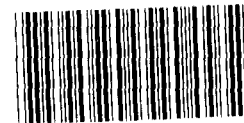125859 300

BY THE U.S. GENERAL ACCOUNTING OFFICE

Report To The Secretary Of The Navy

Observations On Ways The Navy Can Improve Curricula Development For Initial Skill Training

GAO reviewed four Navy "A" schools that provide initial skill training for entry level sailors and found that the schools were teaching some tasks not needed by most entry level sailors. This increases costs, delays sailors getting to the fleet, and, given the same level of resources, reduces the number of personnel that can be trained.

The report identifies the causes of the problem and makes recommendations for improving the curricula development for the Navy's initial skill training. The Department of Defense agrees with GAO's recommendations and is taking or has promised to take corrective action.

125859

GAO/NSIAD-85-33
DECEMBER 18, 1984

830821

UNITED STATES GENERAL ACCOUNTING OFFICE
WASHINGTON, D.C. 20548

B-217065

The Honorable John F. Lehman
The Secretary of the Navy

Dear Mr. Secretary:

We have reviewed selected Navy "A" schools--schools which provide initial skill training for entry level sailors--to determine whether the Navy's system for developing curricula adequately considers the diversity inherent within most Navy occupations (ratings). In many cases, the jobs required of sailors in the same occupations varied between shore establishment and ships, as well as among ships. Without thorough analysis of what should be taught centrally, the diversity in occupations can result in curricula that include many tasks seldom performed at the entry level.

Teaching skills not needed results in longer courses than necessary--which increases costs, delays sailors getting to the fleet, and, given the same level of resources, reduces the number of personnel that can be trained. The Navy's planned expansion to a 600-ship fleet increases the importance of limiting "A" school curricula to specific tasks most sailors perform at the entry level and to general information about the occupation (a description of the occupation, its importance, its relationship to Navy systems, career progression information, vocabulary, and use of manuals).

We studied four occupations--aviation storekeeper (AK), disbursing clerk (DK), ship's serviceman (SH), and storekeeper (SK)--that Navy officials characterized as being diverse and less technical and as having a relatively stable training requirement. In comparing the tasks done frequently by entry level sailors to the tasks taught in the "A" school, we found each school taught some tasks needed by less than 30 percent of the sailors. Additionally, the ship's serviceman occupation had very few core tasks (tasks done by at least 30 percent of the sailors), and these tasks were being taught in both "A" school and fleet training centers. Curriculum conferences were held after we began our work, and changes were made or planned to

better align the curricula with tasks most often done by entry level sailors. However, each of the schools still teach tasks not needed by most entry level sailors, thereby, unnecessarily extending the length of the schools.

Teaching more than is necessary can occur in the "A" schools because decisions on what should be taught are usually based on the collective experience and judgment of attendees at a curriculum conference. While the attendees have information available to analyze jobs, instructions are vague as to how the information should be used and no documented justification is required for including in the curricula tasks that are infrequently done. Additionally, schools continue to teach these tasks because of problems with the feedback system which is designed to identify problems and improve training.

Details of the results of our work, the four occupations studied, and locations visited are included in appendixes I, II, and III, respectively.

On the basis of our review of the four "A" schools, we believe that the Navy could spend its training dollars better by improving its system for developing curricula so that material taught better matches entry level sailors' needs. If material not needed by entry level sailors were deleted from the "A" school courses

-- the AK school could be reduced 4 weeks;

-- the DK and SK schools could be reduced 2 weeks each; and

-- the SH school could be reduced 3 weeks or eliminated if the Navy deems it appropriate to send sailors to fleet training centers where core tasks are being taught.

Recognizing that the Navy has decided to change the way it develops much of its curricula and has contracted to study how the curricula development model used by fleet ballistic missile submarine schools can be best adapted to the rest of the Navy, we recommend that in developing the new guidelines, you:

-- assure there are provisions for specific use of data that identifies the percentage of entry level sailors in the occupation who perform the task,

2

-- require identification of material in the curriculum that is needed by few sailors in the occupation and documentation of reasons for including that material, and

-- consider alternatives other than "A" school (such as on-the-job training and use of fleet training centers) for teaching skills that are not needed by most entry level sailors.

While these new guidelines are being developed, we recommend that you

-- review the current feedback system for "A" schools (called Level II Surveys) to see if changes can be made in the timing of the questionnaires and if stricter requirements can be set for action to be taken when deficiencies are noted,

-- delete the material not needed by most entry level sailors in the four "A" schools studied so that training resources can be better spent, and

-- determine whether it is worthwhile to keep the ship serviceman "A" school since the core tasks are limited and are taught elsewhere in the Navy.

In providing written comments on a draft of this report, the Department of Defense agreed with all of our recommendations and has taken or has promised to take corrective action. The Department agreed, for the most part, with our findings. Its major disagreement centered on our using the "percentage of entry level sailors performing" as the sole basis for concluding what tasks should be taught in the "A" schools we reviewed. We agree, and the report recognizes, that other factors such as task criticality and learning difficulty need to be considered in designing curricula. However, we believe that when noncore tasks are included in the curriculum, the reasons for their inclusion should be justified and documented. For the four "A" schools we reviewed, we found no documentation for including the noncore material in the course curriculum. (See app. I for a more detailed response to the Department's comments and app. IV for the Department's written comments.)

As you know, 31 U.S.C. 720 requires the head of a federal agency to submit a written statement on actions taken on our recommendations to the Senate Committee on Governmental Affairs and the House Committee on Government Operations no later than 60 days after the date of the report and to the House and Senate Committees on Appropriations with the agency's first request for appropriations made more than 60 days after the date of the report.

We are sending copies of this report to the Chairmen of the above committees, the Chairmen, Senate and House Committees on Armed Services; the Secretary of Defense; and the Director, Office of Management and Budget.

Sincerely yours,

Frank C. Conahan
Director

C o n t e n t s

ABBREVIATIONS

AK   aviation storekeeper
CNET   Chief of Naval Education and Training
CNTT   Chief of Naval Technical Training
DK   disbursing clerk
NODAC   Navy Occupational Development and Analysis
              Center
OPNAV   Office of the Chief of Naval Operations
SH   ship's serviceman
SK   storekeeper

OBSERVATIONS ON WAYS THE NAVY CAN IMPROVE

CURRICULA DEVELOPMENT FOR

INITIAL SKILL TRAINING

INTRODUCTION

The Navy training establishment ashore provides both recruit
and specialized training. Recruit training consists of general
indoctrination training for about 100,000 enlisted personnel each
year. Specialized skill training provides officers and enlisted
personnel with new or higher levels of skills in military
specialties to match specific job requirements.

The three types of specialized training are initial skill
training ("A" schools), skill progression training ("C" schools),
and functional training ("F" schools). "A" schools provide the
basic technical knowledge and skills needed to perform under
supervision at the job entry level. The other school courses are
more specialized and are aimed toward a particular job or
function. The Navy also operates fleet training centers that
provide additional technical training.

The Navy has 84 "A" schools, which last from 4 to about 40
weeks in about 20 locations. About 65,000 students attended "A"
school in each of the last 2 fiscal years. The Chief of Naval
Education and Training (CNET) estimated total "A" school costs of
over $400 million in fiscal year 1983, including $96 million for
the operation and maintenance of "A" schools; $123 million for
military pay, including management of the schools but excluding
students; and $214 million for student pay and allowances. In
addition to the cost of operating the schools, to the extent
noncore courses are being taught, the Navy foregoes the use of
the sailors, instructors, and managers of the school who could be
sent to the fleet or shore stations. This lost productivity is
not calculated, but is important as the Navy expands to a 600-
ship fleet and, consequently, needs to train more people. The
CNET agreed that expanding to a 600-ship fleet will require using
present resources more efficiently, increasing resources, or a
combination of both.

Making the best use of available resources requires careful
curricula development, which is difficult in designing "A"
schools because of the differences found within the occupations
at the entry level. In many cases, the jobs required of sailors
in the same occupation varied between the shore establishment and
ships, as well as among ships. Occasionally, the occupation
itself is composed of several different jobs. For example, the

ship serviceman occupation encompasses the jobs of laundryman,
dry cleaner, vending machine operator, barber, commissary man,
retail store operator, and stock controller. Of these jobs, the
core tasks--those done by at least 30 percent of the entry level
sailors--are those related to laundry, such as washing and
pressing clothes.

The Navy is, of course, aware of the difficulties involved
in designing appropriate training for diverse occupations and has
issued Procedures for Instructional Systems Development (Naval
Education and Training--NAVEDTRA 110A). Until March 30, 1984,
NAVEDTRA 110A provided the guidelines for developing all training
material within the Navy Education and Training Command except
for submarine training materials covered by another instruction.
NAVEDTRA 110A suggested jobs be analyzed so that tasks that were
infrequently done, were simple, or would not be done immediately
could be recognized and taught in other than "A" schools. The
information recommended for use in developing curricula included
the job task analyses developed by the Navy Occupational
Development and Analysis Center (NODAC). This analysis lists for
each occupation the tasks, as well as the percentage of sailors
at each grade level doing the tasks.

In addition to the job task analyses, NODAC develops and
updates occupational standards that describe for each occupation
the tasks sailors in each grade level should be able to do.
Although this data was available, school commands usually used a
panel of subject matter experts from numerous locations in the
Navy to decide what should be taught. Decisions were based on
the collective experience and judgment of attendees at the
curriculum conferences, according to various Navy officials.

On March 30, 1984, the CNET directed that all Navy training
be developed using the model now being used by a small part of
the submarine community, the fleet ballistic missile submarines.
In this model, equipment operation and maintenance manuals are
analyzed to determine training needed, not occupational standards
and Job Task Inventories from NODAC data. A contractor is study-
ing what changes the model needs to allow it to be effectively
used by all of the Navy, according to Navy and contractor
officials.

OBJECTIVE, SCOPE,
AND METHODOLOGY

Our objective was to determine whether the Navy's method of
developing curricula for "A" schools adequately considers the
diversity inherent in most Navy occupations. We recognize that
the Navy also uses on-the-job training to teach entry level

sailors the needed skills for their occupations. However, we did not review this aspect of Navy training.

To identify the number of diverse occupations and the reasons for the diversity, we discussed all 84 enlisted occupations for which there is an "A" school with the enlisted community managers in the Office of the Chief of Naval Operations (OPNAV). To guide our discussions, we used a uniform interview procedure with the 12 community managers responsible for the 84 enlisted occupations. We also discussed the information collected with the training program coordinators at the Naval Technical Training Command in Millington, Tennessee, and resolved any differences in responses through additional discussions with the community managers.

The community managers and training program coordinators agreed that 66 of the 84 occupations were diverse at the entry level due to equipment or system differences and/or differences in the jobs done on shore versus in the fleet. Because of the time that would have been required to analyze entry level requirements and school curricula for all Navy occupations, we selected four occupations that were among those that Navy officials said were less technical and, therefore, had more stable training requirements. Typically, the more technical occupations are concerned with equipment that is modified periodically; consequently, the training needs change more frequently than requirements for the less technical occupations. The four occupations reviewed were aviation storekeeper (AK), disbursing clerk (DK), storekeeper (SK), and ship's serviceman (SH). Our findings with regard to these occupations may not be representative of all Navy occupations.

To determine whether the diversity in Navy occupations is adequately considered in developing curricula, we addressed the following three subissues for each of the four occupations:

-- What do most entry level sailors in the occupation do?

-- What does the "A" school curriculum teach?

-- What alternatives exist for teaching entry level requirements?

To identify tasks done by most sailors in each occupation at the entry level, we used performance data, which NODAC provided from the Navy Occupational Task Analysis Program, to develop lists of tasks done by 50 percent or more of the entry level sailors in the occupation. Because the number of tasks done by 50 percent of the sailors was small, and to be conservative, we

also developed lists of tasks done by at least 30 percent of the sailors. We included the lists of tasks (core tasks) done by at least 30 percent of the sailors in a questionnaire, which was administered to supervisors of entry level sailors at fleet and shore activities visited. The purpose of the questionnaire was to ensure that the tasks listed from NODAC data represented the tasks done by most entry level sailors.

We visited a few of each type of duty station--carrier, destroyer, submarine, submarine tender, other ships, and shore-- to identify any problems with the NODAC data and to develop an understanding of how entry level sailors were used. Navy officials selected the ships based on the ships' availability and the shore installations based on those that had entry level sailors in the four occupations. (See app. III for a list of the 17 ships, 4 submarines, and 29 shore stations visited.)

After determining what entry level sailors in the selected occupations do, we reviewed the "A" school curriculum for each occupation to identify the tasks being taught. We compared tasks being taught with the lists of core tasks to determine how well the training program matched what entry level sailors did. With the assistance of course supervisors and instructors, we determined the time associated with teaching the core tasks. CNET also provided us with cost data associated with the "A" schools.

On the basis of discussions with fleet and training personnel, we assessed the need for and the time spent to train noncore tasks and examined three alternatives for changing the "A" school when mismatches occurred:

-- Teach general background information and core tasks in "A" school and teach noncore tasks on the job when needed.

-- Teach general background information and core tasks in "A" school and teach noncore tasks--either as an extension of "A" school or in fleet training centers-- only to those who need them.

-- Eliminate "A" school if there are only a few core tasks, if the training is available elsewhere, and/or if the tasks are easily taught on the job.

In analyzing these alternatives, we asked fleet and shore supervisors to assess the impact of limiting "A" schools to the core tasks and discussed these alternatives and the reasons for

including noncore tasks in "A" schools with officials of each of
the four schools, Chief of Naval Technical Training (CNTT), CNET,
and OPNAV.

Navy officials identified factors such as recruiting,
advancement and reenlistment rates, job rotation policies, and
lack of onboard training opportunities that could affect the need
for "A" schools. Although we intended to assess the validity of
each factor, we were unable to do so because either data was not
available or in those cases where data was available, we could
not isolate "A" school as a cause.

We also met with officials of numerous other agencies to
identify any similar studies and to discuss the issues being
developed. The agencies contacted included the Office of
Technology Assessment, the Congressional Budget Office, the
Congressional Research Service, the Defense Audit Service, the
Department of Defense's Office of the Assistant Inspector General
for Auditing, and the Naval Audit Service.

We performed our work from January 1983 through February
1984 at the headquarters and field activities listed in appendix
III. Our work was carried out in accordance with generally
accepted government auditing standards.

"A" SCHOOLS STUDIED ARE
TEACHING TASKS NOT NEEDED
BY MOST ENTRY LEVEL SAILORS

Because of the differences in shore and sea assignments, in
equipment at various locations, and/or in jobs within an occupa-
tion, the Navy needs to rigorously analyze entry level require-
ments when developing curricula for centralized training to
identify entry level skills common to most sailors. In addition,
factors other than these, such as sailors' retention of infor-
mation, demand that the Navy carefully consider what will be
taught in "A" schools. For example, most entry level sailors
have never been on a Navy ship so they may find it difficult to
imagine what the job will be like and, consequently, have a more
difficult time in retaining information on the needed skills.
Also decreasing the degree of retention is the delay in using the
skills learned. This occurs because as soon as sailors arrive in
the fleet they usually spend from 3 to 9 months (depending on the
ship) doing general detail duties, such as chipping paint and
compartment cleaning.

In our view, these factors, plus the diversity in occupa-
tions, clearly indicate that "A" school training should be
limited to specific core tasks most sailors need to perform at
the entry level and to general background information about an

occupation--such as a description of the occupation, its importance, its relationship to Navy systems, career progression information, vocabulary, and use of manuals. Noncore tasks should be included in the curriculum only if a valid reason can be justified and documented for doing so.

Navy training officials agree that it is inefficient to use "A" schools to teach tasks performed by few entry level sailors. However, each of the four "A" schools reviewed taught tasks needed by only a small percentage of the entry level sailors. After we reported our preliminary observations to Navy training officials, the Navy conducted curriculum review conferences that included the four "A" schools. These conferences resulted in eliminating or reducing some noncore tasks. For example, the DK curriculum conference participants recognized that core tasks for an entry level DK are to compute, adjust, and reconcile the leave and earnings statements. Consequently, the conference proposed reducing the training of noncore tasks--financial returns, appropriations, and travel claims--from about 1 week to 1 day. This change results in a better match between tasks taught in the "A" school and tasks needed by most entry level DKs. Likewise, the SH curriculum conference resulted in the reduction of recordkeeping training from 3.5 weeks to a 3-day overview since entry level SHs do not perform recordkeeping tasks.

Despite these positive changes, all four "A" schools still provide training for tasks not usually performed at the entry level. (See app. II for details concerning the results of our analysis of each "A" school.) The table below shows the amount of time spent teaching noncore tasks when we began our work and that proposed by the curriculum conference participants.

| | March 1983 course | | Proposed course | |
| | Total length (weeks) | Time spent on noncore tasks (weeks) | Total length (weeks) | Time spent on noncore tasks (weeks) |
Occupation				
AK	7	3	9	4
DK[a]	8	1	9	1/2
SH	6	4	6	3
SK	7	4	7	2

[a]Additionally, about 1-1/2 weeks of the proposed DK course could be saved if other changes were made as explained in appendix II.

Teaching noncore entry level tasks results in longer courses than may be necessary, which naturally increases the cost of the courses. Although neither we nor Navy officials could determine exactly how much could be saved by reducing the length of these

courses, the total cost associated with their operation ranges from $1.4 to $2.4 million annually (see app. II, pg. 9). Navy officials agreed that at least part of this total cost could be saved by reducing the courses to the time required to teach core tasks. In one case (SH), perhaps the total cost could be saved since the 3 weeks of core task material is also taught at fleet training centers.

In addition to increasing costs, lengthening the courses by teaching noncore tasks (1) keeps people from getting to the fleet (lost productivity) and (2) given the same level of resources, reduces the number of people that can be trained each year.

CURRICULUM DEVELOPMENT PROCESS AND
FEEDBACK SYSTEMS ALLOW MISMATCHES

Because of diversity in occupations, teaching more than is necessary can occur easily in an attempt to teach each sailor all possible jobs, especially if the specific assignment cannot be predicted. Curriculum conferences, however, are intended to identify those skills necessary for most sailors. While NODAC data describing the frequency that tasks are done is available for use at curriculum conferences, instructions are vague regarding how the data should be used and when exceptions should be made if tasks are not often done by entry level sailors. There is no specific requirement to justify or document reasons for teaching noncore tasks.

Decisions on what should be taught are usually made based on the collective experience and judgment of curriculum conference attendees. For example, in the curriculum conferences held in May and June of 1983 for the four occupations reviewed, subject matter experts representing the Atlantic and Pacific Fleets and some major shore commands changed the curricula based predominantly on their personal experiences. Although some changes corrected mismatches between what most entry level sailors did and what was being taught in the curricula (which had been developed in earlier conferences), the courses still include material not needed by most entry level sailors.

Even if the system for designing curricula has flaws, the feedback system should identify those tasks being taught that are not needed. The Navy has a feedback system (called Level II Surveys) to gather data through questionnaires from the supervisors of "A" school graduates to evaluate training programs; however, problems exist in both the program's administration and the use of the results. According to fleet personnel, the questionnaires arrive before the graduates have had much of an opportunity to work in their skill areas because they have been

on general detail duty most of the time. Consequently, super-
visors are unable to give good feedback to school officials.
Also, most supervisors failed to see any link between their
responses and subsequent changes to the curricula. Even though
problems are identified in the feedback process, our review shows
they sometimes continue because school officials discount the
feedback results, postpone action, or shift responsibility for
the problems. Recently the Naval Audit Service and the Naval
Inspector General have recognized similar problems with the
Navy's curricula development and feedback process.

AGENCY COMMENTS AND OUR EVALUATION

In its comments on a draft of this report, the Department of
Defense agreed with all of our recommendations and outlined a
series of actions that the Navy has taken or plans to take to
correct the problems. (See app. IV.) For example, in fiscal
year 1985, the Navy plans to implement our recommendations
concerning developing new curricula guidelines, deleting material
not needed by most entry level sailors in the four "A" schools we
reviewed, and studying the need for the ship's serviceman "A"
school.

The Department concurred in one of our findings and
partially concurred in the other three. Its major disagreement
focused on using the "percentage of entry level sailors perform-
ing" as the sole basis for concluding what tasks should be taught
in the "A" schools reviewed. While "percentage of entry level
sailors performing" a task is a critical factor in determining
what should be taught in an "A" school, the report does not state
that it is the sole basis for curricula decisions. The Depart-
ment noted, and we agree, that other factors, such as task
criticality and learning difficulty, can support teaching tasks
not usually performed at the entry level. However, we believe,
as indicated by our recommendations on pages 2 and 3 of the
letter, that if the Navy chooses not to limit the curriculum to
tasks done by most sailors, it should document the reasons for
teaching tasks performed by few entry level sailors.

ANALYSIS OF SELECTED OCCUPATIONS

BACKGROUND

A sailor can become an AK, DK, SH or SK by learning about the occupation on the job or by attending "A" school. In deciding whether or not a sailor goes to "A" school, the Navy considers such factors as the sailor's test scores and the availability of space in the school(s) for which the sailor qualifies. The following chart shows the number of sailors who were "A" school graduates in the four occupations.

No. of sailors on active duty as of November 19, 1983

	Total	"A" school graduates
AK	4,491	1,627
DK	2,545	859
SH	4,675	533
SK	8,534	2,545

The number of graduates for each of the "A" schools for the most recent 3 fiscal years is shown in the following table:

No. of graduates

	FY1982	FY1983	Projected FY1984
AK	480	416	535
DK	317	320	242
SH	697	650	746
SK	886	1,033	1,250

CNET estimates the total cost of each school by computing the operating and maintenance costs, military pay, student pay and allowances, and any other costs associated with supporting the "A" school, such as management overhead. The following list shows the estimated costs for each school for fiscal year 1983:

AK	$1.7 million
DK	1.4 million
SH	1.8 million
SK	2.4 million

After four years of service, sailors can either reenlist or leave the Navy. The following table shows the first-term reenlistment statistics for the four occupations studied for fiscal years 1982 and 1983.

	Percent reenlisted			
	FY82	FY83		
	Total	"A" Grad	Non "A" grad	Total
AK	49	61	67	64
DK	56	70	64	66
SH	48	36	64	55
SK	47	62	66	64

A description of each of the occupations, an identification of the tasks common to entry level sailors in the occupation, an analysis of the "A" school curriculum, and the results of recent curriculum conferences are presented on the following pages.

AVIATION STOREKEEPER (AK)

The AKs receive, store, and issue aviation supplies and repair parts and maintain associated records. For example, they make stock checks, follow up on requisitions, and maintain local supply logs.

The NODAC data shows that at least 30 percent of the entry-level AKs perform basic tasks related to the issue and receipt of parts. Some of the most frequently performed tasks are

--cross referencing part numbers,

--preparing requisitions,

--canceling requisitions, and

--maintaining receipt files.

Our questionnaire, which was administered to supervisors at fleet and shore activities, confirmed that the core tasks identified by NODAC accurately reflect the supervisors' use of entry level sailors. Further, most supervisors said there would be little or no impact if the "A" school training were limited to these tasks.

Our review of the NODAC data and the school curriculum showed that the self-paced "A" school is teaching 11 tasks that are done by at least 50 percent of the entry level sailors and 28 tasks that are done by at least 30 percent of these sailors. When we began our work, the average time to complete "A" school was 7 weeks, including 1 week for learning to type 20 net words per minute. At that time, school officials estimated that 4 weeks were being spent teaching core tasks and background

information (including typing). The remaining 3 weeks were being spent teaching noncore tasks such as budgets and financial reporting.

As a result of our work and fleet concerns, the Navy held a curriculum conference that resulted in the following proposed changes to the "A" school:

--Increase the frequency, thoroughness, and
  comprehensiveness of testing.

--Increase practical work and night study.

--Add use of typewriter for form/worksheet preparation.

--Add lectures to selected segments.

--Add lesson topics concerning Naval Aviation Maintenance
  Procedures, Shipboard Uniform Automated Data Processing
  System, and material security.

These changes will be implemented after the proposed curricula and equipment requests have been approved.

As a result of these changes, the school officials plan to lengthen the course to 9 weeks. According to these officials, about 5 of the 9 weeks will be spent teaching core tasks, including the general background information and typing to 20 net words per minute. They recognize that the remaining weeks will be spent teaching tasks that, according to NODAC data, few entry level sailors do. However, they believe that the "A" school needs to teach a little about all possible jobs since they cannot predict which of the tasks AK sailors will be doing at the initial duty stations. Another reason cited by school officials for teaching noncore tasks was to prepare students for their advancement examination. The necessity for teaching students material to help them pass the exam is questionable since about 99 percent pass the exam and about 96 percent are promoted, whether or not the students have attended "A" school.

We believe that the AK "A" school should be limited to teaching core tasks and providing general background knowledge for the occupation. This would reduce the 9-week course by 4 weeks.

DISBURSING CLERK (DK)

The DKs keep records of payments and receipts for all of the Navy's personnel and purchasing operations. For example, they

compute pay, prepare payrolls, maintain pay records, process travel vouchers, and prepare financial statements and reports.

Tasks that are done by at least 30 percent of the entry level DKs are primarily those associated with the payroll record-keeping function. For example, some of the most frequently performed tasks are to

   --annotate sailors' individual leave and earnings statements,

   --compute pay and allowances, and

   --reconcile the leave and earnings statements.

Our questionnaire confirmed that the core tasks identified by NODAC accurately reflect the tasks performed by entry level sailors. Further, most supervisors said there would be little or no impact if the "A" school training were limited to these tasks.

Our review of the NODAC data and the school curriculum showed that the "A" school is teaching 20 tasks that are done by at least 50 percent of the entry level sailors and 29 tasks that are done by at least 30 percent of these sailors. When we began our work, the "A" school was self-paced, and the average completion time was 8 weeks (including 1 week for typing). At that time, school officials estimated that 7 weeks were being spent teaching the common skills and background (including 1 week for typing) and that 1 week was being spent training noncore tasks, such as travel, financial returns, and appropriations.

As a result of our work and fleet concerns, the Navy held a curriculum conference, which recognized the mismatch we had observed between the curriculum and tasks performed. The conference resulted in the following proposed changes to the "A" school:

   --Change from self-paced to group-paced instructional mode.

   --Increase course length to 9 weeks, including a 2-week typing laboratory to assure all students adequate time to achieve minimum typing requirements (i.e., 15 net words per minute).

   --Reduce training on appropriations and funds, travel publications, and financial returns from 4 days to 1 day.

> --Decrease scope of training to enable increased
>   depth of training on the pay computation aspects
>   of the DK occupation.
>
> --Increase testing, homework, and night study
>   requirements.

The conference resulted in reducing the week of noncore material
to 1 day; however, more time is being spent on additional
exercises so that the self-paced course still requires 8 weeks
(including typing).

According to DK "A" school officials, the planned 2-week
typing laboratory is scheduled to be at the beginning of the
course, which will increase the length of training because the
average self-paced typing course only took 1 week. Although Navy
officials agreed that 6 weeks were adequate to teach the core
tasks and general information about the occupation, the new
group-paced course is designed to take 7 weeks. The extra week
is for some special pay items and added practical exercises.
According to Navy training officials, the new group-paced course
should start in early 1985.

We believe that the deletion of most noncore material from
the DK course was a wise decision. A small amount of time (1/2
week) is still being spent on special pay items, which few
sailors compute. We are not sure, however, that the substitution
of additional exercises and other work to the course merits
keeping the course length. Also, Navy officials agreed that the
new group-paced course could be reduced 1 week by moving the
typing toward the end of the course and allowing it to be
self-paced.

SHIP'S SERVICEMAN (SH)

The SH provides services for Navy personnel ashore and
afloat by operating and managing resale activities (such as a
ship's store, commissary stores, and Navy exchanges) as well as
the service activities of the ship's stores and Navy exchanges
(such as laundry and dry cleaning facilities, vending machines,
fountains, snack bars, and barber and tailor shops).
Additionally, the SHs perform clerical and stock control
functions.

NODAC data shows that tasks done by at least 30 percent of
the entry-level SHs are all associated with the laundry. For
example, some of the tasks frequently performed are

--press laundry,

--wash laundry,

--dry laundry, and

--maintain laundry log.

Our questionnaire confirmed that the core tasks identified by
NODAC accurately reflect the use of entry level sailors.
However, most respondents said there would be some impact if the
"A" school training were limited to these tasks. The areas most
frequently identified as being hindered by limiting the school to
core tasks were

--basic SH recordkeeping,

--barber skills (barbering skills are not taught in
  "A" school), and

--ship's store operations.

These three areas are done by a small percentage (less than 30
percent) of entry level SHs.

As many Navy officials and a recent Navy Resale and Services
Support Organization study pointed out, most entry level SH
sailors start in the laundry area. The laundry duty, according
to one Navy official, is used to identify the more proficient and
dependable SHs to rotate into the more accountable positions such
as retail operations.

Our review of the NODAC data and the school curriculum
showed that the "A" school is teaching 10 tasks that are done by
at least 30 percent of the entry level sailors and 2 tasks that
are done by at least 50 percent of them. When we began our work,
the group-paced "A" school course was 6 weeks, of which about
2 weeks were being spent on laundry tasks. The remainder of the
curriculum was spent on recordkeeping and other tasks that are
done by few entry level sailors.

After we began our work, a curriculum conference was held
which recognized that a substantial part of the course was
teaching information not needed by most entry level sailors.
Specific changes recommended were

--reduce ship's store recordkeeping and administrative
  tasks from 3.5 weeks to a 3-day overview,

--increase the laundry laboratory time by 30 hours,

--increase performance testing, and

--expand time spent on retail operations by 55 hours.

Although training of recordkeeping and administrative tasks, which are low frequency tasks, was greatly reduced, training for other low frequency tasks related to retail operations was increased. The revised SH course will be 6 weeks long and should be implemented by October 1, 1984, according to school officials.

While the material for the revised curriculum is being developed, the course has been temporarily reduced to 4 weeks, 2 weeks of which are spent on laundry tasks. However, of the 10 days set aside for laundry, only about 5 days are for lecture and/or hands-on training because of the limited amount of equipment. The other 5 days are spent waiting or watching others. The remaining 2 weeks are spent as follows: 3 days on general background material, including a brief overview of ship's store records and typing, and about 7 days for teaching retail operations.

Since fleet training centers teach all the core tasks (laundry tasks) now taught in the "A" school, we discussed eliminating the SH "A" school with school officials and officials from CNTT, CNET, and OPNAV. They said that the "A" school was needed to prevent recruiting problems, occupation degradation, and job rotation difficulties. Although documentation was requested to support these contentions, either data was not available or in those cases where data was available, we could not isolate "A" school as a cause. Navy officials, in some cases, agreed that if entry level sailors were being used predominantly in the laundry, then training should be limited to those tasks or the SH "A" school should be eliminated. However, they believed that the majority of entry level sailors should be doing jobs other than laundry.

We believe that the "A" school should be limited to teaching core tasks (laundry) and providing a brief overview of retail functions and general background information about the occupation, which would require about 3 weeks, according to the SH course supervisor. Since the core tasks are being taught in fleet training centers, we also believe that elimination of the "A" school should be considered.

STOREKEEPER (SK)

The SKs are responsible for ensuring that the supplies to operate all the Navy's activities are available when needed. They keep track of clothing, machine parts, tools, paper, forms,

office materials and machines, maintenance materials, furniture, linens, food--all the materials and equipment used by Navy personnel.

NODAC data shows that at least 30 percent of entry level sailors perform basic tasks associated with the issue and receipt of supplies. For example, some of the most frequently performed tasks are

    --stow material,

    --break out material,

    --issue material from stock, and

    --verify quantity and condition of material received.

Our questionnaire confirmed that the core tasks identified by NODAC accurately reflect the tasks performed by entry level sailors. Further, most supervisors said there would be little or no impact if the "A" school training were limited to these tasks.

Our review of the NODAC data and school curriculum showed that the "A" school is teaching 9 tasks done by at least 50 percent of the entry level sailors and 21 tasks done by at least 30 percent of these sailors. Currently, the SK "A" school is a self-paced course requiring an average of about 7 weeks to complete, including about 1 week for typing, according to the SK course supervisor. SK school officials estimate that 3 weeks are spent teaching core tasks in the self-paced mode. The remaining 4 weeks are spent teaching typing and noncore tasks, such as financial records, purchasing, and technical research.

As a result of our work and fleet concerns, the Navy held a curriculum conference that proposed the following changes to the course:

    -- Change the instructional method from self-paced to
       group-paced for the entire course except for the
       end-of-course performance laboratory.

    -- Reduce typing requirement to keyboard
       familiarization.

    -- Use the time saved from reducing the typing
       requirement to present new material (Coordinated
       Shipboard Allowance List and the Master Index and
       Allowance Parts List) and expand existing material
       by adding more exercises and remedial training.

-- Increase testing, homework, use of audio visual
   aids, and night study.

Some of these changes have occurred already, such as the added
testing and homework, but most will not be initiated until the
group-paced course is instituted, which was scheduled for October
1984.

As reflected by the NODAC data and Navy officials' comments,
the SK "A" school can be limited to the core tasks, which
currently require about 3 weeks, plus other subjects such as
technical research, Coordinated Shipboard Allowance List use and
maintenance, the basic supply system manuals, and a general
occupation overview, which require 2 weeks. Navy officials at
the Naval Technical Training Center in Meridian, Mississippi,
CNTT, CNET, and the enlisted community manager at OPNAV agree
that 5 weeks are adequate for providing the training needed by
most entry level SKs. Thus, we believe that the SK "A" school
can and should be reduced to the 5 weeks required to teach the
core tasks and to provide needed general background knowledge.

LOCATIONS VISITED

Office of the Chief of Naval Operations	Washington, D.C.
Naval Military Personnel Command	Washington, D.C.
Navy Occupational Development and Analysis Center	Washington, D.C.
Navy Recruiting Command	Washington, D.C.
Navy Accounting and Finance Center	Washington, D.C.
Naval Supply Systems Command	Washington, D.C.
Chief of Naval Education and Training	Pensacola, Florida
Naval Education and Training Program Development Center	Pensacola, Florida
Chief of Naval Technical Training	Millington, Tennessee
Naval Technical Training Center (NTTC) --Aviation Storekeeper "A" School --Storekeeper "A" School --Ship's Serviceman "A" School --Disbursing Clerk "A" School	Meridian, Mississippi
Navy Resale and Services Support Office	Staten Island, New York
Commander in Chief, U.S. Atlantic Fleet	Norfolk, Virginia
Commander Naval Air Force, U.S. Atlantic Fleet	Norfolk, Virginia
Commander Submarine Forces U.S. Atlantic Fleet	Norfolk, Virginia
Commander Naval Surface Force, U.S. Atlantic Fleet	Norfolk, Virginia
Fleet Training Center	Norfolk, Virginia
Selected Ships - Atlantic Fleet U.S.S. Ponce (LPD-15) U.S.S. Raleigh (LPD-1) U.S.S. Canisteo (AO-99) U.S.S. San Diego (AFS-06) U.S.S. Truett (FF-1095) U.S.S. Mississippi (CGN-40)	Norfolk, Virginia

U.S.S. L.Y. Spear (AS-36)
U.S.S. Coral Sea (CV-43)
U.S.S. Preble (DDG-46)

Shore Facilities - Atlantic Fleet
  Personnel Support Activity, Norfolk, Virginia
  Personnel Support Activity Detachments:
    Naval Weapons Station, Yorktown, Virginia
    Naval Station, Norfolk, Virginia
    Naval Air Station, Norfolk, Virginia
    Atlantic Fleet Headquarters Support Activity,
      Norfolk, Virginia
    Naval Amphibious Base, Little Creek, Norfolk,
      Virginia
    Oceana, Virginia Beach, Virginia
    Dam Neck, Virginia Beach, Virginia
    Portsmouth, Virginia
    Northwest, Chesapeake, Virginia

Selected Submarines - Atlantic Fleet   Norfolk, Virginia
  U.S.S. Silversides (SSN-679)
  U.S.S. Finback (SSN-670)

Commander in Chief, U.S. Pacific   Pearl Harbor, Hawaii
  Fleet

Commander Submarine Force,   Pearl Harbor, Hawaii
  U.S. Pacific Fleet

Selected Ships - Pacific Fleet   San Diego, California
  U.S.S. Wilson (DDG-07)
  U.S.S. McKee (AS-41)
  U.S.S. Berkley (DDG-15)
  U.S.S. Hepburn (FF-1055)
  U.S.S. O'Callahan (FF-1051)
  U.S.S. Kitty Hawk (CV-63)
  U.S.S. New Orleans (LPH-11)
  U.S.S. Okinawa (LPH-03)

Shore Facilities - Pacific Fleet
  Naval Air Station - North Island, San Diego, California
  Shore Intermediate Maintenance Activity - San Diego, California
  Personnel Support Activity - San Diego, California
  Personnel Support Activity Detachment:
    Naval Air Station - North Island, San Diego, California
    Naval Amphibious Base - Coronado, San Diego, California
    Balboa, California
    Miramar, San Diego, California
    Camp Pendleton, California
    Naval Station, San Diego, California
    El Centro, California
    Point Loma, San Diego, California
  Naval Submarine Base, Pearl Harbor, Hawaii

Selected Submarines - Pacific Fleet   Pearl Harbor, Hawaii
  U.S.S. Omaha (SSN-692)
  U.S.S. Indianapolis (SSN-697)

Commander Naval Air Force,   San Diego, California
  U.S. Pacific Fleet

Commander Naval Surface Force,   San Diego, California
  U.S. Pacific Fleet

Service School Command   San Diego, California

Navy Personnel Research and Development   San Diego, California
    Center

Center for Naval Analyses   Alexandria, Virginia

THE ASSISTANT SECRETARY OF DEFENSE

WASHINGTON, D.C. 20301

2 NOV 1984

MANPOWER,
INSTALLATIONS
AND LOGISTICS

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Director, National Security and
 International Affairs Division
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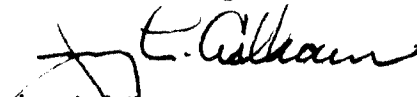Washington, D.C.   20548

Dear Mr. Conahan:

This is the Department of Defense (DoD) response to the
draft GAO report, "Observations on Ways the Navy Can Improve
Curricula Development for Initial Skill Training," dated
September 21, 1984 (GAO Code 967088, OSD Code 6614).

In general, the report accurately identifies a number of
problems which the Navy has experienced in using a curriculum
development process which was in place at the time of the study.
DoD also agrees that the problems cited by GAO, unless corrected,
could result in some training being given in "A" schools that
might be more effectively taught in other instructional settings.
However, the report understates the complexity of the issues
which must be considered in determining curriculum content.
The report uses the "percentage of entry level sailors
performing" as the sole basis for concluding what tasks should or
should not be taught in the "A" schools examined. Numerous other
factors, such as task criticality, learning difficulty, retention
of information, etc., also need to be considered in the design of
effective curricula. These matters are discussed in more detail
in the enclosure to this letter.

One particularly important development that should improve
the Navy's curriculum development process is the issuance of
MILSTD 1388-2A (dated July 1984). This document provides new
guidance on the front-end analysis procedures to be used during
course design. These new procedures, along with other actions
the Navy has taken or plans to take, are expected to correct
problems of the type cited by GAO.

DoD appreciates your interest in this important training
matter.

Sincerely,

Jerry L. Calhoun
**Principal Deputy Assistant Secretary of Defense
(Manpower, Installations & Logistics)**

GAO note: Page references have been changed to correspond to
           pages in the final report.

21

Enclosure to Memo on
GAO Draft Report 6614

GAO Draft Report
"Observations on Ways the Navy Can Improve
Curricula Development for Initial Skill Training"

GAO Code 967088, OSD Code 6614
DoD Comments on GAO Findings and Recommendations

* * * * *

FINDINGS

o   FINDING A: "A" Schools Studied Are Teaching Tasks Not Needed
    by Most Entry Level Sailors. GAO found that, because of the
    differences in shore and sea assignments, equipment at various
    locations, and/or in jobs within an occupation, the Navy needs
    to rigorously analyze entry level requirements when developing
    curricula for centralized training to identify entry level
    skills common to most sailors. GAO further found that factors
    other than these, i.e., sailors' retention of information,
    demand that the Navy carefully consider what will be taught in
    "A" schools. GAO noted that the Navy initial skill training
    "A" schools provide the basic technical knowledge and skills
    needed to perform under supervision at the job entry level.
    GAO concluded that "A" school training should be limited to
    specific core tasks most sailors need to perform at the entry
    level and to general background information about the
    occupation. GAO further concluded that teaching noncore entry
    level tasks results in longer courses than may be necessary
    which naturally increases the cost of the courses, although an
    exact cost to be saved could not be determined. [See pp. 5-7,
    app. I.]

    DoD partially concurs. Entry level requirements need to be
    rigorously analyzed when developing curricula for centralized
    training. In addition, other factors need to be carefully
    considered in determining what will be taught in "A" schools.
    These factors include task criticality, task learning
    difficulty, frequency of task performance on the job,
    performance objectives for the rating, retention of
    information and job rotation requirements. As a result, the
    determination as to what constitutes a "coretask" and hence
    one which should be taught in an "A" school should not be
    limited to a single factor such as the percentage of sailors
    performing the task at the entry level.

o FINDING B: Curriculum Development Process and Feedback
  Systems Allow the Mismatches. GAO found that, while the Navy
  Occupational Development and Analysis Center (NODAC) data
  describing the frequency that tasks are done is available for
  use at curriculum conferences, instructions are vague
  regarding how the data should be used and when exceptions
  should be made if tasks are not often done by entry level
  sailors. GAO further found that there is no specific
  requirement to justify or document reasons for teaching
  noncore tasks -- decisions on what should be taught are
  usually made based on the collective experience and judgement
  of attendees at a curriculum conference. GAO also found that
  even though problems are identified in the feed back process,
  (called Level-II Surveys), they are sometimes allowed to
  continue, as school officials discount the feedback results,
  postpone action, or shift responsibility for the problems.
  The GAO concluded the Navy could spend its training dollars
  better by improving its system for developing curricula so
  that material taught better matches entry level sailors' needs.
  GAO further concluded that even if the system for designing
  curricula has flaws, the feedback system should identify those
  tasks being taught which are not needed. [See pp. 7-8, app.
  1.]

  DOD Concurs. The system for developing curricula has been
  revised. Multiple guidance documents have been done away with
  in favor of a proven set of front end analysis procedures
  found in MILSTD 1388-2A (dated July 1984), and their
  respective Data Item Descriptions. These procedures now in
  use produce a better match between an entry level sailor's
  needs and course objectives.

o FINDING C: All Four "A" Schools Still Provide Training For
  Tasks Not Usually Performed At the Entry Level. GAO found
  that, even though Navy training officials agreed that it is
  inefficient to use "A" schools to teach tasks performed by few
  entry level sailors, each of the four "A" schools reviewed
  taught tasks needed by only a small percentage (less than 30
  percent) of the entry level sailors. GAO further found that,
  after it reported its preliminary observations, the Navy
  conducted curriculum review conferences, which resulted in
  eliminating or reducing some noncore tasks: however, despite
  the positive changes, all four "A" schools still provide for
  tasks not usually performed at the entry level (see Appendix
  II for details of the GAO analysis of each school). GAO
  concluded that teaching noncore entry level tasks results in
  longer courses than may be necessary. GAO also concluded that
  the AK school can be reduced 4 weeks, and the DK and SK
  schools can be reduced 2 weeks each. The GAO further
  concluded that lengthening the courses also (1) keeps people
  from getting to the fleet (lost productivity) and (2) given
  the same level of resources, reduces the number of people that
  can be trained each year. [See pp. 6-7, app. I, and
  pp. 9-17, app.II.]

DOD partially concurs. Training is being provided for some
tasks not usually performed at the entry level in the four "A"
schools GAO examined. However, other factors can support
teaching tasks not usually performed at the entry level. See
discussion in DoD response to Finding A).

o FINDING D: Ship Servicemen (SH) "A" School Elimination. GAO
   found that NODAC data and the school curriculum showed that
   the SH "A" schools are teaching 10 tasks that are done by at
   least 30 percent of the entry level sailors and 2 tasks that
   are done by at least 50 percent of them. Since fleet training
   centers teach all the core tasks (laundry tasks), now taught
   in the "A" school, GAO discussed eliminating the SH "A"
   school, but noted that officials said the school was needed to
   prevent recruiting problems, etc. GAO, however, found that no
   documentation was available to support these contentions,
   or they could not be isolated. The GAO concluded that the "A"
   schools should be limited to teaching core tasks (laundry) and
   providing a brief overview of retail functions and general
   background information about the occupations. GAO further
   concluded that since the core tasks are being taught in fleet
   training centers, elimination of the SH "A" school or a 3-week
   reduction of the school should be considered. [See pp. 13-15,
   app. II.]

   DoD partially concurs. SH "A" schools are teaching 10 tasks
   that are performed by at least 30 percent of the entry level
   sailors and 2 tasks that are done by at least 50 percent of
   them. SH "A" school training, however, is considered
   essential by the Fleet not only to ensure that sailors can be
   immediately utilized in the laundry operation but also to
   enable them to perform other jobs of the rating to which most
   will be assigned during their first tour. In view of this
   demand for SH entry level training, elimination of "A" school
   training would impose a significant additional training burden
   on the Fleet Training Commands as well as require additional
   Fleet resource expenditures. The requirements for SH
   training, however, will be reexamined by the NAVY to determine
   the appropriateness of the current course content and
   instructional settings.

RECOMMENDATIONS

RECOMMENDATION 1. GAO recommended that the Secretary of the
Navy assure there are provisions for specific use of data
which identified the percent of entry level sailors in the
occupation who perform the tasks. [See p. 2, letter.]

DoD concurs. Policy providing specific guidance in the use of
percent performing data for entry level sailors will be
reviewed and revised by Navy as necessary. The review is
expected to be completed in FY-85.

o   RECOMMENDATION 2. GAO recommended that the Secretary of the
    Navy require identification of material in the curriculum
    which is needed by few sailors in the occupation and
    documentation of reasons for including that material [See p. 3,
    letter.]

    DoD concurs. Justification for design decisions to include
    material having a low percentage performing vice "needed by
    few sailors in the occupation" will be documented, so as to
    establish an audit trail. Navy will ensure that appropriate
    directives are issued and then monitored to ensure compliance.
    The directives are expected to be issued in FY85.

o   RECOMMENDATION 3. GAO recommended that the Secretary of the
    Navy direct that the current feedback system for "A" schools
    (called Level II Surveys) be reviewed to see if changes can be
    made in the timing of the questionnaires and if stricter
    requirements can be set for action to be taken when
    deficiencies are noted. [See p. 3, letter.]

    DoD concurs. Review procedures have been established in
    support of the NAVEDTRACOM Training Appraisal/feedback system
    (CNETINST 1540.3B, dated 21 June 1981) to confirm that review
    and action by functional commanders have taken place. In late
    1983, an action item tracking system was initiated which has
    resulted in corrective action being taken on 80 percent of all
    noted deficiencies within 90 days.

o   RECOMMENDATION 4. GAO recommended that the Secretary of the
    Navy consider alternatives other than "A" school (such as on
    the job training and use of fleet training centers) for
    teaching skills which are not needed by most entry level
    sailors. [See p. 3, letter.]

    DOD Concurs. Among several reasons for establishing "A"
    schools is their ability to relieve the basic occupational
    training burden of Fleet Commands. Skills taught in "A"
    schools will only be those needed (and documented) by most
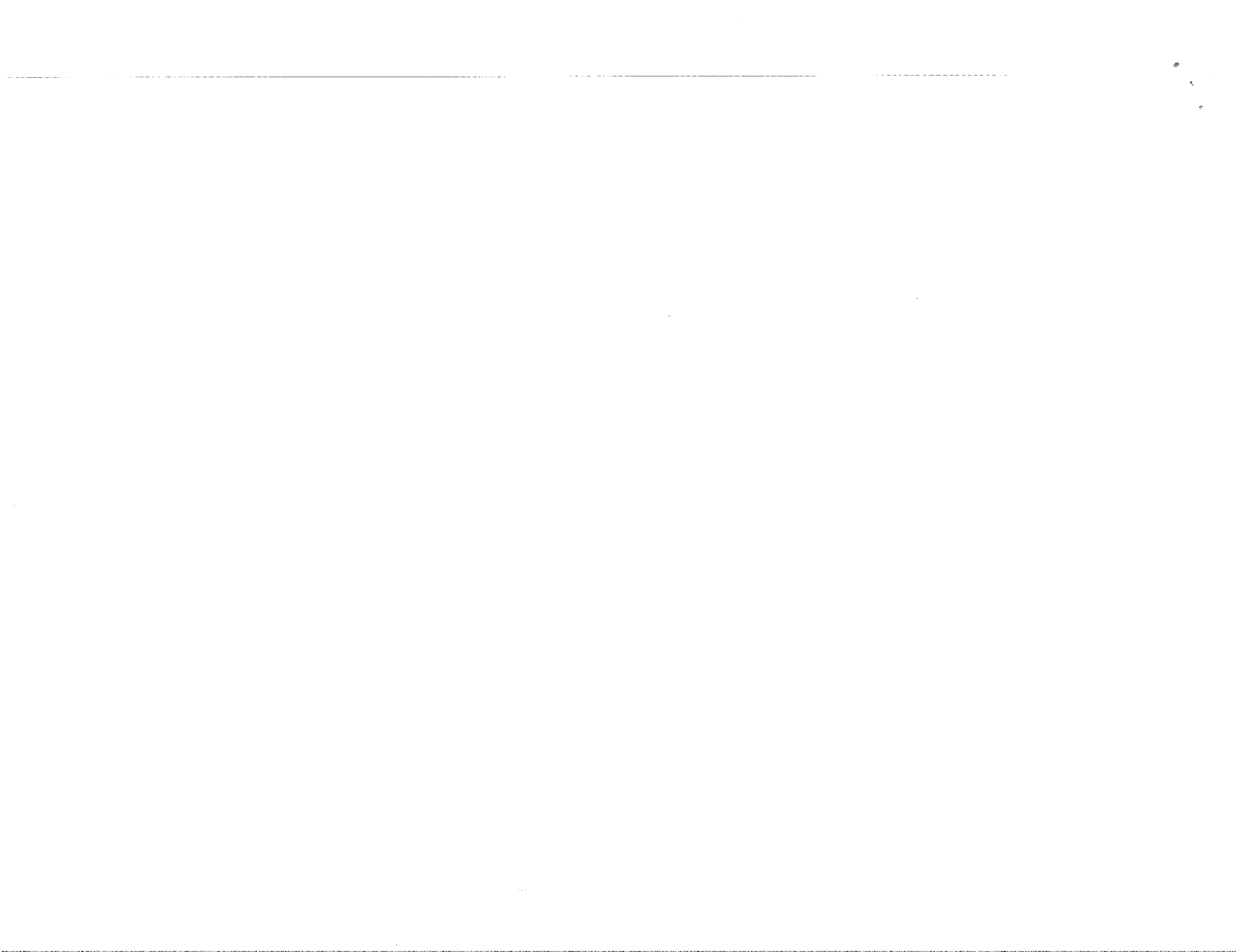   entry level sailors. (Also see response to Recommendation 1
    and 2)

o   RECOMMENDATION 5. GAO recommended that the Secretary of the
    Navy direct deletion of the material not needed by most entry
    level sailors in the four "A" schools we studied so that
    training resources can be better spent. [See p. 3,
    letter.]

    DoD concurs. Courses for the four "A" schools studied will be
    restructured in FY85 and any material not needed by most entry
    level sailors will be deleted.

o RECOMMENDATION 6. GAO recommended that the Secretary of the
   Navy determine whether it is worthwhile to keep the ship
   serviceman "A" school since the core tasks are limited and
   already taught elsewhere in the Navy. [See p. 3,
   letter.]

   DoD concurs. The requirement to have a SH "A" school course
   will be reexamined during the planned study of "A" schools in
   FY85. (See recommendations 1, 2 and 5).

(967088)