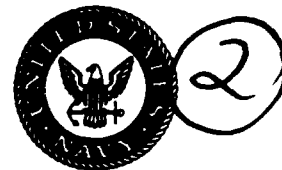


Navy Personnel Research and Development Center

San Diego, CA 92152-6800

TN-90-8

January 1990



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Analysis of the Individuals Account for Officers

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Analysis of the Individuals Account for Officers

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FOREWORD

This project was conducted in response to a Chief of Naval Personnel request to investigate the Individuals Account for Officers to determine if it could be reduced, and to report the findings to him. The request to the Navy Personnel Research and Development Center (NAVPERSRANDCEN) originated in mid-December 1988 and the findings were briefed at the end of January 1989. This report contains the findings.

Many individuals were generous in providing information which supported this study. They include CDR L. Wright, Aviation School Command, Pensacola; Trey McDonald and Jo Young, NETPMSA, Pensacola; Russ McNair, CDR R. Brooks, and Jill Mullins, CNET; Rob McDonald and Gary Hodak, NTSC Orlando; CW04 G. Cole, PNCS Goza, PNC Nunnery, TMU, New Orleans; Dave Monroe, SWOS, Newport; LCDR K. Roberts, SWOS, San Diego; LCDR Sevald, LT Groth, and LT Alexander, NUCPWRSCOL, Orlando; Jim Bolwerk, COMNAVAIRPAC; LCDR D. Hall, COMASWINGSPAC; CDR H. Hunter, COMFITAEEWWINGPAC; Pete Hodgison and J. Kleinwaks, Navy Audit Service, Washington DC; David Rodney and Bob Downey, CNA; George Horn, OP-290; CDR R. Peterman, LT G. Bauer, and LT W. Hardin, OP-391; CAPT S. Sterling, CDR T. Thorsen, and CDR R. Parker, OP-591; LCDR G. Habel, OP-01B2N; Charley McPeters, OP-01B2E; CAPT M. Steen, LCDR E. Sullivan and LCDR R. Chenette, OP-112; CAPT R. Miller, CDR T. Meyer, and LT K. Burcher, OP-130; CDR Doshe and LCDR Goodson, OP-131; LCDR P. Little, OP-167; Dixie Kenyon and Linda Kane, NMPC-163; CAPT P. Romanski and LCDR L. Rosenberg, NMPC-413; LT J. Ahlgrimm, NMPC-421; CDR G. Stubbs and LT J. Freeman, NMPC-433; CDR V. Matthews and LT J. Smith, NMPC-454; Gerry Stoopman, CDR D. George and DPCS Renadette, NMPC-47; and C. Chesser, NMPC-731.

Although the above list is in no particular order in terms of their contributions, the support of CDR Tory Matthews, NMPC-454, was especially noteworthy for the breadth of ideas, leads to knowledgeable sources, and documentary material.

This research was funded under the Quick Response R&D Program supported by the Commander, Naval Military Personnel Command.

MURRAY ROWE
Director, Manpower Systems Department



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INTRODUCTION

Naval Officers serving on active duty are classified in two broad categories: those occupying operational billets, both ashore and afloat; and those not in operational billets. The latter category of officers comprises the Individuals Account for Officers (IAO). It includes officers who are patients and detainees, those awaiting discharge and those in transit between billets, including leave taken while in transit (altogether, TPPH); those on temporary duty (TEM DU); and those in training for an operational billet and in professional education programs.

The IAO is a necessary cost of doing business: officers get sick, they must travel between duty stations, they must be trained, etc. However, the IAO may also reflect inefficiencies in the officer personnel system. When schools in a training pipeline are not scheduled so that an individual can move from one to another without delay, when orders are not promptly issued to students completing or attriting from school, or when the system does not function efficiently in other ways, the size of the IAO increases. For a particular force of officer personnel, each officer in the Individuals Account (IA) directly reduces the number available to fill operational billets.

There are several ways to reduce the size of the IAO, including the following:

1. The preferred method is to eliminate inefficiencies. Schools that are not scheduled to optimize student flow through prescribed training pipelines, delays in issuing orders to school graduates, and school attrition represent situations which add to the size of the account.
2. Policies that cause officers to be included in the IAO, such as policies requiring en route training, can be changed.
3. The application of personnel accounting codes can be changed to redefine an officer's status as operational in certain situations. For example, leave taken in transit can be charged to the detaching or receiving activity instead of adding to IAO.
4. Attrition from schools can be reduced. Every attrite adds to the IAO, not only because of the additional requirement for training which is created, but also because of the delay surrounding an unplanned movement.
5. Operational tour lengths can be increased. With fewer rotations, less movement is required.

Because of time limitations, this study did not investigate all of these options. Those which were investigated are discussed in the following sections. In addition, no attempt was made to address the imbalance between programmed (or budgeted) IAO billets and actual IAO workyears. The task of this study was to examine the IAO in order to reduce it--not to increase the number of billets devoted to the IAO.

APPROACH

The problem of reducing the IAO was approached from several directions. First, personnel data was extracted from the Officer Master File (OMF). The data was analyzed to determine the

current size of the IAO and its location in terms of grade, community, and IAO category (e.g. student/trainee, TEMDU, TPPH). In addition, the data was examined historically to detect any trends in IAO. Second, documentary evidence was examined to assess current knowledge about the problem and proposed solutions. This included copies of briefings, instructions, and documents of various kinds. Third, interviews with a wide variety of offices were made to verify information derived from automated and documentary sources and to track down apparent differences in facts presented by various interviewees.

A major part of the study was devoted to gaining an understanding of the IAO: its overall size and the size of each of its components; trends in size and composition; how the account is managed; current policies affecting it; and previous efforts to reduce its size.

To start, a review of the IAO literature was conducted at the Navy Personnel Research and Development Center (NAVPERSRANDCEN) library and by using two automated systems; the Manpower and Training Research Information System (MATRIS) and the National Technical Information System (NTIS). Although, no previous research work on the IAO problem was located through these systems, useful background information was available in two unpublished papers written by Yuh-Ling Su at NAVPERSRANDCEN, which provided information about the size of the account. In addition, a file of correspondence provided by Navy Military Personnel Command (NMPC-454), described a 1982-83 effort to reduce the IAO. Briefings from the Individuals Account Working Group (IAWG) provided information about more recent management initiatives, especially in the enlisted area.

MANAGEMENT OF THE IAO

The IAO is not centrally managed: a large number of organizations play a role in establishing and executing the policies and procedures which govern its size. Training policies are established by OP-01, the appropriate Warfare Sponsor (OP-02, 03 and 05), and NMPC--with the Warfare Sponsor being the predominant party. Training policies are implemented by the training establishment and NMPC, through its placement and detailing functions. Several organizations within the training establishment may be involved in managing a single training pipeline. For example, five organizational elements are responsible for moving an aviation trainee through the pipeline to their first duty station: NMPC determines the flow of personnel for the period from commissioning until commencement of training; the Aviation Schools Command is responsible for training at Aviation Officer Candidate School (AOCS) and Aviation Preflight Indoctrination (API); the Chief of Naval Air Training (CNATRA) is responsible for Undergraduate Pilot/NFO Training; the Fleet Commanders are responsible for Fleet Readiness Squadron (FRS) training; and the Chief of Naval Education and Training (CNET) has overall training responsibility.

Because of the decentralization of IAO management responsibility, there are a variety of organizations and study groups involved in monitoring the Account. A brief description of each of these follows.

Quarterly Production Alignment Conference

Aviation training is long and expensive, and particularly difficult to manage. Problems with weather and aircraft availability often delay students' progress through the pipeline. To deal with

these problems, a quarterly meeting (the Quarterly Production Alignment Conference) of representatives of the various organizations involved is held to make near-term adjustments to the flow of trainees. This meeting is typically attended by 30 to 40 individuals representing OP-59, OP-13, NMPC, CNET, CNATRA, Naval Aviation Schools Command, CNRC, COMNAV-AIRPAC, COMNAV-AIRLANT, MCCDC, and HQMC.

Transient Monitoring Unit

Another organization which supports continuing management of the IAO is the Transient Monitoring Unit (TMU), located at the Enlisted Personnel Management Center (EPMAC) in New Orleans. This group regularly visits Navy installations to identify inefficiencies in personnel movements, many of which contribute to the IA. The TMU is chartered to look at both officer and enlisted personnel, but has placed more emphasis on the latter.

Individuals Account Working Group

A third group that was formed to control the IA for both Officer and Enlisted personnel is the IAWG. This group is chaired by OP-112 and includes representatives from many of the organizations which influence the size of the IA. It meets quarterly and reports to a Flag Level Steering Committee. Like the TMU, it has concentrated most of its past efforts on enlisted personnel.

Naval Training Systems Center

Of particular interest are two studies commissioned by the IAWG in 1988. The Navy Training Systems Center (NTSC), located in Orlando, Florida, was tasked to study the supernumerary problem, first for the Navy as a whole and then for the aviation pipeline in particular. The Navy-wide study used the Navy Integrated Training Resources and Administration System (NITRAS) as a source of data. In its report on supernumeraries, NTSC devoted most attention to enlisted supernumeraries, although 38 officer courses entered in NITRAS were examined to determine the supernumerary level. For these courses, the supernumerary level is about 8 percent, and about half of that number is associated with the Nuclear Power school. Because aviation schools are not yet fully reported in NITRAS, a separate study of that pipeline was commissioned. Based on preliminary information, the volume of supernumeraries in the undergraduate aviation pipeline is not expected to be much different than other officer training pipelines.

Naval Education and Training Program Support Activity

CNET, in its capacity as overall training manager, has an analysis staff located at Naval Education and Training Program Management Support Activity (NETPMSA). This group has studied the various enlisted training pipelines. They first described the pipelines for all ratings and then examined school convening dates within each pipeline to see if an efficient pipeline flow was possible. Recommendations were made, where appropriate, to adjust convening dates. As a final step, the problem of scheduling students through the pipeline was studied and benchmark levels for supernumeraries were established for comparison with actual supernumerary levels. A similar study of officer training has not been undertaken, although it is not clear that the problem with officer pipelines requires the same level of effort.

Naval Audit Service

The Naval Audit Service (NAS) was tasked to recommend ways to reduce the pool of newly commissioned officers awaiting training. This pool forms in the summer and extends to the autumn of each year as a result of May and June Naval Academy (USNA) and Navy Reserve Officer Training Corps (NROTC) graduations. This pool is commonly referred to as the "Ensign stash." The preliminary results of the NAS study were forwarded to NMPC for review. By and large, the main recommendation is to delay active duty for newly-commissioned NROTC and USNA graduates until a school seat is available.

NMPC-454

This office is responsible for monitoring the IAO and providing visibility at the headquarters level. It receives regular monthly reports of "individuals" by grade and community and special reports from the TMU. This office provides quarterly briefings to the Chief of Naval Personnel (CNP) on the condition of the IAO.

SIZING THE IAO

Current Status of the IAO

The IAO was examined for the most recent available year as well as the past 12 fiscal years (1977 through 1988) in terms of grade, community, designator, and accounting category (training, TPPH, and TEMDU).

The current size of the IAO and its components was determined by processing an extract of the end Fiscal Year 1988 OMF. The resulting information, shown graphically in Figures 1 to 4, identify the areas which contribute most to the present size of the IAO.

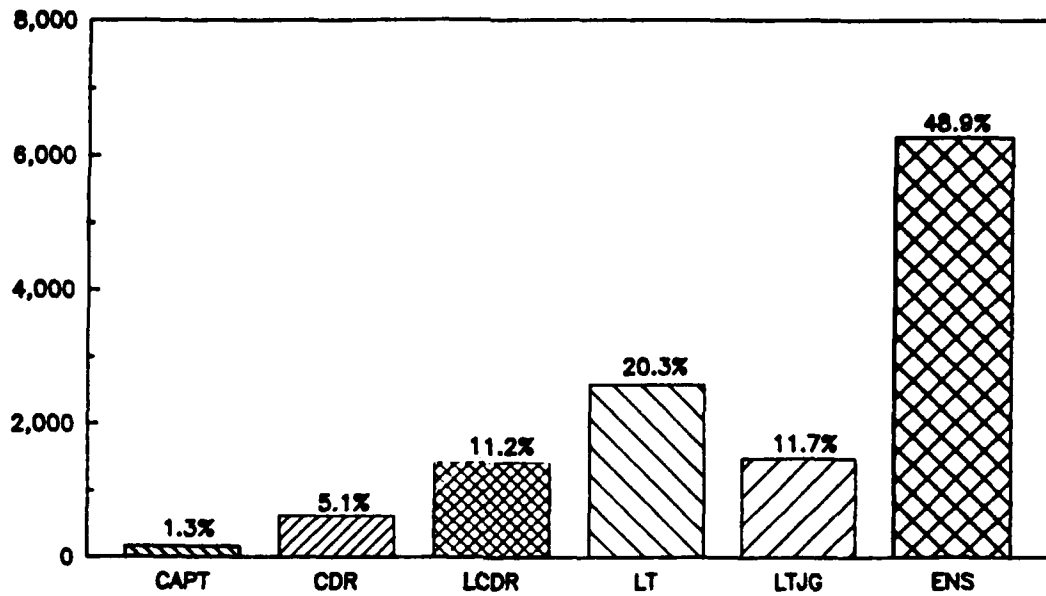
Almost half of the IAO consists of Ensigns (Figure 1), although Ensigns represent only 13.1 percent of the total officer force. Over 80 percent of the IAO lies in the three lowest officer grades.

When viewed by community (Figure 2), the Unrestricted Line (URL) constitutes almost 77 percent of the IAO. Because the URL community is only 57 percent of the officer force, it clearly makes a disproportionately high contribution to the IAO.

The URL portion of the IAO is shown by designator in Figure 3. Generally, the size of the IAO for most designators is proportional to the size of the designator itself. However, Pilots, NFOs and Submarine Designators contribute to the IAO at a rate slightly higher than their percentage of the URL, while Surface Warfare and Special Warfare Designators are at a slightly lower rate. The General URL contributes a significantly lower percentage. Over 80 percent of the URL contribution is made by Pilot, NFO, and Surface Designators alone.

Figure 4 shows the IAO divided into its four categories: Long-term Training (LTT), Short-term Training (STT), TPPH, and TEMDU. The two training categories dominate the IAO, with about 73 percent of the total. To summarize, at end of FY 1988 the largest part of the IAO was students, and the largest part of the students are members of the URL community--particularly in the Surface Warfare, Submarine, and Aviation Designators.

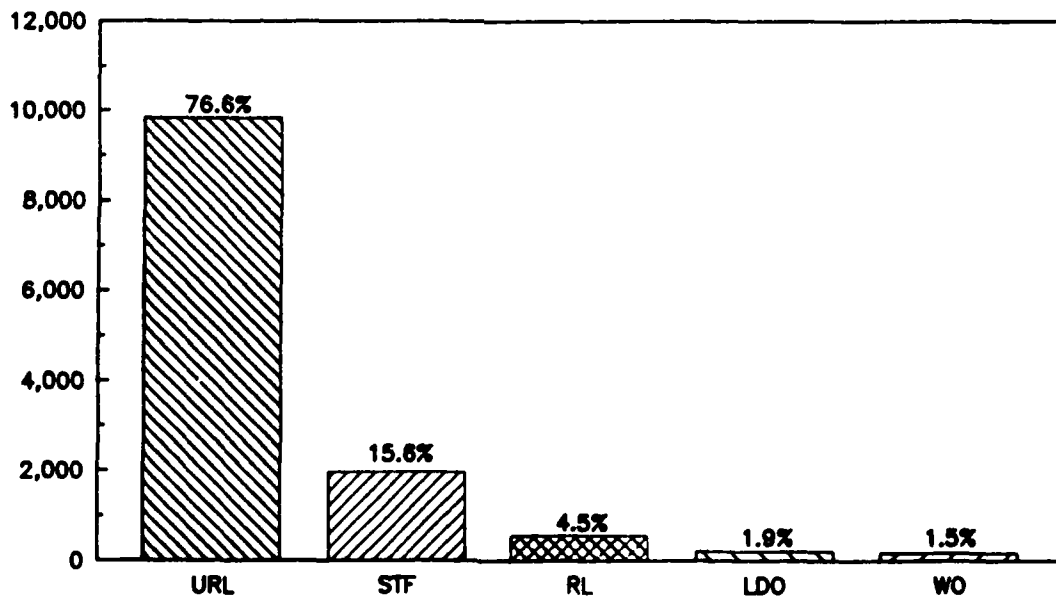
NUMBER OF PERSONNEL



Source: 30 Sep 88 OMF.

Figure 1. Officer individuals account by grade.

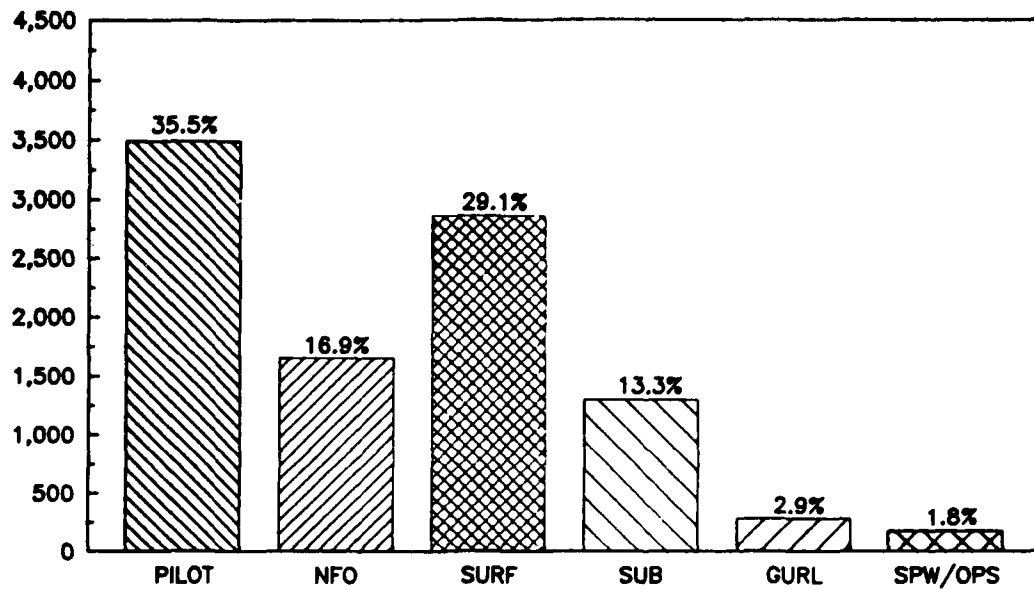
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Source: 30 Sep 88 OMF.

Figure 2. Officer individuals account by community group.

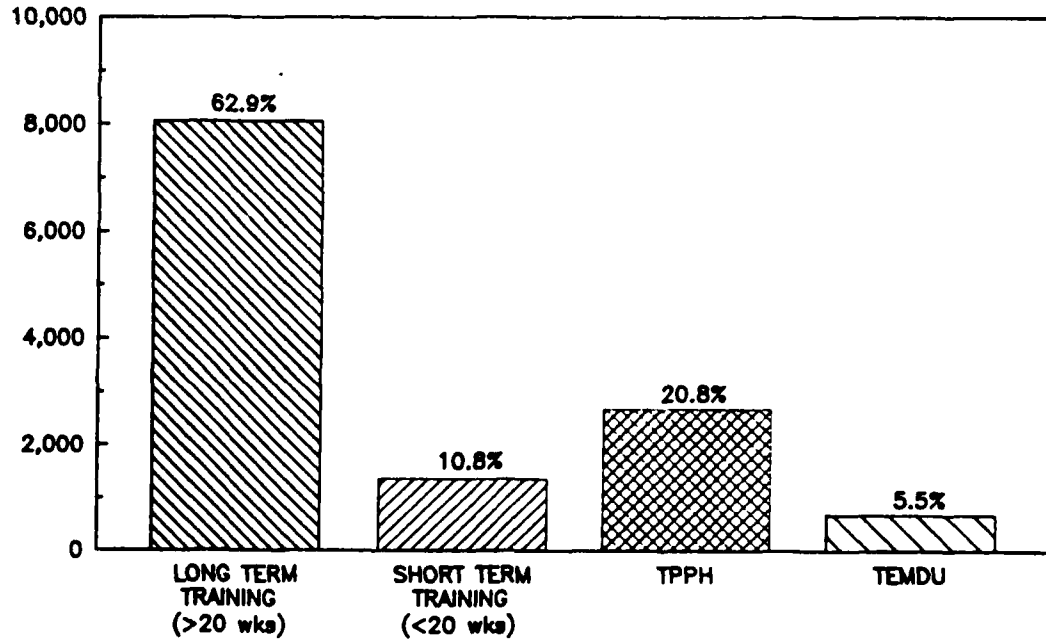
NUMBER OF PERSONNEL



Source: 30 Sep 88 OMF.

Figure 3. Officer individuals account by URL designator.

NUMBER OF PERSONNEL



Source: 30 Sep 88 OMF.

Figure 4. Officer individuals account by category.

IAO Trends

Trends over the 12 year period from 1977 to 1988 are shown in Figures 5 to 8. Figure 5 shows that over the 12 year period (with the exception of FY 1979 and 1982) the overall size of the IAO has remained nearly constant at about 18 percent of the total officer force. The two exception years were due to data processing problems with the original data. The actual values are probably close to those of the adjacent years. Within the relatively constant total, the student category has steadily increased, while the TPPH category has decreased by a nearly equal amount. TEMDU has made a small and relatively constant contribution to the IAO.

The IAO percentage of the personnel inventory in each community (Figure 6) has remained nearly constant over the period, with the URL rate double that of the Restricted Line (RL) and Staff Corps. However, when the student category is viewed by URL designator (Figure 7), some trends are apparent. The percentage of the inventory in each of the four designators in a student status has increased over the 12 year period, with Pilots and Submarine Officers showing the largest increases. Finally, when we focus on long-term training within the bottom three pay grades of the URL (Figure 8), a trend similar to that in Figure 7 appears--but more dramatic. Pilot and Submarine student rates have increased markedly, while the rate for Surface Warfare Officer has increased more slowly.

In summary, trends over the most recent 12 year period show a constant size for the total IAO, with URL students increasing and TPPH decreasing. The increase in students is largely in the primary warfare designators. Based on this data, the remainder of the study is focused mostly on training pipelines for the URL designators.

ANALYSIS OF TRAINING PIPELINES

A total of 12 training pipelines were examined: the entry level pipeline, a Department Head pipeline, and a Commanding Officer pipeline for each of the four major designators within URL: Surface (Conventional), Surface (Nuclear), Aviation, and Submarine. Actual and prescribed pipeline lengths were compared to determine how much of the student IAO results from training policy and how much comes from other factors.

Entry pipelines were examined by measuring the time required for officers arriving at their first permanent duty stations in FY 1988 to traverse the entire pipeline from commissioning to first duty station. The training policy for entry pipelines was taken from the *Unrestricted Line Officer Career Planning Guidebook*, supplemented by information provided by Placement Officers.

Follow-on pipelines (i.e., en route training) were examined by comparing the actual time required to get from one duty station to another with the policy for that same movement. Actual pipelines were measured by inspecting the orders of officers en route to Department Head and Commanding Officer tours using the Officer Assignment Information System (OAIS) and the Officer Distribution Information System (ODIS). The policy on these pipelines was provided by Placement Officers. The results are discussed below.

INDIVIDUALS ACCOUNT RATE (INDIVIDUALS/POPULATION)

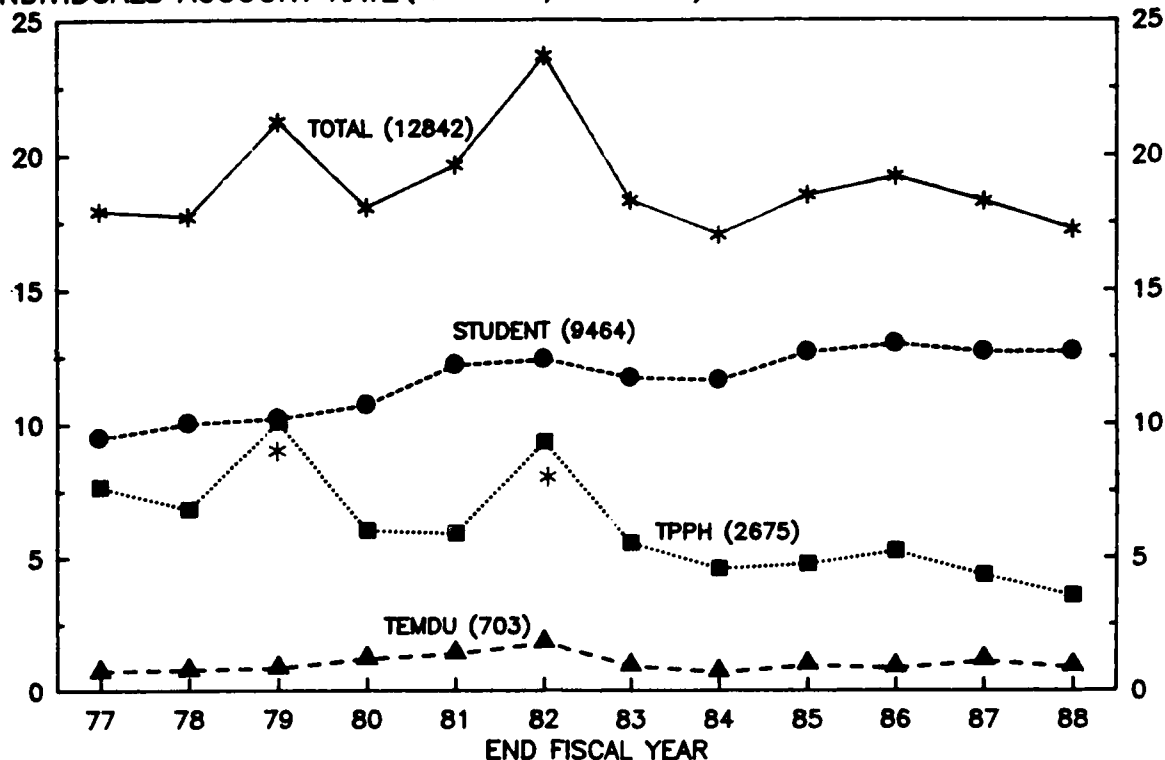


Figure 5. Components of individuals account for total office force (EFY88 = 74,597).

TOTAL INDIVIDUALS ACCOUNT RATE (Incl. STU, TPPH, TEMDU)

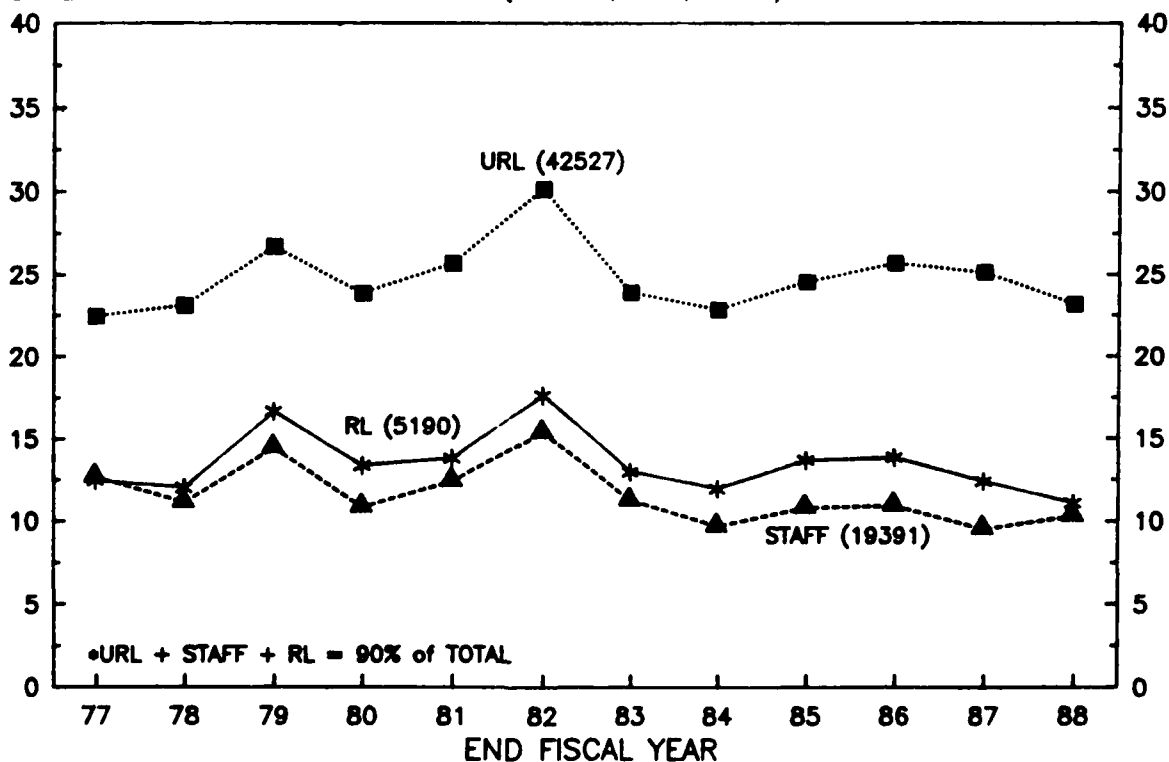


Figure 6. Individuals account for officers by community (EFY88 = 74,597).*

STUDENT INDIVIDUALS ACCOUNT RATE (ACC = 340+360)

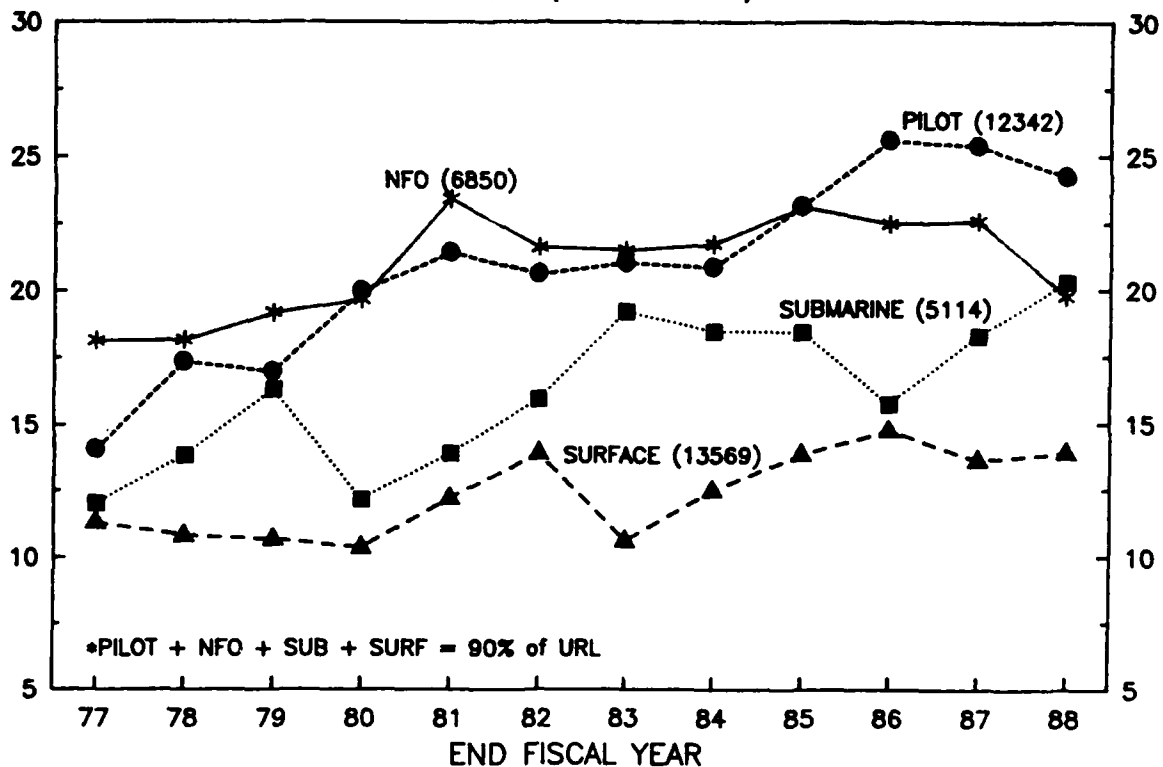


Figure 7. Students account for officers by URL group (EFY88 = 42,527).*

LTT RATES

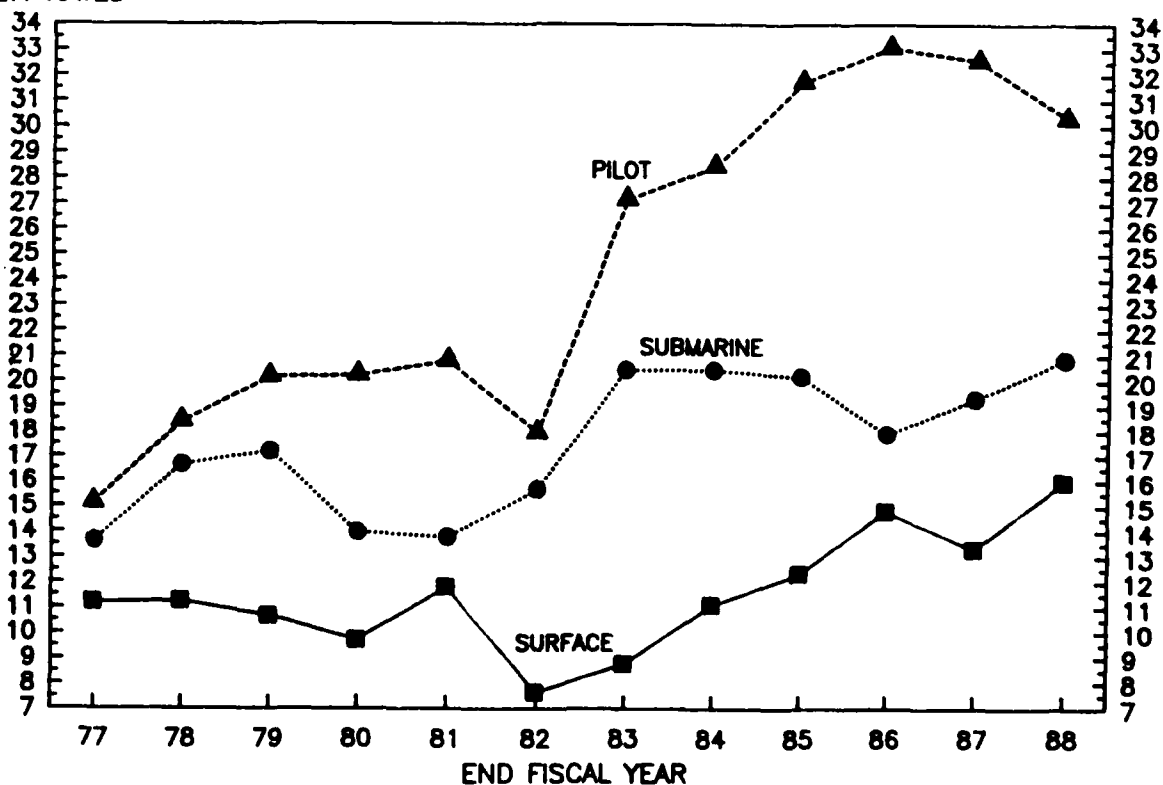


Figure 8. URL (B3) LTT student rates by community.

Submarine Officers

1. Entry Pipeline. USNA and NROTC graduates entering submarine warfare are normally granted 1 month of leave upon graduation. Otherwise, officers from all commissioning sources follow the same pipeline; namely, Nuclear Power School, followed by training at a prototype reactor site, followed by basic submarine officer training. It is worth noting that unlike the Surface Warfare community, billet-specific training for Submarine Officers is done on a Temporary Additional Duty (TAD) basis after an officer reports to a permanent duty station. One month of leave is normally granted between prototype training and basic submarine training. A reasonable norm for an efficient pipeline is about 17 months, computed as follows:

Nuclear Power School	26 weeks
Prototype Training	26 weeks
Submarine Officer Basic	12 weeks
Travel and Proceed	4 weeks
Leave	6 weeks
Total	74 weeks (17 months)

Figure 9 shows the actual pipeline lengths for Submarine Officers arriving at first their duty station in Fiscal Year 1988. The mean of the distribution is 21 months. Just over 92 percent of officers experienced pipeline lengths between 17 and 25 months. In examining the records of individuals in the distribution, the primary reason for the 4 month difference between the policy norm and the actual mean is the Ensign stash. In the Submarine Community, the stash is further amplified by officers who attend graduate education immediately upon commissioning. Another, but less significant reason, is a delay between the completion of Nuclear Power training and commencement of Submarine Officer training.

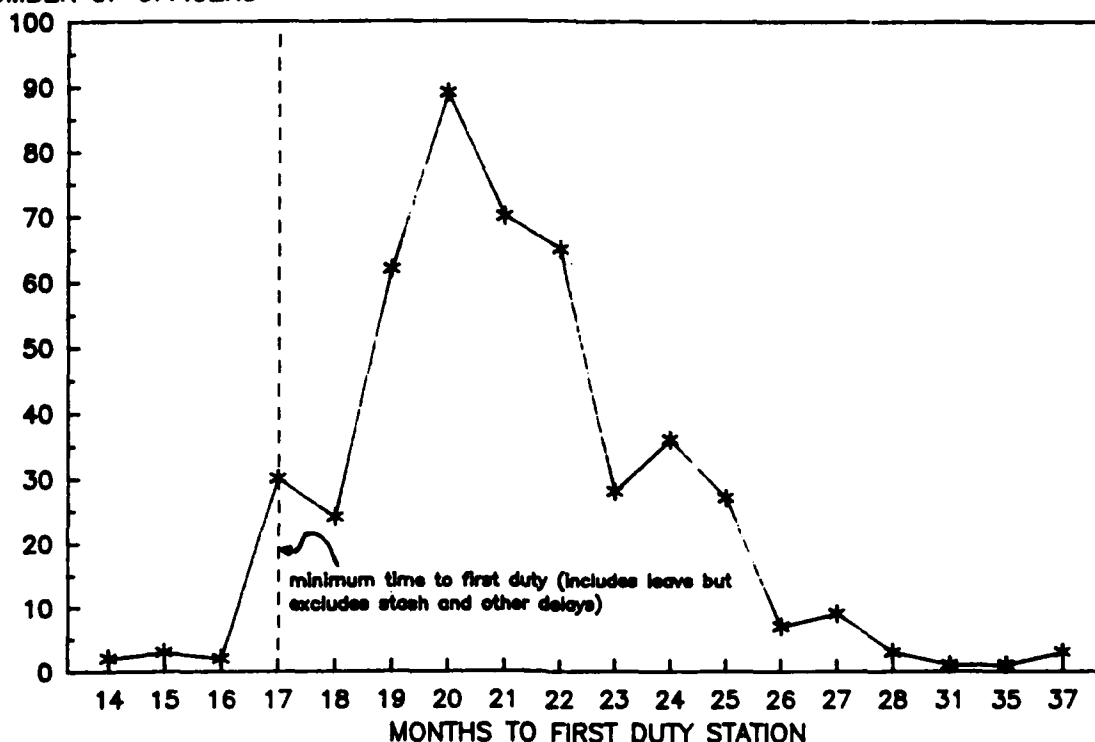
2. Follow-on Submarine Pipelines. Submarine Department Head training is limited to the 22 week Submarine Officer Advanced Course, plus leave and travel estimated to average 4 weeks. The total pipeline is therefore about 6.5 months. A sample of orders of 11 Submarine Officers en route to Department Head billets shows the following actual pipeline lengths:

<6 mos	6 mos	7 mos	8 mos	>8 mos	Average
0	4	6	1	0	6.7

The prescribed Commanding Officer pipeline for submarine duty is about 7 months, computed as follows:

Reactor Training	13 weeks
Tactics, Refresher	9 weeks
Tactics at Sea	3 weeks
Coordinated Tactics	2 weeks
Leave and Travel	4 weeks
Total	31 weeks (7.2 months)

NUMBER OF OFFICERS



Processed from: OMF, EFY87, and 88.

Figure 9. Pipeline length for initial warfare training by submariners (N = 471).

Inspection of a sample of orders for 21 Prospective Submarine Commanding Officers showed the following distribution of actual pipeline lengths:

<6 mos	6 mos	7 mos	8 mos	9 mos	10 mos	>10 mos	Average
0	2	6	9	3	1	0	7.76

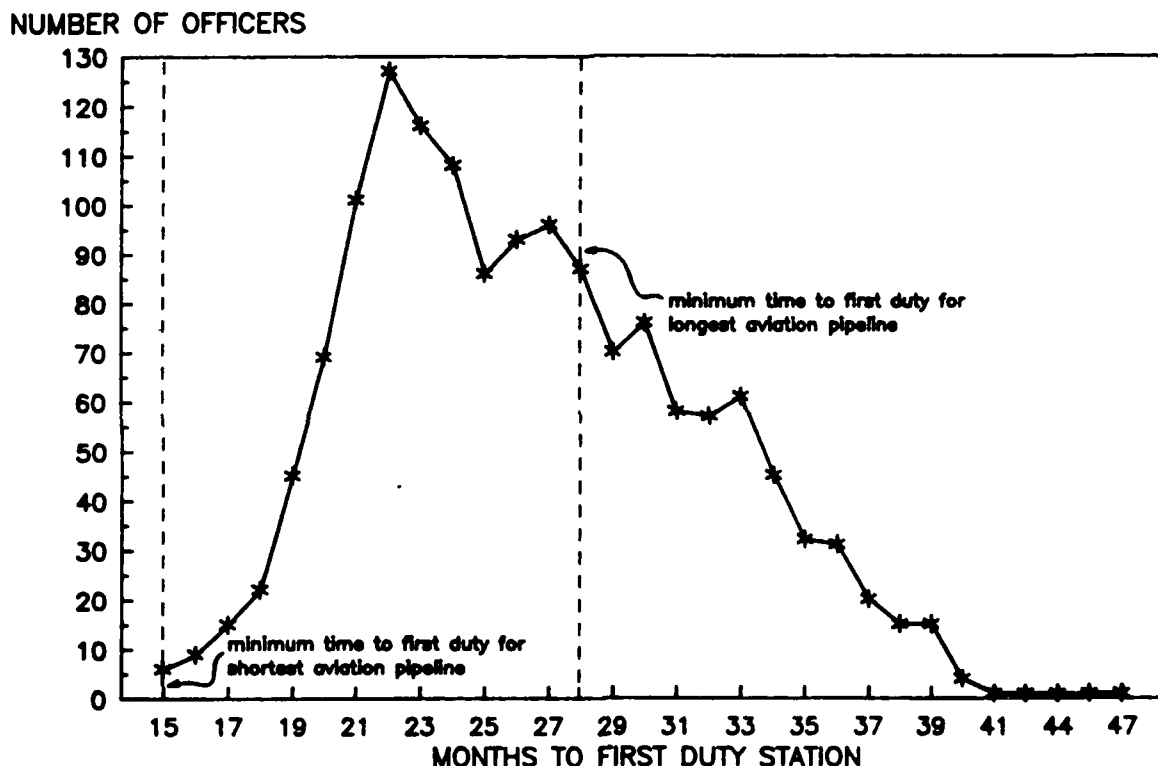
The data indicates that Submarine follow-on training pipelines, for both Department Heads and Commanding Officers, conforms very closely with prescribed policy.

Aviation Officers

1. **Entry Pipeline.** USNA and NROTC graduates entering air warfare are normally granted 1 month of leave upon graduation. Next, they attend API in Pensacola, FL and start Undergraduate Pilot/NFO training. Aviation Officer Candidates and Aviation Reserve Officer Candidates start Undergraduate Pilot/NFO training immediately upon commissioning. After completion of Undergraduate Pilot/NFO training, officers move to a Fleet Readiness Squadron (FRS) for final training prior to reporting to an operational squadron. The time required to complete Undergraduate Pilot/NFO training is different for NFOs and Pilots, and further varies with the type of aircraft flown. There are nine pipelines within Undergraduate Pilot/NFO Training and 13 FRS squadrons, each a different length. The shortest efficient pipeline for an entry level NFO is 15 months, while an efficient fighter pilot pipeline is 28 months long.

	<u>Short</u>	<u>Long</u>
Aviation Preflight Indoctrination (API)		6 weeks
Undergraduate Pilot/NFO Training	37 weeks	68 weeks
Fleet Readiness Squadron (FRS)	19 weeks	30 weeks
Travel and Proceed	3 weeks	5 weeks
Leave	5 weeks	11 weeks
Total	64 weeks	120 weeks (28 mos)

Figure 10 shows the distribution of actual time required for entry level aviators to reach first permanent duty stations in Fiscal Year 1988. Not surprisingly (considering the number of pipelines), the pipeline lengths are more spread out than Surface and Submarine distributions.



Processed from: OMF, EFY87, and 88.

Figure 10. Pipeline length for initial warfare training by aviators (N = 1489).

However, the wide dispersion and higher-than-expected mean of actual data (26.5 mos.) cannot be attributed to training alone. When inspecting the records of individuals in the right tail of the distribution, the same Ensign stash problem noted for Submarine Officers was seen. In addition, some delays were noted in the various segments of the pipeline (API, Primary, Basic, Intermediate, Advanced, and FRS).

2. Follow-on Aviation Pipeline. Follow-on training for Pilots/NFOs is not as formally documented as it is for Surface Warfare Officers, nor is it as uniform as for Submarine Officers.

The number of months between duty stations for a sample of 41 officers en route to Aviation Department Head billets is distributed as follows:

0/1 mos	2 mos	3 mos	4 mos	5 mos	6 mos	7 mos	Average
0	5	5	11	9	7	4	4.5

The number of months between duty stations for a sample of 12 officers en route to Aviation Commanding Officer billets is as follows:

0 mos	1 mos	2 mos	3 mos	4 mos	5 mos	>5 mos	Average
0	3	3	4	1	1	0	2.5

The variation in pipeline length reflects the differences in training requirements at the different FRS squadrons as well as various problems (e.g., weather and aircraft availability) in completing the training in the prescribed time. However, with the exception of Carrier Air Group Commander billets, the pipelines are shorter than in the Submarine and Surface communities. The vast majority of follow-on aviation training is FRS training.

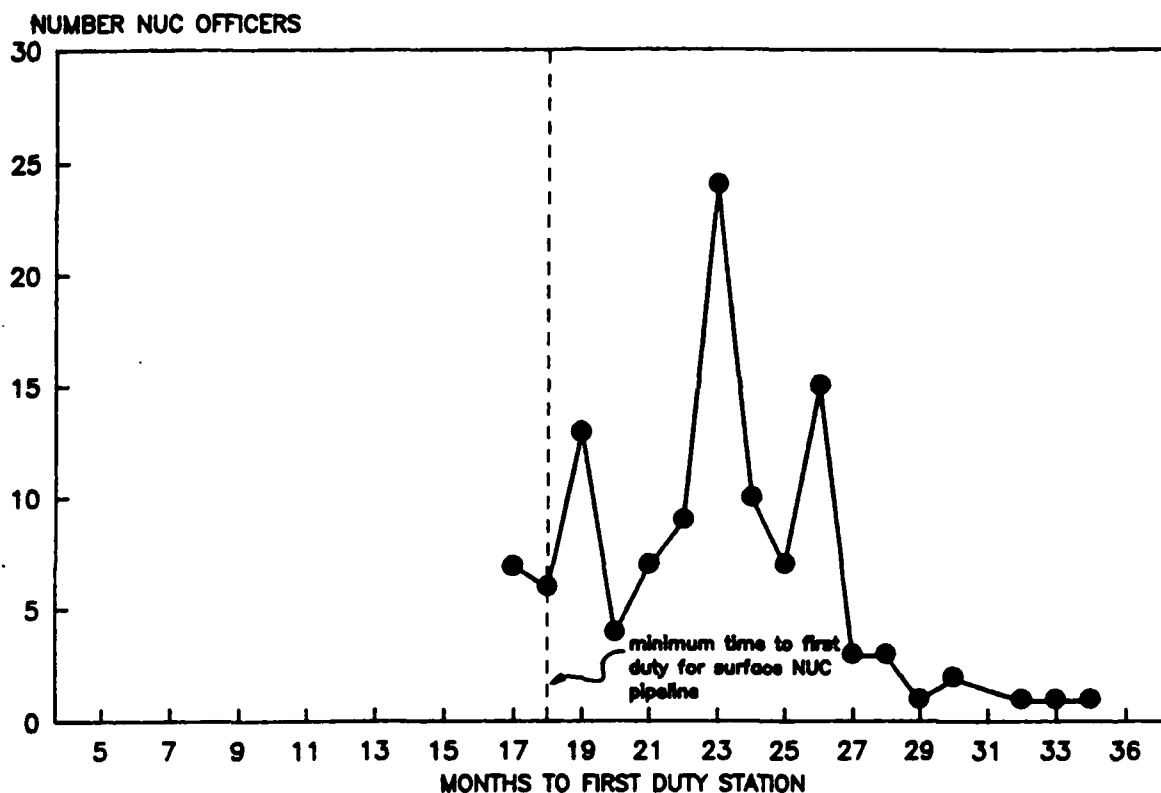
Surface (Nuclear) Officers

1. Entry Pipeline. USNA and NROTC graduates entering nuclear surface warfare are normally granted 1 month of leave upon graduation. Otherwise, officers from all commissioning sources follow the same pipeline: Nuclear Power School, followed by training at one of the prototype reactors sites, followed by the Basic Surface Warfare Officers course (SWOS). It is customary to grant 1 month of leave between prototype training and Basic SWOS. An efficient entry pipeline for a nuclear-trained Surface Warfare Officer is 18 months, computed as follows:

Nuclear Power School	26 weeks
Prototype Training	26 weeks
Surface Warfare Officer	15 weeks
Travel and Proceed	4 weeks
Leave	6 weeks
Total	77 weeks (18 months)

Figure 11 shows the actual entry level pipeline lengths for nuclear trained Surface Warfare Officers arriving at their first permanent duty stations in fiscal year 1988. The mean of the distribution is about 22.5 months, with about 25 percent of these Officers requiring more than 24 months. The primary reason for the longer-than-prescribed pipelines (i.e., those officers in the right tail of the distribution) is delayed entry into the training pipeline--the Ensign stash problem. Similar to Submarine Officers, a significant number of prospective Nuclear-qualified Surface Warfare Officers enter graduate-level education immediately upon commissioning.

2. Follow-on Nuclear Surface Warfare Pipelines. Follow-on pipelines for nuclear Surface Warfare Officers are similar to those discussed below for conventional Surface Warfare Officers, except that nuclear refresher training is added.



Processed from: OMF, EFY87, and 88.

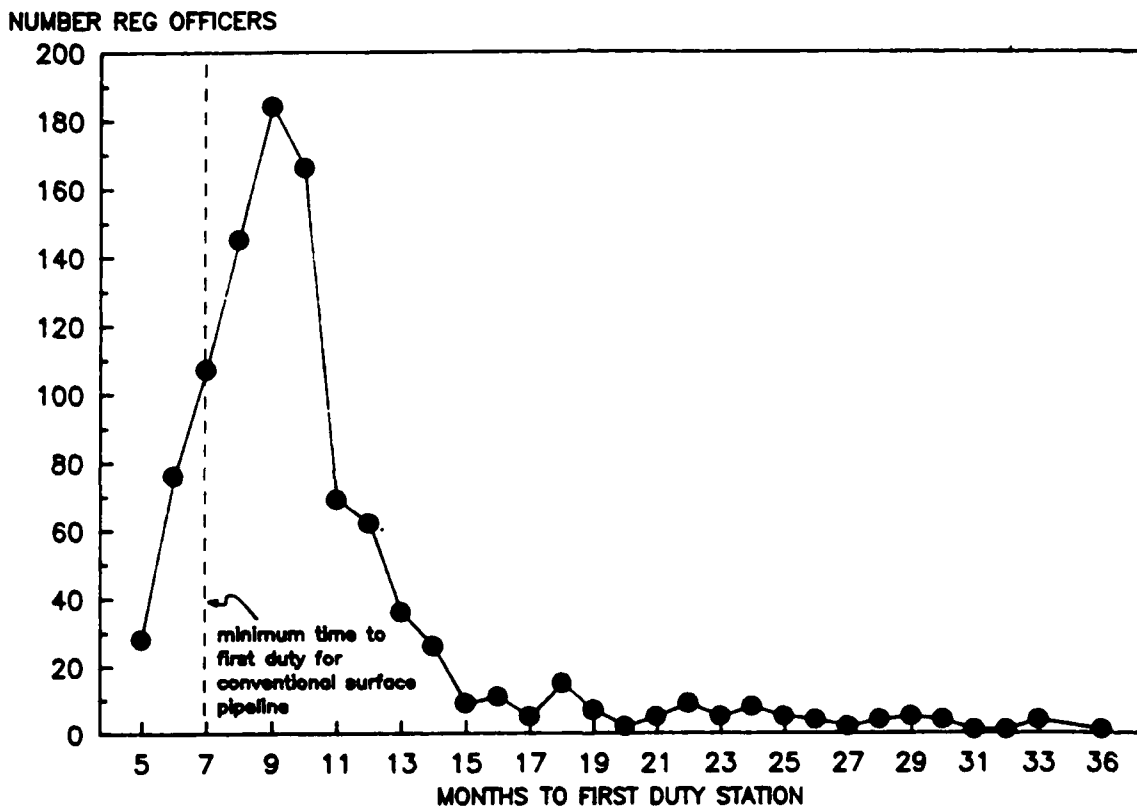
Figure 11. Pipeline length for initial warfare training by surface--NUC (N = 120).

Surface (Conventional) Officers

1. **Entry Pipeline.** USNA and NROTC graduates entering conventional surface warfare are normally granted 1 month of leave upon graduation. Otherwise, officers from all commissioning sources follow the same pipeline: SWOS basic training at either Newport, RI or Coronado, CA, followed by billet-specific training. The most efficient pipeline for conventional Surface Warfare Officers ranges from 4 months (for OCS graduates attending Basic SWOS only), to 8 months (for USNA/NROTC graduates attending basic SWOS and a 3 month follow-on course of instruction). A reasonable norm for the pipeline is 7 months, computed as follows:

Surface Warfare Officers School	15 weeks
Billet Specific Training	8 weeks
Travel and Proceed	3 weeks
Leave	3 weeks
Total	29 weeks (7 months)

Figure 12 shows the actual distribution of pipeline lengths for conventional Surface Warfare Officers arriving at their first permanent duty station in Fiscal Year 1988. As can be seen, the distribution has a mode of 9 months and it is skewed to the right. An inspection of orders of officers in tail of the distribution showed the most significant cause of lengthy pipelines to be dropouts from aviation and nuclear power training who then enter the conventional surface pipeline. One factor which may be particularly significant in this regard is medical screening for aviation training. It was reported that eye exams given prior to entering aviation training are often overruled (student is disqualified) once an individual receives a second eye exam at Pensacola. If this is true, a more rigorous eye exam prior to entering the aviation pipeline might eliminate this category of attrition. There is also a delay in the conventional Surface Warfare pipeline prior to entering training because of the Ensign stash.



Processed from: OMF, EFY87 and 88.

Figure 12. Pipeline length for initial warfare training by surface--conventional (N = 1010).

2. Follow-on Conventional Surface Pipelines. Requirements for follow-on training for Surface Warfare Officers, both conventional and nuclear, are documented in a publication produced by OP-39 in coordination with Placement Officers and Detailers. The document is entitled *Surface Warfare Billet Training Requirements by Ship Class/Staff* and is known as the BST. This publication establishes a specific training pipeline for every billet on every surface ship type. Generally, the pipeline for a Department Head tour includes 6 months of training at Newport RI, followed by billet-specific training. The pipeline for a Commanding Officer includes a 3 month engineering course, 6 weeks of pre-Commanding Officer training, and tactics training--a total of about 6 months--plus any billet-specific training. Officers en route to second tours generally do not repeat training received the first time through the pipeline.

Because of the large number of ship types involved, it is difficult to summarize Surface Warfare follow-on pipelines. However, the important point is that both nuclear and conventional Surface Warfare Officers en route to Commanding Officer billets and Department Head billets are in close compliance with the training established by the BST.

THE ENSIGN STASH

When USNA and NROTC graduates are commissioned, a backlog of Ensigns waiting to begin training is created because the various training facilities cannot accommodate all the graduates at once. This backlog is handled by temporarily assigning ("stashing") such officers in activities throughout the Navy and is commonly called the "Ensign stash." It is a significant source of delay in each of the four warfare designators, and directly adds to the IAO. The Naval Audit Service recently investigated this problem and issued a preliminary report. They estimated the average length of stash for 3,490 officers commissioned during Fiscal Year 1987 was 2.6 months, with a total cost to the Navy of \$16.6 million. The report recommends that NROTC graduates be commissioned as Reserve Officers assigned to inactive duty until there is a place in school for them. The report is presently under review. A program to allow the 1989 class of NROTC graduates to voluntarily delay active duty has been initiated; this is a first step toward the policy change described above.

There are other ways to reduce the Ensign stash problem. For example: USNA midshipmen who are prospective Surface Warfare Officers could receive basic SWOS training during their final summer at the Naval Academy and proceed directly to their assigned ships when they graduate; USNA/NROTC midshipmen who are prospective aviators could complete API during their final summer and move directly into the Undergraduate Pilot/NFO training curriculum upon graduation; the AOCS and OCS classes could be eliminated in the months of May through August to accommodate USNA and NROTC input; the sequencing of training could be varied so that more officers can enter training pipelines at the same time.

LOOSE ENDS

With limited time and resources, the study team was unable to investigate several potential problem areas which deserve additional attention.

1. The personnel accounting system places officers in an IA status according to a set of procedures. These procedures do not necessarily conform to Department of Defense (DOD) guidance, nor are they always internally consistent. For example, leave and training are charged to an operational account when the officer departs from and returns to a permanent duty station. But if the leave or training occurs in transit from one duty station to another, it is charged to the IAO. This increases the size of the IAO, although it has no consequences for personnel utilization. It may be worthwhile to examine how other services account for leave and training and medical status. The Navy's IAO may be somewhat inflated because of accounting practices alone.

2. Although basic officer training and follow-on training pipelines were scrutinized in this study, there was little opportunity to look into graduate education for possible IAO reductions. In

the course of a few interviews, the length of graduation education (at least in some cases) came into question, particularly where the course work lasted 2 years. The extent of this practice ought to be examined and documented.

3. In several interviews, it was reported that training sometimes has extended beyond what was minimally essential in order to qualify as long-term training (greater than 20 weeks). This qualification made it possible to eliminate costs associated with TAD, under which short-term training occurs. To the extent that this practice occurs, it conserves per diem costs at the expense of the IAO, and detracts from personnel utilization. The degree of this practice could be evaluated using OAS/ODIS to examine individual orders, especially for en route training.

4. A substantial part of aviation training occurs in the various FRS pipelines. FRS training data was not readily available and there was insufficient time to examine all of the pipelines. While Undergraduate Pilot/NFO training was recently studied by NTSC, no similar effort has been planned for FRS. On several occasions, interviewees noted that FRS training was frequently delayed by lack of aircraft availability and weather problems, leading to pools of officers waiting to be trained. Although there are limits to what can be done to overcome such problems, they ought to be investigated if only to establish norms for what is reasonable in terms of these pools. Also, the efficiency of the FRS could be reviewed to assure that follow-on training is of a consistent duration for officers with similar backgrounds.

FINDINGS AND RECOMMENDATIONS

1. The overall size of the IAO has been relatively constant for 12 years. During this period, the Student Account has steadily grown while the TPPH Account has steadily decreased. The TEMDU Account has been relatively small and constant. A disproportionately large number of students/trainees are URL, particularly in the three main warfare specialties.

2. No single office has responsibility for overall management of the IAO. The IAO is affected by the actions of numerous offices within Navy headquarters and the various training activities. A central focus is needed to not only monitor IAO status, but actively work to implement changes in policy and practice to control the size of the IAO. The following actions are recommended to provide a central focus for managing the IAO:

a. Improve reporting and monitoring.

(1) Ensure that accounting practices are consistent and in compliance with DOD instructions.

(2) Include all training courses (including all aviation and graduate education) in the NITRAS system. This will allow centralized monitoring of all training and provide the visibility necessary for efficient management.

(3) Regularly monitor "time to first duty station" as a measure of effectiveness of the entry pipeline. The method used in this study is documented in Appendix A. IAO time for follow-on training should be periodically monitored as well.

b. Aggressively manage the training pipeline.

(1) Clearly document all training pipelines and ensure "heel to toe" scheduling of schools in each pipeline, to the extent possible.

(2) Establish standards for delays in pipelines (e.g., time awaiting transfer, time awaiting the start of training, etc).

(3) Use the TMU to "police" the system: monitor compliance with standards, investigate those areas which are not in compliance, and follow through on problems which are detected.

c. The above recommendations can best be implemented by establishing an organization with the authority and organizational autonomy needed to make changes in personnel management procedures.

3. The Ensign stash is a significant source of "dead time." Calculate its precise size and find ways to reduce it significantly, or entirely. Delaying NROTC commissionings will be effective, but other approaches may be needed.

4. There is some avoidable dead time in the officer personnel system caused by slow reassignment of attrites from warfare training. Although the number of officers involved is small, the average time spent awaiting transfer is large; it is estimated at 2 to 6 months, depending upon the community and the situation. Implement procedures to promptly reassign individuals who attrite from the warfare training pipelines. (Note: a new policy was initiated by VADM Boorda (OP-01) at the IAO Briefing, 30 January 1989.)

5. Some reduction in the size of the IAO can be realized by better management, but significant reductions in the IAO can only come from reductions in the volume of training.

a. Minimize training time by shortening courses, automating or eliminating lightly attended training, and implementing new training techniques such as self-paced instruction, tele-training, and computer-aided instruction.

b. Employ more analytic methods to justify training. Analyze the value added by training in terms of improved productivity or performance as compared to its cost in terms of personnel utilization.

c. Determine how much training of each kind is enough. Give credit for individual experience and past training wherever possible. Verify the need for training--is it mission-essential? Verify the content and length of all training--does it exceed minimum mastery levels? Verify the delivery system--can distributed training or automated training be used to replace formal classroom courses?

APPENDIX A
PROCEDURE TO MEASURE TIME TO FIRST PERMANENT DUTY STATION

PROCEDURE TO MEASURE TIME TO FIRST PERMANENT DUTY STATION

1. Using the end year (e.g., 30 September 1988) Officer Master File (OMF), select records of officers in pay grades O-1 and O-2 whose Accounting Category Code (ACC) = 100. In order that these records represent individuals who have arrived at their first duty station, we eliminate records showing an ACC = 100 at the end of the previous year (e.g., 30 September 1987). This helps eliminate those officers on the recent end year OMF where the ACC = 100 represents their second operational tour.

2. Eliminate records without equal year and month values for Date of Gain to Active Duty (Initial) and Date of Gain to Active Duty (Current) and Date of First Commission. This eliminates any ambiguity in computing the time to First Permanent Duty Station.

3. Separate the remaining records based on Designator:

a. Surface (conventional): 111X and 116X.

b. Surface (nuclear): 111X and 116X plus AQD = KD1 or OAC = J or OCC = F or N.

c. Aviation: 130X, 131X, 132X, 137X or 139X.

d. Submarine: 112X or 117X.

4. Compute pipeline length by subtracting the Date of Gain to Active Duty (Initial) from the Date of Reporting to First Permanent Duty Station. In order to determine whether current assignment is First Permanent Duty Station:

a. If an officer has Past Duty Station 2 and the type of assignment of Past Duty Station 2 is sea duty (i.e., Type of Assignment Code = C or D), then Past Duty Station 2 is the officer's First Permanent Duty Station. If the type of assignment of Past Duty Station 2 is not sea duty then the officer's Current Duty Station field is used.

b. If the type of assignment of Current Duty Station is sea duty, then Current Duty Station is the officer's First Permanent Duty Station. If the type of assignment of Current Duty Station is not sea duty, then the officer's record is eliminated.

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