

GAO

Briefing Report to the Chairmen,
Subcommittees on Defense, Senate and
House Committees on Appropriations

September 1987

ARMY BUDGET

**Potential Reductions to
Aircraft Procurement
Budgets**



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United States
General Accounting Office
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National Security and
International Affairs Division

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September 10, 1987

The Honorable John C. Stennis
Chairman, Subcommittee on Defense
Committee on Appropriations
United States Senate

The Honorable Bill Chappell, Jr.
Chairman, Subcommittee on Defense
Committee on Appropriations
House of Representatives

As requested, we reviewed selected aircraft procurement line items in the Army's fiscal year 1988 budget request. Specifically, we reviewed the Army's requests of about \$1.6 billion for seven helicopter systems--the AH-64A Apache, the UH-60A Black Hawk, the CH-47D Chinook, the OH-58D Army Helicopter Improvement Program (AHIP), the OH-58 Kiowa, and the MH-47E and MH-60X Special Operations Force (SOF) modifications. Our review focused on the Army's justifications for the fiscal year 1988 budget estimates and the execution of the fiscal years 1987 and 1986 budgets.

We identified \$214.7 million in potential reductions--\$66.7 million for fiscal year 1988, \$116.6 million for fiscal year 1987, and \$31.4 million for fiscal year 1986. To identify these potential reductions, we recalculated budget estimates using contract information more current than the Army used when it prepared the budget. In addition, we used revised Office of the Secretary of Defense inflation guidelines and revised Army requirements and cost estimates.

We discussed the contents of this report with Office of the Secretary of Defense and Army program officials and have incorporated their comments where appropriate. In most cases, Army program officials agreed that certain funds are potentially not needed for their budgeted purposes. Program officials, however, stated their preference that budget reductions not be made but that funds should remain available to them for other purposes. We did not review these proposed alternative uses of the funds. As requested, we did not obtain official agency comments. Our objectives, scope, and methodology are described in appendix II.

B-223087

We are sending copies of this report to various congressional committees; the Secretaries of Defense and the Army; and the Director, Office of Management and Budget. Copies will be made available to others upon request.

Should you need additional information or have questions, please contact Mr. Thomas J. Brew, Associate Director, on (202) 275-4133.



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ABBREVIATIONS

AHIP	Army Helicopter Improvement Program
EPA	Economic Price Adjustment
ECO	Engineering Change Order
OSD	Office of the Secretary of Defense
SOF	Special Operations Force
TADS/PNVS	Target Acquisition Designation Sight/ Pilot Night Vision Sensor

POTENTIAL REDUCTIONS TO ARMY AIRCRAFT BUDGETS

The Army's fiscal year 1988 Aircraft Procurement appropriation request was \$2.5 billion, including about \$1.8 billion for aircraft and aircraft modifications. We reviewed the justification for about \$1.6 billion of the request for seven helicopter programs and also reviewed the fiscal years 1987 and 1986 budgets for these programs to identify excess funds. As shown in table I.1, we identified potential reductions of about \$214.7 million--\$66.7 million for fiscal year 1988, \$116.6 million for fiscal year 1987, and \$31.4 million for fiscal year 1986.

Table I.1: Summary of Potential Reductions

<u>Army aircraft program</u>	<u>Fiscal years</u>			<u>Total</u>
	<u>1988</u>	<u>1987</u>	<u>1986</u>	
	----- (millions) -----			
AH-64A Apache	\$23.2	\$ 92.3	\$28.1	\$143.6
UH-60A Black Hawk	1.8	2.6	2.1	6.5
CH-47D Chinook	8.2	10.0	0	18.2
OH-58D AHIP	8.2	11.7	0	19.9
OH-58 Kiowa	8.2	0	1.2	9.4
MH-60X SOF	16.1	N/A	N/A	16.1
MH-47E SOF	1.0	N/A	N/A	1.0
Total	<u>\$66.7</u>	<u>\$116.6</u>	<u>\$31.4</u>	<u>\$214.7</u>

AH-64A APACHE

The Apache helicopter is designed to provide increased capabilities, such as increased standoff, adverse weather and night attack capabilities, and improved survivability. This two-person, twin-engine helicopter is capable of carrying up to 16 Hellfire missiles or 76 2.75-inch rockets and varying amounts of 30 millimeter ammunition.

We believe the Apache budget could be reduced by \$143.6 million--\$23.2 million for fiscal year 1988, \$92.3 million for fiscal year 1987, and \$28.1 million for fiscal year 1986.

Fiscal year 1988 budget

The Army requested \$654.6 million to buy 67 Apache helicopters in fiscal year 1988, the Army's last planned procurement of the system, and \$78.8 million for Apache modifications. We believe the request could be reduced by \$23.2 million:

- \$5.6 million for contracts that were definitized for less than was budgeted,
- \$6.6 million for reduced estimates,
- \$700,000 for planned procurement of equipment that exceeds requirements, and
- \$10.3 million for modifications that are not needed because of slippages in the Air-to-Air Stinger missile program.

We found that the fiscal year 1988 budgeted amounts for four cost elements--the airframe, data, and Target Acquisition Designation Sight/Pilot Night Vision Sensor (TADS/PNVS)--exceed actual definitized contract amounts by \$5.6 million. The airframe contract was \$2.8 million less, the data element contract was \$1.5 million less, and the TADS/PNVS contract was \$1.3 million less than budgeted. Apache Program Office officials agreed the contract amounts were less than budgeted for the above cost elements; however, they did not agree that the budget should be reduced. They said the excess funds may be needed for other program requirements that are under budgeted. Three examples they cited were (1) alternate mission equipment production support may require \$8.7 million more than budgeted, (2) system program management may need \$8.8 million more than budgeted, and (3) unfunded data requirements may amount to \$1 million.

Apache Program Office officials have reduced their fiscal year 1988 budget estimates for peculiar (specialized) ground support equipment, avionics peculiar ground support equipment, and engines by about \$6.6 million due, in part, to the lack of support for the original estimates. Specifically, the peculiar ground support equipment estimate was reduced by \$2 million, the avionics peculiar ground support equipment estimate was reduced by \$4.6 million, and the engine estimate was reduced by \$47,000. Program office officials, however, said the budget should not be reduced because these funds may be needed for other requirements that may exceed their budget request, such as alternate mission equipment and production support.

Based on Army requirements, the fiscal year 1988 budget could be potentially reduced by \$700,000 because it includes 28 Hellfire launchers that are not needed. Apache Program Office officials neither agreed nor disagreed with our finding. They prefer the budget not be reduced and stated that if funds are not needed for launchers, they will be needed for other aspects of the Apache program.

We believe the Apache modification program could potentially be reduced by \$10.3 million--the entire amount budgeted for procuring launchers for the Air-to-Air Stinger missile system. Schedule slippages have significantly delayed contract award. A Stinger Program Office official agreed that the Army may not be able to carry out this Apache program in fiscal year 1988, but did not agree with the \$10.3 million reduction. He believed these funds could be used to procure additional launchers for the OH-58C helicopter.

Fiscal year 1987 budget

We believe the Apache's fiscal year 1987 budget could potentially be reduced by \$92.3 million:

- \$41.1 million for contracts definitized for less than budgeted,
- \$1.6 million for equipment procurement that exceeds needs,
- \$21.6 million for revised estimates, and
- \$28 million for schedule slippages that delay funding requirements.

Table I.2 shows the potential reductions of \$41.1 million resulting from definitized contract amounts being less than budgeted amounts.

Table I.2: Potential Fiscal Year 1987 Reductions for the Apache Helicopter Where Budgeted Amounts Exceed Contract Amounts

	<u>Budgeted amount</u>	<u>Contract amount</u>	<u>Difference</u>
----- (millions) -----			
System program management	\$178.8	\$155.4	\$23.4
TADS/PNVS	84.0	76.7	7.3
Peculiar ground support equipment	41.7	34.4	7.3
Data	20.0	17.1	2.9
Engines	<u>87.5</u>	<u>87.3</u>	<u>.2</u>
Total	<u>\$412.0</u>	<u>\$370.9</u>	<u>\$41.1</u>

Apache Program Office officials agreed with our calculations for the contract line items depicted above. However, they did not agree that reductions should be made. They believe other items

will cost more than budgeted and cited engineering change orders (ECOs) and airframe as examples. They also told us there are additional unfunded requirements for value engineering change proposals.

We identified a potential reduction of \$1.6 million resulting from the Army's Hellfire launcher planned procurements which are overstated by 63 units when compared to current requirements. Apache Program Office officials said the \$1.6 million is needed for unfunded and underbudgeted requirements, such as ECOs and alternate mission equipment/production support.

We believe the budget for other government-furnished equipment can potentially be reduced by \$21.6 million based on revised estimates prepared by Apache Program Office personnel. Apache Program Office officials said, however, the budget should not be reduced because they may need the funds for a contingency liability (potential increase in labor hours) on the firm-fixed price airframe contract and ECOs.

The \$32.3 million budget for the Airborne Target Handover System, an Apache modification program, has potential for a \$28 million reduction. The Army had planned to start procuring hardware for the system in fiscal year 1987, but the schedule has slipped to fiscal year 1988. The aircraft modifications are scheduled to begin in January 1990. Only \$4.3 million of the \$32.3 million in the fiscal year 1987 budget has been obligated. We believe that because of this 1-year slippage and the fact that the fiscal year 1987 contract is not scheduled for award until 1988, the unobligated fiscal year 1987 amount of \$28 million has potential for reduction. Apache Program Office officials agreed the scheduled contract award for this budget item has been delayed. They stated, however, that if funding is reduced in fiscal year 1987, the requirement will still exist and may require additional fiscal year 1988 funding. We believe, however, that additional funding will not be needed in fiscal year 1988 because the delay in procuring hardware will in turn cause a delay in the modifications planned for fiscal year 1988.

Fiscal year 1986 budget

We believe the Apache's fiscal year 1986 budget can potentially be reduced by \$28.1 million based on a comparison of budgeted versus final contract award amounts. Apache Program Office officials agreed with the amount. They stated, however, that the budget should not be reduced because the excess funds are needed for other items such as peculiar ground support equipment, alternate mission equipment/production support, and ECOs.

UH-60A BLACK HAWK

The Black Hawk helicopter is used to transport troops and equipment and for other missions such as aeromedical evacuation, repositioning of reserves, and command and control. It is in the eleventh year of production and the Army plans to procure Black Hawk helicopters through fiscal year 1991.

We believe the Army's budget request for the Black Hawk could potentially be reduced by \$6.5 million--\$1.8 million for fiscal year 1988, \$2.6 million in fiscal year 1987, and \$2.1 million for fiscal year 1986.

Fiscal year 1988 budget

The Army requested \$453.4 million for 61 Black Hawk helicopters in fiscal year 1988. We identified potential reductions of \$1.8 million in the Army's budget request based on the following:

- Excess funds of \$1.345 million budgeted for ECOs which, based on historical usage trends for ECOs in the Black Hawk program, are not needed.
- The Army's cost estimates for avionics equipment are overstated by \$422,000 based on the Office of the Secretary of Defense's (OSD's) December 1986 inflation indices instead of the February 1986 inflation indices.

Program officials agreed with the methodology used to identify potential ECO reductions and revised inflation calculations. However, they disagreed with reducing the ECO budget because in past years ECO funds were used for program contingencies, such as safety modifications.

Fiscal year 1987 budget

In our opinion, the fiscal year 1987 Black Hawk program has potential for a \$2.6 million reduction. This reduction consists of (1) \$2.4 million budgeted for ECOs which, based on historical budgeting and spending trends for ECOs, is not needed and (2) \$229,000 for avionics equipment--the budget estimate was overstated by \$166,000 based on more recent inflation indices and an avionics contract awarded for \$63,000 less than budgeted.

Program officials agreed with our findings. However, they said that the excess ECO funds were needed for other program requirements and unknowns and the excess avionics funds could be used for other unfunded program requirements.

Fiscal year 1986 budget

For fiscal year 1986, we determined that the program has potential for reduction of about \$2.1 million: (1) \$1.6 million in overstated ECO estimates, (2) \$151,000 resulting from updated inflation factors, and (3) \$346,000 from avionics contracts awarded for less than budgeted.

As with the fiscal year 1987 budget findings, program officials agreed with our ECO trend analysis and calculations showing excess avionics funds. However, they disagreed that the funds should be reduced and stated that excess avionics funds could be used for other program requirements and excess ECO funds were needed for safety requirements.

CH-47D CHINOOK

The CH-47D Chinook is a medium lift helicopter used to move troops and equipment such as ammunition, repair parts, artillery, special weapons, and vehicles. The CH-47 was developed in the late 1950s and is currently being modernized. The modernization program is in its seventh year and through May 1987, 162 of the planned 436 aircraft had been converted to the "D" model and delivered to the Army. In April 1985, the Army signed a 5-year, multiyear contract with Boeing-Vertol to modernize 240 aircraft from fiscal years 1985 through 1989.

We believe the Army's procurement budget request for the Chinook could be reduced by \$18.2 million--\$8.2 million for fiscal year 1988 and \$10 million for fiscal year 1987.

Fiscal year 1988 budget

The Army requested \$231.9 million in fiscal year 1988 to modernize 48 Chinook aircraft. We believe \$8.2 million of this amount has potential for reduction. The Army's CH-47D multiyear contract has an economic price adjustment (EPA) clause for unanticipated economic fluctuations that apply to labor and labor-related costs for calendar years 1987 through 1990. Using updated direct labor rates provided by the contractor and the formulas shown in the EPA clause, we identified potential reductions of \$8.2 million.

Project Office officials agreed that savings may occur in the program and estimated them at \$6 million to \$9 million. However, they believe the budget should not be reduced, but should be retained until mid-calendar year 1989 when the actual determination of the EPA clause adjustment for calendar year 1988 is planned to be negotiated. They stated they plan to use any EPA savings for items where program shortages occur and as reserves for program

changes. They also stated savings could be used for ECOs, auxiliary power units, changes to trainers, and additional costs to prepare aircraft for the modernization program. Since the budgeted amount exceeds the best estimate of costs by \$8.2 million, we believe that amount should be considered for potential reduction.

Fiscal year 1987 budget

We believe the Army's fiscal year 1987 budget can potentially be reduced by about \$10 million--\$9.3 million on the basis of the EPA clause in the current multiyear contract and \$700,000 for modifications to the original multiyear contract. As with the fiscal year 1988 request, we used updated, direct labor rates provided by the contractor and the EPA clause formulas to identify the potential savings of \$9.3 million.

Project officials agreed that savings would occur as a result of the EPA clause but said they could not specify an amount. They also agreed that modifications to the multiyear contract reduced funding needs by \$700,000. They said that any excess funds could be used to offset reductions by OSD during the past year and to fund requirements that were deferred due to program reductions during fiscal years 1985 and 1986.

OH-58D AHIP

The OH-58D AHIP is a major modernization program for the OH-58A observation helicopters. Modifications include (1) a main rotor with four blades instead of two, (2) a modernized control display system, (3) an upgraded engine and drive system, (4) an improved flight capability, (5) a Stinger missile capability, and (6) a newly developed mast-mounted sight to perform target acquisition and designation during day and night and in adverse weather. AHIP production began in fiscal year 1984, and in August 1986 the Army decided to discontinue the AHIP program. The Army has scheduled 135 helicopters for modernization by the end of the fiscal year 1987 program when current funding ends. The Army requested fiscal year 1988 funds primarily for ground support equipment and system project management to support fielding of aircraft.

We believe the Army's AHIP budget could be reduced by \$19.9 million--\$8.2 million for fiscal year 1988 and \$11.7 million for fiscal year 1987.

Fiscal year 1988 budget

We believe the Army's \$48.1 million fiscal year 1988 budget request for AHIP can potentially be reduced by \$8.2 million--\$5.1 million

for systems project management and \$3.1 million for the optical improvement program.

The AHIP Program Office's estimate for systems project management in fiscal year 1988 is \$17.1 million, or 35.6 percent of the total budget request for AHIP. Since fiscal year 1983, however, the AHIP's system project management costs have averaged about 16.5 percent. In fiscal year 1986, the most recent year for which cost data are available, AHIP's system project management costs were \$35.3 million, or 19.8 percent of a \$178.2 million program. Using the fiscal year 1986 experience of 19.8 percent, the fiscal year 1988 budget request would be \$9.5 million. AHIP Program Office officials said while they had no firm estimate of system project management requirements for fiscal year 1988, they believed at least \$12 million would be needed. Since the budgeted amount exceeds this estimate of costs by \$5.1 million, we believe that amount should be considered for potential reduction.

The Army has requested \$3.1 million for an optical improvement program to enhance the AHIP's survivability on the battlefield. However, as of May 1987, the program's full-scale engineering development had not started, and the Army was projecting that at least 21 to 24 months were required for the development program. A program engineer told us the program schedule has slipped and the earliest completion date for development would be January 1989. Because the optical improvement program will not be technically or operationally proven and demonstrated until fiscal year 1989, we believe the \$3.1 million requested for production in fiscal year 1988 is premature and has potential for reduction. Program officials did not agree with this potential reduction. They contended that the production effort is an extremely low risk program and the \$3.1 million could be used for long lead time items. However, the budget did not include a request for such items and the program office did not have a list of long lead time items. Therefore, we believe the amount should be considered for potential reduction.

Fiscal year 1987 budget

The Army's fiscal year 1987 program can potentially be reduced by \$11.7 million based on the following:

- Data requirements: overstated by \$433,000, using the methodology identified in AHIP's most recent baseline cost estimate.
- Warranties: overstated by \$1.2 million, based on fiscal year 1986 warranty expenditures.

- Preparing aircraft for modifications: overstated by \$136,000 because AHIP program officials used fiscal year 1986 funds to meet part of the fiscal year 1987 requirement.
- ECOs: overstated by \$4.3 million, based on OSD's historical average of 4 percent of hardware costs experienced on Army aircraft programs.
- Peculiar ground support equipment: overstated by \$5.6 million, based on a revised estimate of equipment requirements provided by the AHIP Program Office.

AHIP Program Office officials agreed with our calculations on data requirements, warranty costs, and aircraft preparation expenses. They said, however, that the \$433,000 excess for data requirements could be used for revisions to technical manuals. They disagreed with the potential reduction to the ECO budget, stating that necessary ECOs had accumulated from prior years because they used prior year ECO funds to cover cost overruns in other program areas. AHIP officials agreed that the fiscal year 1987 requirement for peculiar ground support equipment decreased by \$5.6 million. However, they explained that during fiscal years 1983 through 1986, they used \$2.9 million more for peculiar ground support equipment than originally estimated, and that this amount should be retained.

OH-58 KIOWA

The OH-58 Kiowa is a low silhouette helicopter used for observation, scout, and command and control. It is a single-piloted aircraft, with provisions for a second pilot and the capability to carry two passengers or cargo in the rear cargo area.

We believe the Army's budget for the Kiowa could be reduced by \$9.4 million--\$8.2 million for fiscal year 1988 and \$1.2 million for fiscal year 1986.

Fiscal year 1988 budget

The Army requested \$37 million in fiscal year 1988 to modify OH-58 Kiowa helicopters. The two primary modifications planned during fiscal year 1988 include (1) \$27 million to provide the OH-58C model Air-to-Air Stinger missile capability, and (2) \$10 million to install upgraded engines on the OH-58A model. We believe the Army's request may be overstated by as much as \$8.2 million--\$6.6 million for the engine upgrade and \$1.6 million for the missile capability.

The engine upgrade request is overstated because the Army used \$6.3 million in expiring fiscal year 1985 funds to purchase 55 engines and related equipment that were part of the fiscal year 1988 budget request, and used an incorrect base year (1986) inflation factor resulting in an overestimate of \$315,000.

Army program officials agreed with the potential reduction concerning its inflation estimate; however, they disagreed that the fiscal year 1988 budget request should be reduced by \$6.3 million. They said the Army has a requirement for 1,495 engines and the first buy of 60 engines (subsequently reduced to 55) with fiscal year 1985 funds had been an unfunded requirement for several years. However, the Army's budget shows the current requirement is 1,435 upgraded engines with the initial buy in fiscal year 1988. Based on a requirement of 1,435 engines, we believe the budget can be reduced by \$6.3 million.

The Army's fiscal year 1988 Air-to-Air Stinger request overestimates the cost of warranties and ECOs. The request includes about \$1.6 million for ECOs, or 8.78 percent of the estimated hardware costs. OSD's historical data for Army aircraft programs shows that 4 percent of hardware costs is a more realistic budget for ECOs. Based on this historical experience, the budget request for ECOs could be reduced by \$864,000. A Program Office official agreed with our revised calculation. He pointed out, however, that although the budget estimate for ECOs may be too high, estimates for other cost elements may prove too low and excess funds could be used for other purposes.

The fiscal year 1988 estimate of \$737,000 for launcher warranty costs is based on the total estimated hardware costs. However, program office officials told us that the contractor scheduled to produce the launcher for the Air-to-Air Stinger missile included a no-cost warranty in its contract proposal. If these costs are excluded, \$737,000 could be reduced from this budget element. The Air-to-Air Stinger Project Manager agreed with our findings but said that the excess funds should be used to buy more hardware.

Fiscal year 1986 budget

The fiscal year 1986 budget for Air-to-Air Stinger can be reduced by up to \$1.2 million because of overestimates in the ECO and warranty budget lines. Based on OSD's historical data of 4 percent of hardware costs, the ECO budget of \$1.1 million could be reduced by \$631,000. The warranty budget of \$835,000 could be reduced by \$547,000 because the launcher contractor will not be charging the government for warranties.

Program officials agreed they may have overestimated the costs for ECOs and warranties, but believe they have underestimated the costs for test and evaluation. Further, we were told that some contract proposals are higher than estimated, resulting in a \$6 million shortfall for fiscal year 1986. Program officials said they plan to use any excess funds resulting from overbudgeting to meet shortfalls.

SPECIAL OPERATIONS FORCE
AIRCRAFT MODIFICATIONS

The Army plans to modify a total of 23 UH-60A Black Hawk aircraft and 17 CH-47D Chinook helicopters to conduct precision navigation and extended range operations at tactical altitudes through unfamiliar mountainous terrain in support of SOF. These helicopters, when modified, will be designated MH-60X and MH-47E.

The primary modifications to the UH-60A Black Hawk helicopters will include adding a newly integrated cockpit, upgraded engines, and mission equipment to satisfy the SOF utility mission. Improvements to the CH-47D Chinook helicopters will include an upgraded engine for increased mission loads, a fully integrated cockpit, and a modified airframe with special equipment to satisfy the SOF medium lift mission. Modifications to both model aircraft will be made by the aircraft manufacturer, with integration performed by a yet-to-be selected integration contractor.

In April 1987, OSD submitted a request to reprogram \$22.9 million in fiscal year 1987 Research, Development, Test and Evaluation, Army, funds for the SOF development program. However, because of program slippages, current Army plans are to obligate most of the fiscal year 1987 research and development funds in fiscal year 1988 and contracts that were planned for award in fiscal year 1987 are now scheduled for fiscal year 1988. The integrating contractor--the key link to this program's success--will be selected in November 1987 and contracts will be awarded in fiscal year 1988.

Fiscal year 1988 budget

The Army requested \$121.8 million in fiscal year 1988 to begin modifying Black Hawk and Chinook helicopters for selected SOF missions. We identified potential reductions of \$17.1 million in the fiscal year 1988 budget request--\$16.1 million for the MH-60X Black Hawk and \$1 million for the MH-47E Chinook.

MH-60X Black Hawk

We believe the request to modify Black Hawk helicopters can be reduced by \$16.1 million for the following reasons:

- The Army's advance procurement budget request includes \$2.5 million more than the Army's latest estimate of the cost to procure communication and navigation equipment covered by that request.
- The Army's \$17 million budget request for a simulator includes \$6 million in excess of requirements. While the Army included \$17 million in its budget estimate for a simulator, it could be procured on an existing multiyear contract for about \$11 million.
- The Army's \$7.6 million budget request for forward-looking infrared equipment is not needed because the budget deleted this equipment but not the funds.

Project office officials agreed that the \$2.5 million excess in advance procurement funds for communication and navigation equipment will not be needed for the MH-60X aircraft in fiscal year 1988.

The project office officials agreed with our projected contract costs for simulator procurement, but noted that some additional funds may be needed in future years to procure items such as data, training, peculiar ground support equipment, and initial spares.

Program officials likewise agreed that funds for forward-looking infrared equipment would not be needed if procurement was delayed beyond fiscal year 1988. They said, however, that the forward-looking infrared equipment was a high priority component of the project, and believed this capability would be pursued during fiscal year 1988 even though the requirement was deleted in approved budget documents.

MH-47E Chinook

We believe \$1 million of the Army's \$17 million budget request for a Chinook simulator is not needed. We found that the simulator most likely can be procured for a price not to exceed \$16 million. Project Office officials agreed with our projected contract costs for the simulator. However, they stated additional funds may be needed to procure items such as data, training, and peculiar ground support equipment for MH-47E simulator support.

OBJECTIVES, SCOPE, AND METHODOLOGY

The Chairmen, Subcommittees on Defense, Senate and House Committees on Appropriations, asked us to review the basis of, and justification for, the Army's fiscal year 1988 budget estimates and the execution of prior year programs for selected aircraft systems to determine whether the aircraft programs should be funded in the amounts requested. Because of time constraints, we limited our review to major programs, new programs, and programs with significant changes. Specifically, we analyzed the aircraft procurement budget for seven major Army helicopter systems--the AH-64A Apache, the UH-60A Black Hawk, the CH-47D Chinook, OH-58D AHIP, the OH-58 Kiowa, the MH-47E SOF Chinook, and the MH-60X SOF Black Hawk.

In examining the justification for and execution of selected aircraft procurement requests, we analyzed fiscal year 1988 budget justification documents sent to the Congress and determined the degree to which they were adequately and properly supported by approved cost estimates, valid program requirements, and sound methodology. We also determined if any changes had occurred in the aircraft programs or their cost estimates since the fiscal year 1988 budget estimates were prepared. In addition, we reviewed the Army's fiscal years 1986 and 1987 budgets to determine how funds were spent, the impact reprogramming actions have had on budget lines, and the availability of excess funds. Additionally, we evaluated planned system improvements and the relationship of these program changes to budget requests and budget execution. Test plans and results, program reviews, and other program status documents also were examined. We also interviewed Army officials responsible for the management, development, and procurement of the aircraft systems that we reviewed.

We conducted our review from January 1987 through May 1987, primarily at the U.S. Army Aviation Systems Command, St. Louis, Missouri. We performed our work in accordance with generally accepted government auditing standards.

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