THE ROLE OF RETENTION IN MANAGING THE AVIATION WARRANT OFFICER FORCE

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ABSTRACT

A survey conducted by the U. S. Army Research Institute (ARI) in Fiscal Year 1979 identified the number and types of aviation warrant officers (AWOs) who were leaving the Army and the factors that influenced the AWOs' decisions to leave. Despite an increase in retention of AWOs since the survey was conducted, the need for continuing concern about AWO retention exists. ARI currently is developing a separation questionnaire that will be administered to all AWOs who leave the Army. Data yielded by the questionnaire, along with selection and classification data, will be used to establish an AWO Force Management System. The system will enable the U. S. Army Military Personnel Center to react more rapidly and more appropriately to deficiencies, as well as overstrengths, in specific occupational specialties. The separation questionnaire development is discussed and a training cost analysis that demonstrates the value of the system is presented.

BACKGROUND

In Fiscal Year (FY) 1979, the U. S. Army Military Personnel Center (MILPERCEN) noted a trend toward decreased retention of Aviation Warrant Officers (AWOs). Retention data indicated that, for those AWOs who had graduated from flight training in FY 1976 and FY 1977T and who were eligible to leave the Army in FY 1979, retention beyond initial obligation was approximately 45 percent. In contrast, during the three previous years, retention of AWOs at the same career point had remained relatively constant at approximately 65 percent (see Figure 1).

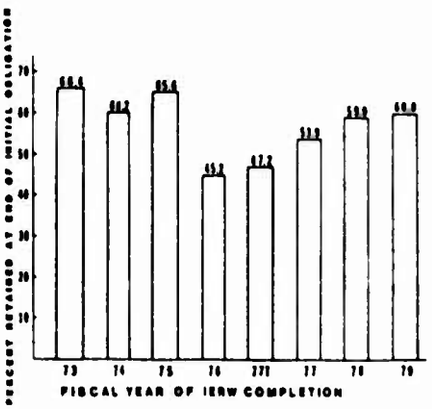

Figure 1. Retention of AWOs at the end of initial obligation.

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MILPERCEN was concerned that, if the trend toward a decrease in retention of AWOs continued, the Army's aviation readiness and combat effectiveness would be seriously reduced. The concern prompted MILPERCEN to request that the Army Research Institute (ARI) provide research support to investigate AWO attrition. In response to MILPERCEN's request, ARI conducted a worldwide survey of Army aviators that identified (a) the number and types of AWOs who were leaving the Army, and (b) the factors that influenced the AWOs' decisions to leave.

The ten factors that attritees identified as having the most influence on their decisions to leave the Army can be classified into three major areas of concern: (a) pay and benefits (e.g., unequal flight pay, erosion of benefits, etc.), (b) supervision and leadership (e.g., lack of technical knowledge about aviation matters by the chain of command, etc.), and (c) assignment and career factors (e.g., lack of opportunity for assignments to desirable installations, uncertainty about future career opportunities in the Army, etc.). These factors subsequently became the focus of a series of initiatives developed by MILPERCEN to improve retention of AWOs. The most publicized initiative was equalization of flight pay between warrant officer and commissioned officer aviators. The research and the resulting initiatives are described in detail in a series of U. S. Army Aviation Digest articles (Everhart & Sanders, 1981; Morgan & Johnson, 1981; Rogers & King, 1981; Sundy, Ruffner, & Wick, 1981).

IMPACT OF THE INITIATIVES

Since the initiation of the AWO retention research in FY 1979, retention of AWOs has steadily increased. The retention rate for first-term AWOs who were eligible to leave the Army in FY 1980 was approximately 54 percent; the retention rate for first-term AWOs who were eligible to leave the Army in FY 1981 was approximately 59 percent; and the retention rate for AWOs who were eligible to leave the Army in FY 1982 was approximately 60 percent (see Figure 1). Because of the transition from a 3-year to a 4-year initial obligation for AWOs who began flight training after 1 October 1978, few first-term AWOs were eligible to leave the Army in FY 1983.

Feedback from individuals in the field suggests that the continued increase in AWO retention is due, in part, to the Army's concern as expressed in the retention initiatives that were enacted during FY 1982. In addition, there is evidence that the decline in the economy has limited the availability of civilian jobs during recent years. The decreased chances of finding a civilian job might have encouraged retention of AWOs who would have chosen to leave the Army.

REASONS FOR CONTINUING CONCERN

Despite the recent increase in retention rate, there are reasons for continuing concern about AWO retention. One of the primary concerns is the high cost of training each time the retention rate declines. For example, in response to the high AWO separation rate in FY 1979, the Department of the Army (DA) directed the U. S. Army Aviation Center (USAAVNC) to increase the AWO training rate from 420 in FY 1979 to 853 in FY 1983. Figure 2 illustrates the dramatic increase in AWOs trained at USAAVNC over the past few years.

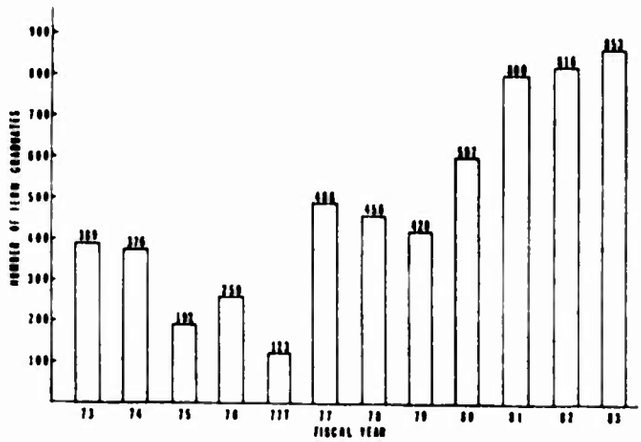

Figure 1. Number of active Army AWO graduates from IERW flight training by fiscal year.

While a higher training rate increases the number of AWOs who remain in the Army, mathematically it also increases the number of AWOs who may leave the Army--even with an improved rate of retention. For example, in FY 1979, when retention rate for first-term AWOs was 45.2 percent, the Army lost 142 AWOs at the end of initial obligation. However, a projected retention rate of 60 percent for the AWOs trained in FY 1980 would represent a loss of 239 AWOs in FY 1984.

The problem of AWO retention becomes of even greater concern when the losses are viewed in terms of training replacement costs. An AWO who separated from the Army at the end of initial obligation in FY 1979 represented a minimum training replacement cost of $189,111 (see Table 1); an AWO trained in FY 1983 will represent a minimum training replacement cost of $254,661 at the end of initial obligation (see Table 2).

TABLE 1

FY 1979 ESTIMATED MINIMUM REPLACEMENT COST OF A UH-1 AVIATION WARRANT OFFICER

COST OF IERW	YEARS OF SERVICE AS AVIATOR (INITIAL OBLIGATION)	FAC 1 ANNUAL FLIGHT HOUR REQUIREMENTS	DOD ESTIMATED COST PER FLIGHT HOUR	ANNUAL COST OF PROFICIENCY TRAINING (COL 3 x COL 4)	CUMULATIVE COST OF PROFICIENCY TRAINING (CUMULATIVE TOTAL OF COL 5)	TOTAL CUMULATIVE COST OF TRAINING (COL 1 + COL 6)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
$121,431	1	96	$235	$22,560	$ 22,560	$143,991
121,431	2	96	235	22,560	45,120	166,551
121,431	3	96	235	22,560	67,680	189,111

TABLE 2

FY 1983 ESTIMATED MINIMUM REPLACEMENT COST OF A UH-1 AVIATION WARRANT OFFICER

COST OF IERW	YEARS OF SERVICE AS AVIATOR (INITIAL OBLIGATION)	FAC 1 ANNUAL FLIGHT HOUR REQUIREMENTS	DOD ESTIMATED COST PER FLIGHT HOUR	ANNUAL COST OF PROFICIENCY TRAINING (COL 3 x COL 4)	CUMULATIVE COST OF PROFICIENCY TRAINING (CUMULATIVE TOTAL OF COL 5)	TOTAL CUMULATIVE COST OF TRAINING (COL 1 + COL 6)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
127,173	1	96	$332	$31,872	$ 31,872	$159,045
127,173	2	96	332	31,872	63,744	190,917
127,173	3	96	332	31,872	95,616	222,789
127,173	4	96	332	31,872	127,488	254,661

The loss of 142 AWOs in FY 1979 represents a total loss of approximately $27,000,000 (142 AWOs multiplied by $189,111 training cost per aviator; see Table 3). In contrast, a projected loss of 239 aviators in FY 1984 would represent a total loss of approximately $61,000,000 (239 AWOs multiplied by $254,661 training cost per aviator; see Table 3). Since the projections of future losses are not based on inflated dollars and do not include the costs of additional aircraft qualification courses, the actual loss represented by these aviators will be much greater.

TABLE 3

ESTIMATED NUMBER AND TRAINING REPLACEMENT COST OF AWOs WHO LEAVE THE ARMY AT THE END OF INITIAL OBLIGATION

FLIGHT SCHOOL COMPLETION	NUMBER OF AWOs TRAINED	END OF INITIAL OBLIGATION	PERCENT ATTRITION	NUMBER OF AWOs WHO LEAVE (COL 2 x COL 4)	ESTIMATED MINIMUM TRAINING REPLACEMENT COST
FY 1976	259	FY 1979	54.8	142	$ 27,000,000
FY 1977T	123	FY 1979	52.8	65	12,000,000
FY 1977	488	FY 1980	46.1	225	43,000,000
FY 1978	456	FY 1981	41.0	187	35,000,000
FY 1979	420	FY 1982	40.0	168	32,000,000
FY 1980	597	FY 1984	40.0 projected	239	61,000,000
FY 1981	800	FY 1985	40.0 projected	320	81,000,000
FY 1982	816	FY 1986	40.0 projected	326	83,000,000
FY 1983	853	FY 1987	40.0 projected	341	87,000,000

CURRENT AWO RETENTION ACTIONS

The financial loss shown in Table 3 supports the conclusion that the Army needs to continue its AWO retention effort. As a part of the Army's ongoing effort to improve the retention of AWOs, ARI currently is developing a separation questionnaire designed specifically for AWOs. ARI was tasked by MILPERCEN to develop the questionnaire as a follow-on to the retention survey. A preliminary version of the separation questionnaire currently is being field tested.

Once the separation questionnaire becomes operational, it will be administered to all separating AWOs as a part of their general outprocessing from the Army. Information provided by the questionnaire will be used to establish a system that yields continuous feedback about AWO attrition. The system will provide current information about the number and types of AWO losses to the Army and about the factors that influence the AWOs to leave the Army.

Information about the AWO losses can be used in the Aviation Warrant Officer Force Management System (see Figure 3) to determine aviator replacement needs, assess training requirements, and forecast AWO force strength. The information can also be used to determine the optimal number of AWOs that must be retained in order to meet the Army's projected AWO requirements at a minimum training rate. Information about the factors that influence attrition can be used to help personnel managers assess the effect of specific policies and decisions on AWO retention and to develop programs to maximize the retention of high quality aviators.

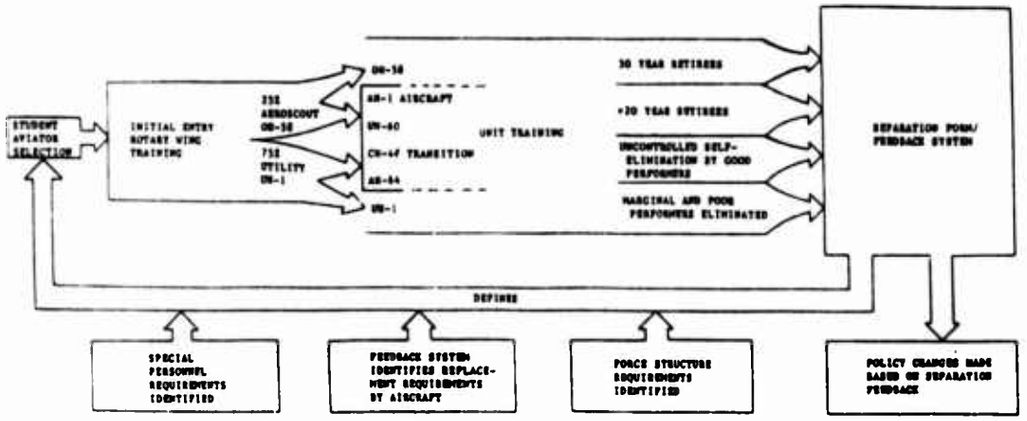

Figure 3. Aviation force management model.

The goal of ARI and MILPERCEN is the development of an Aviation Warrant Officer Force Management System that will have efficient and interactive selection, classification (assignment), and retention programs. Such a system will enable MILPERCEN to react more quickly and more appropriately to specific personnel occupational specialty deficiencies or overstrength situations. The current personnel management system does not effectively address specific occupational specialties or experience levels, nor does it contain a quick feedback mechanism or a data base for long-term personnel projections. Therefore, the AWO understrength problem experienced in FY 1979-81 has become an overstrength problem in 1983. An efficient Aviation Warrant Officer Force Management System will minimize the magnitude and duration of the perturbations experienced above and below the AWO authorization line. The development of such an Aviation Warrant Officer Force Management System is being pursued jointly by ARI and MILPERCEN.

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