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PERSONNEL ATTRITION FROM NAVY ENLISTED INITIAL
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GROUP (NAVY) ORLANDO FL G W HODAK ET AL. MAR 79

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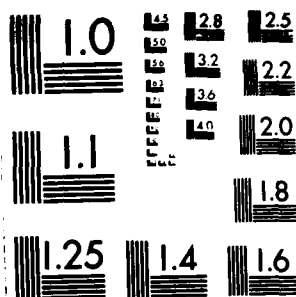
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T A E G REPORT
NO. 69

PERSONNEL ATTRITION FROM
NAVY ENLISTED INITIAL TECHNICAL TRAINING

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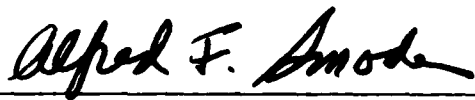
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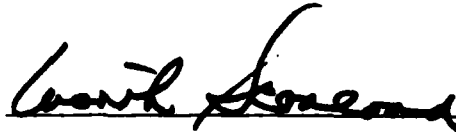
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determine the aggregate and course specific costs of academic and nonacademic attrition.

Extensive data are provided. Major variables studied include academic attrition, nonacademic attrition, qualified vs. unqualified personnel inputs, and cost per graduate. Comparisons are drawn from FY 76 and FY 77 data bases.

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SECTION I

INTRODUCTION

"Attrition represents a reduction of the effectiveness of a force caused by loss of personnel and material. Attrition rate is normally expressed as a percentage, reflecting the degree of losses of personnel or nonconsumable supplies due to various causes within a specified period of time."¹ Personnel who attrite from Navy class "A" schools are a major concern of the Naval Education and Training Command (NAVEDTRACOM) since a major portion of the Chief of Naval Education and Training's (CNET) resources (billets and dollars) are devoted to this type of training.

A previous Training Analysis and Evaluation Group (TAEG) study² (hereafter referred to as TAEG Report 47), examined the extent and the cost of attrition from initial enlistment technical training courses (specifically, A1 and A3 courses). The planning for the study took into consideration the fact that attrition from technical training had not received adequate attention. Consequently, a perspective on attrition attributable to technical training variables (academic and nonacademic) was desirable. A summary of the significant findings of TAEG Report 47 is presented below. In addition, detailed comparisons are made between these findings and those of the present study in subsequent sections of the report.

- . Total attrition in 147 A1 and A3 courses was 7.4 percent (6,446) of total enrollment (86,660) during FY 76, equally distributed between academic and nonacademic types.
- . Ten courses had academic attrition equal to or greater than 10 percent of annual enrollment. Only three courses had nonacademic attrition equal to or greater than 10 percent.
- . Total cost for 118 courses analyzed in the study for FY 76 was \$254,308,000. Of this total the costs of academic and nonacademic attrition were \$8,800,000 and \$,400,000 respectively.
- . A relatively small number of courses account for a "majority" of attrition costs. (Fifteen courses accounted for 72 percent of the total academic attrition cost.)
- . Fourteen percent of the inputs to the 147 A1 and A3 courses were waived; i.e., did not meet minimum Armed Services Vocational Aptitude Battery (ASVAB) course entrance requirements. Waived trainees produced significantly greater academic attrition than qualified trainees.

¹ Dictionary of the United States Military Terms for Joint Usage. Joint Chiefs of Staff, Publication 1. 1 February 1964. Washington, D.C. 20301.

² Middleton, M., Rankin, W., Green, E. and Papetti, C. Academic Attrition from Navy Technical Training Class "A" School Courses. TAEG Report 47. July 1977. Training Analysis and Evaluation Group, Orlando, FL 32813. AD A044029.

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- . Setbacks; i.e., trainees who repeat some portion of a course, represent a potentially greater area of uncertainty than course attrition. Setbacks represent 16 percent of enrollment. Their cost and attrition implications are for the most part unknown.

PURPOSE

The purpose of the present study is to refine and employ the techniques developed by TAEG and to extend the attrition data base for A1 and A3 courses to include FY 77 data. Expanding the data base to include FY 77 permits a comparison of the attrition problem over time; i.e., trends can be examined over successive fiscal years. The long-term goals of TAEG's attrition study program remain:

- . identify those factors associated with academic attrition
- . determine the overall and course-specific costs of academic attrition
- . identify the extent and pattern of attrition in class A1 and A3 courses
- . suggest corrective courses of action for monitoring, controlling, or reducing academic attrition.

APPROACH

The approach taken in this study is similar to that reported in TAEG Report 47 in that data sources for a specified time period containing information on training personnel and costs were exhaustively analyzed. The major variables investigated were the numbers of personnel trained in A1 and A3 courses, their associated costs, numbers of attrites and setbacks, and academic aptitude. The emphasis focused on Navy enlisted class A courses since 70 to 80 percent of the graduates of recruit training are input to these courses, and the bulk of the Navy man-hours of first enlistment training occurs in this setting. Both academic and nonacademic attrition were examined; however, it was hypothesized that academic attrition would have the greater potential for affecting change through training management options.

ORGANIZATION OF THE REPORT

In addition to this Introduction, three major sections are provided. Section II presents the rationale for and the data sources used in the analyses and describes the analyses performed. Section III presents the results of the analyses in graphic and tabular form which include relevant FY 76 and FY 77 data comparisons. Section IV summarizes the major findings of the study with appropriate recommendations.

In addition, four appendices are included. Appendix A, compiles the attrition and cost data used in the various analyses. Appendix B provides information on qualified and unqualified personnel. Appendix C compares all courses common to both FY 76 and FY 77 on selected variables. A continuation of the comparisons in appendix C, restricted to cost data, is shown in appendix D.

SECTION II

APPROACH

This section describes the sources of data, the data elements employed and the analyses performed. The analyses do not exhaust the analytical options that might have been used; however, those included were deemed most pertinent, relevant and meaningful, given the available data. These analyses are identical to those described in TAEK Report 47. They are described here again for the sake of completeness and continuity. A unique aspect of this report is the comparison of the FY 76 and FY 77 data bases in each analysis.

PRELIMINARY DESCRIPTIVE ANALYSIS

The initial effort of this study was to examine the magnitude and variability of attrition among A1 and A3 courses. The rationale was to let actual attrition data suggest problem areas as well as hypotheses about possible correlates of attrition. This purely descriptive analysis of attrition also served as a baseline for subsequent analyses.

DATA SOURCE: NAVY INTEGRATED TRAINING RESOURCES AND ADMINISTRATIVE SYSTEM (NITRAS)

The NITRAS is an automated training information system designed to provide direct support information for the CNET, Chief of Naval Personnel and the Navy Recruiting Command. The NITRAS consists of four files, two of which were utilized in this study and are described below:

Master Course Reference File (MCRF). The MCRF collects and standardizes at one central point all formal training course data elements, schedules, and input/requirements plans. It is a compilation of student planned enrollment on the course/class level. It interfaces with various automated systems to provide Navy training reports.

Training Summary File (TSF). The TSF is a repository for training summary statistics for all training courses. It provides the capability to monitor average trainees on board, course achievement, numbers of trainees under instruction, attrition, and other variations of statistical data.

The data utilized in this preliminary descriptive analysis were acquired from the CNET TSF Reports 1500-1207 and 1500-1208 which are extracts from the TSF containing all FY 77 data on attrition. The data elements used from this report are listed below. Equations 1, 3, 5 and 7 were derived for utilization in the analysis of data and are based on the formulas identified here as formulas 2, 4, 6 and 8, respectively. These latter formulas are taken from the NITRAS Reports Manual, and applied to CNET Report 1500-1207.

- . Input - Actual number of students enrolling during the current fiscal year
- . Grads - Actual number of students graduating during the current fiscal year

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- Standard attrition (percent). This value is the CNTECHTRA approved maximum acceptable rate of attrition for a particular course.

- Attrition total (number)

$$TA = \frac{\text{Percent attrition total (enrollments + graduates)}}{2 - \text{percent attrition total}} \quad (1)$$

- Attrition total (percent)

$$\text{Percent TA} = \frac{\text{Total attrition}}{\text{Total attrition + enrollments + graduates}} \quad (2)$$

- Academic attrition (number)

$$AA = \frac{\text{Percent academic attrition (enrollment + graduates)}}{2 - \text{percentage academic attrition}} \quad (3)$$

- Academic attrition (percent)

$$\text{Percent AA} = \frac{\text{Academic Attrition}}{\text{Academic attrition + enrollment + graduates}} \quad (4)$$

- Nonacademic attrition (number)

$$NAA = \frac{\text{Percent nonacademic attrition (enrollment + graduates)}}{2 - \text{percentage nonacademic attrition}} \quad (5)$$

- Nonacademic attrition (percentage)

$$\text{Percent NAA} = \frac{\text{Nonacademic attrition}}{\text{Nonacademic attrition + enrollments + graduates}} \quad (6)$$

- Setback (number)

$$SB = \frac{\text{Percent total setback (enrollments + graduates)}}{2 - \text{percent total setback}} \quad (7)$$

- Setback (percentage)

$$\text{Percent SB} = \frac{\text{Total setbacks}}{\text{Total setbacks + enrollments + graduates}} \quad (8)$$

It was determined from TSF Report 1500-1208 that there were data for 156 A1 and A3 courses. Using equations 1 through 8, basic descriptive statistical summaries were calculated and inspected. Relatively few courses were found to have academic attrition greater than 10 percent. Therefore, it was decided to depict class intervals of 0 through 10 percent in 1 percent increments and to group an open interval for courses greater than 10 percent.

CORRELATION ANALYSIS

Several hypotheses concerning possible relationships between course variables and attrition were identified from the original analysis, and correlation analyses were performed to test these hypotheses. Data on selected variables were obtained from TSF Report 1500-1208. In addition, the minimum aptitude requirements for entering a course were obtained from the MCRF. This variable was expressed in terms of the minimum ASVAB scores required to qualify an individual for specific "A" courses. The variables that were deemed appropriate for examination included:

- . course length (days)
- . number of course convenings
- . minimum ASVAB
- . student input
- . student graduates
- . standard attrition percentage
- . percentage setback
- . total attrition
- . nonacademic attrition
- . academic attrition

WAIVER ANALYSIS

The availability or qualifications of incoming personnel often do not match the manpower requirements of the Navy. Thus, in spite of minimum (ASVAB) requirements for entry into most "A" courses, some personnel who do not meet minimum aptitude requirements are still admitted to these courses as waived students. Chi-square analyses were run for each course to test the hypothesis that the proportion of unqualified attrites was not significantly greater than the proportion of qualified attrites.

DATA SOURCES: CNET REPORT 1500-1120, CNTECHTRA MONTHLY AND CUMULATIVE STUDENT ATTRITION REPORT AND CNET REPORT 1500-1121, CNTECHTRA MONTHLY CUMULATIVE STUDENT QUALITY REPORT

These reports are extracted from the same NITRAS data base as the Training Summary File reports. Report 1500-1120 contains monthly and cumulative data on student attrition reported by Course Data Processing (CDP) Code and Unit Identification Code (UIC) by academic and nonacademic categories, mental group, USN/USNR, and other variables. Report 1500-1121 contains monthly and cumulative data on student accessions. This latter report summarizes trainee accessions by mental groups and the number of qualified and nonqualified persons entering courses based upon minimum ASVAB scores.

ATTRITION COST ANALYSIS

A prescribed remedy for any attrition problem regardless of its magnitude must be tempered by cost. High attrition percentages do not necessarily mean high attrition cost; low percentage attrition courses may still reflect a very high cost due to large throughput and/or a high cost of training. The purpose

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TABLE 5. COURSES IN WHICH UNQUALIFIED STUDENTS (WAIVERS) ATTRITED AT SIGNIFICANTLY HIGHER RATES THAN QUALIFIED STUDENTS

CDP	SHORT TITLES	CIN	CHI-SQUARE
6001*	QM-A	A-061-0012	39.59
6002*	QM-A	A-061-0012	6.93
6005*	SM-A	A-061-0011	5.55
6006*	SM-A	A-061-0011	3.86
6015*	SURF-ST CLASS A	A-130-0037	16.99
6025	GMT-A	A-644-0014	13.32
6027	FTA-A	A-113-0010	6.92
6053*	CTO-A	A-580-0016	11.27
6059	SK CLASS A	A-551-0014	23.29
6068	MR/A	A-702-0019	15.27
6102	PN-A	A-500-0014	4.35
6120*	HT-A1	A-780-0035	6.17
6125	MS-A	A-800-0013	19.75
6131	DS-A	A-150-0025	4.12
6137	ET-A-3N	A-102-0010	8.74
6142*	OSA	A-221-0011	88.40
6144*	RMA	A-202-0014	51.27
6172	STS-CLASS-A	A-130-0029	3.94
6206	SH-A	A-823-0012	11.96
6240	AVA-AQ-A1	C-100-2013	4.67
6241	AVA-AX-A1	C-100-2013	14.44
6242*	AVA-TD-A1	C-100-2013	7.84
6244*	AFTA-AT-A1	C-100-2010	6.72
6260	BT-A	A-651-0010	17.09
6262	MMA	A-651-0015	6.32
6264	ET-A1-CTM	A-100-0012	6.53
6265	ET-A1-ETR	A-100-0012	24.48
6278*	AC-A1	C-222-2010	14.20
6301*	CTR-A	A-231-0044	9.40
6302*	CTT-A-PREP	A-231-0023	6.06
6320	CTT-SPE-NONMORSE	A-231-0046	8.51
6377	FTG-A1	A-113-0010	9.02
6380	RM-A-SEA	A-202-0026	3.88
6501*	ADJ-A1	C-601-2010	5.08
6513	ABE-A1	C-680-2012	7.06

TABLE 4. CORRELATIONS WITH ATTRITION (FY 76 VS. FY 77)

	CONVEN (1)	MIN ASVAB (2)	INPUT (3)	GRADS (4)	STD ATTR % (5)	SETBACKS (6)	TOT ATTRIT (7)	NONACAD ATTRIT (8)	ACAD ATTRIT (9)
COURSE LENGTH (1)	.041 (.086)	.176 (.100)	-.127 (-.098)	-.117 (-.059)	.332 (.149)	.273 (.305)	.058 (.199)	.001 (.063)	.123 (.293)
NO. OF CONVEN. (2)		.211 (.181)	.437 (.216)	.445 (.193)	.105 (.082)	.062 (-.028)	.343 (.198)	.204 (.200)	.411 (.147)
MIN ASVAB (3)			.006 (-.001)	.022 (-.005)	-.110 (-.336)	-.044 (-.075)	.001 (.018)	.007 (.007)	-.022 (.039)
NO. INPUT (4)				.993 (.984)	.177 (.188)	.357 (.573)	.811 (.749)	.756 (.832)	.537 (.507)
NO. GRADS (5)					.152 (.152)	.333 (.530)	.763 (.683)	.715 (.786)	.499 (.433)
ATTR STD % (6)						.339 (.374)	.386 (.300)	.216 (.228)	.486 (.302)
SETBACKS (7)							.379 (.396)	.184 (.477)	.508 (.213)
TOT ATTRIT NUMBER (8)								.901 (.911)	.726 (.899)
NONACAD ATTRIT (9)									.361 (.643)

FY 76 correlations in parentheses ()

OUTPUT

		Nonacademic Attrition & Grads	Academic Attrition	Total
Input	Qualified	53,816	1,920	55,736
	Nonqualified	10,090	827	10,917
	Total	63,906	2,747	66,653

The chi-square value for this analysis was 393.11, again indicating that waived students attrite at a higher rate. Column 14 of appendix B gives the chi-square for all courses for which waiver data were available.

COST ANALYSIS

The attrition costs cited in this section are average costs. It is recognized that these costs are useful primarily for assessing the relative magnitude of the cost of attrition for long range planning, but are of little value to managers and decision makers who must make the short range operational decisions. Marginal costs are always the appropriate costs for short range decision making. However, the development of marginal costs requires the identification of alternative strategies for reducing attrition in the short term. Such strategies were not addressed in this study. Regardless of the specific attrition-reducing strategies employed, the only estimate of marginal cost savings which is independent of any specific policy for affecting attrition is, and therefore appropriate to this study, student salaries. In this study marginal costs are computed by multiplying attrition weeks by the student salary costs. These estimates are presented in appendix A.

It was not the intent of this study to account for all course and attrition costs but rather to use all readily available data to show the relative impact of attrition on training resource utilization. The data for the preceding analyses were based on 156 A1 and A3 courses. However, from the courses listed in this data base, course cost for only 124 courses was available. The total cost for the 124 courses during FY 77 was \$231,888,000 which includes all direct and indirect costs associated with the courses. Utilizing equation 1 of section II, page 8, the total cost of attrition (both academic and nonacademic) was found to be \$13,164,000 for FY 77. Thus, 5.67 percent of the resources applied to these 124 courses was expended on personnel who attrited. Table 6 presents a summary comparison of the overall costs for FY 76 and FY 77.

Tables 7 and 8 present frequency distributions for (1) total annual cost per course and (2) the annual cost of attrition per course, both with cumulative numbers and cumulative percents. Additionally, in these tables, as well as in all the tables that follow, a comparison between FY 76 and FY 77 data is presented. The significant features of table 7 are as follows:

- The number of courses with an annual cost of less than \$1 million remained relatively stable.

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- . Twenty-five courses have attrition equal to or greater than 15 percent.
- . Attrition decreased in seven courses.
- . PM-A school had the greatest increase in attrition (from 9 to 21 percent).

CORRELATION ANALYSIS

The results of the above analysis give an indication of the scope of the problem of academic and nonacademic attrition and the trends from FY 76 to FY 77. To ascertain the interrelationships of the variables that could have some bearing on attrition, data on nine variables for the A1 and A3 courses were intercorrelated. Table 4 presents the results of this analysis in matrix format. Correlation data for FY 76 are also included, in parentheses, for comparison purposes. Column 9 of table 4 shows the correlations between academic attrition and nine other course variables. Most of the relationships are fairly straightforward when sheer numbers of students put through courses annually are considered.

Overall, the table indicates that FY 77 results parallel the FY 76 results. As indicated in TAEG Report 47, understanding the relationship between setbacks and academic attrition requires much more data than were available for this study.

WAIVER ANALYSIS

Individual course data on waivers and academic attrition were analyzed by chi-square tests on the hypothesis that the proportion of qualified attrites was not significantly different than the proportion of unqualified attrites who succumbed to academic attrition. A significant chi-square, at the $p \leq .05$ level of statistical confidence, was any computed value of the chi-square statistic for a course that equalled or exceeded 3.841. This indicated that unqualified trainees in these courses had a significantly higher rate of ASVAB academic attrition than ASVAB qualified trainees. Course data extracted from CNET Reports 1500-1120 and 1500-1121 were utilized for this analysis. Table 5 contains a listing of courses with significant chi-squares. It should be noted that 17 of the 33 courses that had significant chi-squares in FY 76 reappear on the FY 77 list. Course data from 1500-1120 and -1121 for the FY 76 study were not fully matured (less than 12 months for a number of courses). Therefore, comparison with FY 77 data (full year) would be misleading. Appendix B contains the available waiver data for FY 77.

In the overall analysis of all courses in appendix B, the following relationship between qualification and attrition was observed.

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TABLE 3. COURSES HAVING TOTAL ATTRITION (ACADEMIC AND NONACADEMIC)
EQUAL TO OR GREATER THAN 10 PERCENT (continued)

CDP	SHORT TITLE	CIN	LOCATION	PERCENT ATTRITION	
				FY76	FY77
6146*	PLRS-POS-ELECT-A	A-121-0142	Dam Neck	14	17
6264*	ET-A1-CTM	A-100-0012	Great Lakes	12	17
6006*	SM-A	A-061-0011	San Diego	12	18
6206	SH-A	A-823-0012	Norfolk	8	18
6302*	CTT-A-PREP	A-231-0023	Corry	12	18
6047*	QM-A	A-670-0018	Great Lakes	16	19
6260	BT A	A-651-0010	Great Lakes	7	19
6278*	AC-A1	C-222-2010	Memphis	16	20
130E	NUC PWR	A-661-0010	Orlando	-	21
6076	PM-A	A-790-0012	San Diego	9	21
6126*	QRTR-MSTR-BASE	A-772-0010	New London	12	22
6451	EW CM TECH	A-102-0214	Corry	-	23
6452	RES EM CM TECH	A-102-0214	Corry	-	23
6301*	CTR-A	A-231-0044	Corry	21	24
6299*	EW-OP-TECH	A-102-0155	Corry	43	27
6178*	EW-OP-MAINT/TECH	A-102-0154	Corry	17	28
6418	DIVER SECOND	A-433-0022	Washington, D.C.	-	46

CDP - Course Data Processing Code

CIN - Course Identifying Number

* Course had total attrition equal to or greater than 10 percent in FY 76.

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TABLE 3. COURSES HAVING TOTAL ATTRITION (ACADEMIC AND NONACADEMIC)
EQUAL TO OR GREATER THAN 10 PERCENT

CDP	SHORT TITLE	CIN	LOCATION	PERCENT ATTRITION	
				FY76	FY77
6005	SM-A	A-061-0011	Orlando	5	10
6036	TM-OP-A/S-TORP	A-123-0127	Orlando	1	10
6102*	PN-A	A-500-0014	Meridian	13	10
6172	STS CLASS A	A-130-0029	San Diego	5	10
6245	AFTA-AQ-A1	C-100-2010	Memphis	9	10
6053	CTO-A	A-580-0016	Corry	9	11
6068	MR/A	A-702-0019	San Diego	8	11
5309	SCAT-MOD-1	A-100-0035	New London	9	12
6041*	MN/A	A-647-0016	Charleston	23	12
6057*	YN-A	A-510-0012	Meridian	17	12
6065*	MUSIC BASIC	A-450-0010	Little Creek	15	12
6131*	DS-A	A-150-0025	Mare Island	10	12
6144*	RMA	A-202-0014	San Diego	17	12
6265*	ET-A1-ETR	A-100-0012	Great Lakes	10	12
6419	SCUBA DIVER	A-433-0023	Washington, D.C.	-	12
6002	QMA	A-061-0012	San Diego	4	13
6027*	FTA-A	A-113-0010	Great Lakes	12	13
6093	TM SUB/TORP TECH	A-123-0127	Orlando	1	13
6263	ET-A1-ETN	A-100-0012	Great Lakes	9	13
6457	ET (SU) EW TECH	A-102-0224	Corry	-	13
6478	CTM EW TECH	A-102-0234	Corry	-	13
6025	GMT-A	A-644-0014	TRAGRUPAC	9	14
6078	EA-A	A-412-0010	PT HUE	2	14
6239*	AVA-AT-A1	C-100-2013	Memphis	11	14
6241*	AVA-AX-A1	C-100-2013	Memphis	15	14
6529	ISA	A-242-0010	Lowry	6	14
6536	TM-AS-TORP-TECH	A-123-0127	Orlando	0	14
6001	QMA	A-061-0012	Orlando	2	15
6020	CTA-A	A-510-0015	Corry	7	15
6240*	AVA-AQ-A1	C-100-2013	Memphis	12	15
6377	FTG-A1	A-113-0010	Great Lakes	-	15
6476	EW FUND/PM TECH	A-102-0209	Corry	-	15
6537*	AW-A1	C-210-2010	Memphis	12	15
6341	OT A	A-210-0011	FLEASWTRACENPAC	-	16
6142	OSA	A-221-0011	Great Lakes	8	17

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- Input to these courses was 8.4 percent (7,303) in FY 76 and 13.7 percent (12,064) in FY 77 of the annual enrollment.

Courses having nonacademic attrition equal to or greater than 10 percent are listed in table 2. Comparison to FY 76 data reveals:

- The number of courses increased from three in FY 76 to ten in FY 77 (a 233 percent increase).
- Two of the three courses contained in the FY 76 list reappear on the FY 77 list.
- In FY 77 four of the ten courses listed also had academic attrition greater than 10 percent.

TABLE 2. COURSES HAVING NONACADEMIC ATTRITION EQUAL TO OR GREATER THAN 10 PERCENT

CDP	SHORT TITLE	CIN	LOCATION	PERCENT ATTRITION	
				FY76	FY77
6126	QTR-MSTR-BASE**	A-772-0010	New London	9	10
6142	OSA	A-221-0011	Great Lakes	5	10
6299*	EW-OP-TECH**	A-102-0155	Corry	39	10
6047*	QM-A	A-670-0018	Great Lakes	11	11
6419	SCUBA DIVER	A-433-0023	Washington, D.C.	-	12
6478	CTM EW TECH	A-102-0234	Corry	-	13
6078	EA-A	A-412-0010	PT HUE	2	14
6178	EW-OP-MAINT/TECH**	A-102-0154	Corry	3	17
6260	BTA	A-651-0010	Great Lakes	7	19
6418	DIVER SECOND**	A-433-0022	Washington, D.C.	-	37

CDP - Course Data Processing Code

CIN - Course Identifying Number

* Course had nonacademic attrition equal to or greater than 10 percent in FY 76.

** Course also had academic attrition equal to or greater than 10 percent.

Table 3 contains those courses which have a total (academic plus nonacademic) attrition level greater than or equal to 10 percent. Comparing FY 77 to the FY 76 data reveals the following:

- The number of courses increased from 31 in FY 76 to 52 in FY 77 (68 percent).
- Twenty-two of the original thirty-one courses (FY 76) reappear on the FY 77 list.

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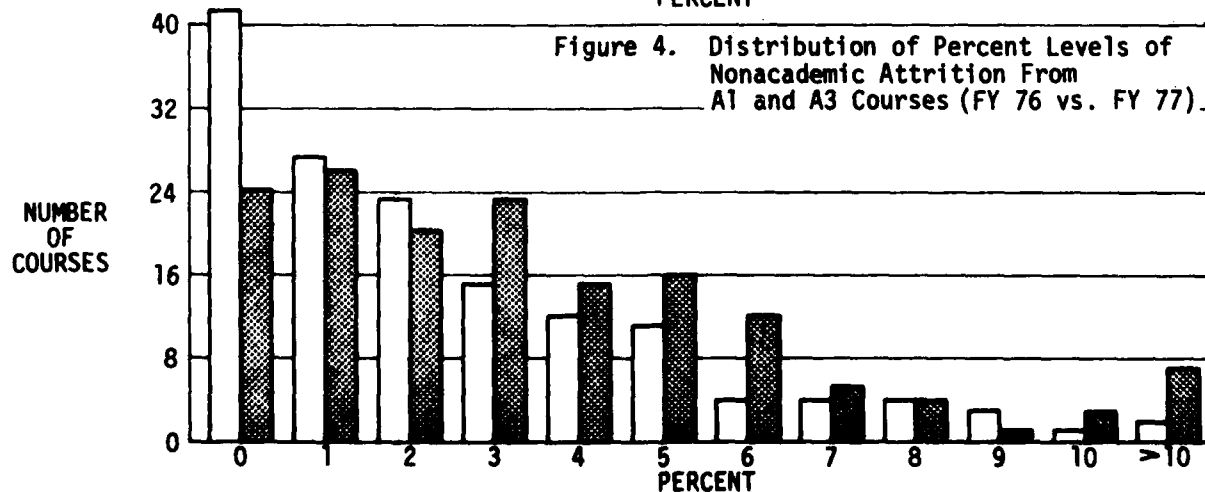
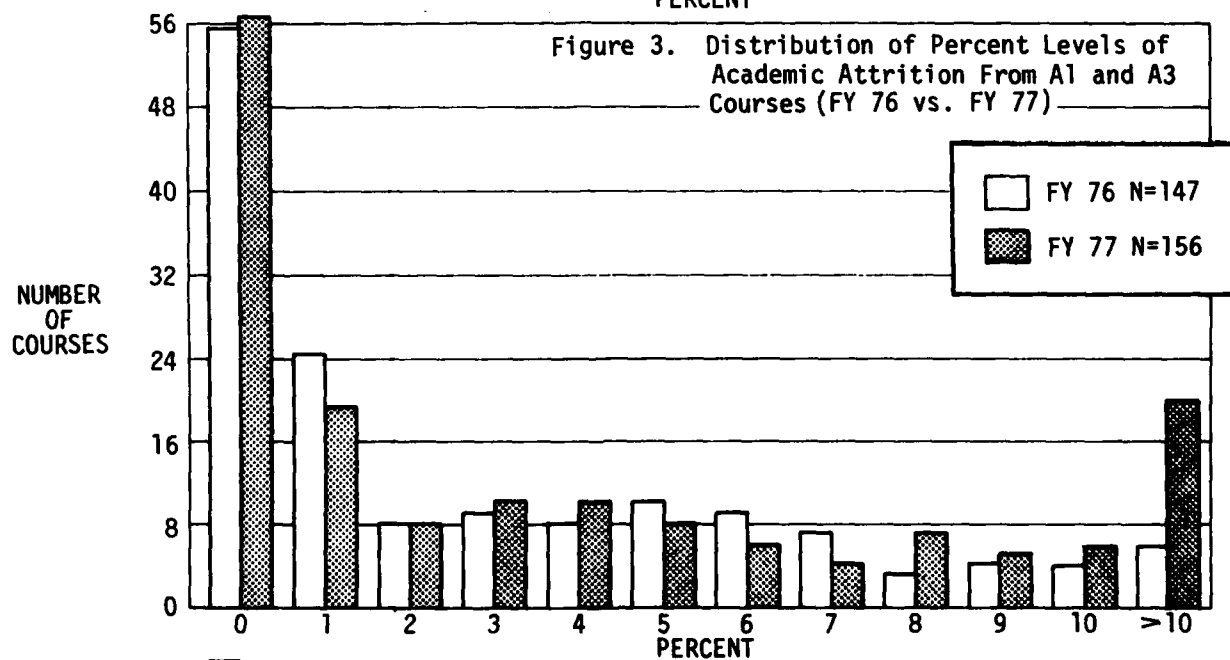
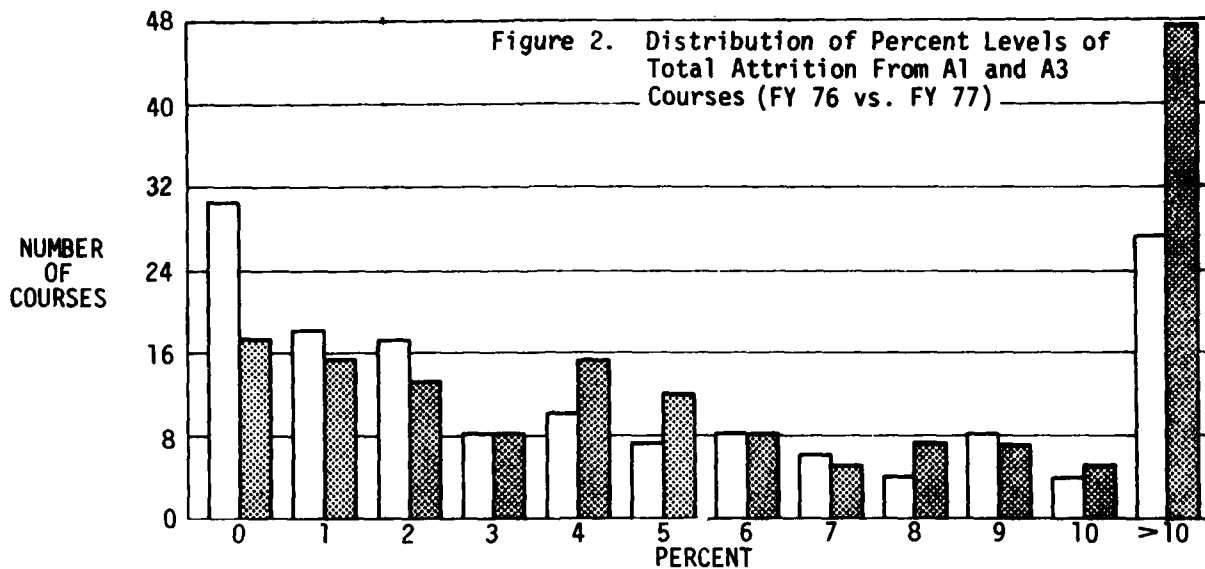
TABLE 1. COURSES HAVING ACADEMIC ATTRITION EQUAL TO OR GREATER THAN 10 PERCENT

CDP	SHORT TITLE	CIN	LOCATION	PERCENT ATTRITION	
				FY76	FY77
6020	CTA-A	A-510-0015	Corry	5	10
6093	TM-SUB/TORP TECH	A-123-0127	Orlando	0	10
6240	AVA-AQ-A1	C-100-2013	Memphis	5	10
6264*	ET-A1-CTM	A-100-0012	Great Lakes	10	10
6529	IS A	A-242-0010	Lowry	4	10
6537	AW-A1	C-210-2010	Memphis	6	10
6002	QMA	A-061-0012	San Diego	2	11
6131	DS-A	A-150-0025	Mare Island	9	11
6146	PLRS-POS-ELECT-A	A-121-0142	Dam Neck	8	11
6001	QMA	A-061-0012	Orlando	1	12
6006	SM-A	A-061-0011	San Diego	9	12
6341	OT A	A-210-0011	FLEASWTRACENLANT	-	12
6126	QRTR-MSTR-BASE	A-772-0010	New London	4	13
6178*	EW-OP-MAINT/TECH	A-102-0154	Corry	14	13
6418	DIVER SECOND	A-433-0022	Washington, D.C.	-	13
6457	ET(SU) EW TECH	A-102-0224	Corry	-	13
130E*	NUC PWR	A-661-0010	Orlando	18	14
6302*	CTT-A-PREP	A-231-0023	Corry	10	14
6536	TM-AS-TORP-TECH	A-123-0127	Orlando	0	14
6206	SH-A	A-823-0012	Norfolk	7	15
6076	PM-A	A-790-0012	San Diego	7	16
6301*	CTR-A	A-231-0044	Corry	17	16
6278*	AC-A1	C-222-2010	Memphis	12	17
6299	EW-OP-TECH	A-102-0155	Corry	6	19
6451	EW CM TECH	A-102-0214	Corry	-	19
6452	RES EM CM TECH	A-102-0214	Corry	-	23

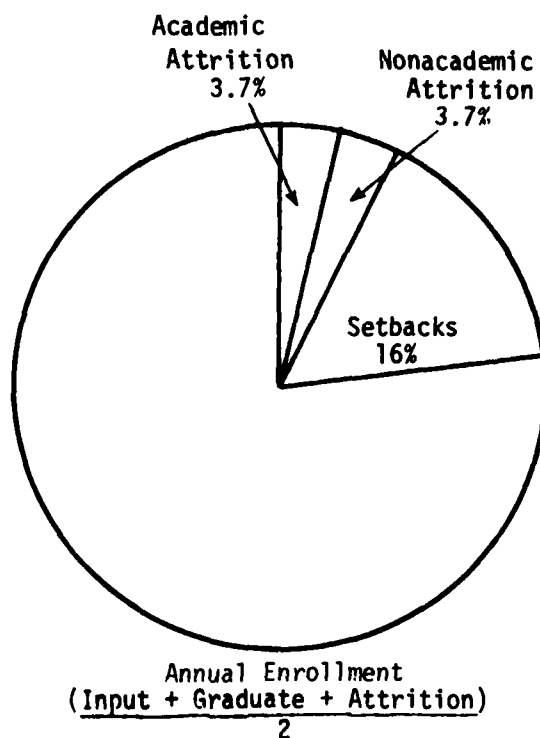
CDP - Course Data Processing Code

CIN - Course Identifying Numbers

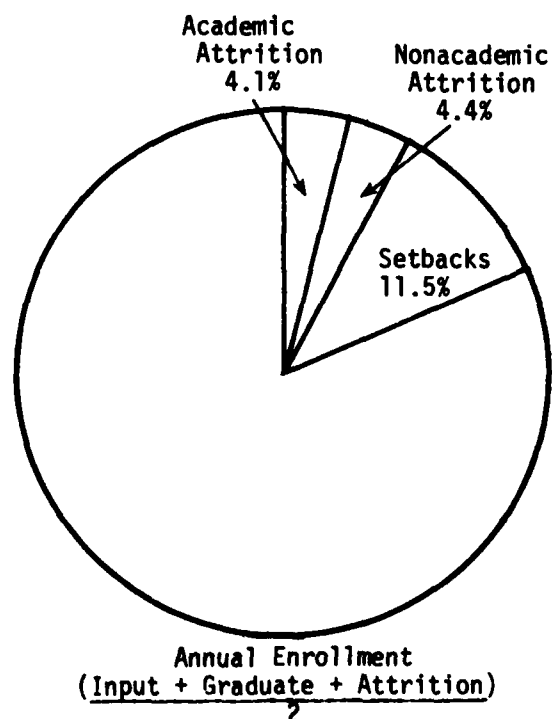
* Courses having academic attrition equal to or greater than 10 percent in FY 76.



	<u>FY 76</u>	
Annual Enrollment*	86,660	
Total Attrition	6,446	7.4%
Academic Attrition	3,223	3.7%
Nonacademic Attrition	3,232	3.7%
Setbacks	13,972	16.0%



	<u>FY 77</u>	
Annual Enrollment*	87,938	
Total Attrition	7,477	8.5%
Academic Attrition	3,595	4.1%
Nonacademic Attrition	3,843	4.4%
Setbacks	10,090	11.5%



*Referred to as "annual average on board (AOB)" in TAEG Report 47.

Figure 1. Relative Proportions of Attrition (FY 76 vs. FY 77)

SECTION III

RESULTS AND DISCUSSION

This section presents the results of the descriptive, correlation, waiver, and cost analyses. Tables of data summaries for FY 77 attrition, FY 77 qualified and unqualified trainee attrition, and FY 76 vs. FY 77 comparisons used to support the rationale for the inferences and conclusions discussed in this section are provided in appendices A, B, C and D.

PRELIMINARY DESCRIPTIVE ANALYSIS

Figure 1 provides a perspective of the magnitude of attrition in Navy A1 and A3 courses for FY 76 and FY 77. FY 76 data were based on 147 courses whereas the FY 77 data were based on 156 courses. Comparison of these fiscal periods reveals that for 133 courses data were available during two years. This is accounted for by the addition and deletion of courses during the latter fiscal period. This comparison reveals that enrollment of students during FY 77 was 1.5 percent higher than that of FY 76 (87,938 vs. 86,660). Total attrition, academic attrition, and nonacademic attrition were all higher during FY 77 than FY 76. However, the total reported number and percentage of setbacks was significantly less in FY 77 than in FY 76. It is important to note that for the 1.5 percent increase in annual enrollment, total attrition rose 1.1 percent and total setbacks decreased by 4.5 percent.

A comparison of percent total attrition from A1 and A3 courses for FY 76 and FY 77 is presented in figure 2. The histogram shows that attrition rates have shifted toward the right (in the direction of increased attrition). From the histogram in figure 2 it is obvious that attrition increased for nearly all percentage intervals. It should be noted that in FY 76, 30 courses had zero attrition while in FY 77 only 17 courses had zero attrition. Furthermore, while 27 courses had attrition greater than 10 percent in FY 76 this number increased to 47 in FY 77. Appendix A presents a complete list of "A" courses and attrition data for FY 77. Appendix C presents a comparison of attrition data for courses for which FY 76 and FY 77 data were available. Appendix D is similar to appendix C but is restricted to cost data.

Figure 3 presents the comparison of the distributions of academic attrition from A1 and A3 courses while figure 4 presents the same comparison for nonacademic attrition. Courses having academic attrition equal to or greater than 10 percent are listed in table 1. Comparison of these data with those of FY 76 shows:

- . The number of courses increased from 10 (6.8 percent of all courses) in FY 76 to 26 (16.6 percent of all courses) in FY 77 (a 160 percent increase).
- . Six of the ten courses contained in the FY 76 list are also contained in the FY 77 list indicating a continued academic attrition problem for these courses.
- . Eight of the courses are at one location--Corry Station.

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rationale utilized the most relevant information on which to fairly and equitably estimate costs that were not otherwise obtainable.

SUMMARY

Four analyses representing four different perspectives on essentially the same data base were performed. In each analysis, the FY 76 and FY 77 data are presented for comparison purposes. The cost data obtained from the RMS data base is to the lowest level reported and is the most accurate obtainable in the NAVEDTRACOM. However, the reader should be reminded that the data obtained from other sources on which this report is based are characterized by a number of vagaries, specifically:

- . Although the data of the NITRAS system exhibits substantial reliability, it is still subject to error.
- . The classification of an attrite as either academic or nonacademic is made on judgment of circumstances on individual cases. It is difficult to classify borderline cases as academic and often academic attrites are classified as nonacademic attrites.
- . CNET Instruction 1540.4 establishes the policy and guidelines on academic attrition. However, local commands have options at their disposal that can mask an attrition problem.

These variations cannot be accounted for in the aggregate data base of this report. The acquisition of an extensively validated data set would have required the expenditure of additional resources with questionable utility for the gains made by such an investment.

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3. Weeks of Enrollment for the i^{th} Course

$$WE_i = \frac{NG_i (CL + 2) + WAA_i + NAA_i}{7}$$

4. Total Cost of Attrition of the i^{th} Course

$$CA_i = (EWC_i) (WAA_i + NAA_i)$$

5. Cost Academic Attrition of the i^{th} Course

$$CAA_i = \frac{(TCA) (NAA)}{NAA + NNAA}$$

6. Cost Nonacademic Attrition of the i^{th} Course

$$CNAA_i = \frac{(TCA) (NNAA)}{NAA + NNAA}$$

7. Academic Attrite Weeks of the i^{th} Course

$$WAA = \frac{(TWA) (NAA)}{NAA + NNAA}$$

8. Nonacademic Attrite Weeks of the i^{th} Course

$$WNAA = \frac{(TWA) (NNAA)}{NAA + NNAA}$$

Several variables of significant policy interest (i.e., Total Cost of Academic Attrition, Total Cost of Nonacademic Attrition, Total Weeks of Academic Attrition) were obtained by summing overall courses. These results are presented in appendix A.

The above calculations were made utilizing the data directly from the RMS data base; whereas, in the previous report an extract of similar variables (Per Capita Report No. 7) was used. At the time of the present analyses, Per Capita Report No. 7 was unavailable because its software was undergoing modification. However, the results obtained are not considered to be different than those that would have been obtained more directly from Per Capita Report No. 7, since the fundamental data source is the same.

In most cases course cost accounting procedures are such that costs for each course are reported under individual RMS cost codes. For some courses cost accounting procedures resulted in the joint allocation of cost because more than one course was combined under a single RMS cost code. Thus, individual course costs, for the combined course cost codes, must be estimated by proration. In these cases, costs were prorated among courses on the basis of student input; concomitantly attrition costs were prorated on the basis of the relative proportions of academic and nonacademic attrition for each course reported in the TSF. This

of this analysis was to determine the magnitude and impact of attrition in terms of what it costs the training community on a per capita and aggregate per course basis. It is an attempt to determine the impact of academic attrition in terms of lost training resources. This kind of analysis provides a basis for weighing the potential benefits of various CNET options or policies designed to influence attrition. Courses experiencing greater attrition cost may have greater potential for payoff, given that options are available for reducing attrition. Courses with high attrition cost and a relatively low number of attrites may be less likely to derive benefits from policies designed to influence attrition.

DATA SOURCE: RESOURCES MANAGEMENT SYSTEM (RMS) PER CAPITA DATA BASE FY 77

The RMS per capita data base is maintained annually and represents an aggregate of costs which includes cost elements such as student and instructor pay and allowances, equipment maintenance and depreciation, and other direct and indirect costs. The following variables were taken or calculated from the RMS data base:

TCC	=	Total Course Cost (student costs, instructor costs, overhead, depreciation)
TCA	=	Total Cost Attrition
TWA	=	Total Weeks Attrition
NAA	=	Number of Academic Attrition
NNAA	=	Number of Nonacademic Attrition
EWC _i	=	Cost per Enrollment Week of the i th Course
DC	=	RMS Direct Cost
SC	=	RMS Student Cost
NG _i	=	Number of Graduates of the i th Course
CL	=	Course Length
C _i	=	Total Cost of the i th Course
CA _i	=	Total Cost of Attrition of the i th Course
CAA _i	=	Total Cost of Nonacademic Attrition for the i th Course
CNAA _i	=	Total Cost of Nonacademic Attrition for the i th Course
CG _i	=	Course Cost per Graduate of the i th Course
WE _i	=	Weeks of Enrollment for the i th Course
WAA _i	=	Weeks of Academic Attrition for the i th Course
WNAA _i	=	Weeks of Nonacademic Attrition for the i th Course.

The following equations shown below were used to perform the various calculations. Several intermediate calculations were required to obtain values for the final results. These equations are presented here for completeness; however, the results obtained from these intermediate calculations are not necessarily shown individually in appendix A.

1. Total Course Cost

$$TCC = DC + SC$$

2. Course Cost per Graduate of the ith Course

$$CG_i = \frac{C_i}{NG_i}$$

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TABLE 5. COURSES IN WHICH UNQUALIFIED STUDENTS (WAIVERS) ATTRITED AT SIGNIFICANTLY HIGHER RATES THAN QUALIFIED STUDENTS (continued)

CDP	SHORT TITLES	CIN	CHI-SQUARE
6515	AE-A1	C-602-2012	17.85
6518	AMS-A1	C-603-2010	4.72
6523*	PH-LEVEL 1	C-400-2010	4.57
6529	ISA	A-242-0010	9.62
6537*	AW-A1	C-210-2010	24.19

Significant chi-square = 3.841

CDP - Course Data Processing Code

CIN - Course Identifying Number

*Course had significant chi-square in FY 76

TABLE 6. RMS COURSE COSTS FY 76 VS. FY 77*

	FY 76	FY 77
Total Course Cost	254,308,000	231,888,000
Total Attrition Cost	15,200,000	13,164,000
Total Academic Attrition Cost	8,800,000	7,130,000
Total Nonacademic Attrition Cost	6,400,000	6,018,000
Total Attrition Cost/Total Course Cost	5.97%	5.67%
Total Number of Courses	118	124

*The total course cost in FY 77 is significantly lower than FY 76 because the costs for a number of high cost courses were not available in the data base (i.e., nuclear power courses), and in some cases courses were phased out or combined. Inclusion of the cost data for these courses could have a profound effect on the figures listed above.

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TABLE 7. DISTRIBUTION OF ANNUAL COST OF COURSES (FY 76 VS. FY 77)

Cost in Thousands	Number of Courses		Cumulative Number of Courses		Cumulative Percent of Courses	
	FY 76	FY 77	FY 76	FY 77	FY 76	FY 77
Under 1,000	57	56	57	56	48	45
1,000-1,999	17	26	74	82	63	66
2,000-2,999	13	20	87	102	74	82
3,000-3,999	7	4	94	106	80	85
4,000-4,999	10	8	104	114	88	92
5,000-5,999	4	5	108	119	92	96
Over 6,000	10	5	118	124	100	100

TABLE 8. DISTRIBUTION OF ANNUAL COST OF TOTAL ATTRITION (FY 76 VS. FY 77)

Cost in Thousands	Number of Courses		Cumulative Number of Courses		Cumulative Percent of Courses	
	FY 76	FY 77	FY 76	FY 77	FY 76	FY 77
0 - 50	72	70	72	70	61	56
51 - 100	8	18	80	88	68	71
101 - 150	13	11	93	99	79	80
151 - 200	4	8	97	107	82	86
201 - 250	2	3	99	110	84	89
251 - 300	7	1	106	111	90	90
301 - 350	0	1	106	112	90	90
351 - 400	0	4	106	116	90	94
Over 400	12	8	118	124	100	100

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- . Courses with an annual cost of over \$6 million decreased by 50 per cent (10 to 5) in FY 77.
- . The biggest increases in numbers of courses occurred in the 1,000 - 1,999 and 2,000 - 2,999 categories (49 percent).

Table 8 displays the distribution of the annual cost of total attrition. Noteworthy items include:

- . The largest increase was in the 51 - 100 thousand cost level (56 percent).
- . The largest decrease was in the 251 - 300 thousand cost level.
- . Although the total courses in the over 400 thousand cost level decreased by four, the number of courses in the 300 thousand to 400 thousand cost category increased from 0 to 5.

While the obtained distributions of FY 77 data on total course costs and course attrition costs are useful in presenting an overall picture, tables 9 and 10 show the costs for academic and nonacademic attrition. Again, for tables 9 and 10 as well as the remaining tables, data are limited to 118 "A" courses for FY 76 and 124 "A" courses for FY 77. Distributions of the annual cost of academic attrition (table 9) and nonacademic attrition (table 10) are very similar. Both are highly skewed in a positive direction toward high cost; i.e., each distribution shows approximately 80 percent of the courses with attrition (academic and nonacademic) cost less than \$100,000. It is important to note that the distributions for FY 76 and FY 77 are almost the same. In the aggregate, academic attrition in FY 77 cost the Navy training community approximately \$7,130,000 for 3,595 attrites while the nonacademic attrition cost was \$6,018,000 for 3,843 attrites. These totals show that although attrition is almost evenly divided between academic and nonacademic (in absolute numbers of attrites), their respective cost is not equal. As percentages of total attrition cost, 54 percent is attributable to academic and 46 percent to nonacademic.

From table 9 it is clear that relatively few courses have large academic attrition costs. The problem is to determine a threshold for concern. In other words, there is no precise way to determine the cost point at which specific courses warrant a more detailed examination. As in the previous report (TAEG Report 47), examining the point at which cumulative academic attrition costs accelerate dramatically (table 9), a threshold of \$150,000 was taken. Given that value as a threshold of concern, 110 courses (88 percent of the "A" courses) have a total academic attrition cost of \$2,741,000, or 38 percent of the total academic attrition cost. Figure 5 pictorially displays these results for FY 77 and FY 76 data. It is noteworthy that in both years approximately the same number of courses (14 and 15) account for a majority of the total academic attrition cost.

Table 11 delineates by CDP and short title the 14 courses which have an annual academic attrition cost greater than \$150,000. This table also presents cost per graduate, percentage academic attrition, throughput, chi-square values of qualified/nonqualified trainees experiencing academic attrition, and mean values of each variable for all the courses. The threshold of \$150,000 was selected utilizing the information of table 9. Three parameters were selected for presentation in

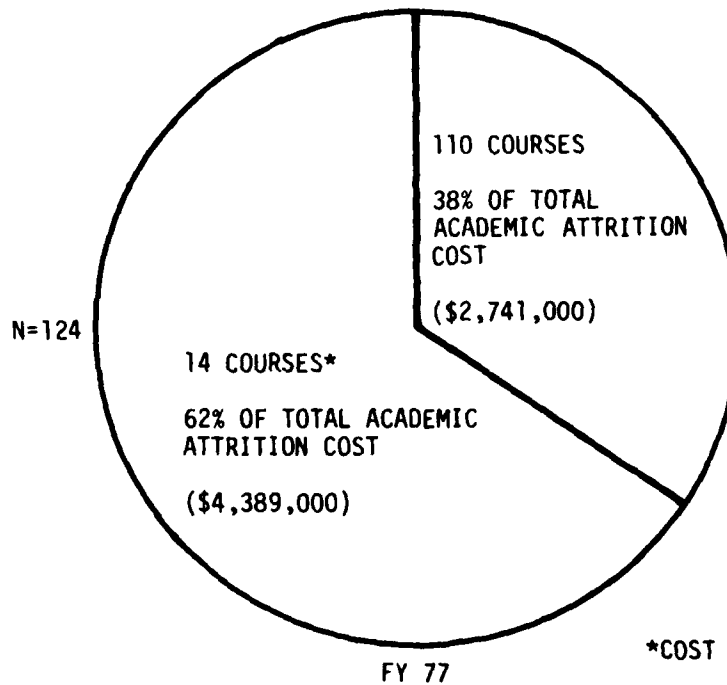
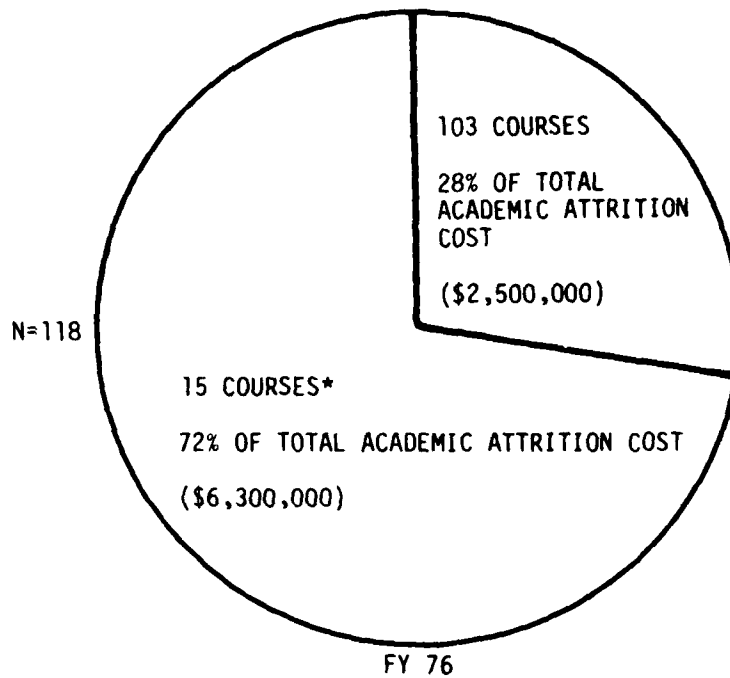
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TABLE 9. ANNUAL COST OF ACADEMIC ATTRITION (FY 76 VS. FY 77)

Cost in Thousands	Number of Courses		Cumulative Number of Courses		Cumulative Percent of Courses	
	FY 76	FY 77	FY 76	FY 77	FY 76	FY 77
0 - 50	85	95	85	95	72	77
51 - 100	10	9	95	104	81	84
101 - 150	8	6	103	110	87	88
151 - 200	3	4	106	114	90	92
201 - 250	2	1	108	115	92	93
251 - 300	1	4	109	119	92	96
301 - 350	2	1	111	120	94	97
351 - 400	3	0	114	120	97	97
Over 400	4	4	118	124	100	100

TABLE 10. ANNUAL COST OF NONACADEMIC ATTRITION (FY 76 VS. FY 77)

Cost in Thousands	Number of Courses		Cumulative Number of Courses		Cumulative Percent of Courses	
	FY 76	FY 77	FY 76	FY 77	FY 76	FY 77
0 - 50	82	88	82	88	68	71
51 - 100	16	22	98	110	83	89
101 - 150	7	4	105	114	89	92
151 - 200	4	4	109	118	92	95
201 - 250	4	1	113	119	96	96
251 - 300	1	2	114	121	97	98
301 - 350	2	1	116	122	98	98
351 - 400	1	1	117	123	99	99
Over 400	1	1	118	124	100	100



*COST \$150,000 PER ANNUM

Figure 5. Academic Attrition Costs Proportions Attributable To Courses Above or Below \$150,000 Threshold for Concern (FY 76 vs FY 77).

table 11 because high academic attrition cost may be attributed to one or more of these factors. For example, OT-A (CDP 6341) was high, relative to the mean, for cost per graduate and academic attrition percentage, but had low throughput. Conversely, MS-A (CDP 6125) has a high throughput, a low academic attrition percentage and a relatively low cost per graduate.

In any attempt made to lower the cost of academic attrition it is recommended that the 14 courses identified in table 11 be subjected to the initial analysis, with initial effort being devoted to those courses identified in both years (i.e., Music Basic, RM-A, etc). Analysis of the mean values for all courses of table 11 reveals an academic attrition percentage greater than the mean value of the 124 courses in the overall analyses. However, several of the courses have cost per graduate or throughput less than the mean values of the 124 courses. Therefore, even though all three parameters (cost per graduate, academic attrition rate, and throughput) influence the cost of academic attrition, the academic attrition percentage is still considered to be the most important variable to study.

TABLE 11. COURSES WITH ACADEMIC ATTRITION COST GREATER THAN \$150,000

CDP	Short Title	Cost per Graduate	Academic Attrition Percent	Throughput	Chi-square*
6065**	Music Basic	7,738	8	598	***
6125	MS-A	2,299	6	1,932	19.75
6142	OS-A	4,664	8	1,681	88.40
6144**	RM-A	2,900	7	3,342	51.27
6239**	AVA-AT-A1	5,753	9	1,435	3.72
6244	AFTA-AT-A1	10,818	5	513	6.72
6263**	ET-A1-ETN	3,045	6	1,400	2.33
6265**	ET-A1-ETC	3,119	5	1,386	24.48
6278**	AC-A1	7,125	17	527	14.20
6301**	CTR-A	10,307	16	468	9.40
6302**	CTT-A-PREP	6,541	14	656	6.06
6341	OT-A	23,304	12	78	0.10
6451	EW-CM-TECH	10,708	19	94	***
6476	EW FUND/PM TECH	46,954	9	36	***
Mean for 14 Courses		10,377	10.1	1,010	
Mean Value for 124 Courses		4,413	4.5	595	

* Significant chi-square = 3.841

** Courses had academic attrition cost greater than \$150,000 in FY 76

*** Waiver data unavailable

CDP - Course Data Processing Code

The last column of this table lists the chi-square values relating qualification and attrition for each course. The relationship between waivers and academic attrition is positive and significant for eight of the fourteen courses. It is also important to note that eight of the courses were repeats from the FY 76 analysis.

In general, the higher the cost of the course due to large throughput and cost per graduate, the higher the cost of attrition. This result is the same as it was in the FY 76 study. Consequently, to negate this scale factor, the attrition cost as a percentage of course cost was analyzed. Tables 12 through 14 show the frequency distributions of total attrition cost, academic attrition cost, and nonacademic attrition cost, respectively, as percentages of course cost for the 124 courses. Again, each distribution is positively skewed from the 1 percent level to the higher levels of percentage of total course cost. It should be noted that although the number of courses under 1 percent decreased significantly (from 41 to 19), the number of courses from 1 to 10 percent increased in all cases except one. It is of interest to note from table 12 that 15 courses have attrition cost equal to or greater than 10 percent of course cost. In tables 13 and 14 only nine and three courses, respectively, exceed 10 percent of the course cost. This apparent discrepancy can be explained by the combinatorial aspects of the data.

In the overall comparison of FY 76 costs vs. FY 77 costs depicted in table 12 the following are considered most significant:

- . The number of courses in the under 1 percent category decreased from 35 percent in FY 76 to 15 percent in FY 77.
- . Although the number of courses with attrition costs equal to or greater than 10 percent of course cost remained relatively constant from FY 76 to FY 77 (14 vs. 15), the number of courses in the 15 percent and above category increased from three in FY 76 to 11 in FY 77.

Note that the observations for total attrition presented above, apply similarly to the academic and nonacademic attrition. Both forms of attrition show that there is a marked decrease in the number of courses in the under 1 percent level and an increase in the number of courses in the 10 percent and above levels. The critical result is that in FY 76 over half the courses had an attrition cost to course cost ratio of less than 1 percent in both cases; whereas in FY 77 less than 50 percent of the courses were at this level (i.e., 44 percent for academic attrition and 30 percent for nonacademic attrition).

Figures 6 and 7 were constructed from the data in tables 13 and 14 with the curves from FY 76 data represented by the broken lines. From these curves the positive skewness of the data is quite apparent. Cost data for all courses for which RMS data were available in both FY 76 and FY 77 are contained in appendix D. Included in appendix D for reference purposes are the following course cost data: total cost, total attrition cost, academic attrition cost, nonacademic attrition cost, and cost per graduate.

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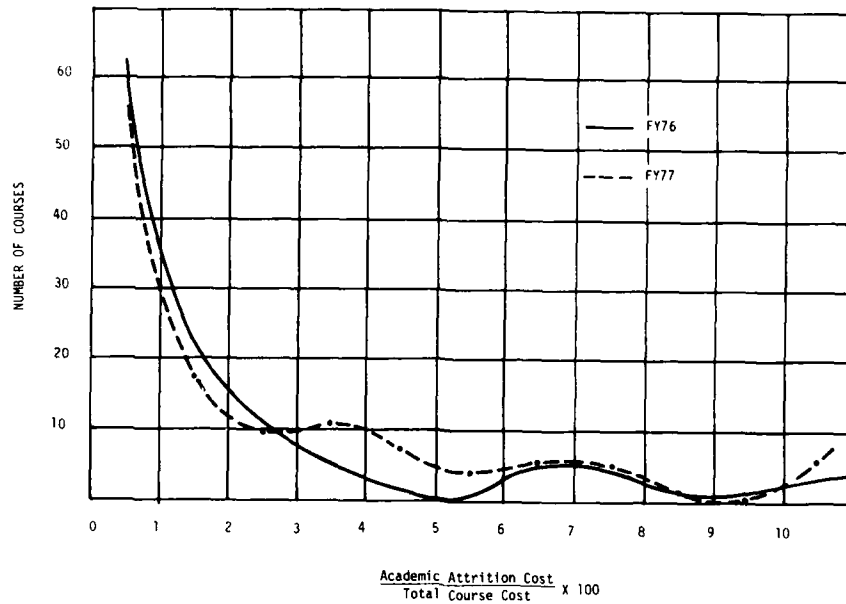


Figure 6. Academic Attrition Cost as a Percentage of Total Course Cost (FY 76 vs. FY 77)

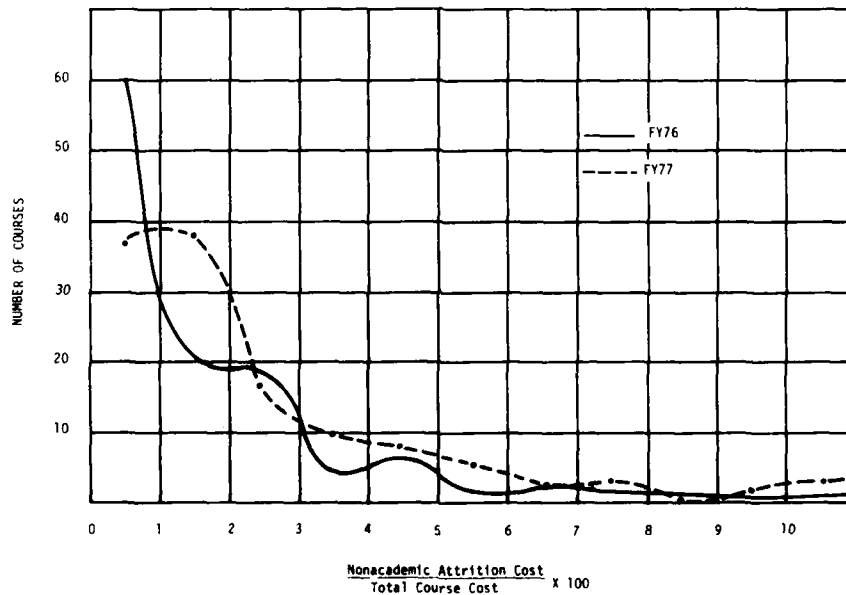


Figure 7. Nonacademic Attrition Cost as a Percentage of Total Course Cost (FY 76 vs. FY 77)

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TABLE 12. DISTRIBUTION OF THE ATTRITION COST
AS A PERCENTAGE OF COURSE COST
(FY 76 VS. FY 77)

Percent Attrition Cost Course Cost	Number of Courses		Cumulative Number of Courses		Cumulative Percent of Courses	
	FY 76	FY 77	FY 76	FY 77	FY 76	FY 77
Under 1	41	19	41	19	35	15
1.0 to 1.9	14	22	55	41	47	33
2.0 to 2.9	16	16	71	57	60	46
3.0 to 3.9	14	18	85	75	72	60
4.0 to 4.9	6	3	91	78	77	63
5.0 to 5.9	7	9	98	87	83	70
6.0 to 6.9	1	5	99	92	84	74
7.0 to 7.9	0	4	99	96	84	77
8.0 to 8.9	1	6	100	102	85	82
9.0 to 9.9	4	7	104	109	88	88
10.0 to 10.9	2	1	106	110	90	89
11.0 to 11.9	2	1	108	111	92	90
12.0 to 12.9	5	2	113	113	96	91
13.0 to 13.9	0	0	113	113	96	91
14.0 to 14.9	2	0	115	113	97	91
15 & Above	3	11	118	124	100	100

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TABLE 13. DISTRIBUTION OF THE ACADEMIC ATTRITION COST
AS A PERCENTAGE OF COURSE COST (FY 76 VS. FY 77)

Percent Academic Attrition Course Cost	Number of Courses		Cumulative Number of Courses		Cumulative Percent of Courses	
	FY 76	FY 77	FY 76	FY 77	FY 76	FY 77
Under 1	62	55	62	55	53	44
1.0 to 1.9	21	17	83	72	70	58
2.0 to 2.9	12	9	95	81	81	65
3.0 to 3.9	4	12	99	93	84	75
4.0 to 4.9	1	7	100	100	85	81
5.0 to 5.9	0	3	100	103	85	83
6.0 to 6.9	6	6	106	109	90	88
7.0 to 7.9	4	5	110	114	93	92
8.0 to 8.9	1	1	111	115	94	93
9.0 to 9.9	2	0	113	115	96	93
10 & Above	5	9	118	124	100	100

TABLE 14. DISTRIBUTION OF THE NONACADEMIC ATTRITION COST AS
A PERCENTAGE OF COURSE COST (FY 76 VS. FY 77)

Percent Nonacademic Attrition Course Cost	Number of Courses		Cumulative Number of Courses		Cumulative Percent of Courses	
	FY 76	FY 77	FY 76	FY 77	FY 76	FY 77
Under 1	60	37	60	37	51	30
1.0 to 1.9	21	38	81	75	69	60
2.0 to 2.9	19	18	100	93	85	75
3.0 to 3.9	4	10	104	103	88	83
4.0 to 4.9	7	8	111	111	94	90
5.0 to 5.9	1	5	112	116	95	94
6.0 to 6.9	2	1	114	117	97	94
7.0 to 7.9	1	3	115	120	97	97
8.0 to 8.9	1	0	116	120	98	97
9.0 to 9.9	1	1	117	121	99	98
10 & Above	1	3	118	124	100	100

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For the majority of the courses analyzed, the cost of academic attrition is a very small percentage of the overall cost of a course. The obvious implication for where to focus any effort to reduce academic attrition should be only in those few extremely high attrition cost courses. In the few courses with relatively high attrition costs, both the opportunity to improve and the payoff are greatest. The cost of exploring attrition reducing policies and practices elsewhere would not be likely to equal or exceed the benefit.

SECTION IV

SUMMARY OF FINDINGS AND RECOMMENDATIONS FOR FUTURE CONSIDERATIONS

This section presents the significant findings of this study with comments as appropriate. The findings are organized by attrition levels, attrition cost, and causes of attrition. A series of recommendations is also presented. The order in which the findings are presented does not represent a priority in which they should be addressed for correction of the problem, order of difficulty, or cost to be saved or expended. For each item the specific page(s) of the present report is cited for the reader who wishes more detail.

Extent and Patterns of Attrition in A1 and A3 Courses

- . Total attrition in 156 A1 and A3 courses was 8.5 percent (7,477) of total enrollment (87,938) during FY 77 (page 14).
- . Compared with attrition from the Navy prior to the end of obligated service (42 percent) academic and nonacademic attrition represents a far smaller percentage.³ In fact, the bulk of attrition from A1 and A3 courses represents virtually no direct attrition from the Navy.
- . Academic attrition and nonacademic attrition in the aggregate represents about the same amount of attrites, 4.1 percent academic and 4.4 percent nonacademic (page 14).
- . Individual courses vary widely in the percentage of academic and nonacademic attrites. Specific inferences cannot be made for individual courses (page 14).
- . Sixteen percent (10,917 + 66,653) of the inputs to the 156 A1 and A3 courses are waived; i.e., do not meet minimum ASVAB course entrance requirements. These percentages include waived personnel under special categories such as racial minority and reading difficulty (page 22). "The statistics on page 22 of the report indicate that the Navy is doing a good job in their recruitment of 'unqualified trainees.' Of this group of 10,917, only 827 (8.2%) academically attrited from 'A' school. To eliminate these attrites would have reduced school output by over 10,000 in 1977. Since it is very likely that the recruiters were unable to recruit enough 'qualified trainees' (with a 3.5% academic attrition rate), the enrollment of this unqualified group seems to have been extremely cost effective. In addition, as pointed out...in the report, the bulk of attrites from A1 and A3 courses do not attrite from the Navy."⁴

³ Verbal communication from Captain W. A. Lamm, Special Assistant for Attrition, Deputy Chief of Naval Personnel, Bureau of Naval Personnel, March 1978.

⁴ Personal communication from Dr. I. Shever, CNET Code 005. However, the authors maintain that special attention to the training problems of waived trainees is warranted.

Overall and Course Specific Costs of Academic Attrition

- . Total cost for 124 courses analyzed in this study for FY 77 was \$231,888,000. Attrition constitutes \$13,164,000 of this total (page 21).
- . Academic attrition cost for the 124 courses analyzed is \$7,130,000 per year whereas nonacademic attrition is \$6,018,000 (page 26).
- . In the aggregate, academic attrition costs are greater than non-academic costs because a relatively few high cost courses have far greater academic than nonacademic attrites (page 26).
- . Fourteen courses account for 62 percent of all academic attrition cost (page 26).
- . Fourteen courses have academic attrition costing more than \$150,000 per year (page 29).
- . Nine courses have academic attrition costs greater than 10 percent of their respective course cost (page 30).

Factors Associated with Academic Attrition

- . Variables such as course length, throughput, and number of convenings are positively related to academic attrition (page 22).
- . Forty courses show a significant course waiver effect (page 23, 24).
- . Eight of the 15 most costly courses also show a significant course waiver effect (page 29).
- . Setbacks; i.e., trainees who repeat some portion of a course, represent a potentially greater area of uncertainty than course attrition. Setbacks represent 11.5 percent of enrollment. Their cost and attrition implications are for the most part unknown (page 14).

ATTRITION IN FY 76 VS. FY 77

The following comparisons of FY 76 to FY 77 data must be interpreted with extreme caution because of the limitation of two data points--the differing of courses between years and tenuous nature of the data in both years.

- . Total attrition in FY 77 was greater than that in FY 76.
- . Total attrition cost in FY 77 was less than that of FY 76.
- . Enrollment was higher during FY 77 than in FY 76.

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RECOMMENDATIONS

The recommendations and conclusions of this study are outlined below. They are identical to those offered in the previous study (TAEG Report 47).

- . Careful in-depth monitoring and scrutiny should be continued by CNTECHTRA of all courses, and TAEG's assistance should be requested on specific attrition problems.
- . Special attention should be given to schools that have high waivers and high percentage of waiver failures.
- . Investigate "C" courses to ascertain if "C" school attrites should have been attrited from "A" school.
- . Investigate entire pipeline of a rating to ascertain where and when personnel attrite. A hypothesis is that personnel who attrite from "C" schools did poorly in "A" schools. It is costly to train personnel in a series of courses (i.e., Basic Electricity and Electronics supplies inputs to Electronic Technician "A" school which supplies inputs to "C" school) and have them attrite after completion of "A" school.
- . Investigate courses that have high attrition for a possible two-track system. One track would continue to turn out graduates based on current time and material whereas the other track would increase the course length.
- . Perform detailed analyses on waivers to ascertain if waiver score point spread should be tightened.
- . Investigate further the relationship between setbacks and attrition. Revise/establish setback policy.
- . Investigate when and where setback and/or failure occur during selected courses (i.e., time, subject matter, etc.).
- . Perform analysis on setbacks from the following perspectives:
 - (1) Academic setbacks
 - (2) Nonacademic setbacks
 - (3) Setback policy from individual course, school, and CNET in the aggregate
 - (4) Cost of setbacks.

AND UNQUALIFIED ATTRITION (continued)

FIED T	ACADEMIC ATTRITION		QUALIFIED ATTRITES			UNQUALIFIED ATTRITES			CHI-SQUARE
	NUMBER	% OF TOTAL INPUT	NUMBER	OF QUAL INPUT	OF ACADEMIC ATTRITES	NUMBER	OF UNQUAL INPUT	OF ACADEMIC ATTRITES	
5	6	7	8	9	10	11	12	13	14
41	6±1		8±1			11±1		11±6	
13.3	2	1.9	1	1.1	50.0	1	7.1	50.0	0.24
15.6	0	0	0	0	0	0	0	0	-
19.2	19	11.4	16	11.9	84.2	3	9.4	15.8	0.50
12.9	2	1.2	1	0.7	50.0	1	4.5	50.0	0.26
24.9	43	4.9	26	3.9	60.5	17	7.7	39.5	4.35*
-	-	-	-	-	-	-	-	-	-
8.6	0	0	0	0	0	0	0	0	-
35.4	0	0	0	0	0	0	0	0	-
7.2	2	2.9	2	3.1	100.0	0	0	0	0.97
16.7	5	0.5	4	0.4	80.0	1	0.6	20.0	0.12
20.8	8	0.7	3	0.4	37.5	5	2.2	62.5	6.17*
-	-	-	-	-	-	-	-	-	-
8.0	0	0	0	0	0	0	0	0	-
21.8	133	6.5	83	5.1	62.4	50	11.1	37.6	19.75*
38.3	9	15.0	3	8.1	33.3	6	26.1	66.7	2.32
10.1	39	13.1	31	11.6	79.5	8	26.7	20.5	4.12*
5.5	1	0.1	1	0.14	100.0	0	0	0	3.58
7.4	10	1.1	9	1.1	90.0	1	1.5	10.0	8.74*
18.7	0	0	0	0	0	0	0	0	-
18.6	146	8.4	76	5.4	52.1	70	21.7	47.9	88.40*
10.3	254	7.7	194	6.5	76.4	60	17.6	23.6	51.27*
11.9	82	12.2	70	11.8	85.4	12	15.0	14.6	0.41
12.6	0	0	0	0	0	0	0	0	-
7.2	3	1.7	3	1.8	100.0	0	0	0	0.41
18.8	11	2.9	8	2.6	72.7	3	4.3	27.3	0.12
9.2	28	6.6	22	5.7	78.6	6	15.4	21.4	3.94*
12.9	36	35.6	32	36.4	88.9	4	30.8	11.1	0.49
21.0	0	0	0	0	0	0	0	0	-
16.8	1	1.1	1	1.3	100.0	0	0	0	0.79
-	-	-	-	-	-	-	-	-	-
16.7	0	0	0	0	0	0	0	0	-
9.8	1	0.2	0	0	0	1	1.7	100.0	1.84
10.3	1	0.3	0	0	0	1	2.5	100.0	1.72
8.3	0	0	0	0	0	0	0	0	-
37.5	0	0	0	0	0	0	0	0	-
9.9	0	0	0	0	0	0	0	0	-
26.3	104	16.4	62	13.2	59.6	42	25.1	40.4	11.96*
30.6	6	1.3	3	0.9	50.0	3	2.1	50.0	0.35
10.0	148	9.8	126	9.3	85.1	22	14.6	14.9	3.72
14.4	36	10.2	26	8.6	72.2	10	19.6	27.8	4.67*

TABLE B-1. QUALIFIED AND UNQUALIFIED ATTRIBUTION

CDP	SHORT TITLE	CIN	QUALIFIED INPUT			UNQUALIFIED INPUT		ACADEMIC ATTRIBUTION
			TOTAL INPUT	NUMBER	% OF TOTAL INPUT	NUMBER	% OF TOTAL INPUT	
1	2	3	4	5	6			
			2+1			4+1		
6082	SW-A	A711 0015	105	91	86.7	14	13.3	2
6083	UT-A	A720 0012	64	54	84.4	10	15.6	0
6093	TM SUB/TORP TECH	A123 0127	167	135	80.8	32	19.2	19
6097	EO-A	A730 0010	170	148	87.1	22	12.9	2
6102	PN-A	A500 0014	886	665	75.1	221	24.9	43
6103	OT-A	A210 0011	-	-	-	-	-	-
6108	FT-A2	A113 0019	455	416	91.4	39	8.6	0
6115	GM-A	A041 0010	387	250	64.6	137	35.4	0
6118	SQQ23 PAIR OP-BAS	A130 0097	69	64	92.8	5	7.2	2
6119	HT-A1	A780 0035	1106	932	84.3	174	16.7	5
6120	HT-A1	A780 0035	1079	855	79.2	224	20.8	8
6122	CTI-A2-HEBREW	A232 0041	-	-	-	-	-	-
6123	CTI-A2-ARABIC	A232 0042	25	23	92.0	2	8.0	0
6125	MS-A	A800 0013	2062	1612	78.2	450	21.8	133
6126	QRTR-MSTR BASE	A772 0010	60	37	61.7	23	38.3	9
6131	DS-A	A150 0025	297	267	89.9	30	10.1	39
6135	ET-A-3R	A104 0010	775	732	94.5	43	5.5	1
6137	ET-A-3N	A102 0010	914	846	92.6	68	7.4	10
6140	CTI-A2-FRENCH	A232 0040	16	13	81.3	3	18.7	0
6142	OSA	A221 0011	1735	1412	81.4	323	18.6	146
6144	RMA	A202 0014	3310	2969	89.7	341	10.3	254
6146	PLRS-POS-ELECT-A	A121 0142	674	594	88.1	80	11.9	82
6149	CM-A	A610 0022	119	104	87.4	15	12.6	0
6161	CTM-A	A102 0109	180	167	92.8	13	7.2	3
6167	DP-A	A531 0016	373	303	81.2	70	18.8	11
6172	STS-CLASS A	A130 0029	425	386	90.8	39	9.2	28
6178	EW-OP-MAINT/TECH	A102 0154	101	88	87.1	13	12.9	36
6182	ASH-A1	C602 2023	124	98	79.0	26	21.0	0
6183	ASM-A1	C602 2024	95	79	83.2	16	16.8	1
6184	INTRO WELD	A700 0011	-	-	-	-	-	-
6193	MK-111-OP-BAS	A130 0088	12	10	83.3	2	16.7	0
6194	MK-114-OP-BAS	A130 0083	604	545	90.2	59	9.8	1
6195	SQS-DG-OP-BAS	A130 0084	390	350	89.7	40	10.3	1
6196	SQS-35V-38-OPBAS	A130 0085	36	33	91.7	3	8.3	0
6197	SQS-26-BX-OPBAS	A130 0092	8	5	62.5	3	37.5	0
6198	SQS-26-CX/AXR	A130 0086	444	400	90.1	44	9.9	0
6206	SH-A	A823 0012	636	469	73.7	167	26.3	104
6209	SH-A	A823 0012	474	329	69.4	145	30.6	6
6239	AVA-AT-A1	C100 2013	1509	1358	90.0	151	10.0	148
6240	AVA-AQ-A1	C100 2013	354	303	85.6	51	14.4	36

*Significant Chi-square = 3.841

QUALIFIED AND UNQUALIFIED ATTRITION

UNQUALIFIED INPUT		ACADEMIC ATTRITION		QUALIFIED ATTRITES			UNQUALIFIED ATTRITES			CHI-SQUARE
NUMBER	% OF TOTAL INPUT	NUMBER	% OF TOTAL INPUT	NUMBER	% OF QUAL INPUT	% OF ACADEMIC ATTRITES	NUMBER	% OF UNQUAL INPUT	% OF ACADEMIC ATTRITES	
1	5	6	7	8	9	10	11	12	13	14
	4+1		6+1		8+1	8+6		11+1	11+6	
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
12	8.7	0	0	0	0	0	0	0	0	-
-	-	-	-	-	-	-	-	-	-	-
2	6.5	2	6.5	1	3.4	50	1	50	50	1.23
3	5.5	3	5.5	3	5.8	100	0	0	0	0.77
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
6	12.2	0	0	0	0	0	0	0	0	-
-	-	-	-	-	-	-	-	-	-	-
85	18.6	72	15.8	39	10.5	54.2	33	38.2	45.8	39.59*
81	25.2	39	12.1	22	9.1	56.4	17	20.9	43.6	6.93*
72	17.1	17	4.0	10	2.9	58.8	7	9.7	41.2	5.55*
76	24.1	43	13.7	27	11.3	62.8	16	21.1	37.2	3.86*
96	9.4	36	3.5	25	2.7	69.4	11	11.5	30.6	16.99*
48	25.8	19	10.2	7	5.1	36.8	12	25.0	63.2	13.32*
94	10.9	72	8.3	57	7.4	79.2	15	16.0	20.8	6.91*
23	16.3	8	5.7	7	5.9	87.5	1	4.3	12.5	0.63
24	12.6	18	9.5	17	10.2	94.4	1	4.2	5.6	1.75
23	22.8	5	5.0	2	2.6	40.0	3	13.0	60	2.22
11	15.5	3	4.2	2	3.3	66.7	1	9.1	33.3	3.29
6	11.3	6	11.3	4	8.5	66.7	2	33.3	33.3	1.26
30	10.9	24	8.7	16	6.5	66.7	8	26.7	33.3	11.27*
78	33	90	7.9	52	6.8	57.8	38	10.1	42.2	3.31
79	21.8	33	2.3	14	1.4	42.4	19	6.8	57.6	23.29*
45	19.7	9	3.9	6	3.3	66.7	3	6.7	33.3	0.39
11	24.4	0	0	0	0	0	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
97	19.5	41	8.2	23	5.6	56.1	18	18.6	43.9	15.27*
19	13.0	3	0.2	2	0.1	66.7	1	0.5	33.3	3.68
-	-	-	-	-	-	-	-	-	-	-
16	12.3	4	0.4	3	0.4	75.0	1	0.9	25.0	2.11
10	16.9	9	15.3	8	16.3	88.9	1	10.0	11.1	0.98
13	23.2	3	5.4	1	2.3	33.3	2	15.4	66.7	1.28
1	16.7	0	0	0	0	0	0	0	0	-
7	10.8	0	0	0	0	0	0	0	0	-
17	10.8	0	0	0	0	0	0	0	0	-

TABLE B-1. QUALIFIED AND UNQUALIFIED

CDP	SHORT TITLE	CIN	QUALIFIED INPUT			UNQUALIFIED INPUT		ACAD ATTR
			TOTAL INPUT	NUMBER	% OF TOTAL INPUT	NUMBER	% OF TOTAL INPUT	
1	2	3	4	5	6			
			2±1		4±1			
130E	NUC PWR	A661 0010	-	-	-	-	-	-
340S	AVR-A1	C100 2014	-	-	-	-	-	-
348X	SQ-23-PAIR OPBAS	A130 0097	-	-	-	-	-	-
541U	SQS 53 OPBAS	A130 0103	138	126	91.3	12	8.7	0
1300	NUC PWR	A661 0010	-	-	-	-	-	-
1301	NUC PWR	A661 0010	-	-	-	-	-	-
2053	CTT-FLR 11/15 OPS	A231 0024	31	29	93.5	2	6.5	2
3197	CTT ELINT OP	A231 0028	55	52	94.5	3	5.5	3
3522	AVCC-A1	C780 2010	-	-	-	-	-	-
3806	ET SEIR	A104 0012	-	-	-	-	-	-
4084	CTT CLSC WIZ OP	A231 0038	49	43	87.8	6	12.2	0
5261	SCAT-MOD-2	A100 0036	-	-	-	-	-	-
5309	SCAT-MOD-1	A100 0035	-	-	-	-	-	-
6001	QM-A	A061 0012	456	371	81.4	85	18.6	72
6002	QM-A	A061 0012	322	241	74.8	81	25.2	39
6005	SM-A	A061 0011	420	348	82.9	72	17.1	17
6006	SM-A	A061 0011	315	239	75.9	76	24.1	43
6015	SURF-ST-CLASS A	A130 0037	1017	921	90.6	96	9.4	36
6025	GMT-A	A644 0014	186	138	74.2	48	25.8	19
6027	FTA-A	A113 0010	863	769	89.1	94	10.9	72
6034	TM-SS-TORP-OP	A123 0127	141	118	83.7	23	16.3	8
6036	TM-OP-A/S-TORP	A123 0127	190	166	87.4	24	12.6	18
6041	MN-A	A647 0016	101	78	77.2	23	22.8	5
6046	IM-A	A670 0010	71	60	84.5	11	15.5	3
6047	QM-A	A670 0018	53	47	88.7	6	11.3	6
6053	CTO-A	A580 0016	276	246	89.1	30	10.9	24
6057	YN-A	A510 0012	1145	767	67.0	378	33	90
6059	SK-CLASS A	A551 0014	1279	1000	78.2	279	21.8	33
6061	DK-A	A542 0011	229	184	80.3	45	19.7	9
6063	INFO SPEC JO A1	A570 0011	45	34	75.6	11	24.4	0
6065	MUSIC BASIC	A450 0010	-	-	-	-	-	-
6068	MR/A	A702 0019	497	400	80.5	97	19.5	41
6070	EM/A	A662 0016	1691	1472	87.0	219	13.0	3
6071	EM/A	A662 0016	-	-	-	-	-	-
6073	IC-A	A623 0012	946	830	87.7	116	12.3	4
6076	PM-A	A790 0012	59	49	83.1	10	16.9	9
6077	ML-A	A790 0010	56	43	76.8	13	23.2	3
6078	EA-A	A412 0010	6	5	83.3	1	16.7	0
6079	CE-A	A721 0018	65	58	89.2	7	10.8	0
6081	BU-A	A710 0010	158	141	89.2	17	10.8	0

*Significant Chi-square = 3.841

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APPENDIX B

QUALIFIED AND UNQUALIFIED TRAINEE ATTRITION

ION DATA FOR CLASS A1 AND A2 COURSES (continued)

GRADUATES	ACADEMIC ATTRITION (#)	ACADEMIC ATTRITION (%)	NONACADEMIC ATTRITION (#)	NONACADEMIC ATTRITION (%)	TOTAL ATTRITION (#)	TOTAL ATTRITION (%)	STANDARD ATTRITION (%)	SETBACKS (#)	SETBACKS (%)	RMS COST CODE	TOTAL COURSE COST (000's)	COST PER GRADUATE	ACADEMIC ATTRITION COST (000's)	NONACADEMIC ATTRITION COST (000's)	TOTAL ATTRITION COST (000's)	MARGINAL COST** (000's)
39	2	5	1	3	3	8	20	0	-	5FCC	84	2145	15.5	7.7	23.2	7.9
49	0	-	1	2	1	2	20	0	-	5FCC	116	2363	0.0	6.7	6.7	2.3
365	4	1	11	3	14	4	4	37	10	5CBA	1294	3545	3.8	10.5	14.3	8.1
720	70	9	46	6	121	15	9	203	24	5CBA	2763	3837	101.8	66.9	168.7	96.1
89	0	-	15	3	15	3	10	15	3	5BBA	311	3495	0.0	50.7	50.7	27.9
1739	0	-	17	1	17	1	2	0	-	5DBS	2490	1431	0.0	15.7	15.7	7.7
1754	0	-	0	-	0	-	2	0	-	5DBT	2149	1225	0.0	0.0	0.0	5.6
969	0	-	31	3	31	3	10	31	3	5BBA	3508	3619	0.0	121.2	121.2	66.6
111	1	1	0	-	1	1	0	1	1	5SCC	227	2048	4.0	0.0	4.0	1.3
343	0	-	3	1	3	1	0	0	0	5SCB	605	1763	0.0	1.3	1.3	0
25	7	13	22	37	29	46	0	10	19	-	-	-	-	-	-	-
23	0	-	3	12	3	12	0	0	-	-	-	-	-	-	-	-
21	0	-	0	-	0	-	0	0	-	-	-	-	-	-	-	-
94	26	19	6	5	32	23	10	28	20	5VB1	1007	10708	317.7	73.3	391.0	132.9
28	8	23	0	-	8	23	10	12	32	5BV1	-	-	-	-	-	-
7	3	13	0	-	3	13	10	15	50	-	-	-	-	-	-	-
34	2	3	2	3	4	5	5	6	7	9PBB	-	-	-	-	-	-
36	15	9	10	6	25	15	10	82	42	5VBB	1690	46954	256.4	171.0	427.4	128.2
-	0	-	1	13	1	13	0	0	-	-	-	-	-	-	-	-
2534	136	5	54	2	193	7	8	0	-	5ACC	4492	1772	127.7	50.7	178.5	67.8
1504	32	2	64	4	97	6	10	488	27	5AIB	4206	2796	42.9	85.9	128.8	65.7
384	4	1	8	2	16	4	5	21	5	5PDD	802	2098	3.4	6.9	10.3	3.8
325	22	6	4	1	26	7	8	38	10	5PDB	1100	3385	34.9	6.3	41.2	14.8
1573	34	2	52	3	87	5	7	379	20	5BFB	5424	3448	54.0	82.6	136.6	66.9
589	13	2	19	3	26	4	7	109	16	5AEB	2230	3785	23.4	34.2	57.7	17.3
1397	15	1	44	3	60	4	7	220	14	5AED	2865	2050	21.6	63.3	84.9	36.5
1963	21	1	84	4	106	5	10	409	18	5AEC	5226	2662	37.4	149.7	187.1	91.7
566	6	1	30	5	36	6	5	231	33	5PCB	2489	4397	12.7	63.5	76.3	28.2
326	12	4	15	5	27	9	5	82	25	5PBB	2079	6379	31.4	39.4	70.8	31.8
433	0	-	4	1	4	1	5	0	-	5BEB	1096	2531	0.0	12.8	12.8	5.1
449	0	-	14	3	14	3	5	0	-	5SBB	-	-	-	-	-	-
290	30	8	4	1	34	9	8	22	6	5HBB	-	-	-	-	-	-
406	0	-	4	1	4	1	5	26	6	5PDC	792	1951	0.0	6.3	6.3	2.1
544	17	3	11	2	28	5	8	28	5	5SCB	1059	1946	14.2	9.2	23.4	10.1
233	28	10	11	4	40	14	10	22	8	5MBB	607	2605	10.9	4.3	15.2	11.3
192	0	-	4	2	4	2	5	8	4	5ADB	588	3064	0.0	6.4	6.4	2.7
73	12	14	0	-	12	14	5	6	7	5ABB	241	3305	18.3	0.0	18.3	5.3
505	57	10	28	5	88	15	15	199	31	5BCB	1954	3869	99.7	49.0	148.6	62.4

TABLE A-1. ATTRITION DATA FOR CLASS A1 AND A2 COURSES (cont)

CDP	SHORT TITLE	CIN	LOCATION	COURSE LENGTH (Days)	NUMBER OF CONVENINGS	TYPE COURSE*	MINIMUM ASVAB	INPUT	GRADUATES	ACADEMIC ATTRITION (%)	ACADEMIC ATTRITION (%)	NONACADEMIC ATTRITION (%)	NONACADEMIC ATTRITION (%)	TOTAL ATTRITION (%)
6346	SCAT-MOD-4	A100 0051	NEW LONDON	12	10	L	100	39	39	2	5	1	3	3
6347	SCAT-MOD-3	A100 0050	NEW LONDON	19	11	L	100	59	49	0	-	1	2	1
6376	FTG-A2	A113 0019	G. LAKES	96	25	L	225	333	365	4	1	11	3	14
6377	FTG-A1	A113 0010	G. LAKES	75	50	L	225	770	720	70	9	46	6	121
6378	GMT ASROC A	A041 0010	G. LAKES	82	50	L	163	100	89	0	-	15	3	15
6380	RM A SEA	A202 0026	SAN DIEGO	31	252	P	100	1651	1739	0	-	17	1	17
6381	RM A SHORE	A202 0027	SAN DIEGO	17	252	P	100	1709	1754	0	-	0	-	0
6400	GMG A	A041 0010	G. LAKES	82	50	L	163	1062	969	0	-	31	3	31
6401	BQQ-2 BAS OP	A130 0189	SAN DIEGO	26		L	225	104	111	1	1	0	-	1
6402	OA-1283 BAS OP	A130 0188	SAN DIEGO	26		L	225	337	343	0	-	3	1	3
6418	DIVER SECOND	A433 0022	WASH DC	86	4	L	0	72	25	7	13	22	37	29
6419	SCUBA DIVER	A433 0023	WASH DC	29		L	0	25	23	0	-	3	12	3
6444	I IN STS "A"	A130 0204	SAN DIEGO	96	3	L	0	21	21	0	-	0	-	0
6451	EW CM TECH	A102 0214	CORRY	68	25	L	0	154	94	26	19	6	5	32
6452	RES EM CM TECH	A102 0214	CORRY	47	25	L	0	34	28	9	23	0	-	8
6457	ET (SU) EW TECH	A102 0224	CORRY	138	5	L	0	38	7	3	13	0	-	3
6473	AG A1	C420 2010	CHANUTE	101	16	L	110	125	34	2	3	2	3	4
6476	EW FUND/PM TECH	A102 0209	CORRY	129	14	L	0	272	36	15	9	10	6	25
6478	CTM EW TECH	A102 0234	CORRY				15	-	-	0	-	1	13	1
6501	ADJ-A1	A601 2010	MEMPHIS	41	252	B	193	2731	2534	136	5	54	2	193
6506	AO-A1	A646 2010	MEMPHIS	64	49	L	201	1621	1504	32	2	64	4	97
6512	ABF-A1	C821 2010	LAKEHURST	26	24	L	96	419	384	4	1	8	2	16
6513	ABE-A1	C680 2012	LAKEHURST	45	25	L	96	394	325	22	6	4	1	26
6515	AE-A1	C602 2012	MEMPHIS	75	100	L	212	1835	1573	34	2	52	3	87
6516	AME-A1	C602 2015	MEMPHIS	62	50	L	96	668	589	13	2	19	3	26
6517	AMH-A1	C602 2017	MEMPHIS	49	50	L	96	1521	1397	15	1	44	3	60
6518	AMS-A1	C603 2010	MEMPHIS	61	50	L	96	2171	1963	21	1	84	4	106
6519	PR-BASIC	C602 2010	LAKEHURST	70	50	P	156	605	566	6	1	30	5	36
6520	AG-A1	C420 2010	LAKEHURST	101	16	L	110	246	326	12	4	15	5	27
6521	TD-A1	C191 2010	MEMPHIS	39	252	P	225	413	433	0	-	4	1	4
6522	AKA	C551 2010	MERIDIAN	51	50	P	105	492	449	0	-	14	3	14
6523	PH-LEVEL 1	C400 2010	PENSACOLA	85	52	P	105	425	290	30	8	4	1	34
6527	ABH-A1	C822 2010	LAKEHURST	24	25	L	96	424	406	0	-	4	1	4
6528	AZ-A1	C516 2010	MERIDIAN	47	25	L	105	553	544	17	3	11	2	28
6529	ISA	A242 0010	LOWRY	82	16	L	105	295	233	28	10	11	4	40
6530	ASE-A1	C602 2019	MEMPHIS	64	25	L	156	221	192	0	-	4	2	4
6536	TM-AS-TORP-TECH	A123 0127	ORLANDO	40	25	L	96	84	73	12	14	0	-	12
6537	AW-A1	C210 2010	MEMPHIS	80	50	L	110	581	505	57	10	28	5	88

*P = Self-paced
L = Lock-step

C = Computer Managed Instruction
B = Both Self-paced and Lock-step

** As defined on p. 21

DATA FOR CLASS A1 AND A3 COURSES (continued)

ACADEMIC ATTRITION (#)	ACADEMIC ATTRITION (%)	NONACADEMIC ATTRITION (#)	NONACADEMIC ATTRITION (%)	TOTAL ATTRITION (#)	TOTAL ATTRITION (%)	STANDARD ATTRITION (%)	SETBACKS (#)	SETBACKS (%)	RMS COST CODE	TOTAL COURSE COST (000's)	COST PER GRADUATE	ACADEMIC ATTRITION COST (000's)	NONACADEMIC ATTRITION COST (000's)	TOTAL ATTRITION COST (000's)	MARGINAL COST** (000's)
30		24	4	55	9	10	303	41	5BBD	5550	10818	154.6	123.7	278.3	150.3
9		4	3	12	10	10	61	41	5BBD	1120	8238	31.8	14.1	45.9	24.8
6		8	5	12	8	10	67	37	5BBD	1404	8830	21.2	28.3	49.5	26.7
29		608	19	608	19	10	0	-	5JGB	5128	2028	8.7	182.2	190.9	
0		69	5	69	5	10	0	-	5JFA	1357	1021	0.0	11.8	11.8	3.9
0		345	7	345	7	10	0	-	5JBA	9578	2103	0.0	534.8	534.8	278.1
88		88	6	198	13	12	198	13	5DBA	4263	3045	198.4	198.4	396.8	222.2
23		18	8	41	17	12	31	13	5DBA	663	2986	41.5	32.5	74.0	41.5
74		104	7	181	12	12	168	11	5DBA	4323	3119	156.0	219.2	375.1	210.1
30		20	2	50	5	8	103	10	5DBA	2946	2966	86.8	57.9	114.7	81.0
10		6	3	14	7	8	18	9	5DBA	588	3094	30.4	18.2	48.7	27.3
18		18	2	36	4	8	75	8	5DBA	2670	3006	49.6	49.6	99.3	55.6
114		25	4	137	20	15	317	41	5FBB	3755	7125	290.7	63.8	354.5	109.9
2		2	1	4	2	5	16	7	5HBB	780	3733	5.3	5.3	10.6	3.7
0		0	-	0	-	5	0	-	5MCB	91	6975	0.0	0.0	0.0	0
1		1	2	2	4	4	1	2	5MOB	218	4842	0.0	0.0	0.0	0
0		10	7	10	7	4	3	2	5NCB	730	5937	0.0	9.6	9.6	5.6
0		2	2	2	2	6	0	-	5HBB	494	4495	0.0	6.1	6.1	2.2
2		7	4	9	5	5	13	7	5PDB	955	5335	1.5	5.4	7.0	2.5
0		6	2	6	2	5	3	1	5PCB	1099	3340	0.0	2.2	2.2	1.0
16		3	10	24	27	12	99	78	9VBB						
0		0	-	0	-	10	0	-							
103		56	9	162	24	25	485	58	5QCH	4824	10307	542.3	294.9	837.2	36.0
123		33	4	162	18	15	686	59	5QCJ	4291	6541	605.3	162.4	767.7	330.1
1		1	1	2	2	0	34	28	5QCK	361	3644	0.0	0.0	0.0	0
13		4	1	17	4	0	193	37	5QCM	1088	2733	16.0	4.9	21.0	7.8
3		1	1	6	4	3	16	11	-						
0		1	6	1	6	3	0	-	-						
0		1	6	1	6	3	0	-	-						
0		0	-	0	-	3	5	22	-						
0		0	-	0	-	3	0	-	-						
0		0	-	0	-	3	0	-	-						
1		0	-	1	3	3	0	-	-						
0		0	-	0	-	3	0	-	-						
4		2	2	7	6	0	1	1	5FDB	570	5939	86.9	43.5	130.4	41.7
0		22	2	22	2	2	22	2	5BBF	2274	2031	0.0	29.9	29.9	12.6
16		6	5	22	16	10	8	6	5ZBB	1818	23304	233.4	87.5	321.0	54.6
0		1	2	1	2	20	0	-	5FCC	92	2196	0.0	1.9	1.9	1.0
1		1	3	2	5	20	0	-	5FCC	86	2200	6.5	6.5	13.1	4.4
0		0	-	0	-	20	0	-	5FCC	77	2340	0.0	0.0	0.0	0

TABLE A-1. ATTRITION DATA FOR CLASS A1 AND A3 COURSES

CDP	SHORT TITLE	CIN	LOCATION	COURSE LENGTH (Days)	NUMBER OF CONVENINGS	TYPE COURSE*	MINIMUM ASVAB	INPUT	GRADUATES	ACADEMIC ATTRITION (#)	ACADEMIC ATTRITION (%)	NONACADEMIC ATTRITION (#)	NONACADEMIC ATTRITION (%)	TOTAL ATTRITION (#)
6244	AFTA-AT-A1	C100 2010	MEMPHIS	180	51	L	225	661	513	30	5	24	4	55
6245	AFTA-AQ-A1	C100 2010	MEMPHIS	180	51	L	225	101	136	9	7	4	3	12
6246	AFTA-AX-A1	C100 2010	MEMPHIS	180	51	L	225	135	159	6	4	8	5	12
6260	BT-A	A651 0010	G. LAKES	53	50	P	156	3266	2528	29	1	608	19	608
6261	EN-A	A652 0018	G. LAKES	42	50	P	156	1357	1328	0	-	69	5	69
6262	MM-A	A651 0015	G. LAKES	42	50	P	156	4954	4554	0	-	345	7	345
6263	ET-A1-ETN	A100 0012	G. LAKES	68	50	L	225	1442	1400	88	6	88	6	198
6264	ET-A1-CTM	A100 0012	G. LAKES	68	50	L	225	217	222	23	10	18	8	41
6265	ET-A1-ETR	A100 0012	G. LAKES	68	50	L	225	1495	1386	74	5	104	7	184
6266	ET-A2-ETN	A100 0014	G. LAKES	47	50	L	225	968	993	30	3	20	2	50
6267	ET-A2-CTN	A100 0014	G. LAKES	47	50	L	225	202	190	10	5	6	3	14
6268	ET-A2-ETR	A100 0014	G. LAKES	47	50	L	225	900	888	18	2	18	2	36
6278	AC-A1	C222 2010	MEMPHIS	96	49	L	110	702	527	114	17	25	4	137
6286	BU-A	A710 0010	GULFPORT	66	10	L	150	229	209	2	1	2	1	4
6287	EA-A	A412 0010	GULFPORT	81	2	L	105	27	13	0	-	0	-	0
6288	SW-A	A711 0015	GULFPORT	61	6	L	150	68	45	1	2	1	2	2
6289	CE-A	A721 0018	GULFPORT	58	12	L	156	140	123	0	-	10	7	10
6290	UT-A	A720 0012	GULFPORT	79	8	L	150	132	110	0	-	2	2	2
6291	CM-A	A610 0022	GULFPORT	94	12	L	150	172	179	2	1	7	4	9
6292	EO-A	A730 0010	GULFPORT	61	12	L	150	266	329	0	-	6	2	6
6299	EW-OP-TECH	A102 0155	CORRY	138	25	P	110	76	79	16	19	8	10	24
6300	PC-A	A515 0018	FT B. HARRISON	24	22	P	110	211	216	0	-	0	-	0
6301	CTR-A	A231 0044	CORRY	154	50	P	100	720	468	103	16	56	9	162
6302	CTT-A-PREP	A231 0023	CORRY	89	50	P	100	984	656	123	14	33	4	162
6319	CTT/ICR/NONMORSE	A231 0047	CORRY	40	33	P	100	109	99	1	1	1	1	2
6320	CTT-SPE-NONMORSE	A231 0046	CORRY	32	50	P	100	451	398	13	3	4	1	17
6321	CTI-A2-RUSSIAN	A232 0021	GOODFELLOW	105	15	L	206	131	141	3	2	1	1	6
6322	CTI-A2-CHI-MAN	A232 0022	GOODFELLOW	112	7	L	206	16	18	0	-	1	6	1
6323	CTI-A2-VIETNAM	A232 0023	GOODFELLOW	77	6	L	206	16	18	0	-	1	6	1
6328	CTI-A2-KOREAN	A232 0028	GOODFELLOW	107	7	L	206	23	19	0	-	0	-	0
6329	CTI-A2-COMMON BL	A232 0029	GOODFELLOW	28	3	L	206	4	4	0	-	0	-	0
6330	CTI-A2-GERMAN	A232 0030	GOODFELLOW	42	2	L	206	4	2	0	-	0	-	0
6331	CTI-A2-SPANISH	A232 0031	GOODFELLOW	63	14	L	206	29	36	1	3	0	-	1
6333	CTI-A2-SERB-CRO	A232 0033	GOODFELLOW	28	1	L	206	3	3	0	-	0	-	0
6337	UWFT-CLASS A	A130 0138	NEW LONDON	75	8	L	225	116	96	4	4	2	2	7
6339	HTA-PH 2	A700 0010	PHIL	60	36	L	156	1069	1119	0	-	22	2	22
6341	OT-A	A210 0011	FLEASWTRACLANT	75	8	L	258	170	78	16	12	6	5	22
6343	SCAT-MODS 3-6	A101 0134	NEW LONDON	68	7	L	100	44	42	0	-	1	2	1
6344	SCAT-MOD-6	A100 0053	NEW LONDON	19	10	L	100	41	39	1	3	1	3	2
6345	SCAT-MOD-5	A100 0052	NEW LONDON	12	10	L	100	38	33	0	-	0	-	0

*P = Self-paced
L = Lock-step

C = Computer Managed Instruction
B = Both Self-paced and Lock-step

** As defined on p. 21

DATA FOR CLASS A1 AND A3 COURSES (continued)

ACADEMIC ATTRITION (#)	ACADEMIC ATTRITION (%)	NONACADEMIC ATTRITION (#)	NONACADEMIC ATTRITION (%)	TOTAL ATTRITION (#)	TOTAL ATTRITION (%)	STANDARD ATTRITION (%)	SETBACKS (#)	SETBACKS (%)	RMS COST CODE	TOTAL COURSE COST (000's)	COST PER GRADUATE	ACADEMIC ATTRITION COST (000's)	NONACADEMIC ATTRITION COST (000's)	TOTAL ATTRITION COST (000's)	MARGINAL COST** (000's)
0	-	2	3	2	3	5	2	3	5CCB	445	7951	0.0	0.0	0.0	0
18	12	3	2	24	13	5	16	9	5ABB	532	3642	34.2	5.7	39.9	11.6
3	1	14	5	16	6	5	11	4	5BBB	1402	5155	4.6	21.3	25.9	5.7
40	1	60	6	102	10	15	40	4	5CCC	2121	2313	45.7	68.6	114.3	50.3
0	-	49	4	62	5	2	0	-	5BGB	2980	2479	0.0	56.0	56.0	29.1
0	-	12	2	12	2	4	24	4	5CBA	2136	3322	0.0	10.9	10.9	6.2
0	-	15	3	15	3	10	15	3	5BBA	1630	2869	0.0	48.3	48.3	26.5
2	3	1	1	3	4	2	1	1	5SDH	332	4197	12.5	6.3	18.8	5.8
0	-	0	-	13	1	2	0	-	5CEB	1529	1197	0.0	0.0	0.0	0
12	1	12	1	12	1	1	0	-	5BBC						
0	-	0	-	0	-	3	1	3							
130	6	64	3	199	9	8	744	30	5EFB	4443	2299	154.8	76.2	231.1	124.8
9	13	7	10	16	22	7	0	-	5FCC	139	2446	28.8	22.4	51.1	17.4
41	11	4	1	45	12	13	176	40	5KGA						
0	-	9	1	9	1	5	53	6	5DBA	2571	2921	0.0	57.1	57.1	32.0
10	1	10	1	20	2	5	92	9	5DBA	2937	2966	46.0	46.0	92.0	51.5
0	-	0	-	0	-	3	3	13							
149	8	189	10	333	17	13	512	25	5ABA	7840	4664	268.7	340.9	609.6	31.1
257	7	220	6	453	12	15	108	3	5DBB	9693	2900	424.0	363.0	786.9	275.4
80	11	43	6	128	17	15	346	40	5BAA	4624	7202	-	-	-	
0	-	4	2	4	2	5	2	1	5BDB	897	4850	0.0	5.6	5.6	2.1
4	2	6	3	9	5	5	144	56	5QCG	1385	8097	11.6	17.3	28.9	10.4
13	3	4	1	18	4	5	61	13	5EEB	1115	2693	19.1	5.9	25.0	11.0
29	6	19	4	49	10	9	19	4	5SCE	1488	3235	80.4	52.7	133.1	48.0
35	13	47	17	82	28	20	259	68	5VBF	6976	16376	17.3	23.2	40.5	13.0
0	-	4	2	4	2	5	9	4	5ADC	630	3042	0.0	7.0	7.0	3.0
2	1	8	4	10	5	7	12	6	5ADD	587	3432	3.4	13.6	17.1	6.0
0	-	7	1	7	1	1	0	-	5SDE	706	955	0.0	9.4	9.4	3.3
0	-	5	1	5	1	1	0	-	5SDG	953	2085	0.0	11.7	11.7	4.0
0	-	0	-	0	-	1	0	-	5SDL	118	1556	0.0	0.0	0.0	1.5
0	-	5	1	5	1	1	0	-	5SDK	1027	2078	0.0	14.3	14.3	4.6
104	15	20	3	127	18	15	60	9	5DGD	814	1461	107.7	20.7	128.4	69.3
5	1	5	1	10	2	4	16	3	5EFP	523	1033	5.6	5.6	11.1	6.2
147	9	80	5	234	14	10	0	-	5BBB	8257	5753	501.6	273.0	774.6	418.3
37	10	18	5	57	15	10	0	-	5BBB	1993	6305	138.7	67.5	206.2	111.4
27	7	31	8	56	14	10	0	-	5BBB	1971	5569	85.7	98.4	184.2	99.5
22	5	13	3	36	8	10	0	-	5BBB	2311	5475	99.9	59.0	158.9	85.8

TABLE A-1. ATTRITION DATA FOR CLASS A1 AND A3

CDP	SHORT TITLE	CIN	LOCATION	COURSE LENGTH (Days)	NUMBER OF CONVENINGS	TYPE COURSE*	MINIMUM ASVAB	INPUT	GRADUATES	ACADEMIC ATTRITION (#)	ACADEMIC ATTRITION (%)	NONACADEMIC ATTRITION (#)	NONACADEMIC ATTRITION (%)
6083	UT-A	A720 0012	PT HUE	79	7	L	150	62	56	0	-	2	
6093	TM SUB/TORP TECH	A123 0127	ORLANDO	40	25	L	96	197	146	18	10	3	
6097	EO-A	A730 0010	PT HUE	61	10	L	150	255	272	3	1	14	
6102	PN-A	A500 0014	MERIDIAN	48	50	P	110	1023	917	40	4	60	
6106	HT-A2	A700 0010	SAN DIEGO	60	252	L	156	1219	1202	0	-	49	
6108	FT-A2	A113 0019	G. LAKES	96	25	L	225	509	643	0	-	12	
6115	GM-A	A041 0010	G. LAKES	82	50	L	163	422	568	0	-	15	
6118	SQ 23 PAIR OP-BAS	A130 0097	SAN DIEGO	54	8	L	225	73	79	2	3	1	
6119	HT-A1	A780 0035	SAN FRAN	22	50	P	156	1275	1277	0	-	0	
6120	HT-A1	A780 0035	PHIL	22	50	L	156	1178	1179	12	1	12	
6122	CTI-A2-HEBREW	A232 0041	GOODFELLOW	56	4	L	206	10	8	-	-	-	
6123	CTI-A2-ARABIC	A232 0042	GOODFELLOW	91	7	L	206	33	30	0	-	0	
6125	MS-A	A800 0013	SAN DIEGO	54	73	L	100	2285	1932	130	6	64	
6126	QRTR-MSTR-BASE	A772 0010	NEW LONDON	33	6	L	101	73	57	9	13	7	1
6131	DS-A	A150 0025	MARE ISLAND	180	25	L	225	353	352	41	11	4	
6135	ET A-3R	A104 0010	G. LAKES	26	50	L	225	834	880	0	-	9	
6137	ET-A-3N	A102 0010	G. LAKES	33	50	L	225	967	990	10	1	10	
6140	CTI-A2-FRENCH	A232 0040	GOODFELLOW	28	8	L	206	22	22	0	-	0	
6142	OSA	A221 0011	G. LAKES	96	50	L	110	1906	1681	149	8	189	1
6144	RMA	A202 0014	SAN DIEGO	42	252	P	100	3756	3342	257	7	220	
6146	PLRS-POS-ELECT-A	A121 0142	DAM NECK	117	50	L	225	740	642	80	11	43	
6149	CMA	A610 0022	PT HUE	94	9	L	150	198	185	0	-	4	
6161	CTM-A	A102 0109	CORRY	96	50	P	225	198	171	4	2	6	
6167	DPA	A531 0016	SAN DIEGO	54	25	L	110	460	414	13	3	4	
6172	STS-CLASS A	A130 0029	SAN DIEGO	40	34	L	225	470	460	29	6	19	
6178	EW-OP-MAINT/TECH	A102 0154	CORRY	361	50	L	110	77	426	35	13	47	1
6182	ASH-A1	C602 2023	MEMPHIS	67	25	L	156	211	207	0	-	4	
6183	ASM-A1	C602 2024	MEMPHIS	65	25	L	156	202	171	2	1	8	
									17				
6194	MK-114-OP-BAS	A130 0083	SAN DIEGO	12	AR	L	225	699	739	0	-	7	
6195	SQS-DG-OP-BAS	A130 0084	SAN DIEGO	19	AR	L	225	447	457	0	-	5	
6196	SQS-35V-38-OPBAS	A130 0085	SAN DIEGO	12	11	L	225	67	76	0	-	0	
6198	SQS-26-CX/AXR	A130 0086	SAN DIEGO	19	AR	L	225	483	494	0	-	5	
6206	SH-A	A823 0012	NORFOLK	26	25	L	100	724	557	104	15	20	
6209	SH-A	A823 0012	SAN DIEGO	26	25	L	100	530	506	5	1	5	
6239	AVA-AT-A1	C100 2013	MEMPHIS	102	252	C	225	1679	1435	147	9	80	
6240	AVA-AQ-A1	C100 2013	MEMPHIS	102	252	C	225	389	316	37	10	18	
6241	AVA-AX-A1	C100 2013	MEMPHIS	102	252	C	225	389	354	27	7	31	
6242	AVA-TD-A1	C100 2013	MEMPHIS	71	252	C	225	451	422	22	5	13	

*P = Self-paced
L = Lock-step

C = Computer Managed Instruction
B = Both Self-paced and Lock-step

** As defined on p. 21

TRITION DATA FOR CLA S A1 AND A3 COURSES

ACADEMIC ATTRITION (#)	ACADEMIC ATTRITION (%)	NONACADEMIC ATTRITION (#)	NONACADEMIC ATTRITION (%)	TOTAL ATTRITION (#)	TOTAL ATTRITION (%)	STANDARD ATTRITION (%)	SETBACKS (#)	SETBACKS (%)	RMS COST CODE	TOTAL COURSE COST (000's)	COST PER GRADUATE	ACADEMIC ATTRITION COST (000's)	NONACADEMIC ATTRITION COST (000's)	TOTAL ATTRITION COST (000's)	MARGINAL COST** (000's)
424	14	235	8	660	21	-	-	-	-	718	2163	27.5	8.3	35.8	13.6
10	3	3	1	14	4	15	59	16	5PGB						
0	-	-	-	-	-	8	-	-	5DEC						
0	-	2	3	2	3	0	0	0	5PDK	290	3668	0.0	3.5	3.5	1.1
0	-	2	1	2	1	0	2	1	5SDN	422	2851	0.0	5.6	5.6	2.0
2	4	0	-	2	4	5	29	47	5QED	103	2011	2.6	0.0	2.6	1.0
3	4	0	-	3	4	5	34	37	5QES	511	7194	17.4	0.0	17.4	8.0
0	-	2	1	2	1	5	8	3	5AGB	501	2043	0.0	2.4	2.4	
7	1	23	3	30	4	10	103	13	5ACF	1364	1918	6.5	21.3	27.8	11.1
0	-	0	-	0	-	0	11	20	-						
8	4	10	5	17	9	20	-	-	5FCB						
19	8	12	5	29	12	20	-	-	5FCB						
72	12	23	4	92	15	10	72	12	5CBB	1356	2562	86.6	27.6	114.2	40.0
42	11	7	2	50	13	10	30	8	5DBP	567	1649	43.7	7.3	51.0	28.0
17	3	43	7	58	10	10	40	7	5CBC	1282	2489	23.1	54.4	77.6	40.3
43	12	21	6	66	18	10	21	6	5DBR	533	1720	45.1	22.0	67.2	35.6
48	4	24	2	72	6	10	60	5	5SDB	3698	3152	147.2	73.6	220.8	77.2
16	10	9	6	25	15	10	86	44	5QCF	590	4278	46.2	26.0	72.2	23.8
18	9	12	6	29	14	5	6	3	-						
74	8	45	5	123	13	14	197	20	5CBA	3284	3836	108.0	65.7	173.7	99.0
9	6	3	2	11	8	5	7	5	5ABB	424	3448	10.0	3.3	13.4	3.9
19	9	2	1	21	10	5	23	11	5ABB	609	3170	28.1	3.0	31.1	9.0
5	5	8	7	14	12	12	37	30	5CBB	689	7027	25.6	41.0	66.6	18.0
3	4	4	5	7	9	10	0	-	5EBA	588	7352	8.0	10.7	18.7	6.9
6	9	7	11	13	19	10	0	-	5ECA	389	6832	16.8	19.6	36.3	14.2
32	8	16	4	45	11	15	283	54	5QCB	2468	7050	98.8	49.4	148.1	47.4
89	7	63	5	157	12	19	50	4	5SCD	2526	2255	98.4	69.6	168.0	77.3
29	2	43	3	73	5	8	88	6	5SBB	2813	2035	31.8	47.1	78.9	36.3
10	4	10	4	20	8	8	15	6	5SBC	615	2675	10.8	10.8	21.6	9.7
0	-	0	-	0	-	1	0	-	-						
53	8	26	4	80	12	22	102	15	5KBB	4628	7738	285.6	140.1	425.7	200.1
44	8	16	3	61	11	14	44	8	5BBB	1665	3364	47.0	17.1	64.1	34.0
0	-	19	1	19	1	5	156	8	5GBA	5337	2847	0.0	55.3	55.3	28.8
10	1	20	2	31	3	5	140	13	5CDB	2349	2382	8.7	17.4	26.2	14.4
9	16	3	6	12	21	14	0	-	5BHD	331	8497	9.8	3.3	13.1	5.4
3	6	1	2	4	8	10	0	-	5BHB	270	5630	4.8	1.6	6.3	2.4
0	-	2	14	2	14	7	0	-	5ACB	82	6839	0.0	0.0	0.0	0
0	-	3	4	3	4	4	2	2	5CBB	348	4521	0.0	5.7	5.7	1.3
0	-	0	-	0	-	5	4	2	5ABB	862	3882	0.0	0.0	0.0	0
1	1	12	8	14	9	4	1	1	5AEB	474	331	0.6	6.7	7.3	2.5

TABLE A-1. ATTRITION DATA FOR CLASS A1 A1

CDP	SHORT TITLE	CIN	LOCATION	COURSE LENGTH (Days)	NUMBER OF CONVENINGS	TYPE COURSE*	MINIMUM ASVAB	INPUT	GRADUATES	ACADEMIC ATTRITION (#)	ACADEMIC ATTRITION (%)	NONACADEMIC ATTRITION (#)
130E	NUC PWR	A661 0010	ORLANDO	170	8	-	0	3806	1822	424	14	235
340S	AVR-A1	C100 2014	MEMPHIS	35	50	L	225	352	332	10	3	3
348X	SQQ 23 PAIR OPBAS	A130 0097	CHAS	26	4	L	0	-	-	-	-	-
532R	MALRE - A	C680 2015	LAKEHURST	40	7	L	0	74	79	0	-	2
541U	SQS 53 OPBAS	A130 0103	SAN DIEGO	19	AR	L	225	161	148	0	-	2
2053	CTT-FLR-11/15 OPS	A231 0024	CORRY	40	51	P	100	45	51	2	4	0
3197	CTT-ELINT OP	A231 0028	CORRY	68	25	P	100	77	71	3	4	0
3522	AVCC - A1	C780 2010	MEMPHIS	28	25	L	0	251	245	0	-	2
3585	BASHEL - A1	C600 2010	MEMPHIS	42	50	L	0	769	711	7	1	23
4084	CTT CLSC WIZ OP	A231 0038	WINTER HARBOR	98	3	L	100	58	44	0	-	0
5261	SCAT-MOD-2	A100 0036	NEW LONDON	26	10	L	0	185	186	8	4	10
5309	SCAT-MOD-1	A100 0035	NEW LONDON	26	10	L	0	231	222	19	8	12
6001	QMA	A061 0012	ORLANDO	40	24	L	101	605	529	72	12	23
6002	QMA	A061 0012	SAN DIEGO	40	15	L	101	383	344	42	11	7
6005	SM-A	A061 0011	ORLANDO	40	24	L	105	588	515	17	3	40
6006	SM-A	A061 0011	SAN DIEGO	40	15	L	105	359	310	43	12	21
6015	SURF-ST-CLASS A	A130 0037	SAN DIEGO	40	65	L	225	1178	1173	48	4	24
6020	CTA-A	A510 0015	CORRY	57	50	P	163	166	138	16	10	9
6025	GMT-A	A644 0014	TRAGRUPAC	61	12	L	156	224	165	18	9	12
6027	FTA-A	A113 0010	G. LAKES	75	50	L	225	915	856	74	8	45
6034	TM-SS-TORP-OP	A123 0127	ORLANDO	54	25	L	96	152	123	9	6	3
6036	TM-OP-A/S TORP	A123 0127	ORLANDO	40	25	L	96	201	192	19	9	2
6041	MN-A	A647 0016	CHAS	96	12	L	156	114	98	5	5	8
6046	IM-A	A670 0010	G. LAKES	131	50	P	163	78	80	3	4	4
6047	OM-A	A670 0018	G. LAKES	121	50	P	163	68	57	6	9	7
6053	CTO-A	A580 0016	CORRY	117	50	P	105	415	350	32	8	16
6057	YN-A	A510 0012	MERIDIAN	48	50	P	163	1344	1120	89	7	63
6059	SK CLASS A	A551 0014	MERIDIAN	47	50	L	105	1463	1382	29	2	43
6061	DK-A	A542 0011	MERIDIAN	54	12	L	105	257	230	10	4	10
6063	INFO SPEC JO A1	A570 0011	FT. HARRISON	68	14	L	163	53	66	0	-	0
6065	MUSIC BASIC	A450 0010	LITTLE CREEK	166	34	L	0	663	598	53	8	26
6068	MR/A	A702 0019	SAN DIEGO	80	25	L	156	554	495	44	8	16
6070	EM/A	A662 0016	G. LAKES	59	50	L	156	1868	1874	0	-	19
6073	IC-A	A623 0012	SAN DIEGO	61	50	L	156	1028	986	10	1	20
6076	PM-A	A790 0012	SAN DIEGO	138	5	L	156	65	39	9	16	3
6077	ML-A	A790 0010	SAN DIEGO	95	3	L	156	55	48	3	6	1
6078	EA-A	A412 0010	PT HUE	81	2	L	105	14	12	0	-	2
6079	CE-A	A721 0018	PT HUE	58	10	L	156	86	77	0	-	3
6081	BU-A	A710 0010	PT HUE	66	9	L	150	196	222	0	-	0
6082	SW-A	A711 0015	PT HUE	61	6	L	150	147	143	1	1	12

*P = Self-paced
L = Lock-step

C = Computer Managed Instruction
D = Both Self-paced and Lock-step

** As defined on p. 21

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APPENDIX A

ATTRITION DATA FOR CLASS A1 AND A3 COURSES

TABLE B-1. QUALIFIED AND UNQUALIFIED /

CDP	SHORT TITLE	CIN	QUALIFIED INPUT			UNQUALIFIED INPUT		
			TOTAL INPUT	NUMBER	% OF TOTAL INPUT	NUMBER	% OF TOTAL INPUT	NUMBER
			1	2	3	4	5	6
			2+1			4+1		
6241	AVA-AX-A1	C100 2013	320	287	89.7	33	10.3	2
6242	AVA-TD-A1	C100 2013	393	306	77.9	87	22.1	2
6244	AFTA-AT-A1	C100 2010	606	533	88.0	73	12.0	3
6245	AFTA-AQ-A1	C100 2010	91	83	91.2	8	8.8	9
6246	AFTA-AX-A1	C100 2010	127	107	84.3	20	15.7	6
6260	BT-A	A651 0010	2994	2330	77.8	664	22.2	2
6261	EN-A	A652 0018	1160	967	83.4	193	16.6	0
6262	MM-A	A651 0015	4617	3786	82.0	831	18.0	1
6263	ET-A1-ETN	A100 0012	1321	1208	91.4	113	8.6	8
6264	ET-A1-CTM	A100 0012	202	183	90.6	19	9.4	2
6265	ET-A1-ETR	A100 0012	1401	1287	91.9	114	8.1	7
6266	ET-A2-ETN	A100 0014	903	821	90.9	82	9.1	3
6267	ET-A2-CTN	A100 0014	196	177	90.3	19	9.7	9
6278	ET-A2-ETR	A100 0014	851	807	94.8	44	5.2	2
6278	AC-A1	C222 2010	463	393	84.9	70	15.1	8
6286	BU-A	A710 0010	147	129	87.8	18	12.2	1
6287	EA-A	A412 0010	22	19	86.4	3	13.6	0
6288	SW-A	A711 0015	49	43	87.8	6	12.2	0
6289	CE-A	A721 0018	114	103	90.4	11	9.6	0
6290	UT-A	A720 0012	99	84	84.8	15	15.2	0
6291	CM-A	A610 0022	115	91	79.1	24	20.9	1
6292	EO-A	A730 0010	181	162	89.5	19	10.5	0
6299	EW-OP-TECH	A102 0155	46	39	84.8	7	15.2	1
6300	PC-A	A515 0018	197	149	75.6	48	24.4	0
6301	CTR-A	A231 0044	429	315	73.4	114	26.6	8
6302	CTT-A-PREP	A231 0023	341	314	92.1	27	7.9	7
6319	CTT/ICR/NON MORSE	A231 0047	15	13	86.7	2	13.3	0
6320	CTT/SPE/NON MORSE	A231 0046	123	109	88.6	14	11.4	3
6321	CTI-A2-RUSSIAN	A232 0021	110	85	77.3	25	22.7	3
6322	CTI-A2-CHI-MAN	A232 0022	12	10	83.3	2	16.7	0
6323	CTI-A2-VIETNAM	A232 0023	16	11	68.7	5	31.3	C
6328	CTI-A2-KOREAN	A232 0028	13	9	69.2	4	30.8	C
6329	CTI-A2-COMMON BL	A232 0029	3	1	33.3	2	66.7	C
6330	CTI-A2-GERMAN	A232 0030	4	2	50.0	2	50.0	C
6331	CTI-A2-SPANISH	A232 0031	18	6	33.3	12	66.7	1
6333	CTI-A2-SERB-CRO	A232 0033	-	-	-	-	-	-
6337	UWFT-CLASS A	A130 0138	109	96	88.1	13	11.9	4
6341	OT-A	A210 0011	132	107	81.1	25	18.9	1
6343	SCAT-MODS 3-6	A101 0134	29	28	96.6	1	3.4	C
6344	SCAT MOD 6	A100 0053	31	28	90.3	3	9.7	1

*Significant Chi-square = 3.841

1. ACADEMIC ATTRITION (continued)

UNQUALIFIED ATTRITION		ACADEMIC ATTRITION		QUALIFIED ATTRITES		UNQUALIFIED ATTRITES			
OF TOTAL INPUT	NUMBER	OF TOTAL INPUT	NUMBER	OF QUAL INPUT	OF ACADEMIC ATTRITES	NUMBER	OF UNQUAL ATTRITES	OF ACADEMIC ATTRITES	CHI-SQUARE
5	6	7	8	9	10	11	12	13	14
4±1		6±1		8±1	8±1		11±1	11±6	
10.3	22	6.9	14	4.9	63.6	8	24.2	36.4	14.44*
22.1	23	5.9	12	3.9	52.2	11	12.6	47.8	7.84*
12.0	32	5.3	23	4.3	71.9	9	12.3	28.1	6.72*
8.8	9	9.9	7	8.4	77.8	2	25.0	22.2	0.77
15.7	6	4.7	6	5.6	100.0	0	0	0	0.26
22.2	21	0.7	8	0.3	38.1	13	2.0	61.9	17.09*
16.6	0	0	0	0	0	0	0	0	-
18.0	12	0.3	6	0.2	50.0	6	0.7	50.0	6.32*
8.6	89	6.7	77	6.4	86.5	12	10.7	13.5	2.33
9.4	23	11.4	20	10.9	87.0	3	15.8	13.0	6.53*
8.1	75	5.4	57	4.4	76.0	18	15.8	24.0	24.48*
9.1	32	3.5	28	3.4	87.5	4	4.8	12.5	0.14
9.7	9	4.6	8	4.5	88.9	1	5.3	11.1	0.18
5.2	20	2.4	18	2.2	90.0	2	4.5	10.0	0.23
15.1	87	18.8	62	15.8	71.3	25	35.7	28.7	14.20*
12.2	1	0.7	0	0	0	1	5.6	100.0	1.34
13.6	0	0	0	0	0	0	0	0	-
12.2	0	0	0	0	0	0	0	0	-
9.6	0	0	0	0	0	0	0	0	-
15.2	0	0	0	0	0	0	0	0	-
20.9	1	0.9	1	1.1	100.0	0	0	0	0.52
10.5	0	0	0	0	0	0	0	0	-
15.2	16	34.8	11	28.2	68.8	5	71.4	31.3	3.17
24.4	0	0	0	0	0	0	0	0	-
26.6	81	18.9	48	15.2	59.3	33	28.9	40.7	9.40*
7.9	70	20.5	59	18.8	84.3	11	40.7	15.7	6.06*
13.3	0	0	0	0	0	0	0	0	-
11.4	3	2.4	2	1.8	66.7	1	7.1	33.3	8.51*
22.7	3	2.7	3	3.5	100.0	0	0	0	0.06
16.7	0	0	0	0	0	0	0	0	-
31.3	0	0	0	0	0	0	0	0	-
30.8	0	0	0	0	0	0	0	0	-
66.7	0	0	0	0	0	0	0	0	-
50.0	0	0	0	0	0	0	0	0	-
66.7	1	5.6	1	16.7	100.0	0	0	0	0.04
-	-	-	-	-	-	-	-	-	-
11.9	4	3.7	4	4.2	100.0	0	0	0	0.03
18.9	16	12.1	12	11.2	75.0	4	16.0	25.0	0.1
3.4	0	0	0	0	0	0	0	0	-
9.7	1	3.2	1	3.6	100.0	0	0	0	1.92

TABLE B-1. QUALIFIED AND UNQUALIFIED

CDP	SHORT TITLE	CIN	QUALIFIED INPUT			UNQUALIFIED INPUT		
			TOTAL INPUT	NUMBER	% OF TOTAL INPUT	NUMBER	% OF TOTAL INPUT	NUMBER
1	2	3	4	5	6			
			2+1			4+1		
6345	SCAT-MOD-5	A100 0052	31	26	83.9	5	16.1	0
6346	SCAT-MOD-4	A100 0051	33	29	87.9	4	12.1	2
6347	SCAT-MOD-3	A100 0050	49	42	85.7	7	14.3	0
6376	FTG-A2	A113 0019	288	240	83.3	48	16.7	3
6377	FTG-A1	A113 0010	673	592	88.0	81	12.0	72
6378	GMT ASROC A	A041 0010	90	55	61.1	35	38.9	0
6380	RM-A SEA	A202 0026	1564	1369	87.5	195	12.5	3
6400	GMG A	A041 0010	942	617	65.5	325	34.5	1
6401	BQQ-2-BAS-OP	A130 0189	94	86	91.5	8	8.5	1
6402	OA-1283 BAS OP	A130 0188	310	275	88.7	35	11.3	0
6473	AG-A1	C420 2010	76	72	94.7	4	5.3	1
6501	ADJ-A1	C601 2010	1730	1503	86.9	227	13.1	88
6506	AO-A1	C646 2010	1202	1023	85.1	179	14.9	28
6512	ABF-A1	C821 2010	378	320	84.7	58	15.3	6
6513	ABE-A1	C680 2012	330	283	85.8	47	14.2	22
6515	AE-A1	C602 2012	1088	930	85.5	158	14.5	20
6516	AME-A1	C602 2015	478	416	87.0	62	13.0	7
6517	AMH-A1	C602 2017	857	745	86.9	112	13.1	5
6518	AMS-A1	C603 2010	1368	1194	87.3	174	12.7	10
6519	PR-BASIC	C602 2010	382	312	81.7	70	18.3	6
6520	AG-A1	C420 2010	149	132	88.6	17	11.4	6
6521	TD-A1	C191 2010	372	285	76.6	87	23.4	2
6522	AK-A	C551 2010	410	336	82.0	74	18.0	4
6523	PH-LEVEL 1	C400 2010	264	236	89.4	28	10.6	12
6527	ABH-A1	C822 2010	404	328	81.2	76	18.8	2
6528	AZ-A1	C516 2010	366	269	73.5	97	26.5	8
6529	IS-A	A242 0010	236	199	84.3	37	15.7	26
6530	ASE-A1	C602 2019	112	96	85.7	16	14.3	0
6536	TM-AS-TORP-TECH	A123 0127	71	63	88.7	8	11.3	12
6537	AW-A1	C210 2010	458	397	86.7	61	13.3	53

*Significant Chi-square = 3.841

QUALIFIED AND UNQUALIFIED ATTRITION (continued)

UNQUALIFIED INPUT		ACADEMIC ATTRITION		QUALIFIED ATTRITES		UNQUALIFIED ATTRITES			
% OF TOTAL INPUT	NUMBER	% OF TOTAL INPUT	NUMBER	% OF QUAL INPUT	% OF ACADEMIC ATTRITES	NUMBER	% OF UNQUAL INPUT	% OF ACADEMIC ATTRITES	CHI-SQUARE
5	6	7	8	9	10	11	12	13	14
4±1		6±1		8±1	8±6		11±1	11±6	
16.1	0	0	0	0	0	0	0	0	0
12.1	2	6.1	1	3.4	50.0	1	25.0	50.0	0.3
14.3	0	0	0	0	0	0	0	0	-
16.7	3	1.0	2	0.8	66.7	1	2.1	33.3	0
12.0	72	10.7	55	9.3	76.4	17	21.0	23.6	9.02*
38.9	0	0	0	0	0	0	0	0	-
12.5	3	0.2	1	7.3	33.3	2	1.0	66.7	3.88*
34.5	1	0.1	0	0	0	1	0.3	100.0	0.11
8.5	1	1.1	1	1.2	100.0	0	0	0	2.23
11.3	0	0	0	0	0	0	0	0	-
5.3	1	1.3	1	1.4	100.0	0	0	0	4.07*
13.1	88	5.1	69	4.6	78.4	19	8.4	21.6	5.08*
14.9	28	2.3	22	2.2	78.6	6	3.4	21.4	0.51
15.3	6	1.6	5	1.6	83.3	1	1.7	16.7	0.23
14.2	22	6.7	14	4.9	63.6	8	17.0	36.4	7.60*
14.5	20	1.8	10	1.1	50.0	10	6.3	50.0	17.85*
13.0	7	1.5	4	1.0	57.1	3	4.8	42.9	3.26
13.1	5	0.6	3	0	60.0	2	1.8	40.0	1.27
12.7	10	0.7	8	1.0	80.0	2	1.1	20.0	4.72*
18.3	6	1.6	4	1.3	66.7	2	2.9	33.3	0.18
11.4	6	4.0	4	3.0	66.7	2	11.8	33.3	1.14
23.4	2	0.5	1	0.4	50.0	1	1.1	50.0	2.92
18.0	4	1.0	2	1.0	50.0	2	2.7	50.0	1.03
10.6	12	4.5	8	3.4	66.7	4	14.3	33.3	4.57*
18.8	2	0.5	1	0.3	50.0	1	1.3	50.0	0.05
26.5	8	2.2	3	1.1	37.5	5	5.2	62.5	3.72
15.7	26	11.0	16	8.0	61.5	10	27.0	38.5	9.62*
14.3	0	0	0	0	0	0	0	0	-
11.3	12	16.9	11	17.5	91.7	1	12.5	8.3	0.73
13.3	53	11.6	34	8.6	64.2	19	31.1	35.8	24.19*

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APPENDIX C

FY 76 VS. FY 77 COMMON COURSES;
ATTRITION DATA COMPARISON

TABLE C-1. FY 76 VS. FY 77 COMMON COURSE

CDP	SHORT TITLE	CIN	ACADEMIC ATTRITION						NONACADEMIC ATTRITION					
			NUMBER			PERCENT			NUMBER			PERCENT		
			FY76	FY77	Δ	FY76	FY77	Δ	FY76	FY77	Δ	FY76	FY77	Δ
130E	NUC PWR	A661 0010	-	424	+424	-	14	+14	-	235	+235	-	8	-
340S	AVR-A1	C100 2014	60	10	-50	10	3	-7	23	3	-20	4	1	-
532R	MALRE-A	C680 2015	3	0	-3	3	-	-3	0	2	+2	0	3	-
541U	SQS 53 OP BASIC	A130 0103	0	0	0	0	-	0	0	2	+2	0	1	-
1300	NUC PWR	A661 0010	111	0	-111	18	-	-18	3	-	-35	6	-	-
1301	NUC PWR	A661 0010	336	-	-336	18	-	-18	142	-	-142	8	-	-
2053	CTT-FLR 11/15 OPS	A231 0024	0	2	+2	0	4	+4	1	0	-1	1	-	-
3197	CTT ELINT OP	A231 0028	1	3	+2	1	4	+3	1	0	-1	1	-	-
3522	AVCC-A1	C780 2010	0	0	0	0	-	0	3	2	-1	2	1	-
3585	BASNEL-A1	C600 2010	15	7	-8	2	1	-1	23	23	0	3	3	-
3806	ET SEIR	A104 0012	0	-	0	0	-	0	12	-	-12	2	-	-
5261	SCAT-MOD-2	A100 0036	6	8	+2	7	4	-3	4	10	+6	5	5	-
5309	SCAT-MOD-1	A100 0035	9	19	+10	5	8	+3	7	12	+5	4	5	-
6001	QM-A	A061 0012	5	72	+67	1	12	+11	0	23	+23	0	4	-
6002	QM-A	A061 0012	7	42	+37	2	11	+9	7	7	0	2	2	-
6005	SM-A	A061 0011	19	17	-2	4	3	-1	5	40	+35	1	7	-
6006	SM-A	A061 0011	26	43	+17	9	12	+3	6	21	+15	2	6	-
6015	SURF-ST-CLASS A	A130 0037	39	48	+9	4	4	0	10	24	+14	1	2	-
6020	CTA-A	A510 0015	11	16	+5	5	10	+5	4	9	+5	2	6	-
6025	GMT-A	A644 0014	17	18	+1	6	9	+3	9	12	+3	3	6	-
6027	FTA-A	A113 0010	141	74	-67	7	8	+1	120	45	-75	6	5	-
6034	TM-SS-TORP OP	A123 0127	4	9	+5	1	6	+5	4	3	-1	1	2	-
6036	TM-OP-A/S-TORP 6	A123 0127	0	19	+19	0	9	+9	2	2	0	1	1	-
6041	MN-A	A647 0016	33	5	-28	18	5	-13	9	8	-1	5	7	-
6046	IM-A	A670 0010	6	3	-3	6	4	-2	8	4	-4	8	5	-
6047	QM-A	A670 0018	4	6	+2	5	9	+4	10	7	-3	11	11	-
6053	CTO-A	A580 0016	31	32	+1	5	8	+3	18	16	-2	3	4	-
6057	YN-A	A510 0012	135	89	-46	10	7	-3	107	63	-44	8	5	-
6059	SK-CLASS A	A551 0014	46	29	-17	3	2	-1	15	43	+28	1	3	-
6061	DK-A	A542 0011	10	10	0	4	4	0	2	10	+8	1	4	-
6063	INFO SPEC JO A1	A570 0011	0	0	0	0	-	0	0	0	0	0	-	-
6065	MUSIC BASIC	A450 0010	81	53	-28	9	8	-1	62	26	-36	7	4	-
6068	MR/A	A702 0019	34	44	+10	6	8	+2	11	16	+5	2	3	-
6070	EM/A	A662 0016	13	0	-13	1	-	-1	27	19	-8	2	1	-
6071	EM/A	A662 0016	0	-	0	0	-	0	24	-	-24	2	-	-
6073	IC-A	A623 0012	0	10	+10	0	1	+1	12	20	+8	1	2	-
6076	PM-A	A790 0012	4	9	+5	7	16	+9	1	3	+2	2	6	-
6077	ML-A	A790 0010	3	3	0	7	6	-1	1	1	0	2	2	-
6078	EA-A	A412 0010	0	0	0	0	-	0	1	2	+1	2	14	-
6079	CE-A	A721 0018	2	0	-2	1	-	-1	4	3	-1	2	4	-

FY 77 COMMON COURSES; ATTRITION DATA COMPARISON

ACADEMIC ATTRITION					TOTAL ATTRITION						SETBACKS					
COURSE	PERCENT				NUMBER			PERCENT			NUMBER			PERCENT		
	Δ	FY76	FY77	Δ	FY76	FY77	Δ	FY76	FY77	Δ	FY76	FY77	Δ	FY76	FY77	Δ
5	+235	-	8	+8	-	660	+660	-	21	+21	-	-	0	-	-	0
3	-20	4	1	-3	80	14	-66	13	4	-9	149	59	-90	23	16	-7
2	+2	0	3	+3	3	2	-1	3	3	0	1	0	-1	1	0	-1
2	+2	0	1	+1	0	2	+2	0	1	+1	0	2	+2	0	1	+1
-	-35	6	-	-6	145	-	-145	23	-	-23	0	-	0	0	-	0
-	-142	8	-	-8	464	-	-464	24	-	-24	0	-	0	0	-	0
0	-1	1	-	-1	1	2	+1	1	4	+3	40	29	-11	29	47	+18
0	-1	1	-	-1	2	3	+1	2	4	+2	71	34	-37	53	37	-16
2	-1	2	1	-1	3	2	-1	2	1	-1	2	8	+6	1	3	+2
23	0	3	3	0	39	30	-9	5	4	-1	79	103	+24	10	13	+3
-	-12	2	-	-2	12	-	-12	2	-	-2	116	-	-116	18	-	-18
0	+6	5	5	0	10	17	+7	11	9	-2	0	-	0	0	-	0
12	+5	4	5	+1	16	29	+13	9	12	+3	0	-	0	0	-	0
23	+23	0	4	+4	11	92	+81	2	15	+13	22	72	+50	4	12	+8
7	0	2	2	0	14	50	+36	4	13	+9	24	30	+6	7	8	+1
40	+35	1	7	+6	24	58	+34	5	10	+5	77	40	-37	15	7	-8
21	+15	2	6	+4	37	66	+29	12	18	+6	37	21	-16	12	6	-6
24	+14	1	2	+1	49	72	+23	5	6	+1	29	60	+31	4	5	+1
9	+5	2	6	+4	16	25	+9	7	15	+8	231	86	-145	69	44	-25
12	+3	3	6	+3	27	29	+2	9	14	+5	6	6	0	2	3	+1
45	-75	6	5	-1	248	123	-125	12	13	+1	226	197	-29	11	20	+9
3	-1	1	2	+1	8	11	+3	2	8	+6	17	7	-10	4	5	+1
2	0	1	1	0	2	21	+19	1	10	+9	5	23	+18	2	11	+9
8	-1	5	7	+2	43	14	-29	23	12	-11	64	37	-27	32	30	-2
4	-4	8	5	-3	14	7	-7	14	9	-5	0	0	0	0	-	0
7	-3	11	11	0	15	13	-2	16	19	+3	0	0	0	0	-	0
16	-2	3	4	+1	57	45	-12	9	11	+2	607	283	-324	67	54	-13
63	-44	8	5	-3	239	157	-82	17	12	-5	454	50	-404	30	4	-26
43	+28	1	3	+2	62	73	+11	4	5	+1	62	88	+26	4	6	+2
10	+8	1	4	+3	12	20	+8	5	8	+3	5	15	+10	2	6	+4
0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0
26	-36	7	4	-3	139	80	-59	15	12	-3	139	102	-37	15	15	0
16	+5	2	3	+1	46	61	+15	8	11	+3	108	44	-64	18	8	-10
19	-8	2	1	-1	41	19	-22	3	1	-2	201	156	-45	14	8	-6
-	-24	2	-	-2	24	-	-24	2	-	-2	49	-	-49	4	-	-4
20	+8	1	2	+1	12	31	+19	1	3	+2	219	140	-79	17	13	-4
3	+2	2	6	+4	5	12	+7	9	21	+12	4	0	-4	7	-	-7
1	0	2	2	0	4	4	0	9	8	-1	0	0	0	0	-	0
2	+1	2	14	+12	1	2	+1	2	14	+12	0	0	0	0	-	0
3	-1	2	4	+2	5	3	-2	3	4	+1	2	2	0	1	2	+1

TABLE C-1. FY 76 VS. FY 77 COMMON COURSES; AT

CDP	SHORT TITLE	CIN	ACADEMIC ATTRITION						NONACADEMIC ATTRITION					
			NUMBER			PERCENT			NUMBER			PERCENT		
			FY76	FY77	Δ	FY76	FY77	Δ	FY76	FY77	Δ	FY76	FY77	Δ
6081	BU-A	A710 0010	0	0	0	0	-	0	4	-	-4	2	-	
6082	SW-A	A711 0015	1	1	0	1	1	0	5	12	+7	5	8	
6083	UT-A	A720 0012	0	0	0	0	-	0	3	2	-1	3	3	
6093	TM SUB/TORP TECH	A123 0127	0	18	+18	0	10	+10	2	3	+1	1	2	
6097	EO-A	A730 0010	3	3	0	1	1	0	8	14	+6	3	5	
6102	PN-A	A500 0014	104	40	-64	9	4	-5	45	60	+15	4	6	
6103	OT-A	A210 0011	31	-	-31	8	-	-8	11	-	-11	3	-	
6106	HT-A2	A700 0010	0	0	0	0	-	0	0	49	+49	0	4	
6108	FT-A2	A113 0019	9	0	-9	1	-	-1	27	12	-15	3	2	
6115	GM-A	A041 0010	94	0	-94	7	-	-7	108	15	-93	8	3	
6118	SQQ 23 PAIR OP-BAS	A130 0097	0	2	+2	0	3	+3	0	1	+1	0	1	
6119	HT-A1	A780 0035	0	0	0	0	-	0	11	0	-11	1	-	
6120	HT-A1	A780 0035	0	12	+12	0	1	+1	15	12	-3	1	1	
6121	CTI-A2 THAI	A232 0043	0	-	0	0	-	0	0	-	0	0	-	
6122	CTI-A2-HEBREW	A232 0041	0	-	0	0	-	0	0	-	0	0	-	
6123	CTI-A2-ARABIC	A232 0042	0	0	0	0	-	0	0	0	0	0	-	
6125	MS-A	A800 0013	48	130	+82	2	6	+4	0	64	+64	0	3	
6126	QRTR-MSTR BASE	A772 0010	3	9	+6	4	13	+9	7	7	0	9	10	
6131	DS-A	A150 0025	33	41	+8	9	11	+2	4	4	0	1	1	
6135	ET-A-3R	A104 0010	12	0	-12	1	-	-1	23	9	-14	2	1	
6137	ET-A-3N	A102 0010	17	10	-7	2	1	-1	26	10	-16	3	1	
6140	CTI-A2-FRENCH	A232 0040	0	0	0	0	-	0	0	0	0	0	-	
6142	OSA	A221 0011	67	149	+82	3	8	+5	112	189	+77	5	10	
6144	RMA	A202 0014	285	257	-28	8	7	-1	360	220	-140	10	6	
6146	PLRS-POS-ELECT-A	A121 0142	78	80	+2	8	11	+3	68	43	-25	7	6	
6149	CM-A	A610 0022	0	0	0	0	-	0	2	4	+2	1	2	
6161	CTM-A	A102 0109	3	4	+1	1	2	+1	0	6	+6	0	3	
6167	OP-A	A531 0016	17	13	-4	4	3	-1	0	4	+4	0	1	
6172	STS-CLASS A	A130 0029	13	29	+16	3	6	+3	8	19	+11	2	4	
6178	EW-OP-MAINT/TECH	A102 0154	51	35	-16	14	13	-1	10	47	+37	3	17	
6182	ASH-A1	C602 2023	2	0	-2	1	-	-1	3	4	+1	2	2	
6183	ASM-A1	C602 2024	6	2	-4	3	1	-2	7	8	-1	4	4	
6184	INTRO WELD	A700 0011	0	-	0	0	-	0	0	-	0	0	-	
6193	MK-111-OP-BAS	A130 0088	1	-	-1	1	-	-1	0	-	0	0	-	
6194	MK-114-OP-BAS	A130 0083	0	0	0	0	-	0	0	7	+7	0	1	
6195	SQS-DG-OP-BAS	A130 0084	0	0	0	0	-	0	0	5	+5	0	1	
6196	SQS-35V-38 OP-BAS	A130 0085	1	0	-1	2	-	-2	0	0	0	0	-	
6197	SQS-26-BX-OP-BAS	A130 0092	0	-	0	0	-	0	0	-	0	0	-	
6198	SQS-26-CX/AXR	A130 0086	0	0	0	0	-	0	4	5	+1	1	1	
6206	SH-A	A823 0012	42	104	+62	7	15	+8	12	20	+8	2	3	

FY 77 COMMON COURSES; ATTRITION DATA COMPARISON (continued)

ACADEMIC ATTRITION				TOTAL ATTRITION						SETBACKS						
77	PERCENT			NUMBER			PERCENT			NUMBER			PERCENT			
	Δ	FY76	FY77	Δ	FY76	FY77	Δ	FY76	FY77	Δ	FY76	FY77	Δ	FY76	FY77	Δ
-4		2	-	-2	4	0	-4	2	-	-2	6	4	-2	3	2	-1
+7		5	8	+3	6	14	+8	6	9	+3	0	1	+1	0	1	+1
-1		3	3	0	3	2	-1	3	3	0	1	2	+1	1	3	+2
+1		1	2	+1	2	24	+22	1	13	+12	2	16	+14	1	9	+8
+6		3	5	+2	11	16	+5	4	6	+2	11	-	-11	4	4	0
+15		4	6	+2	153	102	-51	13	10	-3	245	40	-205	20	4	-16
-11		3	-	-3	44	-	-44	11	-	-11	133	-	-133	20	-	-20
+49		0	4	+4	25	62	+37	1	5	+4	0	0	0	0	-	0
-15		3	2	-1	36	12	-24	4	2	-2	74	24	-50	8	4	-4
-93		8	3	-5	196	15	-181	14	3	-11	137	15	-122	10	3	-7
+1		0	1	+1	0	3	+3	0	4	+4	0	1	+1	0	1	+1
-11		1	-	-1	11	13	+2	1	1	0	216	0	-216	18	-	-18
-3		1	1	0	15	12	-3	1	1	0	0	0	0	0	-	0
0		0	-	0	0	-	0	0	-	0	0	-	0	0	-	0
0		0	-	0	0	-	0	0	-	0	0	-	0	0	-	0
0		0	-	0	0	0	0	0	-	0	0	1	+1	0	3	+3
+64		0	3	+3	48	199	+151	2	9	+7	123	744	+621	5	30	+25
0		9	10	+1	10	16	+6	12	22	+10	0	0	0	0	-	0
0		1	1	0	37	45	+8	10	12	+2	87	176	+89	22	40	+18
-14		2	1	-1	2	9	+7	23	1	-22	84	53	-31	7	6	-1
-16		3	1	-2	35	20	-15	4	2	-2	181	92	-89	19	9	-10
0		0	-	0	0	0	0	0	-	0	0	3	+3	0	13	+13
+77		5	10	+5	183	333	+150	8	17	+9	280	512	+232	12	25	-13
-140		10	6	-4	636	453	-183	17	12	-5	0	108	+108	0	3	+3
-25		7	6	-1	141	128	-13	14	17	+3	280	346	+166	26	40	+14
+2		1	2	+1	2	4	+2	1	2	+1	2	2	0	1	1	0
+6		0	3	+3	3	9	+6	1	5	+4	275	144	-131	71	56	-15
+4		0	1	+1	17	18	+1	4	4	0	72	61	-9	16	13	-3
+11		2	4	+2	21	49	+28	5	10	+5	4	19	+15	3	4	+1
+37		3	17	+14	63	82	+19	17	28	+11	1128	259	-869	125	68	-57
+1		2	2	0	5	4	-1	3	2	-1	9	9	0	5	4	-1
-1		4	4	0	13	10	-3	7	5	-2	21	12	-9	11	6	-5
0		0	-	0	0	-	0	0	-	0	0	-	0	0	-	0
0		0	-	0	1	-	-1	1	-	-1	0	-	0	0	-	0
+7		0	1	+1	0	7	+7	0	1	+1	0	0	0	0	-	0
+5		0	1	+1	4	5	+1	1	1	0	0	0	0	0	-	0
0		0	-	0	1	0	-1	2	-	-2	0	0	0	0	-	0
0		0	-	0	0	-	0	0	-	0	0	-	0	0	-	0
+1		1	1	0	4	5	+1	1	1	0	0	0	0	0	-	0
+8		2	3	+1	48	127	+79	8	18	+10	12	60	+48	2	9	+7

TABLE C-1. FY 76 VS. FY 77 COMMON COURSES; ATTRITION

CDP	SHORT TITLE	CIN	ACADEMIC ATTRITION						NONACADEMIC ATTRITION					
			NUMBER			PERCENT			NUMBER			PERCENT		
			FY76	FY77	Δ	FY76	FY77	Δ	FY76	FY77	Δ	FY76	FY77	Δ
6209	SH-A	A823 0012	0	5	+5	0	1	+1	0	5	+5	0	5	+5
6239	AVA-AT-A1	C100 2013	94	147	+53	6	9	+3	78	80	+2	5	7	+2
6240	AVA-AQ-A1	C100 2013	20	37	+17	5	10	+5	28	18	-10	7	9	+2
6241	AVA-AX-A1	C100 2013	45	27	-18	7	7	0	59	31	-28	9	7	-2
6242	AVA-TD-A1	C100 2013	21	22	+1	4	5	+1	21	13	-8	4	5	+1
6244	AFTA-AT-A1	C100 2010	21	30	+9	5	5	0	21	24	+3	5	4	-1
6245	AFTA-AQ-A1	C100 2010	12	9	-3	6	7	+1	6	4	-2	3	2	-1
6246	AFTA-AX-A1	C100 2010	12	6	-6	6	4	-2	10	8	-2	5	4	-1
6260	BT-A	A651 0010	0	29	+29	0	1	+1	217	608	+391	7	19	+12
6261	EN-A	A652 0018	0	0	0	0	-	0	35	69	+34	2	4	+2
6262	MM-A	A651 0015	0	0	0	0	-	0	268	345	+77	5	7	+2
6263	ET-A1-ETN	A100 0012	65	88	+23	5	6	+1	52	88	+36	4	6	+2
6264	ET-A1-CTM	A100 0012	30	23	-7	10	10	0	6	18	+12	2	7	+5
6265	ET-A1-ETR	A100 0012	76	74	-2	5	5	0	76	104	+28	5	7	+2
6266	ET-A2-ETN	A100 0014	9	30	+21	1	3	+2	28	20	-8	3	2	-1
6267	ET-A2-CTN	A100 0014	8	10	+2	3	5	+2	11	6	-5	4	3	-1
6268	ET-A2-ETR	A100 0014	37	18	-19	3	2	-1	37	18	-19	3	2	-1
6278	AC-A1	C222 2010	85	114	+29	12	17	+5	27	25	-2	4	4	0
6286	BU-A	A710 0010	2	2	0	1	1	0	2	2	0	1	1	0
6287	EA-A	A412 0010	0	0	0	0	-	0	0	0	0	0	0	0
6289	CE-A	A721 0018	0	0	0	0	-	0	1	10	+9	2	2	0
6290	UT-A	A720 0012	0	0	0	0	-	0	1	2	+1	1	2	+1
6291	CM-A	A610 0022	0	2	+2	0	1	+1	1	7	+6	1	4	+3
6292	EO-A	A730 0010	2	0	-2	1	-	-1	4	6	+2	2	2	0
6299	EW-OP-TECH	A102 0155	7	16	+9	6	19	+13	54	8	-46	39	10	-29
6300	PC-A	A515 0018	0	0	0	0	-	0	0	0	0	0	0	0
6301	CTR-A	A231 0044	128	103	-25	17	16	-1	28	56	+28	4	3	-1
6302	CTT-A-PREP	A231 0023	77	123	+46	10	14	+4	15	33	+18	2	4	+2
6319	CTT/ICR/NON MORSE	A231 0047	0	1	+1	0	1	+1	0	1	+1	0	1	+1
6320	CTT/SPE/NON MORSE	A231 0046	0	13	+13	0	3	+3	0	4	+4	0	1	+1
6321	CTI-A2-RUSSIAN	A232 0021	1	3	+2	1	2	+1	2	1	-1	2	1	-1
6322	CTI-A2-CHI-MAN	A232 0022	0	0	0	0	-	0	3	1	-2	9	6	-3
6323	CTI-A2-VIETNAM	A232 0023	0	0	0	0	-	0	0	1	+1	0	6	+6
6326	CTI-A2-POLISH	A232 0026	0	-	0	0	-	0	0	-	0	0	-	0
6327	CTI-A2-BULGAR	A232 0027	0	-	0	0	-	0	0	-	0	0	-	0
6328	CTI-A2-KOREAN	A232 0028	0	0	0	0	-	0	0	0	0	0	-	0
6329	CTI-A2-COMMON BL	A232 0029	0	0	0	0	-	0	0	0	0	0	-	0
6330	CTI-A2-GERMAN	A232 0030	0	0	0	0	-	0	0	0	0	0	-	0
6331	CTI-A2-SPANISH	A232 0031	3	1	-2	6	3	-3	0	0	0	0	-	0
6332	CTI-A2-ROM	A232 0032	0	-	0	0	-	0	0	-	0	0	-	0

MMO, COURSES: ATTRITION DATA COMPARISON (continued)

CADEMIC ATTRITION				TOTAL ATTRITION						SETBACKS					
R	PERCENT			NUMBER			PERCENT			NUMBER			PERCENT		
Δ	FY76	FY77	Δ	FY76	FY77	Δ	FY76	FY77	Δ	FY76	FY77	Δ	FY76	FY77	Δ
+5	0	1	+1	5	10	+5	1	2	+1	25	16	-9	5	3	-2
+2	5	5	0	177	234	+57	11	14	+3	15	0	-15	1	-	-1
-10	7	5	-2	49	57	+8	12	15	+3	8	0	-8	2	-	-2
-28	9	8	-1	101	56	-45	15	14	-1	13	0	-13	2	-	-2
-8	4	3	-1	44	36	-8	8	8	0	5	0	-5	1	-	-1
+3	5	4	-1	43	55	+12	10	9	-1	190	303	+113	38	41	+3
-2	3	3	0	18	12	-6	9	10	+1	87	61	-26	37	41	+4
-2	5	5	0	20	12	-8	10	8	-2	82	67	-15	35	37	+2
+391	7	19	+12	217	608	+391	7	19	+12	740	0	-740	22	-	-22
+34	2	5	+3	35	69	+34	2	5	+3	243	0	-243	13	-	-13
+77	5	7	+2	268	345	+77	5	7	+2	1424	0	-1424	24	-	-24
+36	4	6	+2	120	198	+78	9	13	+4	315	198	-117	22	13	-9
+12	2	8	+6	36	41	+5	12	17	+5	63	31	-32	20	13	-7
+28	5	7	+2	157	184	+27	10	12	+2	387	168	-219	23	11	-12
-8	3	2	-1	38	50	+12	4	5	+1	160	103	-57	16	10	-6
-5	4	3	-1	19	14	-5	7	7	0	40	18	-22	14	9	-5
-19	3	2	-1	74	36	-38	6	4	-2	253	75	-178	19	8	-11
-2	4	4	0	115	137	+22	16	20	+4	244	317	+73	31	41	+10
0	1	1	0	4	4	0	2	2	0	2	16	+14	1	7	+6
0	0	-	0	0	0	0	0	-	0	1	0	-1	7	-	-7
+9	2	7	+5	1	10	+9	2	7	+5	0	3	+3	0	2	+2
+1	1	2	+1	1	2	+1	1	2	+1	1	0	-1	1	-	-1
+6	1	4	+3	1	9	+8	1	5	+4	0	13	+13	0	7	+7
+2	2	2	0	4	6	+2	2	2	0	2	3	+1	1	1	0
-46	39	10	-29	61	24	-37	43	27	-16	145	99	-46	69	78	+9
0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0
+28	4	9	+5	162	162	0	21	24	+3	695	485	-210	128	58	-70
+18	2	4	+2	92	162	+66	12	18	+6	789	686	-103	70	59	-11
+1	0	1	+1	0	2	+2	0	2	+2	7	34	+27	13	28	+15
+4	0	1	+1	0	17	+17	0	4	+4	81	193	+112	26	37	+11
-1	2	1	-1	3	6	+3	3	4	+1	20	16	-4	17	11	-6
-2	9	6	-3	3	1	-2	9	6	-3	0	0	0	0	-	0
+1	0	6	+6	0	1	+1	0	6	+6	0	0	0	0	-	0
0	0	-	0	0	-	0	0	-	0	0	-	0	0	-	0
0	0	-	0	0	-	0	0	-	0	0	-	0	0	-	0
0	0	-	0	0	0	0	0	-	0	0	5	+5	0	22	+22
0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0
0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0
0	0	-	0	3	1	-2	6	3	-3	1	0	-1	2	-	-2
0	0	-	0	0	-	0	0	-	0	0	-	0	0	-	0

TABLE C-1. FY 76 VS. FY 77 COMMON COURSES:

CDP	SHORT TITLE	CIN	ACADEMIC ATTRITION						NONACADEMIC ATTRITION				
			NUMBER			PERCENT			NUMBER			PER	
			FY76	FY77	Δ	FY76	FY77	Δ	FY76	FY77	Δ	FY76	FY77
6333	CTI-A2-SERBO-CRO	A232 0033	0	0	0	0	-	0	0	0	0	0	0
6337	UWFT-CLASS A	A130 0138	0	4	+4	0	4	+4	0	2	+2	0	0
6339	HTA-PH2	A700 0010	0	0	0	0	-	0	2	22	+20	1	1
6340	HT MAINT	A790 0013	0	-	0	0	-	0	0	-	0	0	0
6345	SCAT-MOD-5	A100 0052	0	0	0	0	-	0	0	0	0	0	0
6346	SCAT-MOD-4	A100 0051	0	2	+2	0	5	+5	0	1	+1	0	0
6347	SCAT-MOD-3	A100 0050	0	0	0	0	-	0	0	1	+1	0	0
6501	ADJ-A1	C601 2010	102	136	+34	4	5	+1	76	54	-22	3	3
6502	ADR-A1	C601 2012	3	-	-3	1	-	-1	3	-	-3	1	1
6506	AO-A1	C646 2010	17	32	+15	1	2	+1	103	64	-39	6	6
6512	ABF-A1	C821 2010	0	4	+4	0	1	+1	3	8	+5	1	1
6513	ABE-A1	C680 2012	3	22	+19	1	6	+5	3	4	+1	1	1
6515	AE-A1	C602 2012	44	34	-10	2	2	0	67	52	-15	3	3
6516	AME-A1	C602 2015	8	13	+5	1	2	+1	33	19	-14	4	4
6517	AMH-A1	C602 2017	33	15	-18	2	1	-1	67	44	-23	4	4
6518	AMS-A1	C603 2010	15	21	+6	1	1	0	75	84	+9	5	5
6519	PR-BASIC	C602 2010	5	6	+1	1	1	0	10	30	+20	2	2
6520	AG-A1	C420 2010	6	12	+6	2	4	+2	6	15	+9	2	2
6521	TD-A1	C191 2010	4	0	-4	1	-	-1	4	4	0	1	1
6522	AK-A	C551 2010	8	0	-8	3	-	-3	11	14	+3	4	4
6523	PH-LEVEL 1	C400 2010	18	30	+12	5	8	+3	7	4	-3	2	2
6527	ABH-A1	C822 2010	0	0	0	0	-	0	0	4	+4	0	0
6528	AZ-A1	C516 2010	14	17	+3	3	3	0	5	11	+6	1	1
6529	IS-A	A242 0010	9	28	+19	4	10	+6	2	11	+9	1	1
6530	ASE-A1	C602 2019	2	0	-2	1	-	-1	5	4	-1	3	3
6536	TM-AS-TORP-TECH	A123 0127	0	12	+12	0	14	+14	0	0	0	0	0
6537	AW-A1	C210 2010	44	57	+13	6	10	+4	44	28	-16	6	6

FY 77 COMMON COURSES: ATTRITION DATA COMPARISON (continued)

NONACADEMIC ATTRITION					TOTAL ATTRITION					SETBACKS					
NUMBER	PERCENT			NUMBER			PERCENT			NUMBER			PERCENT		
	FY77	Δ		FY76	FY77	Δ	FY76	FY77	Δ	FY76	FY77	Δ	FY76	FY77	Δ
0	0			0	0	0	0	-	0	0	0	0	0	-	0
2	+2			0	7	+7	0	6	+6	0	1	+1	0	1	+1
22	+20			1	22	+20	1	2	+1	9	22	+13	5	2	-3
-	0			0	-	0	0	-	0	0	-	0	0	-	0
0	0			0	0	0	0	-	0	0	0	0	0	-	0
1	+1			0	3	+3	0	8	+8	0	0	0	0	-	0
1	+1			0	1	+1	0	2	+2	0	0	0	0	-	0
54	-22			3	2	-1	155	193	+38	6	7	+1	0	-	0
-	-3			1	-	-1	5	-	-5	10	-	-10	4	-	-4
64	-10			6	4	-2	121	97	-24	7	6	-1	289	488	+199
8	+5			1	2	+1	3	16	+13	13	21	+8	4	5	+1
4	+1			1	1	0	5	26	+21	51	38	-13	18	10	-8
52	-15			3	3	0	113	87	-26	305	379	+74	13	20	+7
19	-14			4	3	-1	33	26	-7	50	109	+59	6	16	+10
44	-23			4	3	-1	102	60	-42	191	220	+29	11	14	+3
84	+9			5	4	-1	91	106	+15	91	409	+318	6	18	+12
30	+20			2	5	+3	15	36	+21	117	231	+114	21	33	+12
15	+9			2	5	+3	9	27	+18	51	82	+31	16	25	+9
4	0			1	1	0	4	4	0	0	0	0	0	-	0
14	+3			4	3	-1	17	14	-3	28	0	-28	10	-	-10
4	-3			2	1	-1	26	34	+8	22	22	0	6	6	0
4	+4			0	1	+1	0	4	+4	19	26	+7	5	6	+1
11	+6			1	2	+1	19	28	+9	24	28	+4	5	5	0
11	+9			1	4	+3	13	40	+27	6	22	+16	3	8	+5
4	-1			3	2	-1	7	4	-3	5	8	+3	3	4	+1
0	0			0	-	0	0	12	+12	0	6	+6	0	7	+7
28	-16			6	5	-1	92	88	-4	12	15	+3	224	31	+4

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TAEG Report No.

APPENDIX D

FY 76 VS. FY 77 COMMON COURSES;
ATTRITION COST DATA COMPARISON

TABLE D-1. FY 76 VS. FY 77 COMMON COURSES; ATTRIT

CDP	SHORT TITLE	CIN	TOTAL COST (X 1000)			TOTAL ATTRITION COST (X 1000)			FY
			FY76	FY77	Δ	FY76	FY77	Δ	
130E	NUC PWR	A661 0010	-	-	-	-	-	-	-
340S	AVR-A1	C100 2014	1004.8	718	-286.8	117.3	35.8	-81.5	81
532R	MALRE-A	C680 2015	379.7	290	- 89.7	9.1	3.5	- 5.6	9
541U	SQS 53 OP BASIC	A130 0103	30.5	422	+391.5	0	5.6	+ 5.6	0
1300	NUC PWR	A661 0010	6342.3	-	-	952.5	-	-	939
1301	NUC PWR	A661 0010	6400.7	-	-	978.5	-	-	671
2053	CTT-FLR 11/15 OPS	A231 0024	255.4	103	-152.4	1.5	2.6	+ 1.1	0
3197	CTT ELINT OP	A231 0028	47.8	511	+463.2	-	17.4	-	-
3522	AVCC-AL	C780 2010	478.1	501	+ 22.9	5.9	2.4	- 3.5	0
3585	BASNEL-AL	C600 2010	1606.7	1364	-242.7	39.7	27.8	-11.9	11
3806	ET SEIR	A104 0012	1913	-	-	5.2	-	-	0
5261	SCAT-MOD-2	A100 0036	-	-	-	-	-	-	-
5309	SCAT-MOD-1	A100 0035	-	-	-	-	-	-	-
6001	QM-A	A061 0012	930.5	1356	+425.5	6.8	114.2	+107.4	6
6002	QM-A	A061 0012	511.6	567	+ 55.4	15.6	51.0	+ 35.4	7
6005	SM-A	A061 0011	858.9	1282	+423.1	30.2	77.6	+47.4	24
6006	SM-A	A061 0011	458.6	533	+ 74.4	24.2	67.2	+43.0	19
6015	SURF-ST-CLASS A	A130 0037	3105.5	3698	+592.5	141.5	220.8	+79.3	111
6020	CTA-A	A510 0015	615.4	590	- 25.4	53.8	72.2	+18.4	38
6025	GMT-A	A644 0014	-	-	-	-	-	-	-
6027	FTA-A	A113 0010	10831.6	3284	-7547.6	421	173.7	-247.3	221
6034	TM-SS-TORP-OP	A123 0127	889	424	- 465.0	16	13.4	- 2.6	1
6036	TM-OP-AIS-TORPA	A123 0127	441	609	+ 168.0	7.9	31.1	+ 23.2	-
6041	MN-A	A647 0016	1256.6	689	- 567.6	113.3	66.6	- 46.7	8
6046	IM-A	A670 0010	529.2	588	+ 58.8	22.5	18.7	- 3.8	-
6047	QM-A	A670 0018	394.0	389	- 5.0	14.6	36.3	+ 21.7	-
6053	CTO-A	A580 0016	2945.4	2468	- 477.4	146.1	148.1	+ 2.0	9
6057	YN-A	A510 0012	2659.1	2526	- 133.1	343.8	168.0	-175.8	24
6059	SK-CLASS A	A551 0014	3008.8	2813	- 195.8	2.1	78.9	+ 76.8	-
6061	DK-A	A542 0011	954.7	615	- 339.7	2.4	21.6	+ 19.2	-
6063	INFO SPEC JO A1	A570 0011	-	-	-	-	-	-	-
6065	MUSIC BASIC	A450 0010	4840.4	4628	- 212.4	516.6	425.7	- 90.9	29
6068	MR/A	A702 0019	1772.1	1665	- 107.1	40.8	64.1	+ 23.3	3
6070	EM/A	A662 0016	3720.3	5337	+1616.7	101.4	55.3	- 46.1	3
6071	EM/A	A662 0016	2555.1	-	-	21.3	-	-	-
6073	IC-A	A623 0012	2358.8	2349	- 9.8	15.9	26.2	+ 10.3	-
6076	PM-A	A790 0012	321.6	331	+ 9.4	7.5	13.1	+ 5.6	-
6077	ML-A	A790 0010	218.8	270	+ 51.2	7.5	6.3	- 1.2	-
6078	EA-A	A412 0010	247.9	82	- 165.9	1.6	0.0	- 1.6	-
6079	CE-A	A721 0018	701.6	348	- 353.6	9.5	5.7	- 3.8	-

FY 77 COMMON COURSES; ATTRITION COST DATA COMPARISON

TOTAL ATTRITION COST (X 1000)			ACADEMIC ATTRITION COST (X 1000)			NONACADEMIC ATTRITION COST (X 1000)			COST PER GRADUATE		
FY76	FY77	Δ	FY76	FY77	Δ	FY76	FY77	Δ	FY76	FY77	Δ
-	-	-	-	-	-	-	-	-	-	-	-
7.3	35.8	-81.5	83.8	27.5	- 56.3	33.5	8.3	-25.2	1513	2163	+ 650
9.1	3.5	- 5.6	9.1	0	- 9.1	0	3.5	+ 3.5	3651	3668	+ 17
0	5.6	+ 5.6	0	0	-	0	5.6	+ 5.6	2030	2851	+ 821
2.5	-	-	939.4	-	-	313.1	-	-	8559	-	-
8.5	-	-	677.5	-	-	301.1	-	-	8559	-	-
7.5	2.6	+ 1.1	0	2.6	+ 2.6	1.5	0	- 1.5	2202	2011	- 191
-	17.4	-	-	17.4	-	-	0	-	-	7194	-
5.9	2.4	- 3.5	0	0	0	5.9	2.4	- 3.5	1568	2043	+ 475
9.7	27.8	-11.9	15.9	6.5	- 9.4	23.8	21.3	- 2.5	2457	1918	- 539
5.2	-	-	0	-	-	5.2	-	-	5960	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
6.8	114.2	+107.4	6.8	86.6	+79.8	0	27.6	+27.6	1512	2562	+1050
5.6	51.0	+ 35.4	7.8	43.7	+35.9	7.8	7.3	- 0.5	1560	1649	+ 89
30.2	77.6	+47.4	24.2	23.1	- 1.1	6.0	54.4	+48.4	1577	2489	+ 91
24.2	67.2	+43.0	19.8	45.1	+ 25.3	4.4	22.0	+17.6	1587	1720	+ 133
11.5	220.8	+79.3	113.2	147.2	+ 34.0	28.3	73.6	+45.3	2412	3152	+ 740
53.8	72.2	+18.4	38.4	46.2	+ 7.8	15.4	26.0	+10.6	2772	4278	+1506
-	-	-	-	-	-	-	-	-	-	-	-
21	173.7	-247.3	226.7	108.0	-118.7	194.3	65.7	-128.6	3583	3836	+ 253
16	13.4	- 2.6	8.0	10.0	+ 2.0	8.0	3.3	- 4.7	1902	3448	+1546
7.9	31.1	+ 23.2	0	28.1	+ 28.1	7.9	3.0	- 4.9	1902	3170	+1268
13.3	66.6	- 46.7	88.7	25.6	- 63.1	24.6	41.0	+ 16.4	6868	7027	+ 159
22.5	18.7	- 3.8	9.6	8.0	- 1.6	12.9	10.7	- 2.2	4725	7352	+2627
14.6	36.3	+ 21.7	4.6	16.8	+ 12.2	10.0	19.6	+ 9.6	4582	6832	+2250
46.1	148.1	+ 2.0	91.3	98.8	+ 7.5	54.8	49.4	- 5.4	5077	7050	+1973
43.8	168.0	-175.8	246.6	98.4	-148.2	97.2	69.6	- 27.6	2435	2255	- 180
2.1	78.9	+ 76.8	1.6	31.8	+ 30.2	.5	47.1	+ 46.6	2096	2035	- 61
2.4	21.6	+ 19.2	1.9	10.8	+ 8.9	.5	10.8	+ 10.3	3604	2675	- 929
-	-	-	-	-	-	-	-	-	-	-	-
16.6	425.7	- 90.9	290.6	285.6	- 5.0	226.0	140.1	- 85.9	5769	7738	+1969
40.8	64.1	+ 23.3	30.6	47.0	+ 17.6	10.2	17.1	+ 6.9	2885	3364	+ 479
01.4	55.3	- 46.1	33.8	0.0	- 33.8	67.6	55.3	- 12.3	2501	2847	+ 346
21.3	-	-	0	-	-	21.3	-	-	2129	-	-
15.9	26.2	+ 10.3	0	8.7	+ 8.7	15.9	17.4	+ 1.5	2233	2382	+ 149
7.5	13.1	+ 5.6	5.8	9.8	+ 4.0	1.7	3.3	+ 1.6	7482	8497	+1015
7.5	6.3	- 1.2	5.8	4.8	- 1.0	1.7	1.6	- 0.1	5919	5630	- 289
1.6	0.0	- 1.6	0	0.0	0	1.6	0.0	- 1.6	4679	6839	+2160
9.5	5.7	- 3.8	2.8	0.0	- 2.8	6.7	5.7	- 1.0	3508	4521	+1013

TABLE D-1. FY 76 VS. FY 77 COMMON COURSES; ATTRITION

CDP	SHORT TITLE	CIN	TOTAL COST (X 1000)			TOTAL ATTRITION COST (X 1000)		
			FY76	FY77	Δ	FY76	FY77	Δ
6081	BU-A	A710 0010	854.1	862	+ 7.9	0	0	0
6082	SW-A	A711 0015	400.5	474	+ 73.5	9.2	7.3	- 1.9
6083	UT-A	A720 0012	608.9	445	- 163.9	5.3	0.0	- 5.3
6093	TM SUB/TORP TECH	A123 0127	381	532	+ 151.0	6.9	39.9	+ 33.0
6097	EO-A	A730 0010	1560.9	1402	- 158.9	8.9	25.9	+ 17.0
6102	PN-A	A500 0014	2305.5	2121	- 184.5	255.7	114.3	-141.4
6103	OT-A	A210 0011	4356.4	-	-	34.2	-	-
6106	HT-A2	A700 0010	5602.6	2980	-2622.6	0	56.0	+ 56.0
6108	FT-A2	A113 0019	-	2136	-	-	10.9	-
6115	GM-A	A041 0010	4745.6	1630	-3115.6	281.8	48.3	-233.5
6118	SQQ 23 PAIR OP-BAS	A130 0097	182	332	+ 150.0	0	18.8	+ 18.8
6119	HT-A1	A780 0035	2509.1	1529	- 980.1	7.2	0.0	- 7.2
6120	HT-A1	A780 0035	2215.7	-	-	10.2	-	-
6121	CTI-A2-THAI	A232 0043	-	-	-	-	-	-
6122	CTI-A2-HEBREW	A232 0041	-	-	-	-	-	-
6123	CTI-A2-ARABIC	A232 0042	-	-	-	-	-	-
6125	MS-A	A800 0013	4436.7	4443	+ 6.3	78.3	231.1	+152.8
6126	QRTR-MSTR BASE	A772 0010	97.2	139	+ 41.8	3.4	51.1	+ 47.7
6131	DS-A	A150 0025	-	-	-	-	-	-
6135	ET-A-3R	A104 0010	1992	2571	+ 579.0	373.6	57.1	-316.5
6137	ET-A-3N	A102 0010	1880	2937	+1057	293.9	92.0	-291.9
6140	CTI-A2-FRENCH	A232 0040	-	-	-	-	-	-
6142	OSA	A221 0011	9216.9	7840	-1376.9	300.2	609.6	+309.4
6144	RMA	A202 0014	13351.9	9693	-3658.9	872.6	786.9	- 85.7
6146	PLRS-POS-ELECT-A	A121 0142	5907.2	4624	-1283.2	18.4	-	-
6149	CM-A	A610 0022	917.2	897	- 20.2	8.2	5.6	- 2.6
6161	CTM-A	A102 0109	1065.7	1385	+ 319.3	14.8	28.9	+ 14.1
6167	DP-A	A531 0016	1125.4	1115	- 10.4	18.8	25.0	+ 6.2
6172	STS-CLASS A	A130 0029	3016.2	1488	-1528.2	106.0	133.1	+ 27.1
6178	EW-OP-MAINT/TECH	A102 0154	6388.4	6976	+ 587.6	588.2	40.5	-547.7
6182	ASH-A1	C602 2023	681.6	630	- 51.6	2.8	7.0	- 4.2
6183	ASM-A1	C602 2024	703.8	587	- 116.8	3.0	17.1	+ 14.1
6184	INTRO WELD	A700 0011	16.6	-	-	-	-	-
6193	MK-111-OP-BAS	A130 0088	89.1	-	-	2.3	-	-
6194	MK-114-OP-BAS	A130 0083	615.4	706	+ 90.6	0	9.4	+ 9.4
6195	SQS-DG-OP-BAS	A130 0084	457.2	953	+ 495.8	0	11.7	+ 11.7
6196	SQS-35V-38 OP-BAS	A130 0085	527.1	118	- 409.1	0.4	0	- 0.4
6197	SQS-26-BX-OP-BAS	A130 0092	63.4	-	-	0	-	-
6198	SQS-26-CX/AXR	A130 0086	431.0	1027	+ 596.0	2.4	14.3	+ 11.9
6206	SH-A	A823 0012	900.2	814	- 86.2	21.6	128.4	+106.8

COMMON COURSES; ATTRITION COST DATA COMPARISON (continued)

TOTAL ATTRITION (X 1000)			ACADEMIC ATTRITION COST (X 1000)			NONACADEMIC ATTRITION COST (X 1000)			COST PER GRADUATE		
FY77	Δ		FY76	FY77	Δ	FY76	FY77	Δ	FY76	FY77	Δ
0	0		0	0	0	0	0	0	3936	3882	- 54
7.3	- 1.9		1.5	0.6	- 0.9	7.7	6.7	- 1.0	4171	3317	- 854
0.0	- 5.3		0	0	0	5.3	0.0	- 5.3	5486	7951	+2465
39.9	+ 33.0		0	34.2	+ 34.2	6.9	5.7	- 1.2	1902	3642	+1740
25.9	+ 17.0		2.2	4.6	+ 2.4	6.7	21.3	+ 14.6	5051	5155	+ 104
114.3	-141.4		177.0	45.7	-131.3	78.7	68.6	- 10.1	2387	2313	- 74
-	-		24.9	-	-	9.3	-	-	5036	-	-
56.0	+ 56.0		0	0.0	0	0	56.0	+ 56.0	2209	2479	+ 270
10.9	-		-	0.0	-	-	10.9	-	-	3322	-
48.3	-233.5		131.5	0.0	-131.5	150.3	48.3	-102.0	3546	2869	- 677
18.8	+ 18.8		0	12.5	+ 12.5	0	6.3	+ 6.3	2461	4197	+1736
0.0	- 7.2		0	0.0	0	7.2	0.0	- 7.2	1256	1197	- 59
-	-		0	-	-	10.2	-	-	1858	-	-
-	-		-	-	-	-	-	-	-	-	-
-	-		-	-	-	-	-	-	-	-	-
231.1	+152.8		78.3	154.8	+ 76.5	0	76.2	+ 76.2	1821	2299	+ 478
51.1	+ 47.7		1.0	28.8	+ 27.8	2.4	22.4	+ 20.0	3037	2446	- 591
-	-		-	-	-	-	-	-	-	-	-
57.1	-316.5		124.5	0.0	-124.5	249.1	57.1	-192.0	2540	2921	+ 381
92.0	-291.9		117.6	46.0	- 71.6	176.3	46.0	-130.3	2540	2966	+ 426
-	-		-	-	-	-	-	-	-	-	-
609.6	+309.4		112.6	268.7	+156.1	187.6	340.9	+153.3	4021	4664	+ 643
786.9	- 85.7		387.8	424.0	+ 36.2	484.8	363.0	-121.8	4555	2900	-1655
-	-		9.8	-	-	8.6	-	-	5747	-	-
5.6	- 2.6		0	0	0	8.2	5.6	- 2.6	5558	4850	- 708
28.9	+ 14.1		14.8	11.6	- 3.2	0	17.3	+ 17.3	4037	8097	+4060
25.0	+ 6.2		18.8	19.1	+ 0.3	0	5.9	+ 5.9	2501	2693	+ 192
133.1	+ 27.1		63.6	80.4	+ 16.8	42.4	52.7	+ 10.3	4274	3235	-1039
40.5	-547.7		484.4	17.3	-467.1	103.8	23.2	- 80.6	17503	16376	-1127
7.0	- 4.2		0.9	0	- 0.9	1.9	7.0	+ 5.1	3872	3042	- 830
17.1	+ 14.1		1.3	3.4	+ 2.1	1.7	13.6	+ 11.9	4069	3432	- 637
-	-		-	-	-	-	-	-	1187	-	-
-	-		2.3	-	-	0	-	-	781	-	-
9.4	+ 9.4		0	0	0	0	9.4	+ 9.4	1584	955	- 629
11.7	+ 11.7		0	0	0	0	11.7	+ 11.7	1252	2085	+ 833
0	- 0.4		0.4	0	- 0.4	0	0	0	824	1556	+ 732
-	-		0	-	-	0	-	-	1219	-	-
14.3	+ 11.9		0	0	0	2.4	14.3	+ 11.9	1418	2078	+ 660
128.4	+106.8		16.8	107.7	+ 90.9	4.8	20.7	+ 15.9	1127	1461	+ 334

TABLE D-1. FY 76 VS. FY 77 COMMON COURSES; ATTRITION C

CDP	SHORT TITLE	CIN	TOTAL COST (X 1000)			TOTAL ATTRITION COST (X 1000)			FY76
			FY76	FY77	Δ	FY76	FY77	Δ	
6209	SH-A	A823 0012	611.4	523	- 88.4	0	11.1	+ 11.1	0
6239	AVA-AT-A1	C100 2013	7236	8257	+1021	281.6	774.6	+493.0	153
6240	AVA-AQ-A1	C100 2013	1872	1993	+ 121	72.8	206.2	+133.4	30
6241	AVA-AX-A1	C100 2013	3036	1971	- 1065	126	184.2	+ 58.2	55
6242	AVA-TD-A1	C100 2013	2594	2311	- 283	101	158.9	+ 57.9	50
6244	AFTA-AT-A1	C100 2010	4857	5550	+ 693	254	278.3	+ 24.3	127
6245	AFTA-AQ-A1	C100 2010	2311	1120	-1191	120.9	45.9	- 75.0	80
6246	AFTA-AX-A1	C100 2010	2226	1404	- 822	128.1	49.5	- 78.6	69
6260	BT-A	A651 0010	6191.8	5128	-1063.8	264	190.9	- 73.1	0
6261	EN-A	A652 0018	1596.1	1357	- 239.1	76.8	11.8	- 65.0	0
6262	MM-A	A651 0015	2967.7	9578	+6610.3	126.5	534.8	+408.3	0
6263	ET-A1-ETN	A100 0012	4700	4263	- 437.0	587.7	396.8	-190.9	326
6264	ET-A1-CTM	A100 0012	1141	663	- 478.0	142.7	74.0	- 68.7	118
6265	ET-A1-ETR	A100 0012	588	4323	+3735.0	736	375.1	-360.9	368
6266	ET-A2-ETN	A100 0014	2574	2946	+ 372.0	321.9	114.7	-207.2	80
6267	ET-A2-CTN	A100 0014	716	588	- 128.0	89.6	48.7	- 40.9	38
6268	ET-A2-ETR	A100 0014	3447	2670	- 777.0	431	99.3	-331.7	215
6278	AC-A1	C222 2010	4781.8	3755	-1026.8	448	354.5	- 93.5	336
6286	BU-A	A710 0010	838.4	780	- 58.4	4.4	10.6	+ 6.2	2
6287	EA-A	A412 0010	121.7	91	- 30.7	0	0	0	0
6289	CE-A	A721 0018	238.1	730	+ 491.9	8.3	9.6	+ 1.3	4
6290	UT-A	A720 0012	464.8	494	+ 29.2	10.7	6.1	- 4.6	0
6291	CM-A	A610 0022	469.0	955	+ 486.0	3	7.0	+ 4.0	0
6292	EO-A	A730 0010	1025.3	1099	+ 73.7	11	2.2	- 8.8	3
6299	EW-OP-TECH	A102 0155	958.1	-	-	95	-	-	12
6300	PC-A	A515 0018	-	-	-	-	-	-	-
6301	CTR-A	A231 0044	4624.5	4824	+ 199.5	1492.2	837.2	- 655.0	1208
6302	CTT-A-PREP	A231 0023	3389	4291	+ 902.0	403.7	767.7	- 364.0	336
6319	CTT/ICR/NON MORSE	A231 0047	163.1	361	+ 197.9	0	0	0	0
6320	CTT/SPE/NON MORSE	A231 0046	406.5	1088	+ 681.5	0	20.9	+ 20.9	0
6321	CTI-A2-RUSSIAN	A232 0021	-	-	-	-	-	-	-
6322	CTI-A2-CHI-MAN	A232 0022	-	-	-	-	-	-	-
6323	CTI-A2-VIETNAM	A232 0023	-	-	-	-	-	-	-
6326	CTI-A2-POLISH	A232 0026	-	-	-	-	-	-	-
6327	CTI-A2-BULGAR	A232 0027	-	-	-	-	-	-	-
6328	CTI-A2-KOREAN	A232 0028	-	-	-	-	-	-	-
6329	CTI-A2-COMMON BL	A232 0029	-	-	-	-	-	-	-
6330	CTI-A2-GERMAN	A232 0030	-	-	-	-	-	-	-
6331	CTI-A2-SPANISH	A232 0031	-	-	-	-	-	-	-
6332	CTI-A2-ROM	A232 0032	-	-	-	-	-	-	-

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TABLE D-1. FY 76 VS. FY 77 COMMON COURSES; ATTRITION COST

CDP	SHORT TITLE	CIN	TOTAL COST (X 1000)			TOTAL ATTRITION COST (X 1000)			AC ATT COST
			FY76	FY77	Δ	FY76	FY77	Δ	
6333	CTI-A2-SERBO-CRO	A232 0033	-	-	-	-	-	-	-
6337	UWFT-CLASS A	A130 0138	-	570	-	-	130.4	-	-
6339	HTA-PH2	A700 0010	555.7	2274	+1718.3	2.5	29.9	+27.4	0
6340	HT MAINT	A790 0013	3	-	-	0	-	-	0
6341	OT-A	A210 0011	-	1818	-	-	321	-	-
6343	SCAT MODS 3-6	A101 0134	-	92	-	-	1.9	-	-
6344	SCAT MOD 6	A100 0053	-	86	-	-	13.1	-	-
6345	SCAT-MOD-5	A100 0052	-	77	-	-	0	-	-
6346	SCAT-MOD-4	A100 0051	-	84	-	-	23.2	-	-
6347	SCAT-MOD-3	A100 0050	-	116	-	-	6.7	-	-
6376	FTG-A2	A113 0019	-	1294	-	-	14.3	-	-
6377	FTG-A1	A113 0010	-	2763	-	-	168.7	-	-
6378	GMT ASROC A	A041 0010	-	311	-	-	50.7	-	-
6380	RM A SEA	A202 0026	-	2490	-	-	15.7	-	-
6381	RM A SHORE	A202 0027	-	2149	-	-	10.8	-	-
6400	GMG A	A041 0010	-	3508	-	-	121.2	-	-
6401	BQQ-2 BAS OP	A130 0189	-	227	-	-	4.0	-	-
6402	OA-1283 BAS OP	A130 0188	-	605	-	-	1.3	-	-
6418	DIVERS SECOND	A433 0022	-	-	-	-	-	-	-
6419	SCUBA DIVER	A433 0023	-	-	-	-	-	-	-
6444	I IN STS "A"	A130 0204	-	-	-	-	-	-	-
6451	EW CM TECH	A102 0214	-	1007	-	-	391.0	-	-
6452	RES EM CM TECH	A102 0214	-	-	-	-	-	-	-
6457	ET(SU) EW TECH	A102 0224	-	-	-	-	-	-	-
6473	AG A1	C420 2010	-	-	-	-	-	-	-
6476	EW FUND/PM TECH	A102 0209	-	1690	-	-	427.4	-	-
6478	CTM EW TECH	A102 0234	-	-	-	-	-	-	-
6501	ADJ-A1	C601 2010	549.8	4492	3942.2	199.4	178.5	-20.9	113.9
6502	ADR-A1	C601 2012	780.5	-	-	6.8	-	-	3.4
6506	AO-A1	C646 2010	5010.6	4206	- 804.6	119.1	128.8	+ 9.7	17.0
6512	ABF-A1	C821 2010	996.8	802	- 194.8	15.8	10.3	- 5.5	0
6513	ABE-A1	C680 2012	1169.5	1100	- 69.5	21.2	41.2	+20.0	10.6
6515	AE-A1	C602 2012	6694.1	5424	-1270.1	190.5	136.6	-53.9	76.2
6516	AME-A1	C602 2015	2097.8	2230	+ 132.2	76.6	57.7	-18.9	15.3
6517	AMH-A1	C602 2017	4043.9	2865	-1178.9	145.5	84.9	-60.6	48.5
6518	AMS-A1	C603 2010	4363.5	5226	+ 862.5	112	187.1	+75.1	18.7
6519	PR-BASIC	C602 2010	2010.4	2489	+ 478.6	81.4	76.3	- 5.1	27.1
6520	AG-A1	C420 2010	1980.2	2079	+ 98.8	50	70.8	+20.8	25.0
6521	TD-A1	C191 2010	805.6	1096	+ 290.4	12	12.8	+ 0.8	6.0
6522	AK-A	C551 2010	621.7	-	-	3	-	-	1.3

77 COMMON COURSES; ATTRITION COST DATA COMPARISON (continued)

TOTAL ATTRITION COST (X 1000)		ACADEMIC ATTRITION COST (X 1000)			NONACADEMIC ATTRITION COST (X 1000)			COST PER GRADUATE		
FY77	Δ	FY76	FY77	Δ	FY76	FY77	Δ	FY76	FY77	Δ
-	-	-	-	-	-	-	-	-	-	-
130.4	-	-	86.9	-	-	43.5	-	-	5939	-
29.9	+27.4	0	0	0	2.5	29.9	+27.4	5097	2031	-3066
-	-	0	-	-	0	-	-	1019	-	-
321	-	-	233.5	-	-	87.5	-	-	23304	-
1.9	-	-	0	-	-	1.9	-	-	2196	-
13.1	-	-	6.6	-	-	6.5	-	-	2200	-
0	-	-	0	-	-	0	-	-	2340	-
23.2	-	-	15.5	-	-	7.7	-	-	2145	-
6.7	-	-	0	-	-	6.7	-	-	2363	-
14.3	-	-	3.8	-	-	10.5	-	-	3545	-
168.7	-	-	101.8	-	-	66.9	-	-	2763	-
50.7	-	-	0	-	-	50.7	-	-	3495	-
15.7	-	-	0	-	-	15.7	-	-	1431	-
10.8	-	-	0	-	-	10.8	-	-	1225	-
121.2	-	-	0	-	-	121.2	-	-	3619	-
4.0	-	-	4.0	-	-	0	-	-	2048	-
1.3	-	-	0	-	-	1.3	-	-	1763	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
391.0	-	-	317.7	-	-	73.3	-	-	10708	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
427.4	-	-	256.4	-	-	171.0	-	-	46954	-
-	-	-	-	-	-	-	-	-	-	-
178.5	-20.9	113.9	127.7	+13.8	85.5	50.7	-34.8	1767	1772	+ 5
-	-	3.4	-	-	3.4	-	-	2410	-	-
128.8	+ 9.7	17.0	42.9	+25.9	102.1	85.9	-16.2	3037	2796	-241
10.3	- 5.5	0	3.4	+ 3.4	15.8	6.9	- 8.9	1706	2089	+383
41.2	+20.0	10.6	34.9	+24.3	10.6	6.3	- 4.3	3241	3385	+144
136.6	-53.9	76.2	54.0	-22.2	114.3	82.6	-31.7	3532	3448	- 84
57.7	-18.9	15.3	23.4	+ 8.1	61.3	34.2	-27.1	3550	3785	+235
84.9	-60.6	48.5	21.6	-26.9	97.0	63.3	-33.7	2653	2050	-603
187.1	+75.1	18.7	37.4	+18.7	93.3	149.7	+66.4	3158	2662	-496
76.3	- 5.1	27.1	12.7	-14.4	54.3	63.5	+ 9.2	5153	4397	-756
70.8	+20.8	25.0	31.4	+ 6.4	25.0	39.4	+14.4	6691	6379	-312
12.8	+ 0.8	6.0	0	- 6.0	6.0	12.8	+ 6.8	2051	2531	+480
-	-	1.3	-	-	1.7	-	-	2656	-	-

TABLE D-1. FY 76 VS. FY 77 COMMON COURSES; ATTRITION

CDP	SHORT TITLE	CIN	TOTAL COST (X 1000)			TOTAL ATTRITION COST (X 1000)			FY76
			FY76	FY77	Δ	FY76	FY77	Δ	
6523	PH-LEVEL 1	C400 2010	1489.5	-	-	216.7	-	-	154.8
6527	ABH-A1	C822 2010	1163.0	792	- 371.0	0	6.3	+6.3	0
6528	AZ-A1	C516 2010	966.0	1059	+ 93.0	32	23.4	- 8.6	24.0
6529	IS-A	A242 0010	802.3	607	- 195.3	18.8	15.2	- 3.6	15.0
6530	ASE-A1	C602 2019	664.2	588	- 76.2	2.4	6.4	- 4.0	0.6
6536	TM-AS-TORP-TECH	A123 0127	96	241	+ 145.0	0	18.3	+18.3	0
6537	AW-A1	C210 2010	3102.1	1954	-1148.1	160.2	148.6	-11.6	80.1

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