

12874-11587

BY THE COMPTROLLER GENERAL

# Report To The Congress

OF THE UNITED STATES

## The Navy's Pilot Shortage: A Selective Bonus And Other Actions Could Improve Retention

Problems with retention and training have resulted in the Navy's having about 24 percent fewer pilots on duty than it requires. The other services have much smaller shortages but could have more of a problem in the future.

Some actions taken by the Navy could improve pilot retention, but further actions are needed. A bonus targeted to pilots eligible to leave the service could be an effective means of improving retention, but the proposed across-the-board increase in flight duty pay is not warranted.

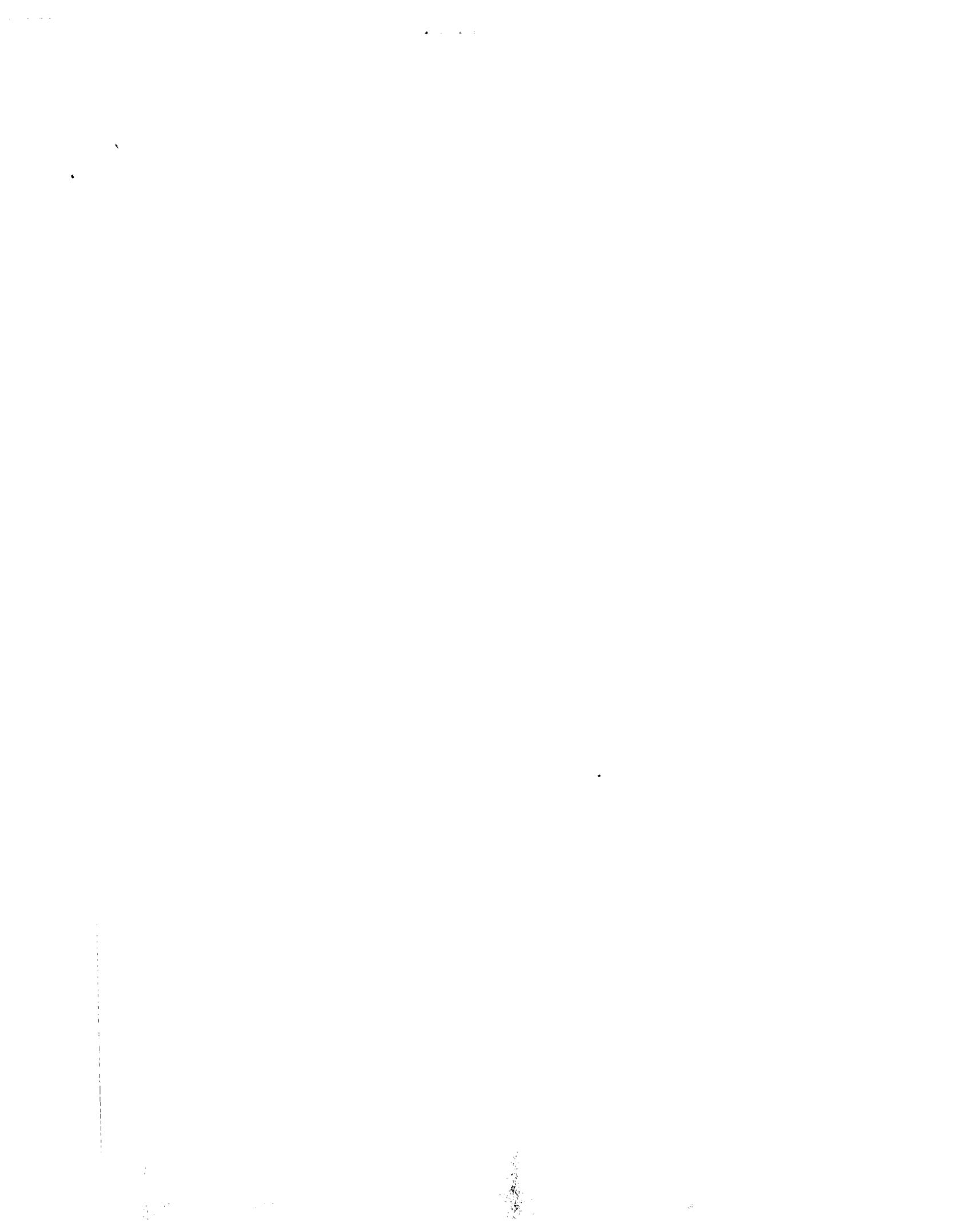


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FEBRUARY 15, 1980





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

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To the President of the Senate and the  
Speaker of the House of Representatives

This report discusses the Navy's pilot shortage and efforts taken and needed to improve retention, especially of pilots completing their initial service requirement. Higher than normal retention is needed because of low pilot production and high voluntary and involuntary separations from active duty during the past few years. We initiated this review because of our concern about whether the services' proposed across-the-board increase in flight duty pay was warranted.

We are sending copies of this report to the Director, Office of Management and Budget; the Secretary of Defense; and to the Secretaries of the Army, Navy, and Air Force.

A handwritten signature in black ink, reading "Louis B. Blount".

Comptroller General  
of the United States

AGC 0005  
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COMPTROLLER GENERAL'S  
REPORT TO THE CONGRESS

THE NAVY'S PILOT SHORTAGE:  
A SELECTIVE BONUS AND OTHER  
ACTIONS COULD IMPROVE RETEN-  
TION

D I G E S T

The Secretary of Defense should adopt the services' recommendation and seek legislative authority for a selective bonus to be used when necessary to increase the retention of pilots eligible to leave the service.

The services also proposed a 50-percent, across-the-board increase in flight duty pay. This is not the best solution. While the higher pay could have some effect on retention, most of the increase would go to pilots not eligible to leave the service and to about 50,000 officers and enlisted personnel with flight duties who do not now pose a retention problem. A study by the Center for Naval Analyses completed in 1979 concluded that bonuses would retain more pilots at a lower cost than would across-the-board flight duty pay increases.

During fiscal year 1979, about 103,000 officers and enlisted personnel received \$208 million in flight duty pay designed to attract and retain personnel with aviation careers. (See p. 2.)

While all services have some pilot shortages only the Navy has a severe problem. At September 30, 1979, the Navy had 2,600 (24 percent) fewer pilots than it needed. Pilot shortages in the other services ranged from 1,300 in the Air Force to 700 in the Marine Corps. (See p. 3.)

The services' proposal to increase flight duty pay--an incentive payment--in recognition of inflation misapplies the pay principles that Defense said it uses as a guide

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in setting levels of military compensation. Defense said its pay principles are a combination of comparability, which recognizes inflation in adjusting regular military compensation, and competitiveness, which allocates special and incentive pay to alleviate personnel shortages. Defense had not defined these principles in writing. It said that its failure to properly apply the principles in the past has caused problems.

Past experience has shown that a targeted bonus, also in the services' proposal, would be an effective means to improve retention and would be in accord with the competitive pay principles Defense applies to incentive pay. This bonus could help alleviate the Navy's shortage and could be used later by the other services if warranted. (See p. 5.)

The Navy's serious pilot shortage has several causes, including greater than normal attrition. In addition, for the last 5 years the Navy has been unable to meet its planned training rates, and for 4 years (1975-1978) it separated pilots who wanted to remain in the service. (See p. 8.)

The Navy has taken some actions to curb its current pilot shortage, including placing higher priority on filling instructor positions to help meet training rates. It has stopped involuntary separation of pilots during shortages and has begun recalling pilots previously released. (See p. 9.)

Defense proposed consolidating all helicopter pilot training in the Army, beginning in 1980, to help overcome Navy's training problems. However, late in 1979 the Congress disapproved the proposal. (See p. 11.) Defense officials said that, without such consolidation, the Navy could not meet its training objectives with present resources.

## RECOMMENDATIONS

The Secretary of Defense should:

- Seek legislative authority for a selective bonus targeted to pilots eligible to leave the service.
- Reject the services' proposal for a 50-percent increase in flight duty pay.
- Define in writing Defense's military pay principles and provide training on their proper application.
- Direct the Navy to establish in writing policies and procedures restricting involuntary separations in career fields with shortages.

## AGENCY COMMENTS

Defense officials said they were analyzing the services' proposal and felt that this report would be very useful. They said that flight duty pay should not be increased only because of inflation but disagreed with the need to state Defense's pay principles in writing.

Defense officials also said that, in order to make sure the Navy's pilot training objectives are accomplished, they have instructed the Navy to send 6 students per class (144 maximum per year) to the Army for helicopter pilot training until the Navy can train all of its students itself.

Navy officials agreed that the Navy should have a written policy restricting involuntary separations in career fields with shortages. They said that both a 50-percent increase in flight duty pay and a selective bonus are needed to improve pilot retention.



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ABBREVIATIONS

ACIP	aviation career incentive pay
GAO	General Accounting Office



## CHAPTER 1

### INTRODUCTION

During the past few years, the Navy has experienced a shortage of pilots. While the other services have also experienced some shortages, we concentrated our review on the Navy's problems because they have been the most severe.

We looked at the Aviation Career Incentive Pay (ACIP) program which covers all military officers with flight duties. The program's objectives include creating an equitable system of flight pay, attracting enough candidates for undergraduate pilot training, and, most importantly, inducing these pilots to make the service a career. The services have proposed legislative changes to ACIP to help retain pilots. These changes include a 50-percent increase in flight duty pay for officers and enlisted personnel and added authority to give bonuses.

But the pay issue was not all that concerned us. Other factors were influencing pilots' decisions to remain in or leave military service. So we looked into the causes of Navy pilot attrition and management actions that could counteract this trend.

#### CURRENT FLIGHT DUTY PAY

As early as 1974 the services were having trouble retaining pilots beyond their initial tour. The services were concerned about these losses because of the investment (as much as \$1 million) needed to train and develop pilots. Also, maintaining an experienced corps of pilots was not possible if they were to continue to leave the services during the time they were most needed. In addition, the flight pay system in effect at that time increased pilots' pay throughout their career on the basis of rank and years of service, regardless of how often they flew. Under this system, pilots received 55 percent of their total career flight pay after their 16th year of service and after most of their flying was over.

To correct the problems of the old flight pay system, the Congress passed the Aviation Career Incentive Act on May 31, 1974. Under the act flight pay was based on aviation service rather than total military service. However, for commissioned officers, decreases in and termination of flight pay is based on military service. The 1974 system provides that officers receive more than two-thirds of their flight pay in the first 18 years of their career. This is the period they do most of their flying.

Monthly rates of pay under the 1974 act are: \$100 for officers with 2 or less years of service, \$125 with over 2 years, \$150 with over 3 years, and \$165 with over 4 years. From the 7th through the 18th year, monthly pay is \$245. After 18 years, pay decreases to \$225 and decreases every 2 years thereafter in \$20 increments to \$165. Pay ceases after the 25th year. Monthly flight pay for warrant officers is \$100 for 2 or less years of service, \$110 for over 2, and \$200 for all over 6 years. Enlisted members' flight pay ranges from \$50 each month for the lowest grade (E-1 with 2 or less years service) to \$105 each month for grade E-7 with over 12 years of service as well as all E-8 and E-9 members.

Military personnel entitled to receive flight duty pay and the estimated cost for fiscal year 1979 follow:

<u>Service</u>	<u>Military personnel</u>			<u>Cost</u>		
	<u>Officers</u>	<u>Enlisted</u>	<u>Total</u>	<u>Officers</u>	<u>Enlisted</u>	<u>Total</u>
	----- (000 omitted) -----					
Navy	16,900	8,800	25,700	\$ 38,400	\$ 8,500	\$ 46,900
Air Force	40,400	10,000	50,400	97,300	10,400	107,700
Army	12,800	6,400	19,200	34,500	5,800	40,300
Marine Corps	<u>5,300</u>	<u>2,100</u>	<u>7,400</u>	<u>11,100</u>	<u>1,800</u>	<u>12,900</u>
Total	a/ <u>75,400</u>	<u>27,300</u>	<u>102,700</u>	<u>\$181,300</u>	<u>\$26,500</u>	<u>\$207,800</u>

a/Includes pilots, navigators, naval flight officers, trainees, flight surgeons, and noncrew members eligible for pay when on flight duty.

#### SCOPE OF REVIEW

We reviewed the services' records relating to pilot inventory and requirements. We also considered what inducement, if necessary, the services should use to solve the problem and what Defense was doing to improve retention. We also reviewed the justification for proposed increases in ACIP for officers, increases in enlisted personnel flight pay, and bonuses for officers whom the services wish to retain. We did our work at Army, Navy, and Air Force headquarters in the Washington, D.C., area and at the Naval Air Training Command at Corpus Christi, Texas, and had discussions with Defense and service officials.

## CHAPTER 2

### TARGETED BONUS MAY HELP TO RETAIN MORE PILOTS

In recognition of their low pilot retention rates and the costs of inflation, the services have proposed a selective bonus and a 50-percent across-the-board increase in flight duty pay. However, in our opinion, the across-the-board increase is not the best solution to the Navy's severe pilot shortage, nor is it in keeping with Defense's pay principles in setting the levels of military compensation. While the higher pay will have some effect on retention, most of the increase would go to pilots who are not eligible to leave and to about 50,000 officers and enlisted personnel who have flight duties but who do not yet pose a retention problem.

We believe that the targeted bonus, alone, is in accord with the competitive pay principle, and it has been shown to be effective in improving services' retention rates. The Secretary of Defense should adopt the services' recommendation and seek legislative authority for a selective bonus to be used when necessary to help retain more pilots eligible to leave the service.

### PILOT SHORTAGE SPURS PROPOSED PAY INCREASES

The services are proposing financial inducements as a partial solution to actual and anticipated pilot shortages. Although the Navy has the most acute shortage, other services could have more of a problem in the future. The services' answer to the problem is a draft legislative proposal which specifies pay increases aimed at improving retention.

Pilot requirements, inventory, and shortage for active duty forces at September 30, 1979, follow:

<u>Service</u>	<u>Pilot requirements</u>	<u>Inventory</u>	<u>Shortage</u>
Navy	11,000	8,400	2,600
Army	13,700	12,900	800
Air Force	23,800	22,500	1,300
Marine Corps	<u>3,900</u>	<u>3,200</u>	<u>700</u>
Total	<u>52,400</u>	<u>47,000</u>	<u>5,400</u>

Note: While the Marine Corps pilot shortage is large per centagewise, it was primarily caused by shortfalls in pilot training (see p. 10) rather than high attrition. We would expect this shortage to be quickly overcome once the training problems are corrected.

Although the overall pilot shortage for the services is 10 percent, the Navy is short 24 percent. The pilot shortage has caused the Navy much concern and has spurred the services' efforts to increase pay and to improve the quality of service life.

The services proposed that flight duty pay for pilots be increased by 50 percent and bonuses be given to some pilots who agree to remain on active duty. The proposal also provides for a 50-percent increase in flight duty pay for about 27,000 officers and 25,000 enlisted personnel who have flight duties. The flight duty pay increase would cost about \$106 million annually.

According to the legislative proposal, the increase would restore the relationship between flight pay and basic pay that existed in 1972. The proposed legislation would also give the Secretary of Defense the discretion to authorize special continuation pay (bonus) to commissioned officers and warrant officers with flight duties at an amount not to exceed 4 months basic pay for each year they extend their service beyond their initial obligation.

PROPOSED FLIGHT DUTY PAY  
INCREASE NOT THE BEST SOLUTION

Although the services hope to help solve their retention problems by increasing flight duty pay, such an increase would not be the best solution. In the first place, increases would go to many who are extending their duty in sufficient numbers or who are not eligible to leave the service. Second, the services claim flight duty pay is now too low because of inflation since the pay rates were established in 1955. But flight duty pay is an incentive pay which, according to competitive pay principles, should be set at an amount adequate to attract the right number of qualified personnel. It should not be more than necessary for this purpose and should not be raised solely because of inflation.

Services' data shows that present levels of flight duty pay are adequate to attract and retain enough personnel to satisfy most of their requirements. Only in the case of Navy pilots eligible to leave the service, who represent about 5 percent of the 103,000 members drawing flight duty pay, is retention now a serious problem. Therefore, Defense would be paying about \$100 million to people who either are not eligible to leave the service or who are not now leaving in great numbers.

In our May 1979 report, "The Congress Should Act To Establish Military Compensation Principles" (FPCD-79-11), we stated a need to clearly define the pay principles for setting and adjusting military compensation. Defense has not yet defined in writing its pay principles, and this has contributed to uncertainties among military personnel in this area as shown in our 1979 report.

In a July 1979 letter commenting on that report, Defense officials said they use a combination of comparability and competitiveness as principles to guide them in setting levels of military compensation. Defense officials further stated that the problems they experience are generally related to the failure to apply these principles in specific circumstances and that:

--Comparability is achieved by linking military pay adjustments to increases for general schedule employees. (Such increases recognize inflation in the private sector.)

--Competitiveness is achieved by allocating special and incentive pay to alleviate personnel shortages and to further compensate certain military duties.

The services' proposal to increase flight duty pay because of inflation is an improper application of the comparability principle to incentive pay. Applying the competitive principle, incentive pay would be set at an amount adequate to attract and retain the desired quantity and quality, but should not be more than necessary for this purpose.

#### SPECIAL BONUS MAY SOLVE RETENTION PROBLEM

On the basis of experience in other situations, the services have found that bonus pay can solve short-term retention problems. Presently, the Navy is the only service which needs to offer such a special bonus to its pilots because it must achieve higher than normal retention to overcome its acute shortage. However, if the Defense proposal is enacted, the authority to grant bonuses would be available to the other services should they experience serious pilot shortages.

The services have found bonuses valuable in helping to retain specialists such as physicians and nuclear officers. Bonuses have changed the minds of some of these specialists who had desired to leave the service. For example, retention of physicians was almost doubled when all services first adopted the variable incentive pay bonus system.

Defense studies show that bonuses are more effective than regular monthly payments in increasing retention because of the psychological effect of a large payment at one time. Monthly payments have less impact because recipients tend to view them as part of their basic pay.

Late in 1978 Navy officials asked the Center for Naval Analyses to examine the effects and costs of alternative pay increases on the retention of pilots. The center concluded in 1979 that bonuses increase pilot retention at a lower cost than monthly flight duty pay increases. The center said raises in flight duty pay have higher costs because they are not targeted to pilots who may leave the service, but go to officers who have not completed their minimum service requirement or who are not a retention problem.

### CONCLUSIONS

The services' data shows that the Navy has the greatest pilot shortage and prompt action is needed to improve retention rates. While the increase in flight duty pay will have some effect on retention, it would go to many whose retention is not a problem for the services. However, on the basis of the services' experiences, a targeted bonus would be more effective on retention rates in critical shortage occupations, such as pilots. This bonus could be used by the Navy now and by the other services whenever their shortages warrant it.

Increasing flight duty pay across the board to recognize inflation misapplies the comparability pay principle to incentive pay. We believe this illustrates the need for Defense to clearly define in writing its military pay principles and to train its personnel to properly use them.

### RECOMMENDATIONS

We recommend that the Secretary of Defense:

- Seek legislative authority for a selective bonus targeted to pilots eligible to leave the service and reject the services' proposal for a 50-percent increase in flight duty pay.
- Define in writing Defense's military pay principles and provide training on their application.

## AGENCY COMMENTS

Defense officials told us that they were analyzing the services' proposal and felt that our report would be very useful. However, they disagreed with the need to state in writing Defense's pay principles because it would be too restrictive in setting pay levels and proposing changes. They said their goal was to have a compensation package adequate to attract, motivate, and retain the desired number of service members and that this could be accomplished more readily without a rigid set of pay principles. Defense officials agreed that flight duty pay should not be increased only because of inflation.

We continue to believe that Defense needs to state its pay principles in writing to avoid the problems discussed in this report and acknowledged by Defense in response to our earlier report.

Navy officials said both an increase in flight duty pay and the selective bonus were needed to improve pilot retention.

## CHAPTER 3

### NAVY SEEKS ANSWERS TO THE CAUSES OF SHORTAGES

The shortage of pilots in the Navy has had a number of causes. Greater than normal attrition has decreased the number of available pilots. Also, for the last 5 years the Navy has been unable to meet its planned training rates. And for 4 years (1975-1978) the Navy separated pilots who wanted to stay on duty and could have been retained to ease the shortage problem.

The Navy is taking some actions to curb its current pilot shortage, including recalling pilots previously released, placing higher priority on filling instructor pilot positions to overcome some of its training shortfalls, and stopping involuntary pilot separations. However, more should be done. Because the proposed consolidation of helicopter training was rejected by the Congress, Defense should determine what further steps are needed to assure that the Navy's pilot training program is accomplished. Also, the Navy should have written policies and procedures to restrict involuntary separations in those career fields with shortages.

### MORE PILOTS LEAVING THAN BEFORE

Greater than normal attrition is one of the major factors behind the Navy's current pilot shortage. For example, voluntary losses at the O-3 grade level increased as follows: jet pilots from 133 in 1976 to 296 in 1978, propeller aircraft pilots from 148 in 1976 to 281 in 1978, and helicopter pilots from 42 in 1976 to 82 in 1978. Total O-3 voluntary losses in 1979 were 848, an increase of 189 over 1978.

Many interrelated factors have contributed to these losses. The dramatic increase in airline hiring has done much to draw pilots from the services. Navy pilots say they see airline jobs as lucrative employment opportunities offering higher pay, more job satisfaction, and greater stability and security. However, this may have been a temporary situation since the airlines have recently announced flight cutbacks and pilot layoffs.

Officers who were leaving the Navy indicated dissatisfaction with other aspects of naval aviation. They cited career disincentives, such as

- separation from family,
- decreased flight time,

- overall career dissatisfaction,
- inadequate career counseling,
- unattractiveness of shipboard duty,
- not enough chances for further specialization,
- inflexible assignment and promotion policies,
- decreased chances for advanced education, and
- benefit and retirement uncertainties.

#### NAVY IS ACTING TO CORRECT SHORTAGE PROBLEMS

To induce more pilots to remain on active duty the Navy is revising many of its personnel policies and is also taking a close look at how it can improve retention. To persuade pilots to stay, the Navy is promising greater chances for promotion and for command to those who remain during this critical shortage period, without compromising quality or promotion standards. A side benefit to the individual is the prospect for personal satisfaction. Also, the Navy has created a special office within the Deputy Chief of Naval Operation (Manpower, Personnel and Training) to help solve retention problems.

The Navy also has programs to recall officers, including pilots, to correct its shortage. Efforts began in May 1978 to return Reserve officers to active duty. Then in January 1979 about 1,200 letters were mailed to those who voluntarily resigned or were released in the prior 3 years, inviting them to return to active duty. As a result, more than 200 pilots returned to active duty. Those pilots separated in 1979 will be contacted soon.

Because of some shortages in the 0-4 grade level, the Navy has a program to allow officers to continue on duty past their retirement dates on a selective basis. As a result, 57 pilots have extended their service and were on active duty as of October 1, 1979.

#### PILOT TRAINING RATES NOT BEING MET

For the last 5 years the Navy has been unable to meet its planned training rates for pilots. Shortages of trained instructors and unavailability of training aircraft were two major causes of the problem which produced 1,018 Navy pilots less than programmed during that period. Since the Navy is

also responsible for training Marine Corps pilots, these problems contributed to a training shortfall of 400 Marine Corps pilots as well.

The following table shows that for several years Navy and Marine Corps pilot production has not kept pace with programed training rates.

	<u>FY</u> <u>1975</u>	<u>FY</u> <u>1976</u>	<u>FY</u> <u>1977</u>	<u>FY</u> <u>1978</u>	<u>FY</u> <u>1979</u>	<u>Total</u>
<u>Navy</u>						
Programed (note a)	1,104	1,030	900	800	885	4,719
Actual graduates	<u>924</u>	<u>904</u>	<u>744</u>	<u>597</u>	<u>532</u>	<u>3,701</u>
Shortfall	180	126	156	203	353	1,018
<u>Marine Corps</u>						
Programed (note a)	400	360	360	382	470	1,972
Actual graduates	<u>356</u>	<u>343</u>	<u>351</u>	<u>269</u>	<u>253</u>	<u>1,572</u>
Shortfall	44	17	9	113	217	400

a/President's budget.

Training shortfalls were primarily caused by understaffing the Naval Air Training Command because the Navy placed a priority on keeping pilots in cockpit billets at sea. Navy officials told us this situation was further exacerbated by high attrition of instructor pilots and the extra time required to train their replacements. Also, insufficient maintenance personnel caused problems with the availability of the T-28 trainer aircraft. Navy officials planned on replacing that aircraft with the T-34 and reassigned some of the enlisted personnel to other duties. When introduction of the T-34 was delayed, too few maintenance personnel were available to service the T-28 aircraft. Navy plans provided for contractor maintenance for the T-34 trainers.

During fiscal year 1979, the Navy placed a higher priority on filling instructor positions and expects the Training Command to be fully staffed in 1980 to meet its planned training program. However, we noted that this expectation was based on the transfer of helicopter pilot training to the Army in 1980 which the Congress did not approve.

Consolidating helicopter pilot training was to help problem

The Navy believed it could overcome training shortfalls in 1980 by consolidating its undergraduate helicopter training with that of the Army at Fort Rucker, Alabama. But late in 1979, when acting on the fiscal year 1980 Defense Appropriations Bill, the Congress disapproved the consolidation. We, therefore, doubt that the Navy can fulfill the planned training program because the assignment of instructor pilots and procurement of T-34 aircraft were constrained pending the transfer of helicopter training to the Army. Defense officials told us the Navy could not meet its training needs for the near term without consolidation, and they are deciding what actions to take.

INVOLUNTARY PILOT SEPARATIONS CAUSED FURTHER REDUCTIONS

Despite pilot shortages, the Navy separated 391 pilots between fiscal years 1975 and 1978 to meet its overall reduced officer strength levels, as the following table shows. Most of these were young Reserve pilots who reached the end of their minimum service commitment but were not allowed to stay on active duty.

<u>Fiscal year</u>	<u>Number separated</u>	<u>Yearend pilot shortages</u>	
		<u>Number</u>	<u>Percent</u>
1975	49	976	8
1976	107	364	3
1977	185	1,041	9
1978 (1st quarter)	<u>50</u>	1,647	15
Total separated	<u>391</u>		

Navy regulations do not prohibit involuntary separation of persons in career fields with shortages. Navy officials currently responsible for managing Navy pilots told us that, when they assumed responsibility in 1978, they stopped pilot separations because of shortages. They said that perhaps the previous officials were unaware of the shortages and were authorized to make involuntary separations since the regulations did not preclude them.

Navy officials told us that, in screening officers for separation, those with the lowest performance ratings were identified for release. However, they said that they had the flexibility to consider other factors.

## CONCLUSIONS

Although the Navy has acted to curb its pilot shortage, we believe additional actions should be taken. Because the consolidation of helicopter pilot training was not approved, Defense should determine what further steps should be taken to make sure that the Navy's pilot training program is fully accomplished. Finally, we believe that the Navy should have written policies and procedures restricting involuntary separations in those career fields with shortages.

## RECOMMENDATION

We recommend that the Secretary of Defense direct the Navy to establish policies and procedures restricting involuntary separations in those career fields with shortages.

## AGENCY COMMENTS

Defense officials said that, in order to make sure that the Navy's pilot training objectives are accomplished, they have instructed the Navy to send 6 students per class (144 maximum per year) to the Army for helicopter pilot training until the Navy can train all of the students itself.

Navy officials said they believed Navy personnel clearly understood that it is Navy's policy to restrict involuntary separations as recommended but agreed that the policy should be written.

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