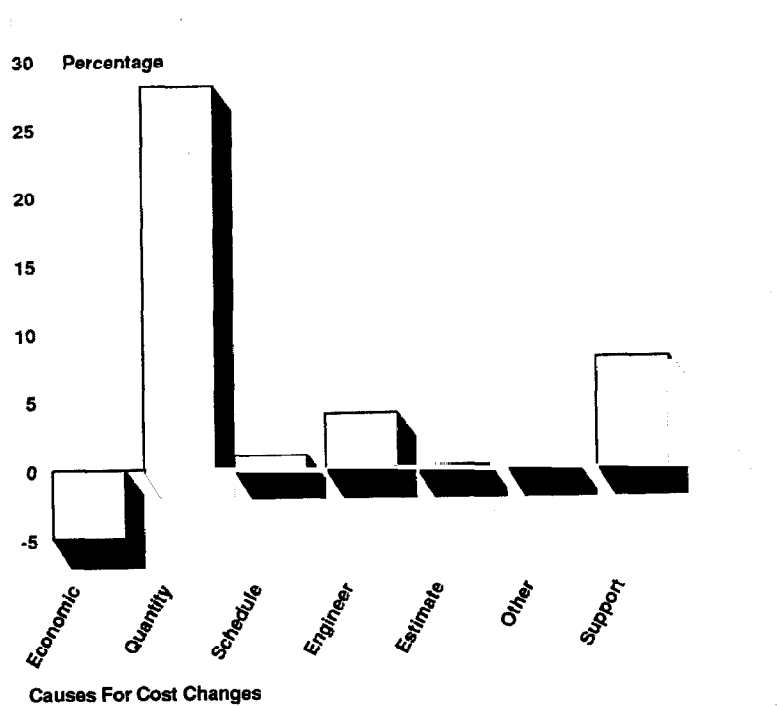


Table IV.10 shows that the Air Force's other systems, excluding the CIS and the I-S/A AMPE, have incurred an overall cost decrease of approximately \$158 million (in current dollars) between December 31, 1986, and December 31, 1987, for the programs common to both reporting periods. Six systems--CSRL, JTIDS, MLS, OTH-B, TRI-TAC, and WIS--reported cost decreases (in current dollars). The other five programs reported cost increases ranging from approximately \$11 million (in current dollars) on the CIS to approximately \$667 million on the DSP.

TABLE IV. 10.

AIR FORCE SELECTED ACQUISITION REPORTS
COST CHANGE FROM DECEMBER 31, 1986 TO DECEMBER 31, 1987

Dollars in Millions

OTHER#	DATE OF ESTIMATE	TOTAL PROGRAM ESTIMATES				QUANTITY	DIFFERENCE BY REPORTED CAUSE													
		PROGRAM COST		UNIT COST			ECONOMIC	QUANTITY	SCHEDULE	ENGRG	ESTIMATE	OTHER	SUPPORT	TOTAL						
		CONSTANT	CURRENT	CONSTANT	CURRENT															
CIS (MARK XV IFF)	12/31/87(PE)	\$ 921.00	\$ 1252.00																	
	12/31/86	924.20	1241.20																	
(DEV COST ONLY NOT IN TOTALS)	DIFFERENCE	-- \$ -3.20	10.80																	
		-- % 0%	1%																	
		=====	-----																	
						CONSTANT 87	\$ 0.00	\$ 0.00	\$ 0.00	\$ -285.30	\$ 0.00	\$ 5.70	\$ -279.60							
						CONSTANT 86	0.00	0.00	0.00	-282.10	0.00	5.70	-276.40							
						DIFFERENCE	\$ 0.00	\$ 0.00	\$ 0.00	\$ -3.20	\$ 0.00	\$ 0.00	\$ -3.20							
							=====	=====	=====	=====	=====	=====	=====							
						CURRENT 87	\$ -86.60	\$ 0.00	\$ 92.90	\$ 0.00	\$ -433.10	\$ 0.00	\$ 6.70	\$ -420.10						
						CURRENT 86	-89.70	0.00	81.20	0.00	-429.10	0.00	6.70	-430.90						
						DIFFERENCE	\$ 3.10	0.00	11.70	0.00	-4.00	0.00	0.00	16.80						
							-----	-----	-----	-----	-----	-----	-----							
CSRL	12/31/87(POE)	\$ 499.40	633.60	\$ 4.80	\$ 6.09	104.00														
	12/31/86	508.20	646.80	4.89	6.22	104.00														
	DIFFERENCE	-- \$ -8.80	-13.20	\$ -0.08	-0.13	0.00														
		-- % -2%	-2%	-2%	-2%	0%														
		=====	-----	=====	-----	-----														
						CONSTANT 87	\$ 0.00	\$ 0.00	\$ 0.00	\$ -102.20	\$ 0.00	\$ -13.70	\$ -115.90							
						CONSTANT 86	0.00	0.00	0.00	-71.70	0.00	-35.40	-107.10							
						DIFFERENCE	\$ 0.00	\$ 0.00	\$ 0.00	\$ -30.50	\$ 0.00	\$ 21.70	\$ -8.80							
							=====	=====	=====	=====	=====	=====	=====							
						CURRENT 87	-16.30	0.00	0.00	0.00	-144.70	0.00	-19.20	-180.20						
						CURRENT 86	-15.30	0.00	0.00	0.00	-100.80	0.00	-50.90	-167.00						
						DIFFERENCE	-1.00	0.00	0.00	0.00	-43.90	0.00	31.70	-13.20						
							-----	-----	-----	-----	-----	-----	-----							
DSF	12/31/87(DE)	\$ 5714.40	8283.10	\$ 219.78	318.58	26.00														
	12/31/86	5437.50	7615.80	217.50	304.63	25.00														
	DIFFERENCE	-- \$ 276.90	667.30	\$ 2.28	13.95	1.00														
		-- % 5%	9%	1%	5%	4%														
		=====	-----	=====	-----	-----														
						CONSTANT 87	\$ 1211.50	\$ 0.00	\$ 0.00	\$ -191.40	\$ 0.00	\$ 269.70	\$ 1289.80							
						CONSTANT 86	1033.80	0.00	0.00	-334.70	0.00	313.80	1012.90							
						DIFFERENCE	\$ 177.70	\$ 0.00	\$ 0.00	\$ 143.30	\$ 0.00	\$ -44.10	\$ 276.90							
							=====	=====	=====	=====	=====	=====	=====							
						CURRENT 87	-174.40	2731.30	52.20	0.00	-415.00	0.00	541.40	2735.50						
						CURRENT 86	-197.20	2309.80	51.80	0.00	-719.20	0.00	623.00	2068.20						
						DIFFERENCE	22.80	421.50	0.40	0.00	304.20	0.00	-81.60	667.30						
							-----	-----	-----	-----	-----	-----	-----							
I-S/A AMPE (TERMINATED; NOT INCLUDED IN TOTALS)	12/31/87(DE)	\$ 131.20	138.70	\$ 0.00	0.00	0.00														
	12/31/86	464.60	555.20	5.00	5.97	93.00														
	DIFFERENCE	-- \$ -333.40	-416.50	\$ -5.00	-5.97	-93.00														
		-- % -72%	-75%	-100%	-100%	-100%														
		=====	-----	=====	-----	-----														
						CONSTANT 87	\$ -217.50	\$ 16.60	\$ 0.00	\$ -302.60	\$ 0.00	\$ -56.50	\$ -560.00							
						CONSTANT 86	-2.10	0.80	0.00	-218.40	0.00	-6.90	-226.60							
						DIFFERENCE	\$ -215.40	\$ 15.80	\$ 0.00	\$ -84.20	\$ 0.00	\$ -49.60	\$ -333.40							
							=====	=====	=====	=====	=====	=====	=====							
						CURRENT 87	-12.00	-278.00	27.00	0.00	-355.50	0.00	-72.30	-690.80						
						CURRENT 86	-16.10	-2.20	5.70	0.00	-253.00	0.00	-8.70	-274.30						
						DIFFERENCE	4.10	-275.80	21.30	0.00	-102.50	0.00	-63.60	-416.50						
							-----	-----	-----	-----	-----	-----	-----							

APPENDIX IV

APPENDIX IV

OTHER	TOTAL PROGRAM ESTIMATES				DIFFERENCE BY REPORTED CAUSE								
	DATE OF ESTIMATE	PROGRAM COST	UNIT COST	QUANTITY	ECONOMIC	QUANTITY	SCHEDULE	ENBRG	ESTIMATE	OTHER	SUPPORT	TOTAL	
IUS (SPACE SHUTTLE)	12/31/87 (OE)	\$ 734.30	1355.60 \$ / 91.79	169.45	8.00	CONSTANT 87	\$ -241.40	\$ 0.00	\$ 20.10	\$ -7.90	\$ 0.00	\$ -228.70	
	12/31/86	704.20	1280.90 / 88.03	88.03	8.00	CONSTANT 86	-241.40	0.00	1.50	-10.70	0.00	-258.80	
	DIFFERENCE --	\$ 30.10	74.70 \$ / 3.76	81.42	0.00	DIFFERENCE	\$ 0.00	\$ 0.00	\$ 18.60	\$ 2.80	\$ 0.00	\$ 8.70	
	-- %	4%	6%	93%	0%								
JSTARS	12/31/87 (FE)	\$ 3069.00	4058.80 \$ / 29.80	39.41	103.00	CONSTANT 87	\$ 1052.30	\$ 0.70	\$ 23.60	\$ 323.90	\$ 0.00	\$ 483.20	
	12/31/86	2735.30	3854.99 / 25.98	34.11	113.00	CONSTANT 86	1052.30	0.00	0.00	245.50	0.00	452.20	
	DIFFERENCE --	\$ 133.70	203.90 \$ / 3.82	5.29	-10.00	DIFFERENCE	\$ 0.00	\$ 0.70	\$ 23.60	\$ 78.40	\$ 0.00	\$ 31.00	
	-- %	5%	5%	16%	-9%								
JT105	12/31/87 (BE)	\$ 961.50	1323.70 \$ / 7.45	10.26	129.00	CONSTANT 87	\$ 481.30	\$ -1.50	\$ 243.80	\$ -109.70	\$ 0.00	\$ 38.60	
	12/31/86	990.80	1361.10 / 5.35	7.36	185.00	CONSTANT 86	450.00	-1.50	204.20	-9.50	0.00	38.80	
	DIFFERENCE --	\$ -29.30	-37.40 \$ / 2.10	2.90	-56.00	DIFFERENCE	\$ 31.30	\$ 0.00	\$ 39.60	\$ -100.20	\$ 0.00	\$ -0.00	
	-- %	-3%	-3%	3%	-30%								
LANTIRN	12/31/87 (BE)	\$ 2476.40	4122.70 \$ / 1.75	2.92	1412.00	CONSTANT 87	\$ 35.40	\$ 19.60	\$ -28.90	\$ 259.70	\$ 0.00	\$ 82.30	
	12/31/86	2457.60	4108.60 / 1.74	2.91	1412.00	CONSTANT 86	35.40	19.60	-46.00	310.20	0.00	36.10	
	DIFFERENCE --	\$ 18.80	14.10 \$ / 0.01	0.01	0.00	DIFFERENCE	\$ 0.00	\$ 0.00	\$ 17.10	\$ -50.50	\$ 0.00	\$ 46.20	
	-- %	1%	0%	0%	0%								
	CURRENT 87					CURRENT 87	-359.60	71.40	32.80	-27.00	434.40	0.00	147.50
	CURRENT 86					CURRENT 86	-352.40	71.40	32.80	-62.70	534.10	0.00	62.20
	DIFFERENCE					DIFFERENCE	-7.20	0.00	35.70	-99.70	0.00	85.30	

TOTAL PROGRAM ESTIMATES							DIFFERENCE BY REPORTED CAUSE								
OTHER	DATE OF ESTIMATE	PROGRAM COST		UNIT COST		QUANTITY		ECONOMIC	QUANTITY	SCHEDULE	ENBRG	ESTIMATE	OTHER	SUPPRT	TOTAL
		CONSTANT	CURRENT	CONSTANT	CURRENT										
MLS	12/31/87(PE)	\$ 232.00	338.30	\$ 0.32	0.47	716.00	CONSTANT 87	\$ 109.70	\$ 0.00	\$ 0.00	\$ -31.70	\$ 0.00	\$ 48.50	\$ 126.50	
	12/31/86	239.30	343.00	0.33	0.48	716.00	CONSTANT 86	120.60	0.00	0.00	-25.70	0.00	38.90	133.80	
	DIFFERENCE --	\$ -7.30	-4.70	\$ -0.01	-0.01	0.00	DIFFERENCE	\$ -10.90	\$ 0.00	\$ 0.00	\$ -6.00	\$ 0.00	\$ 9.60	\$ -7.30	
	-- %	-3%	-1%	-3%	-1%	0%	CURRENT 87	-4.40	157.00	13.60	0.00	-45.90	0.00	74.00	194.30
							CURRENT 86	-7.10	172.80	9.70	0.00	-35.50	0.00	59.10	199.90
						DIFFERENCE	2.70	-15.80	3.90	0.00	-10.40	0.00	14.90	-4.70	
DTH-B	12/31/87(DE)	\$ 1881.90	2459.20	\$ 156.83	204.93	12.00	CONSTANT 87	\$ 487.50	\$ 6.10	\$ 174.00	\$ 10.40	\$ 0.00	\$ 58.60	\$ 736.60	
	12/31/86	1927.60	2494.80	160.63	207.90	12.00	CONSTANT 86	487.50	6.10	185.90	44.80	0.00	58.00	782.30	
	DIFFERENCE --	\$ -45.70	-35.60	\$ -3.81	-2.97	0.00	DIFFERENCE	\$ 0.00	\$ 0.00	\$ -11.90	\$ -34.40	\$ 0.00	\$ 0.60	\$ -45.70	
	-- %	-2%	-1%	-2%	-1%	0%	CURRENT 87	-62.80	687.80	55.20	259.70	29.20	0.00	90.70	1039.80
							CURRENT 86	-94.40	687.80	37.60	277.20	77.10	0.00	90.10	1075.40
						DIFFERENCE	11.60	0.00	17.60	-17.50	-47.90	0.00	0.60	-35.60	
TRI-TAC	12/31/87(PdE)	\$ 1034.90	1995.10	\$ 1.86	3.59	555.00	CONSTANT 87	\$ 125.60	\$ 0.00	\$ 9.20	\$ -173.90	\$ 0.00	\$ -53.00	\$ -92.10	
	12/31/86	1171.40	2291.60	2.25	4.40	521.00	CONSTANT 86	116.10	0.00	9.20	-63.20	0.00	-19.70	44.40	
	DIFFERENCE --	\$ -136.50	-296.50	\$ -0.39	-0.80	34.0	DIFFERENCE	\$ 7.50	\$ 0.00	\$ 0.00	\$ -110.70	\$ 0.00	\$ -33.30	\$ -136.50	
	-- %	-12%	-13%	-17%	-18%	7%	CURRENT 87	-96.20	312.30	37.90	19.90	-401.50	0.00	-102.50	-230.10
							CURRENT 86	-105.70	296.20	19.10	19.90	-135.90	0.00	-27.20	66.40
						DIFFERENCE	9.50	16.10	18.80	0.00	-265.60	0.00	-75.30	-296.50	
WIS (WWM-CCS SYS)	12/31/87(DE)	\$ 1478.00	1980.70	\$ 42.23	56.59	35.00	CONSTANT 87	\$ 0.00	\$ 0.00	\$ 25.70	\$ 27.20	\$ 0.00	\$ -1.90	\$ 51.00	
	12/31/86	1746.70	2306.00	49.91	65.89	35.00	CONSTANT 86	0.00	0.00	25.70	295.90	0.00	-1.90	319.70	
	DIFFERENCE --	\$ -268.70	-325.30	\$ -7.68	-9.29	0.0	DIFFERENCE	\$ 0.00	\$ 0.00	\$ 0.00	\$ -268.70	\$ 0.00	\$ 0.00	\$ -268.70	
	-- %	-15%	-14%	-15%	-14%	0%	CURRENT 87	-200.20	0.00	23.20	30.90	272.20	0.00	-2.40	123.70
							CURRENT 86	-208.80	0.00	22.40	30.90	606.90	0.00	-2.40	449.00

----- TOTAL PROGRAM ESTIMATES -----						----- DIFFERENCE BY REPORTED CAUSE -----									
OTHER	DATE OF ESTIMATE	PROGRAM COST		UNIT COST		QUANTITY	ECONOMIC	QUANTITY	SCHEDULE	ENGRG	ESTIMATE	OTHER	SUPPORT	TOTAL	
		CONSTANT	CURRENT	CONSTANT	CURRENT										
TOTAL															
OTHER	12/31/87		26550.80		912.30	3100.00	CURRENT 87	\$ -1064.50	\$ 5464.40	\$ 292.90	\$ 711.90	\$ 42.40	\$ 0.00	\$ 1490.50	\$ 6937.60
	12/31/86		28099.90		727.89	3224.00	CURRENT 86	-1108.40	4998.60	245.20	564.60	545.50	0.00	1444.80	6690.30
	DIFFERENCE - \$		\$ -1549.10		\$ 84.41	-124.00	DIFFERENCE	\$ 43.90	\$ 465.80	\$ 47.70	\$ 147.30	\$ -503.10	\$ 0.00	\$ 45.70	\$ 247.30
	- %		-6%		12%	-4%									

*INCLUDES ONLY THOSE SYSTEMS ON BOTH THE 1986 AND 1987 SARs.

SUMMARY OF FREQUENTLY REPORTED PROBLEMS WITH
THE SAR SYSTEMS

Since 1969, SARs have been the primary means for the DOD to report on the status of its major weapon system acquisitions to the Congress. SARs are comprehensive reports that contain estimates of each system's cost, schedule, and performance characteristics. As of December 31, 1987, 100 programs were on the SAR system.

Since 1975 we have completed several reviews of the SARs. The following are some of the commonly identified problems associated with SARs.

- SARs are not timely.
- Data is not consistently reported on the same systems.
- Data is often incomplete--all known costs associated with the system are not included in SAR.
- SARs are too lengthy and are difficult to understand.

These problems are recognized and several attempts have been made to address these and other problems. The difficulty in affecting change is that although the general agreement is that SARs could be more useful, a similar agreement on what needs to be done to improve the reports has not been reached. This results, in part, because of the diverse needs of the users.

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