



COMPTROLLER GENERAL OF THE UNITED STATES
WASHINGTON, D.C. 20548

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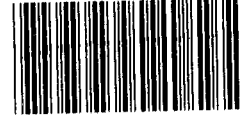
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B-157905

January 31, 1980



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The Honorable Bill Chappell, Jr.
House of Representatives

Dear Mr. Chappell:

Subject: Undergraduate Helicopter Pilot Training:
Consolidation Could Yield Significant
Savings (FPCD-80-37)

During our meeting on September 26, 1979, you asked for certain details from our workpapers that supported findings in our September 20, 1979, report to you and Congressman Richard C. White on consolidating undergraduate helicopter pilot training at Fort Rucker, Alabama. You requested information on (1) differences between the Department of the Navy's current training program and the one proposed under consolidation and (2) some of the intangible benefits the Navy might lose under consolidation.

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AGC 4917

COSTS AND RELATED SAVINGS

Schedules 1 to 13 show the services' training cost estimates and the basis for our conclusion that savings from consolidation should be more than \$63.3 million. ^{1/} Adjustments to both Army and Navy cost estimates were necessary. The Army's estimated incremental cost for training Navy students required an increase of about \$17 million--from \$203.3 million to \$220.6 million. (See schedule 1.) The total increase in the Navy's estimated cost avoidance for training its students under a separate program could not be derived from data it provided to us. However, as schedule 4 shows, the required increase would be at least \$23 million, i.e., \$289.7 million versus Navy's earlier estimate of \$266.6 million. The Navy was still revising its estimate at the time

^{1/}Data is based on the services' cost estimates prepared under the assumptions in the May 1979 Army/Navy joint memorandum of understanding.

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our report was issued. In any event, even an upward adjustment of about \$23 million to the Navy's estimate is more than the \$17 million increase to the Army's estimate. Thus the \$63.3 million savings figure--the difference between the Navy's estimated cost avoidance of \$266.6 million and the Army's estimated incremental cost of \$203.3 million--is conservative; estimated savings from a consolidated training program would probably be greater. We have requested that the Department of Defense finalize its review of the services' cost estimates so that the upper limit on savings can be determined.

Costs for training foreign students

Both services included costs for training foreign students in their estimates. You questioned whether such costs should be part of the services' estimates because foreign countries are required by law to reimburse the United States for costs to train their students. Our position is that these costs should be included for the following reason. Over the past decade, we have issued 19 reports to the Congress and 10 reports to the Secretary of Defense emphasizing the Department of Defense's failure to recover all costs incurred for foreign military sales, including training costs. The primary causes for failure to recover all costs have been inadequate implementation of Defense's pricing policies by the military departments and defense agencies and insufficient followup or monitoring of actual cost recovery practices by Defense policymakers. Including such costs in total estimated costs provides for full disclosure of estimated training costs. Reimbursement by foreign countries would reduce Defense's training costs. However, the proportion of reduction in total costs would be relatively the same for each service, so that the range of estimated savings from consolidation would not be greatly affected.

Effect of fuel consumption and prices on savings

We concluded on page 4 of our previous report that neither increased fuel use nor the effects of future fuel price increases should materially affect the overall estimated savings from consolidating undergraduate helicopter pilot training. Enclosure I of that report provided additional details of our analysis. Schedules 14, 15, and 16 of this report further support our conclusions.

TRAINING PROGRAM DIFFERENCES

The basic difference in training programs is that the Navy now uses a combination fixed-wing/rotary-wing syllabus to train helicopter pilots, whereas under consolidated training, an all-rotary-wing syllabus would be used to train its helicopter pilots. The following compares the current syllabus with the proposed syllabus:

<u>Syllabus now in use</u>		<u>Proposed syllabus under consolidation</u>	
<u>Phase</u>	<u>Weeks</u>	<u>Phase</u>	<u>Weeks</u>
Preflight	6	Preflight	2
Primary	17	Primary	8
Intermediate helicopter	5	Transition	4
Transition helicopter	5	Instrument flight	8
Advanced helicopter	<u>11</u>	Night flight	4
	<u>44</u>	Combat skills	4
		Navy unique	<u>8</u>
			<u>38</u>

We have copies of the detailed programs of instruction, which show specific courses taught, for both the current and the proposed training syllabuses. We will provide copies to you if you want them.

OTHER ISSUES

Some intangible issues raised, for which a cost value is not easily determined, follow.

- Consolidated training does not provide training for the Navy's unique environment.
- Fixed-wing training enhances the acquisition of instrument flying skills during the student pilot's initial instrument flight training and provides a tool useful in screening students for the helicopter, maritime, or jet programs.
- Consolidation will cause loss of orientation to Navy's mission and failure to establish early identification with the Navy way of life for Navy students.

On page 5, our previous report explains that the proposed syllabus for consolidated training does provide for training "unique" to the Navy's environment. Specifically,

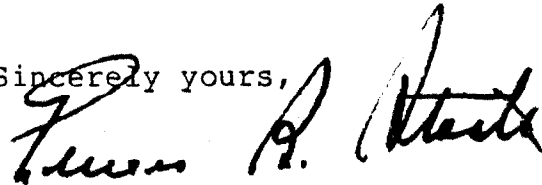
about 1.5 hours are devoted to carrier qualification, which includes five carrier landings at Pensacola, Florida. The Navy has waived this requirement in the past, if the carrier (U.S.S. Lexington) was not available. Under a consolidated program, students would fly to Pensacola, make their carrier-landing attempts, and return to Fort Rucker. The cost for the Navy's unique training, including carrier qualification, has been included in the Army's estimated incremental costs.

Defense officials believe that fixed-wing training is not essential for training helicopter pilots. They believe also that the additional hours spent in a rotary-wing aircraft are more effective in enhancing rotary-wing flight skills than the hours spent in a fixed-wing trainer.

I take this opportunity to express my personal concern over the manner in which you characterized the work of our Office during debate on the House floor on September 27. Your remarks to the House suggested that experienced and fairminded analysts would have reached a different conclusion than that reached by our Office. No doubt, given the controversy surrounding this matter for years, analysts could differ in their conclusions. Whatever disagreements may remain as to conclusions, I assure you that our work was conducted according to standards of objectivity and quality by experienced staff who strove to be fairminded.

We are sending a copy of this report to Congressman Richard C. White.

Sincerely yours,



Comptroller General
of the United States

Enclosures - 16

OUR ANALYSIS OF DEPARTMENT OF THE ARMY'S 5-YEAR
ESTIMATE OF INCREMENTAL COST TO TRAIN NAVY
UNDERGRADUATE HELICOPTER PILOTS
FISCAL YEARS 1980-84

	<u>Cost</u> (millions)	<u>Schedule</u> <u>reference</u>
U.S. Army Aviation Center incremental estimate of cost to train	\$203.4	2 (column 11)
Department of Army's ad- justment to incremental cost to train	<u>12.1</u>	3 (column 2)
Total	215.5	3 (column 3)
Our adjustments	5.1	3 (column 4)
Total 5-year incre- mental cost to train	<u>\$220.6</u>	3 (column 5)

COMMANDING GENERAL, U.S. ARMY AVIATION CENTER

ESTIMATE OF COST TO TRAIN

NAVY UNDERGRADUATE HELICOPTER PILOTS

	Fiscal year					Total 5-year cost (note a)
	1980	1981	1982	1983	1984	
(thousands)						
Family housing management account	\$ 8.5	\$ 11.4	\$ 11.4	\$ 11.4	\$ 11.4	\$ 54.1
Military personnel (note b)	2,183.8	2,638.7	2,633.4	2,671.6	2,717.5	12,845.0
Operation and maintenance	19,709.2	37,760.3	37,600.2	40,006.4	42,393.7	177,469.8
Central supply activities	\$ 29.2	\$ 4.0	\$ 4.0	\$ 4.0	\$ 4.0	
Undergraduate pilot training (note b)	13,350.0	25,734.3	25,636.1	27,431.9	29,214.4	
Support of training establishment	420.2	5.0	5.0	5.0	5.0	
Base operations	1,385.5	1,319.8	1,319.8	1,319.8	1,319.8	
Medical activities		284.9	284.9	298.1	298.1	
Communication and other activities	169.7	55.7	55.7	55.7	55.7	
Troop support and aviation material readiness command (note b)	4,140.8	10,356.6	10,294.7	10,891.9	11,496.7	
Procurement	4,648.4	2,005.5	1,995.1	2,114.1	2,236.4	12,999.5
Undergraduate pilot training (note b)	187.4		2.0	1.4	2.6	
Support of training establishment	2,800.0					
Base operations	686.3					
Communications and other activities	179.0					
Troop support and aviation material readiness command (note b)	795.7	2,005.5	1,993.1	2,112.7	2,233.8	
Military construction	0	0	0	0	0	0
Total cost to train	\$26,549.9	\$42,415.9	\$42,240.1	\$44,803.5	\$47,359.0	a/\$203,368.4

a/To schedule 3 (column 1).

b/Accounts audited by our Office.

OUR ANALYSIS OF DEPARTMENT OF THE ARMY'S
ESTIMATE OF COST TO TRAIN NAVY
UNDERGRADUATE HELICOPTER PILOTS
FISCAL YEARS 1980-84

<u>Account</u>	Estimate by Army Aviation Center (note a)	Department of Army adjustment (note b)	Department of Army position	Our adjustment	Total 5-year cost
	----- (thousands) -----				
Family housing management account	\$ 54.1	\$ 3.9	\$ 58.0		\$ 58.0
Military personnel	12,845.0	720.0	13,565.0	c/\$5,145.5	18,710.5
Operation and maintenance	177,469.8	10,577.2	188,046.0	d/.2	188,046.2
Procurement	12,999.5	799.5	13,789.0		13,789.0
Military construction	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total	a/\$ <u>203,368.4</u>	\$ <u>12,100.6</u>	\$ <u>215,458.0</u>	\$ <u>5,145.7</u>	\$ <u>220,603.7</u>

a/From schedule 2 (column 11).

b/Adjustment requested by our Office to change Army's cost estimate from a 1979 year base to a 1980 year base.

c/Add-on costs for military support and military support tail.

d/Did not use most recent refueling cost rates.

OUR ANALYSIS OF DEPARTMENT OF THE NAVY'S 5-YEAR
ESTIMATE OF COST AVOIDANCE IF UNDERGRADUATE
HELICOPTER PILOT TRAINING IS CONSOLIDATED
FISCAL YEARS 1980-84

	<u>Cost</u>	<u>Schedule reference</u>
	(millions)	
Chief, Naval Education and Training (CNET), estimate to train	\$317.1	5 (column 11)
Department of Navy adjustments	<u>31.9</u>	8 (line 10)
Adjusted cost to train	349.0	8 (column 11)
CNET estimated of Fort Rucker detach- ment	-50.3	7 (column 11)
CNET estimate of phaseout of Whiting Field	<u>-32.1</u>	6 (column 5)
Department of Navy estimate of cost avoidance	266.6	9 (column 7)
Our findings indicate estimate is understated--at a minimum--by	<u>23.1</u>	10 to 13
Adjusted (minimum) cost avoidance	<u>\$289.7</u>	

CHIEF, NAVAL EDUCATION AND TRAINING

ESTIMATE TO TRAIN PILOTS

Account	Fiscal year					Total 5-year cost
	1980	1981	1982	1983	1984	
----- (thousands) -----						
Military personnel	\$32,167	\$29,837	\$26,799	\$25,339	\$26,768	\$140,910
Operation and maintenance	19,687	24,128	20,022	24,434	25,519	113,790
Civilian personnel	\$ 2,740	\$ 2,740	\$1,993	\$ 980	\$ 980	
Aircraft operations	9,095	8,664	7,713	7,855	8,996	
Contract maintenance	580	1,969	3,774	4,750	5,043	
Military support	1,492	1,340	1,049	1,071	1,129	
Base operations	663	697	732	727	727	
Depot level rework	5,117	8,758	4,761	9,031	8,624	
Reimbursable	0	0	0	0	0	
Fixed-wing follow-on	0	0	0	0	0	
One-time costs	0	0	0	0	0	
Aircraft procurement	31,500	27,000	1,000			59,500
Replenishment spares	0	0				
T-34C procurement	31,500	24,000				
2B-24 simulator	0					
2B-37 simulator	0	3,000	1,000			
TH-57 procurement	0					
Military construction						2,900
Outlying fields						
Simulator building						
Total cost to train (note a)	<u>\$83,354</u>	<u>\$80,965</u>	<u>\$47,821</u>	<u>\$49,773</u>	<u>\$52,287</u>	a/ <u>\$317,100</u>

a/To schedule B (line 11).

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CHIEF, NAVAL EDUCATION AND TRAINING

ESTIMATE OF PHASEOUT COST

Account	Fiscal year				Total 5-year cost
	1980	1981	1982	1983	
----- (thousands) -----					
Military personnel	\$15,748				\$15,748
Operation and maintenance	15,161				16,395
Civilian personnel	\$1,744				
Aircraft operations	7,901				
Contract maintenance	305				
Military support	0				
Base operations	577				
Depot level rework	4,057				
Reimbursable	0				
Fixed wing follow-on	0			\$1,234	
One-time cost	577				
Total phaseout costs	\$30,909			\$1,234	a/\$32,143

a/To schedule 9 (line 3).

CHIEF, NAVAL EDUCATION AND TRAINING

ESTIMATE OF FORT RUCKER DETACHMENT

Account	Fiscal year					Total 5-year cost
	1980	1981	1982	1983	1984	
	----- (thousands) -----					
Military personnel	\$7,102	\$ 9,217	\$ 9,336	\$ 9,631	\$ 9,978	\$45,284
Operation and maintenance	728	1,037	1,040	1,080	1,122	5,007
Civilian personnel	\$109	\$100	\$100	\$100	\$100	
Aircraft operations	185	501	498	529	561	
Base operations	150	150	150	150	150	
Military support	284	286	292	301	311	
Total Fort Rucker detachment cost (note a)	<u>\$7,830</u>	<u>\$10,274</u>	<u>\$10,376</u>	<u>\$10,711</u>	<u>\$11,100</u>	<u>a/\$50,291</u>

a/To schedule 9 (line 2).

DEPARTMENT OF NAVY ADJUSTMENTS TO CHIEF, NAVAL EDUCATION
AND TRAINING, ESTIMATE

Account	Fiscal year					Total 5-year cost
	1980	1981	1982	1983	1984	
(thousands)						
Military personnel		\$ 2,000	\$ 2,000	\$ 2,000		\$ 6,000
Operation and maintenance	\$ 1,200	2,600	3,100	4,700	\$ 5,500	17,100
Contract maintenance			\$ 500	\$2,100	\$2,900	
Military support	\$ 400	\$ 400	400	400	400	
Base operations	500	1,500	1,500	1,500	1,500	
Reimbursable	300	700	700	700	700	
Aircraft procurement	-31,000	10,300	27,500	1,000	1,000	8,800
Replenishment spares	500	1,000	1,000	1,000	1,000	
T-34C and T-57 procurement	-31,500	9,300	26,500			
Total adjustments added	-29,800	14,900	32,600	7,700	6,500	31,900
ONET input (note a)	<u>83,354</u>	<u>80,965</u>	<u>47,821</u>	<u>49,773</u>	<u>52,287</u>	<u>a,b/317,100</u>
Total cost as adjusted (note c)	<u>\$53,554</u>	<u>\$95,865</u>	<u>\$80,421</u>	<u>\$57,473</u>	<u>\$58,787</u>	<u>c/\$349,000</u>

a/From schedule 5 (line 21).

b/Includes \$2.9 million for military construction appropriated in prior years.

c/To schedule 9 (line 1).

SCHEDULE 9

SCHEDULE 9

DEPARTMENT OF THE NAVY'S ESTIMATE OF
COST AVOIDANCE IF UNDERGRADUATE HELICOPTER
PILOT TRAINING IS CONSOLIDATED

	1980	1981	1982	1983	1984	Prior year military construction	Total 5-year cost
Cost of training if Navy keeps (note a)	\$53,554	\$95,865	\$80,421	\$57,473	\$58,787	\$2,900	a/\$149,000
Less: Fort Rucker detachment (note b)	-7,830	-10,274	-10,376	-10,711	-11,100		b/-50,291
Phaseout at Whiting Field (note c)	-30,909				-1,234		c/-32,143
Navy cost avoidance	\$14,815	\$85,591	\$70,045	\$46,762	\$46,453	\$2,900	\$266,566

(thousands)

- a/From schedule 8 (line 12).
- b/From schedule 7 (line 7).
- c/From schedule 6 (line 12).

OUR ANALYSIS OF DEPARTMENT OF THE NAVY'S ESTIMATE
OF COST AVOIDANCE FOR FISCAL YEARS 1980-84

MILITARY PERSONNEL

<u>Account</u>	<u>Our findings indicate estimate</u>	<u>Explanation of our findings</u>
	<u>Overstated</u>	
	<u>Understated</u>	
	<u>Amount</u>	
	----- (millions)-----	
Military personnel	\$85.878	
	x	
	\$ 9.2	
		1. Did not follow established planning factors in computing number of flight hours.
		2. Mathematical errors in student load computations.
		3. Did not follow established planning factors in determining number of squadron administrative officers. Omitted requirements in primary and intermediate phase for 2 outyears.
		4. Incomplete complement for maintenance support of T-28 aircraft.
		5. No current analysis for number of base operations support personnel. (note a)
		6. Did not follow established planning factors in determining phaseout requirements and mathematical errors in computations.
		7. Did not use most recent salary rates for costing.
		8. Used wrong end strength in costing Fort Rucker detachment.

a/The amount, i.e., the effect, of this finding on the Navy's cost estimate could not be determined from the data it provided to us.

OUR ANALYSIS OF DEPARTMENT OF THE NAVY'S ESTIMATE

OF COST AVOIDANCE FOR FISCAL YEARS 1980-84

OPERATIONS AND MAINTENANCE

<u>Account</u>	<u>Navy estimate</u>	<u>Our findings indicate estimate overstated</u>	<u>Understated</u>	<u>Amount</u>	<u>Explanation of our findings</u>
	------(millions)-----				
Operations and maintenance Aircraft operations	\$75.488		x	\$ 19.9	<ol style="list-style-type: none"> 1. Did not use most recent rates for costing. 2. Did not include cost for training Coast Guard and foreign students. 3. Errors in computing flight hours.
Civilian personnel					<ol style="list-style-type: none"> 1. No current analysis for the number of personnel estimated for release due to consolidation. Supporting data provided for review was unacceptable. (note a)
Contract maintenance					<ol style="list-style-type: none"> 1. Reallocation of flight hours in T-34C aircraft for foreign and Coast Guard students. 2. Errors in computing flight hours.
Military support					<ol style="list-style-type: none"> 1. Not audited.
Base operations					<ol style="list-style-type: none"> 1. No current analysis to support base operations costs estimated to be avoided due to consolidation. Supporting data provided for review was unacceptable. (note a)
Depot level rework					<ol style="list-style-type: none"> 1. Did not use most recent estimate for costing schedule airframe rework on the OH-1 aircraft. 2. Did not use most recent engine overhaul rates for costing engine overhaul for the OH-1 aircraft. 3. Flight hours understated for the TH-57 aircraft. 4. Did not include cost estimated for rework of T-28 aircraft airframe and engine. 5. Did not include cost estimated for rework on T-34C engine, landing gear, and air worthiness inspections. These costs are not part of the maintenance contract.
Reimbursable					<ol style="list-style-type: none"> 1. Delete as separate item. Direct costs for training foreign students were included in aircraft operations.
Fixed-wing follow-on					<ol style="list-style-type: none"> 1. Not audited.
One-time costs					<ol style="list-style-type: none"> 1. Not audited.

a/The effect of these findings on the Navy's cost estimate could not be determined with the data provided to us for review.

SCHEDULE 11

SCHEDULE 11

OUR ANALYSIS OF DEPARTMENT OF THE NAVY'S ESTIMATE
OF COST AVOIDANCE FOR FISCAL YEARS 1980-84
AIRCRAFT PROCUREMENT

<u>Account</u>	<u>Navy estimate</u>	<u>Our findings</u>	<u>indicate estimate</u>	<u>Amount</u>	<u>Explanation of Our findings</u>
	<u>(millions)</u>	<u>Overstated</u>	<u>Understated</u>		
		(a)	(a)	(a)	
Aircraft procurement	\$ 68.3				
Replenishment spares					1. Estimate included only costs for UH-1 aircraft. No cost shown for T-28, T-34C, and T-57 aircraft. (note b)
T-34C procurement					1. Did not use the most recent estimate of purchase price for aircraft. (note c) 2. Did not use the most recent estimate of the number of aircraft required.
2B24 simulator					1. Not audited. However, Navy officials believed that the simulator the Navy purchased--but not put into place--may not be adequate to meet training needs.
2B27 simulator					1. Not audited.
T-57 aircraft					1. Estimate for additional aircraft costs was understated. (note d)
UH-1 aircraft					1. No cost shown for additional aircraft requirements. (note e)

a/ Could not be determined.

b/ The effect of this finding on the Navy's cost estimate could not be determined because no estimate of costs was readily available.

c/ The effect of this finding indicates that the procurement cost estimate was overstated.

	<u>Navy estimate</u>	<u>Our findings</u>	<u>Difference</u>
Number	116	118	
Cost/aircraft	\$.5 million	\$.43 million	
	<u>\$58.0</u>	<u>\$50.7</u>	<u>\$7.3</u>

d/ The Navy estimated \$1.8 million. Our findings indicate costs for additional procurement should be about \$3.8 million; i.e., 15 aircraft at \$0.250 million/aircraft; difference of about + \$2 million.

e/ The Navy's estimate showed no costs for additional UH-1 needs: 31 aircraft. Navy officials believed that these aircraft would be obtained from the Army. However, no estimate of the costs associated with drawing these aircraft from the Army was made.

OUR ANALYSIS OF DEPARTMENT OF THE NAVY'S ESTIMATE
 OF COST AVOIDANCE FOR FISCAL YEARS 1980-84
 MILITARY CONSTRUCTION

Account	Navy estimate	Our findings indicate estimate		Amount	Explanation of our findings
		Overstated	Understated		
------(millions)-----					
Military construction	\$2.9		x	\$2.4	
Outlying fields					1. Capacity at South Whiting Field would be exceeded with the added OH-1 requirements. Navy officials believed that a detachment could be stationed at Saufly Field. No estimate of cost at Saufly Field was made. Possibly the cost would be only for operation and maintenance.
Simulator building					1. Estimate understated.
Aircraft parking spaces for T-34C aircraft					1. No estimate of cost included for additional aircraft parking spaces.
Fuel system					1. No estimate of cost included for modifications and additions to existing fuel system at Whiting Field.

13

ANALYSIS OF POSSIBLE EFFECT OF
INCREASED FUEL CONSUMPTION AND PRICES
ON ESTIMATED SAVINGS FROM CONSOLIDATION

METHOD

For each program, i.e., separate and consolidated, the following equations were used to analyze this issue:

1. Aircraft hours x fuel consumed (gallons)/hour = total fuel consumption (gallons).
2. Total fuel consumption (gallons) x dollars/gallon = total fuel cost (dollars).

Aircraft hours, gallons consumed each hour, and base price for each gallon of fuel were provided by the respective services.

RESULTS

See schedules 15 and 16.

OUR ANALYSIS OF FUEL CONSUMPTION AND INCREASED

FUEL PRICES FOR UNDERGRADUATE HELICOPTER

PILOT TRAINING FOR FISCAL YEARS 1980-84

FOR TOTAL TRAINING PROGRAM

Program	Aircraft	Gallons consumed each hour	Flight hour	Total fuel consumption	Price each gallon	Total fuel Cost	Effect if fuel price doubled		Effect if fuel price tripled			
							Price each gallon	Total fuel cost	Price each gallon	Total fuel cost		
Separate:												
Navy train at Whiting Field												
	T-28	57	188,420	10,739,940	\$0.63	\$ 6,766,162	\$ 1.26	\$ 13,532,324	\$1.89	\$ 20,298,487		
	T-34C	34	246,332	8,375,288	.45	3,768,880	.90	7,537,759	1.35	11,306,639		
	T-57	21	150,304	3,156,384	.45	1,420,373	.90	2,840,746	1.35	4,261,118		
	UH-1	77	270,875	<u>20,857,375</u>	.45	<u>9,385,819</u>	.90	<u>18,771,638</u>	1.35	<u>28,157,456</u>		
Total Navy						<u>43,128,987</u>		<u>21,341,234</u>		<u>42,682,467</u>		<u>64,023,700</u>
Army train Army at Fort Rucker												
	OH-58	24	81,345	1,952,280	.45	878,526	.90	1,757,052	1.35	2,635,578		
	T-55	13	453,989	5,901,857	.63	3,718,170	1.26	7,436,340	1.89	11,154,510		
	UH-1	77	1,079,343	<u>83,109,411</u>	.45	<u>37,399,235</u>	.90	<u>74,798,470</u>	1.35	<u>112,197,705</u>		
Total Army						<u>90,963,548</u>		<u>41,995,931</u>		<u>83,991,862</u>		<u>125,987,793</u>
Total separate programs						<u>134,092,535</u>		<u>\$63,337,165</u>		<u>\$126,674,329</u>		<u>\$190,011,493</u>
Consolidated:												
Army train all at Fort Rucker												
	OH-58	24	81,345	1,952,280	.45	\$ 878,526	.90	\$ 1,757,052	1.35	\$ 2,635,578		
	T-55	13	633,558	8,236,254	.63	5,188,840	1.26	10,377,680	1.89	15,566,520		
	a/UH-1	77	1,620,190	124,754,630	.45	56,139,584	.90	112,279,167	1.35	168,418,751		
	b/T-28	57	28,614	1,630,998	.63	1,027,529	1.26	2,055,057	1.89	3,082,586		
	b/T-34C	34	3,032	103,088	.45	46,390	.90	92,779	1.35	139,169		
	b/T-57	21	19,100	<u>401,100</u>	.45	<u>180,495</u>	.90	<u>360,990</u>	1.35	<u>541,485</u>		
Total consolidated program						<u>137,078,350</u>		<u>\$63,461,364</u>		<u>\$126,922,725</u>		<u>\$190,384,089</u>
Difference in programs						<u>-2,985,815</u>		<u>\$ -124,199</u>		<u>\$ -248,396</u>		<u>\$ -372,596</u>

a/Includes phaseout hours at Whiting Field.

b/Represent phaseout hours at Whiting Field.

OUR ANALYSIS OF FUEL CONSUMPTION AND INCREASED

FUEL PRICES FOR UNDERGRADUATE HELICOPTER

PILOT TRAINING FOR FISCAL YEARS 1980-84

INCREMENTAL BASIS

Program	Aircraft	Gallons consumed each hour	Flight hour	Total fuel consumption	Price each gallon	Total fuel cost	Effect		Effect	
							if fuel price doubled Price each gallon	Total fuel cost	if fuel price tripled Price each gallon	Total fuel cost
Navy train Navy	T-28	57	188,420	10,739,940	\$0.63	\$ 6,766,162	\$ 1.26	\$13,532,234	\$ 1.89	\$20,298,487
	T-34C	34	246,332	8,375,288	.45	3,768,880	.90	7,537,759	1.35	11,306,639
	T-57	21	150,304	3,156,384	.45	1,420,373	.90	2,840,746	1.35	4,261,118
	UH-1	77	270,875	20,857,375	.45	9,385,819	.90	18,771,638	1.35	28,157,456
Total Navy program				43,128,987		21,341,234		42,682,467		64,023,700
Army train Navy	T-55	13	179,569	2,334,397	.63	1,470,670	1.26	2,941,340	1.89	4,412,010
	a/UH-1	77	540,847	41,645,219	.45	18,740,349	.90	37,480,697	1.35	56,221,046
	b/T-28	57	28,614	1,630,998	.63	1,027,529	1.26	2,055,057	1.89	3,082,586
	b/T-34C	34	3,032	103,088	.45	46,390	.90	92,779	1.35	139,169
	b/T-57	21	19,100	401,100	.45	180,495	.90	360,990	1.35	541,485
Total incremental increase in Army program				46,114,802		21,465,433		42,930,863		64,396,296
Difference in programs				-2,985,815		\$ -124,199		\$ -248,396		\$ -372,596

a/Includes phaseout hours at Whiting Field.

b/Represents phaseout hours at Whiting Field.