

AD-A031 537

ARMED FORCES VOCATIONAL TESTING GROUP RANDOLPH AFB TEX F/G 5/10  
REFERENCE TABLES FOR THE ARMED SERVICES VOCATIONAL APTITUDE BAT--ETC(U)  
MAR 74 H D WILFONG, R J ARMSTRONG

UNCLASSIFIED

AFVTG-TRN-74-1

NL

| OF |  
AD  
A031537



END

DATE  
FILMED  
12-76

(9) TECHNICAL RESEARCH NOTE AFVTG 74-1

(14) AFVTG-TRN-74-1

(2)

D D C

REF ID: A  
NOV 2 1976  
A

(6) REFERENCE TABLES FOR THE  
ARMED SERVICES VOCATIONAL APTITUDE BATTERY

AD A031537

(10) Harry D. Wilfong  
1Lt Ronald J. Armstrong USMC

RESEARCH DIVISION

DISTRIBUTION STATEMENT A

Approved for public release;  
Distribution Unlimited

Armed Forces Vocational Testing Group

Randolph AFB, Texas

(11) March 1974

(12) 19p.

409 105  
bpg

AFVTG PROJECT NUMBER 140

COPY AVAILABLE TO DDC DOES NOT  
PERMIT FULLY LEGIBLE PRODUCTION

Armed Forces Vocational Testing Group Technical Research Reports and Technical Research Notes are developed for primary use and reference by secondary school counselors and Department of Defense employed Armed Services Vocational Aptitude Battery (ASVAB) test administrators. This report is summarized in general terminology for field application by secondary school counselors and test administrators. Conclusions and recommendations are solely those of the primary authors and in no way represent either official policy of the military services or the Department of Defense.

Changes to AFVTG Technical Research Note 74 - 1 - Reference Tables  
for The Armed Services Vocational Aptitude Battery

Request the following changes be made by all holders of the above  
referenced Technical Note:

- a. Page Two - Section III b -  
change 1973-74 to read 1974-75
- b. Table 23 - Area I
  - (1) Change the standard deviation (S) for tenth grade males (10-M) on Coding Speed (CS) from 13.56 to 13.36.
  - (2) Change the mean (M) for twelfth grade females (12-F) on Space Perception (SP) from 10.27 to 10.03.
- c. Table 23 - Area II - change the mean (M) for twelfth grade males (12-M) on Shop Information (SI) from 12.32 to 13.32.
- d. Table 23 - Area V
  - (1) Change the standard deviation (S) for twelfth grade males (12-M) on Tool Knowledge (TK) from 3.35 to 5.17.
  - (2) Change the mean (M) for twelfth grade females (12-F) on Tool Knowledge (TK) from 14.25 to 6.56.
  - (3) Change the standard deviation (S) for twelfth grade females (12-F) on Tool Knowledge (TK) from 5.17 to 3.72.
- e. Table 23 - Area VI
  - (1) Change the mean (M) for twelfth grade females (12-F) on Coding Speed (CS) from 59.99 to 57.00

(2) Change the standard deviation (S) for eleventh grade females (11-F) on Shop Information (SI) from 5.58 to 3.58.

f. Table 23 - Area VII

- (1) Change the standard deviation (S) for twelfth grade males (12-M) on Tool Knowledge (TK) from 3.20 to 5.19.
- (2) Change the mean (M) for twelfth grade females (12-F) on Tool Knowledge (TK) from 14.36 to 6.09.
- (3) Change the standard deviation (S) for twelfth grade females (12-F) on Tool Knowledge (TK) from 5.20 to 3.26.

g. Table 23 - Area IX - change the standard deviation (S) for tenth grade females (10-F) on Arithmetic Reasoning (AR) from 6.34 to 5.34.

## Preface

A primary responsibility of the Research Division, Armed Forces Vocational Testing Group is the summarization and distribution, via military service channels, of results of the Department of Defense High School Testing Program through timely and periodic technical research notes. This initial research report describes basic research findings-translated into subtest frequency distributions by grade and sex-for over 800,000 high school students tested on the Armed Services Vocational Aptitude Battery during school year 1972-73.

Data contained in this AFVTG technical research note are intended for release, application, and reference by high school ASVAB users pending release of the 1974-75 edition of the high school counselor's manual.

The tabular information contained in this research note has been extracted from the historical ASVAB data tapes maintained by the Computational Sciences Division, Air Force Human Resources Laboratory, Air Force Systems Command, Lackland Air Force Base, Texas.

This technical research note has been conducted as a subpart of AFVTG research project unit 100; under guidelines prescribed through Department of Defense Instruction 1304.12 (December 1972).

A

SEARCHED	INDEXED	FILED
SERIALIZED	FILE NUMBER	
JULY 1974		
FEDERAL AVIATION ADMINISTRATION		
REGULATORY COMMISSION		
1000 L'Enfant Plaza SW Washington DC 20590		

*Letter on file*

## Abstract

Pre-existing (prior to school year 1973-74) reference norms for the Armed Services Vocational Aptitude Battery (ASVAB) were predicated upon a representative sample of 3050 examinees, processed through Armed Forces Examining and Entrance Stations (AFEES) and stratified on the Armed Forces Qualification Test to produce a mobilization sample. The data were collected at 11 AFEES throughout the country to provide geographic sampling and were replicated (in terms of subtest means and standard deviations) in the 1973-74 edition of the ASVAB high school counselor's manual as a normative referant.

The present ASVAB reference data described in the present research note are based upon actual results of testing over 800,000 high school students during school year 1972-73. As such, the tabular summaries do not constitute bona fide ASVAB norms, representative of any national mobilization population, but do characterize actual test performance of students, stratified by high school grade and sex, tested during school year 1972-73. Information contained in this technical research note as evidence of an expanded reference base for the ASVAB, is for release to individual high school counselors, pending distribution of the 1974-75 edition of the ASVAB Counselor's Manual.

## Contents

	<i>Page</i>
<b>I. Introduction and Background</b>	
Standardization.....	1
AFQT-ASVAB Correlation.....	1
<b>II. Development of Revised ASVAB Reference Statistics</b>	
Initial Development.....	1
Revised Reference Statistics 1973-74 .....	1
Interpretation.....	2
<b>III. Relationship to Test Score Printout</b>	
Gummed Label Revision.....	2
Counselor's Manual Revision .....	2

## I. INTRODUCTION AND BACKGROUND

In 1966, the Manpower Management Planning Board, of which the Assistant Secretary of Defense (Manpower and Reserve Affairs) was chairman, requested the research representatives of the various services to review technical problems involved in developing a single test battery for use across all services.

The battery was to serve the following purposes: (1) testing high school seniors, (2) establishing mental qualifications for enlistment and induction, (3) selection of enlistment applicants for particular occupational or training systems, and (4) classification and assignment. The vehicle developed for accomplishment of the above objectives was the Armed Services Vocational Aptitude Battery (ASVAB). Initial development and standardization of the ASVAB has been previously described by Bayroff and Fuchs (1970).<sup>1</sup>

a. **Standardization:** The basic objective of the initial ASVAB standardization study - as summarized in Table 4 of the high school counselor's manual (AFVTG 1304.12X, 1973)<sup>2</sup> was to reflect the percentage of men in a hypothetical mobilization population (i.e., all draft eligible males between the ages of 18 and 26) achieving proportional scores on the AFQT. To accomplish this conversion, the experimental ASVAB was administered to 3050 Selective Service registrants of 11 AFEES throughout the country. Results of the standardization study indicated that all the ASVAB tests could be used for screening and qualifying potential enlisted men.

b. **AFQT-ASVAB Correlation:** The correlation between the new ASVAB/AFQT and the operational AFQT was substantial ( $r = .89$ ), almost as high as between the two alternate forms of the operational AFQT (.94 and .92). Consequently, the AFEES reference base of 3050 enlistees was utilized as the ASVAB normative sample, as a result of its high comparability to a legislatively required AFQT referent ( $r = .89$ ), and its ultimate transformation to the 1942-45 mobilization base. For these reasons, the 3050 AFEES sample was adopted as the initial 1972-73 ASVAB normative base.

## II. DEVELOPMENT OF REVISED ASVAB REFERENCE STATISTICS

a. **Initial Development:** It was concluded that an ASVAB "normative referent" based upon a sample of 3050 enlistees processing through representative AFEES was inappropriate for operational use by high school counselors:

(1) Although official Department of Defense policy stresses administration of ASVAB to high school seniors, counseling emphasis is frequently focused at the tenth grade level. Consequently, post-high school graduate norms are an unreliable basis for operational and practical discussions involving students at a pre-12th grade level.

(2) Commercial equivalents of the ASVAB (i.e., the DAT, PMA, Kuder, GATB, Iowa, Guilford, FACT) report aptitude performance as related to grade and sex-specific norms. An ASVAB referent of 3050 (post-high school) students processing through AFEES is a minimally acceptable norming base.

b. **Revised Reference Statistics 1973-74:** Responsive to requests from counselors, and in recognition of the insufficiency of existing published data to satisfy the overall needs of counseling and occupational placement officers, a new set of reference statistics has been established for ASVAB, and is described in this report. Data summarized in the attached tables were constituted on the basis of over 800,000 students tested on ASVAB (Form 1)

during school year 1972-73. As such, they are decidedly characteristic of all students tested - by subtest - on the ASVAB during the preceding school year. They do not, however, constitute representative norms in that the 800,000 students tested do not accurately reflect all strata of any nation-wide population who might be expected to eventually take ASVAB (i.e., the nation-wide mobilization population). The attached tables do represent three dimensions of ASVAB test data not previously available:

- (1) Reference norms for students below the 12th grade level.
- (2) Separate norms for male-female by individual subtest.
- (3) ASVAB subtest descriptive statistics by separate geographic area.

c. **Interpretation:** During discussions with high school counselors/administrators, it should be stressed that the attached reference norms are not truly nation-wide mobilization population statistics. (To meet these criteria the data would need to be stratified on the various strata of urban-rural, ethnic group, sex, geographic region, economic grouping and similar demographic categories.) The percentages reported in the tables are, however, representative of the 800,000 + students who took ASVAB during school year 1972-73, and should be presented as such.

(1) Tables 9 through 17 reflect cumulative percentage scores (actual) by subtest, grade, and sex. For all tests, except Coding Speed, negative scores are possible since penalties are assigned for guessing, hence the possible occurrence of scores zero and below. These "look-up" tables are related to raw score performance since individual student raw scores are to be reported on the counselor's printout beginning with school year 1973-74. Counselor raw score interpretation is expected to be based upon subtest performance within specific sex and grade categories.

(2) Table 23 reports overall ASVAB subtest means and standard deviations by geographic region. To the extent that prescribed geographic regions represent competitive labor markets, these data are expected to serve as an overall occupational expectancy norm. Nation-wide ASVAB performance for school year 1973 (summarized by the number of students tested, by subtest, mean and standard deviation) are shown in Table 24.

### III. RELATIONSHIP TO TEST PRINTOUT

a. **Gummed Label Revision:** As a companion to the attached revised ASVAB reference statistic tables, the computer produced gummed label printout for high school counselors is being revised to display similar information. The revised printout will show four scores for each student, for each subtest:

- Raw Score (Relate to Tables 9-17)
- Overall percentile based on all students tested nation-wide
- Overall percentile based on all students tested by grade
- Overall percentile based on all students tested by grade and sex

b. **Counselor's Manual Revision:** The 1973-74 edition of the ASVAB High School Counselor's Manual has been revised to incorporate reference statistics as shown in Tables 9 through 17 and Tables 23 and 24 (attached). These data were included in the revised edition to serve as basic "look-up" tables for both high school counselors and service test administrators.

*Document is complete. There are no tables 1 thru 8.*

## REFERENCES

<sup>1</sup>Bayroff, A. G. & Fuchs, E. F., *The Armed Services Vocational Aptitude Battery*. U.S. Army Behavior and Systems Research Laboratory, Military Selection Research Division, Arlington, Virginia, February 1970. (Technical Research Report 1161)

<sup>2</sup>Armed Forces Vocational Testing Group, *1973-74 Counselor's Manual*. Randolph AFB, Texas (DOD 1304.12X)

TABLE 9

TABLE 10

TABLE 11

Cumulative Percentage Distribution by Grade and Sex\*

Word Knowledge

Arithmetic Reasoning

Coding Speed												Word Knowledge												Arithmetic Reasoning																									
Cumulative Percentage Distribution by Grade and Sex*												Cumulative Percentage Distribution by Grade and Sex												Cumulative Percentage Distribution by Grade and Sex																									
Raw Scores			10th Male			11th Male			12th Male			Raw Score			10th Male			11th Male			12th Male			Raw Score			10th Male			11th Male			12th Male																
0-00-005	0.36	0.18	0.21	0.09	0.20	0.13	1	4.58	3.19	2.48	1.58	2.58	1.85	1	4.98	5.12	2.68	3.26	2.42	3.40	1.86	1.73	1.42	1.86	2.93	2.95	1.46	1.73	1.42	1.86	1.73	1.42																	
006-010	1.10	0.55	0.58	0.31	0.60	0.43	2	6.19	4.54	3.33	2.18	3.47	2.57	2	7.36	8.39	4.24	5.36	3.80	5.58	5.58	5.36	3.80	3.80	3.80	5.58	5.58	5.36	3.80	3.80	3.80	5.58	5.58	5.36															
011-015	2.54	1.23	1.37	0.64	1.32	0.86	3	6.58	4.85	3.56	2.32	3.70	2.71	3	8.38	9.76	4.90	6.13	4.48	6.47	6.47	6.13	6.13	6.13	4.48	4.48	4.48	6.47	6.47	6.47	4.48	4.48	4.48																
016-020	5.59	2.59	3.23	1.46	2.87	1.73	5	10.98	8.91	6.18	4.45	6.36	5.04	5	17.86	22.49	11.09	14.89	10.20	15.65	15.65	10.20	10.20	10.20	10.20	15.65	15.65	10.20	10.20	10.20	10.20	15.65	15.65	10.20															
021-025	11.52	5.23	6.93	3.14	5.98	3.44	6	13.49	11.44	7.73	5.75	7.92	5.68	6	23.54	30.17	15.15	20.64	13.38	21.58	21.58	15.15	15.15	15.15	15.15	21.58	21.58	15.15	15.15	15.15	15.15	21.58	21.58	15.15															
026-030	19.94	9.50	12.77	6.02	11.11	6.18	7	14.03	11.95	8.04	5.99	8.28	6.81	7	25.63	32.63	16.68	22.75	15.47	23.78	23.78	16.68	16.68	16.68	16.68	23.78	23.78	16.68	16.68	16.68	16.68	23.78	23.78	16.68															
031-035	31.78	15.91	21.84	10.59	19.20	10.38	8	17.01	15.11	10.15	7.99	10.32	8.73	8	33.01	41.95	22.19	30.38	20.69	31.39	31.39	20.69	20.69	20.69	20.69	31.39	31.39	20.69	20.69	20.69	20.69	31.39	31.39	20.69															
036-040	46.48	25.25	34.76	17.51	30.78	16.61	9	20.25	18.56	12.57	10.18	12.65	11.05	9	40.88	51.29	28.50	38.48	26.60	39.39	39.39	26.60	26.60	26.60	26.60	39.39	39.39	26.60	26.60	26.60	26.60	39.39	39.39	26.60															
041-045	62.07	37.91	50.08	28.11	45.53	25.93	10	24.18	22.31	15.09	12.55	15.12	13.61	10	48.54	59.64	34.84	46.35	32.68	46.95	46.95	32.68	32.68	32.68	32.68	46.95	46.95	32.68	32.68	32.68	32.68	46.95	46.95	32.68															
046-050	76.66	54.49	67.19	43.44	62.82	40.15	12	29.30	27.29	18.77	16.07	18.69	17.14	12	58.58	70.36	44.78	57.48	42.08	57.72	57.72	42.08	42.08	42.08	42.08	57.72	57.72	42.08	42.08	42.08	42.08	57.72	57.72	42.08															
051-055	86.20	69.20	79.52	59.99	76.22	55.18	13	34.21	32.34	22.46	19.93	22.26	20.89	13	66.00	77.22	52.27	65.31	49.38	64.93	64.93	49.38	49.38	49.38	49.38	64.93	64.93	49.38	49.38	49.38	49.38	64.93	64.93	49.38															
056-060	92.01	80.62	88.20	73.13	85.81	69.49	14	39.42	37.86	26.70	24.28	26.28	25.09	14	72.54	82.66	59.29	71.99	56.34	71.31	71.31	56.34	56.34	56.34	56.34	71.31	71.31	56.34	56.34	56.34	56.34	71.31	71.31	56.34															
061-065	95.36	88.07	93.20	83.43	91.87	80.59	15	39.99	38.36	27.23	24.71	26.82	25.49	15	74.42	84.21	61.55	74.34	58.70	73.53	73.53	58.70	58.70	58.70	58.70	73.53	73.53	58.70	58.70	58.70	58.70	73.53	73.53	58.70															
066-070	97.18	92.55	96.26	90.46	95.45	88.46	16	46.19	44.85	32.70	30.62	32.15	31.08	16	80.14	88.65	68.56	80.33	65.71	79.23	79.23	65.71	65.71	65.71	65.71	79.23	79.23	65.71	65.71	65.71	65.71	79.23	79.23	65.71															
071-075	98.16	95.31	97.83	94.61	97.43	93.41	18	61.44	61.12	47.87	46.62	46.68	46.21	18	89.31	94.72	80.89	89.33	78.18	88.19	88.19	78.18	78.18	78.18	78.18	88.19	88.19	78.18	78.18	78.18	78.18	88.19	88.19	78.18															
076-080	98.72	96.86	98.60	96.78	98.42	96.11	19	76.02	61.96	48.55	47.11	47.29	46.67	19	90.06	95.25	82.22	90.35	79.57	89.33	89.33	79.57	79.57	89.33	89.33	79.57	79.57	89.33	89.33	79.57	79.57	89.33	89.33	79.57															
081-085	99.04	97.79	99.12	98.02	98.98	97.64	20	71.72	71.50	59.55	58.36	58.01	57.47	20	93.43	96.99	87.37	93.49	85.03	92.75	92.75	85.03	85.03	92.75	92.75	85.03	85.03	92.75	92.75	85.03	85.03	92.75	92.75	85.03															
086-090	99.27	98.33	99.36	98.73	99.29	98.48	21	82.63	82.53	73.21	72.02	71.59	70.94	21	96.01	98.36	91.74	96.01	89.92	95.42	95.42	91.74	91.74	95.42	95.42	91.74	91.74	95.42	95.42	91.74	91.74	95.42	95.42	91.74															
091-095	99.51	98.93	99.59	99.16	99.57	99.12	22	92.68	92.19	87.21	85.67	85.94	84.77	22	97.98	99.25	95.33	97.87	94.11	97.46	97.46	95.33	95.33	97.46	97.46	94.11	94.11	97.46	97.46	94.11	94.11	97.46	97.46	94.11															
096-100	100.00	99.83	99.95	100.00	99.98	100.00	24	97.96	97.52	95.78	94.99	95.24	94.53	24	99.33	99.81	98.39	99.31	97.85	99.10	99.10	98.39	98.39	99.31	99.31	97.85	97.85	99.31	99.31	97.85	97.85	99.31	99.31	97.85															
(N)	(54176)	(46999)	(102605)	(78384)	(297645)	(214883)	(N)	(54176)	(46999)	(102605)	(78384)	(297645)	(214883)	(N)	(54176)	(46999)	(102605)	(78384)	(297645)	(214883)	(N)	(54176)	(46999)	(102605)	(78384)	(297645)	(214883)	(N)	(54176)	(46999)	(102605)	(78384)	(297645)	(214883)	(N)	(54176)	(46999)	(102605)	(78384)	(297645)	(214883)	(N)	(54176)	(46999)	(102605)	(78384)	(297645)	(214883)	(N)

\*Cumulative frequency may not be additive to 100% as a function of rounding.

TABLE 12

Tool Knowledge

Cumulative Percentage Distribution by Grade and Sex												
<u>Raw Score</u>	10th			11th			12th			13th		
	<u>Male</u>	<u>Female</u>										
0 & below	.92	3.38	.67	2.63	.55	.55	2.64	0 & below	4.37	5.31	2.93	3.81
1	1.56	8.10	1.10	6.92	.91	6.80	1	7.64	9.45	5.19	4.29	0 & below
2	2.70	17.00	1.91	14.90	1.61	14.78	2	11.82	14.75	8.38	10.69	8.75
3	3.00	18.50	2.10	16.33	1.80	16.16	3	12.55	15.46	8.93	11.34	9.33
4	5.56	33.24	3.84	30.42	3.46	29.96	4	18.38	22.53	13.53	17.10	14.11
5	9.52	50.59	6.87	47.63	6.11	46.45	5	25.63	30.89	19.36	27.70	19.92
6	14.84	66.53	11.00	63.38	9.63	61.82	6	33.02	39.41	25.64	31.15	26.22
7	15.69	68.49	11.68	65.44	10.31	63.92	7	34.17	40.68	26.71	32.40	27.40
8	23.10	81.36	17.57	76.34	15.57	76.76	8	42.74	49.82	34.04	40.73	34.87
9	31.75	89.35	24.58	87.16	21.98	85.51	9	51.23	58.76	41.82	49.20	42.66
10	40.87	93.91	32.23	92.30	28.94	90.77	10	59.03	66.84	49.50	57.53	50.35
11	42.11	94.54	33.22	92.97	29.97	91.43	11	60.37	68.20	51.05	59.34	51.93
12	51.89	97.02	42.13	95.98	38.37	94.72	12	68.15	75.88	59.33	67.71	59.98
13	61.36	98.28	51.38	97.54	47.33	96.57	13	75.34	82.30	67.19	75.35	67.68
14	70.22	98.95	60.40	98.47	56.14	97.71	14	81.65	87.73	74.31	82.03	74.62
15	71.02	99.03	61.22	98.57	56.99	97.83	15	82.73	88.70	75.84	83.50	76.16
16	79.08	99.39	70.38	99.12	66.23	98.56	16	88.16	92.78	82.90	88.98	82.48
17	86.05	99.68	78.64	99.47	75.02	99.03	17	92.03	95.69	87.72	93.05	87.73
18	91.07	99.81	85.63	99.69	82.70	99.38	18	94.99	97.53	91.97	95.89	91.85
19	91.39	99.82	86.05	99.70	83.08	99.40	19	95.37	97.83	92.65	96.44	92.62
20	95.15	99.92	91.66	99.85	89.54	99.67	20	97.53	98.61	95.58	98.15	95.60
21	97.71	99.97	96.65	99.94	94.43	99.85	21	98.75	99.58	97.95	99.13	97.67
22	99.11	100.00	98.21	99.99	97.64	99.95	22	99.46	99.87	98.94	99.66	99.66
23	99.15	100.00	98.28	99.99	99.49	99.95	23	99.49	99.89	99.70	99.95	99.95
24	99.82	100.00	99.61	100.00	98.45	99.98	24	99.87	99.99	99.70	99.92	99.94
25	100.00	100.00	100.00	100.00	100.00	100.00	25	100.00	99.97	100.00	99.99	100.00

TABLE 13

Space Perception

Cumulative Percentage Distribution by Grade and Sex												
<u>Raw Score</u>	10th			11th			12th			13th		
	<u>Male</u>	<u>Female</u>										
0 & below	.92	3.38	.67	2.63	.55	.55	2.64	0 & below	4.37	5.31	2.93	3.81
1	1.56	8.10	1.10	6.92	.91	6.80	1	7.64	9.45	5.19	4.29	0 & below
2	2.70	17.00	1.91	14.90	1.61	14.78	2	11.82	14.75	8.38	10.69	8.75
3	3.00	18.50	2.10	16.33	1.80	16.16	3	12.55	15.46	8.93	11.34	9.33
4	5.56	33.24	3.84	30.42	3.46	29.96	4	18.38	22.53	13.53	17.10	14.11
5	9.52	50.59	6.87	47.63	6.11	46.45	5	25.63	30.89	19.36	27.70	19.92
6	14.84	66.53	11.00	63.38	9.63	61.82	6	33.02	39.41	25.64	31.15	31.15
7	15.69	68.49	11.68	65.44	10.31	63.92	7	34.17	40.68	26.71	32.40	31.15
8	23.10	81.36	17.57	76.34	15.57	76.76	8	42.74	49.82	34.04	40.73	34.87
9	31.75	89.35	24.58	87.16	21.98	85.51	9	51.23	58.76	41.82	49.20	42.66
10	40.87	93.91	32.23	92.30	28.94	90.77	10	59.03	66.84	49.50	57.53	50.35
11	42.11	94.54	33.22	92.97	29.97	91.43	11	60.37	68.20	51.05	59.34	51.93
12	51.89	97.02	42.13	95.98	38.37	94.72	12	68.15	75.88	59.33	67.71	59.98
13	61.36	98.28	51.38	97.54	47.33	96.57	13	75.34	82.30	67.19	75.35	67.68
14	70.22	98.95	60.40	98.47	56.14	97.71	14	81.65	87.73	74.31	82.03	74.62
15	71.02	99.03	61.22	98.57	56.99	97.83	15	82.73	88.70	75.84	83.50	76.16
16	79.08	99.39	70.38	99.12	66.23	98.56	16	88.16	92.78	82.90	88.98	82.48
17	86.05	99.68	78.64	99.47	75.02	99.03	17	92.03	95.69	87.72	93.05	87.73
18	91.07	99.81	85.63	99.69	82.70	99.38	18	94.99	97.53	91.97	95.89	91.85
19	91.39	99.82	86.05	99.70	83.08	99.40	19	95.37	97.83	92.65	96.44	92.62
20	95.15	99.92	91.66	99.85	89.54	99.67	20	97.53	98.61	95.58	98.15	95.60
21	97.71	99.97	96.65	99.94	94.43	99.85	21	98.75	99.58	97.95	99.13	97.67
22	99.11	100.00	98.21	99.99	97.64	99.95	22	99.46	99.87	98.94	99.66	99.66
23	99.15	100.00	98.28	99.99	97.70	99.95	23	99.49	99.89	99.70	99.95	99.95
24	99.82	100.00	99.61	100.00	98.45	99.98	24	99.87	99.99	99.70	99.92	99.94
25	100.00	100.00	100.00	100.00	100.00	100.00	25	100.00	99.97	100.00	99.99	100.00

TABLE 14

Mechanical Comprehension

Cumulative Percentage Distribution by Grade and Sex												
<u>Raw Score</u>	10th			11th			12th			13th		
	<u>Male</u>	<u>Female</u>										
0 & below	.92	3.38	.67	2.63	.55	.55	2.64	0 & below	4.37	5.31	2.93	3.81
1	1.56	8.10	1.10	6.92	.91	6.80	1	7.64	9.45	5.19	4.29	0 & below
2	2.70	17.00	1.91	14.90	1.61	14.78	2	11.82	14.75	8.38	10.69	8.75
3	3.00	18.50	2.10	16.33	1.80	16.16	3	12.55	15.46	8.93	11.34	9.33
4	5.56	33.24	3.84	30.42	3.46	29.96	4	18.38	22.53	13.53	17.10	14.11
5	9.52	50.59	6.87	47.63	6.11	46.45	5	25.63	30.89	19.36	27.70	19.92
6	14.84	66.53	11.00	63.38	9.63	61.82	6	33.02	39.41	25.64	31.15	31.15
7	15.69	68.49	11.68	65.44	10.31	63.92	7	34.17	40.68	26.71	32.40	31.15
8	23.10	81.36	17.57	76.34	15.57	76.76	8	42.74	49.82	34.04	40.73	34.87
9	31.75	89.35	24.58	87.16	21.98	85.51	9	51.23	58.76	41.82	49.20	42.66
10	40.87	93.91	32.23	92.30	28.94	90.77	10	59.03	66.84	49.50	57.53	50.35
11	42.11	94.54	33.22	92.97	29.97	91.43	11	60.37	68.20	51.05	59.34	51.93
12	51.89	97.02	42.13	95.98	38.37	94.72	12	68.15	75.88	59.33	67.71	59.98
13	61.36	98.28	51.38	97.54	47.33	96.57	13	75.34	82.30	67.19	75.35	67.68
14	70.22	98.95	60.40	98.47	56.14	97.71	14	81.65	87.73	74.31	82.03	74.62
15	71.02	99.03	61.22	98.57	56.99	97.83	15	82.73	88.70	75.84	83.50	76.16
16	79.08	99.39	70.38	99.12	66.23	98.56	16	88.16</td				

TABLE 15

TABLE 16

TABLE 17

Cumulative Percentage Distribution by Grade and Sex												
Raw Score	10th Male			10th Female			11th Male			11th Female		
	10th Male	10th Female	11th Male	10th Male	10th Female	11th Male	11th Male	11th Female	12th Male	11th Male	12th Female	
0 & below	2.59	8.80	1.29	5.62	1.16	5.52	0 & below	5.48	17.45	2.64	12.05	
1	4.05	15.16	2.05	10.13	1.81	10.06	1	8.92	28.43	4.48	20.65	
2	5.87	23.42	3.10	16.93	2.76	16.74	2	13.40	41.29	7.17	31.83	
3	6.53	25.54	3.48	18.72	3.20	18.53	3	15.06	44.58	8.16	34.72	
4	9.44	37.07	5.21	28.81	4.91	28.66	4	21.31	58.74	12.37	48.37	
5	13.42	50.50	7.98	41.34	7.58	40.97	5	28.79	71.40	17.67	61.88	
6	18.71	63.16	11.74	54.74	11.32	54.14	6	36.94	81.28	23.81	73.79	
7	20.21	65.69	12.94	57.31	12.51	56.65	7	39.50	83.34	25.91	76.36	
8	27.84	77.15	18.72	70.23	17.97	69.27	8	48.07	90.20	33.23	84.89	
9	36.29	86.04	25.81	80.88	24.89	78.75	9	56.55	94.40	40.94	91.13	
10	46.07	91.57	34.46	98.51	33.13	87.42	10	64.26	97.06	48.63	94.68	
11	48.00	92.67	36.16	98.86	34.81	88.48	11	66.15	97.43	50.76	95.31	
12	58.49	96.23	46.08	94.34	44.41	93.34	12	73.08	98.45	58.34	97.90	
13	68.21	98.05	56.80	97.10	54.67	96.29	13	79.05	99.04	65.35	98.21	
14	77.31	98.02	67.02	98.47	64.78	97.89	14	83.96	99.35	71.77	98.82	
15	78.38	98.15	68.21	98.61	65.96	98.04	15	84.92	99.39	73.07	99.90	
16	85.61	99.59	77.56	99.32	75.26	98.98	16	88.92	99.59	78.90	99.22	
17	91.22	99.82	85.31	99.66	83.46	99.47	17	92.31	99.74	84.26	99.45	
18	96.06	99.94	91.23	98.82	88.84	98.72	18	94.87	99.83	88.74	99.64	
19	96.26	99.95	91.55	99.83	90.15	98.73	19	95.09	99.94	89.13	99.65	
20	97.79	100.00	96.80	99.83	94.74	98.85	20	97.06	99.88	92.89	99.77	
21	98.12	100.00	98.10	99.97	97.63	99.65	21	98.54	99.91	96.05	99.89	
22	99.75	100.00	99.38	99.98	98.20	99.98	22	99.41	99.96	99.29	99.94	
23	99.76	100.00	99.40	99.98	99.21	99.98	23	99.43	99.99	99.34	99.96	
24	99.96	100.00	99.88	99.99	99.84	100.00	24	99.89	99.99	99.57	100.00	
25	100.00	99.99	99.99	99.99	99.99	100.00	25	100.00	100.00	100.00	100.00	
(54176)	(48999)	(102805)	(78384)	(297645)	(214983)	(N)	(54176)	(48999)	(102605)	(78384)	(297645)	
(102805)	(78384)	(297645)	(214983)	(N)	(54176)	(48999)	(102605)	(78384)	(297645)	(214983)	(N)	
(54176)	(48999)	(102605)	(78384)	(297645)	(214983)	(N)	(54176)	(48999)	(102605)	(78384)	(297645)	

TABLE 18  
General Technical Composite

Percentage Falling in Each Interval by Grade and Sex

Percentile Range	11-Male			11-Female			12-Male			12-Female			Percentile Range
	11-Male	11-Female	12-Male	11-Male	11-Female	12-Male	11-Male	11-Female	12-Male	11-Male	11-Female	12-Male	
85-99	.9	.5	1.5	.8	.9	2	.4	.3	.6	.5	.6	0	1.2
90-94	1.0	.7	1.7	1.2	1.2	90-94	1.0	.8	1.4	90-94	3.1	.1	4.5
85-89	1.7	1.4	2.2	2.0	85-89	.8	1.4	1.1	2.0	85-89	4.6	.1	6.2
80-84	2.7	2.1	3.5	3.1	80-84	1.0	2.1	1.8	3.3	80-84	7.0	.3	8.7
75-79	1.9	1.7	3.0	2.5	75-79	2.3	3.0	2.9	4.8	75-79	6.8	.7	8.2
70-74	5.7	4.4	7.6	6.0	70-74	3.4	6.0	4.5	7.5	70-74	5.5	.9	6.4
65-69	4.7	3.2	6.8	4.4	65-69	4.4	6.9	5.8	9.1	65-69	6.4	1.4	7.2
60-64	7.7	6.4	9.0	8.1	60-64	4.9	7.9	6.3	8.2	60-64	6.0	1.5	6.4
55-59	7.1	6.3	8.0	6.6	55-59	6.1	8.4	7.9	9.4	55-59	6.9	2.6	6.9
50-54	8.1	7.3	7.8	8.5	50-54	8.2	9.8	8.4	8.9	50-54	7.1	3.2	5.8
45-49	9.5	9.4	9.6	9.3	45-49	8.1	9.0	8.6	8.2	45-49	6.7	4.3	6.3
40-44	8.7	8.3	7.1	7.9	40-44	9.8	8.8	9.5	8.6	40-44	6.4	6.0	5.3
35-39	7.0	8.4	6.3	7.6	35-39	10.4	8.4	9.7	7.7	35-39	6.1	7.3	5.4
30-34	7.9	9.8	7.0	8.2	30-34	9.7	7.5	8.2	5.7	30-34	5.8	9.7	4.7
25-29	7.3	8.8	5.9	7.9	25-29	8.6	6.4	7.6	4.6	25-29	5.9	12.4	4.1
20-24	6.1	7.8	4.9	5.8	20-24	8.0	5.2	6.1	3.9	20-24	5.0	13.7	4.3
15-19	5.4	6.7	3.8	4.9	15-19	6.7	4.0	5.1	3.0	15-19	3.6	12.2	3.0
10-14	3.9	4.2	3.1	3.4	10-14	4.0	2.6	3.1	2.0	10-14	2.7	10.4	2.2
05-09	2.0	2.0	1.6	1.3	05-09	2.2	1.0	1.7	.9	05-09	2.5	9.5	2.1
01-04	.7	.8	.5	.01-04	.8	.4	.6	.2	01-04	1.3	3.7	1.1	2.9
N	9291	8901	8972	8568	N	9291	8901	8972	8568	N	9291	8901	8972

TABLE 19  
Chemical Composite

Percentage Falling in Each Interval by Grade and Sex

Percentile Range	11-Male			11-Female			12-Male			12-Female			Percentile Range
	11-Male	11-Female	12-Male	11-Male	11-Female	12-Male	11-Male	11-Female	12-Male	11-Male	11-Female	12-Male	
85-99	.9	.5	1.5	.8	.9	2	.4	.3	.6	.5	.6	0	1.2
90-94	1.0	.7	1.7	1.2	90-94	1.0	1.0	.8	1.4	90-94	3.1	.1	4.5
85-89	1.7	1.4	2.2	2.0	85-89	.8	1.4	1.1	2.0	85-89	4.6	.1	6.2
80-84	2.7	2.1	3.5	3.1	80-84	1.0	2.1	1.8	3.3	80-84	7.0	.3	8.7
75-79	1.9	1.7	3.0	2.5	75-79	2.3	3.0	2.9	4.8	75-79	6.8	.7	8.2
70-74	5.7	4.4	7.6	6.0	70-74	3.4	6.0	4.5	7.5	70-74	5.5	.9	6.4
65-69	4.7	3.2	6.8	4.4	65-69	4.4	6.9	5.8	9.1	65-69	6.4	1.4	7.2
60-64	7.7	6.4	9.0	8.1	60-64	4.9	7.9	6.3	8.2	60-64	6.0	1.5	6.4
55-59	7.1	6.3	8.0	6.6	55-59	6.1	8.4	7.9	9.4	55-59	6.9	2.6	6.9
50-54	8.1	7.3	7.8	8.5	50-54	8.2	9.8	8.4	8.9	50-54	7.1	3.2	5.8
45-49	9.5	9.4	9.6	9.3	45-49	8.1	9.0	8.6	8.2	45-49	6.7	4.3	6.3
40-44	8.7	8.3	7.1	7.9	40-44	9.8	8.8	9.5	8.6	40-44	6.4	6.0	5.3
35-39	7.0	8.4	6.3	7.6	35-39	10.4	8.4	9.7	7.7	35-39	6.1	7.3	5.4
30-34	7.9	9.8	7.0	8.2	30-34	9.7	7.5	8.2	5.7	30-34	5.8	9.7	4.7
25-29	7.3	8.8	5.9	7.9	25-29	8.6	6.4	7.6	4.6	25-29	5.9	12.4	4.1
20-24	6.1	7.8	4.9	5.8	20-24	8.0	5.2	6.1	3.9	20-24	5.0	13.7	4.3
15-19	5.4	6.7	3.8	4.9	15-19	6.7	4.0	5.1	3.0	15-19	3.6	12.2	3.0
10-14	3.9	4.2	3.1	3.4	10-14	4.0	2.6	3.1	2.0	10-14	2.7	10.4	2.2
05-09	2.0	2.0	1.6	1.3	05-09	2.2	1.0	1.7	.9	05-09	2.5	9.5	2.1
01-04	.7	.8	.5	.01-04	.8	.4	.6	.2	01-04	1.3	3.7	1.1	2.9
N	9291	8901	8972	8568	N	9291	8901	8972	8568	N	9291	8901	8972

TABLE 20  
Electronics Composite

Percentage Falling in Each Interval by Grade and Sex

Percentile Range	11-Male			11-Female			12-Male			12-Female			Percentile Range
	11-Male	11-Female	12-Male	11-Male	11-Female	12-Male	11-Male	11-Female	12-Male	11-Male	11-Female	12-Male	
85-99	.9	.5	1.5	.8	.9	2	.4	.3	.6	.5	.6	0	1.2
90-94	1.0	.7	1.7	1.2	90-94	1.0	1.0	.8	1.4	90-94	3.1	.1	4.5
85-89	1.7	1.4	2.2	2.0	85-89	.8	1.4	1.1	2.0	85-89	4.6	.1	6.2
80-84	2.7	2.1	3.5	3.1	80-84	1.0	2.1	1.8	3.3	80-84	7.0	.3	8.7
75-79	1.9	1.7	3.0	2.5	75-79	2.3	3.0	2.9	4.8	75-79	6.8	.7	8.2
70-74	5.7	4.4	7.6	6.0	70-74	3.4	6.0	4.5	7.5	70-74	5.5	.9	6.4
65-69	4.7	3.2	6.8	4.4	65-69	4.4	6.9	5.8	9.1	65-69	6.4	1.4	7.2
60-64	7.7	6.4	9.0	8.1	60-64	4.9	7.9	6.3	8.2	60-64	6.0	1.5	6.4
55-59	7.1	6.3	8.0	6.6	55-59	6.1	8.4	7.9	9.4	55-59	6.9	2.6	6.9
50-54	8.1	7.3	7.8	8.5	50-54	8.2	9.8	8.4	8.9	50-54	7.1	3.2	5.8
45-49	9.5	9.4	9.6	9.3	45-49	8.1	9.0	8.6	8.2	45-49	6.7	4.3	6.3
40-44	8.7	8.3	7.1	7.9	40-44	9.8	8.8	9.5	8.6	40-44	6.4	6.0	5.3
35-39	7.0	8.4	6.3	7.6	35-39	10.4	8.4	9.7	7.7	35-39	6.1	7.3	5.4
30-34	7.9	9.8	7.0	8.2	30-34	9.7	7.5	8.2	5.7	30-34	5.8	9.7	4.7
25-29	7.3	8.8	5.9	7.9	25-29	8.6	6.4	7.6	4.6	25-29	5.9	12.4	4.1
20-24	6.1	7.8	4.9	5.8	20-24	8.0	5.2	6.1	3.9	20-24	5.0	13.7	4.3
15-19	5.4	6.7	3.8	4.9	15-19	6.7	4.0	5.1	3.0	15-19	3.6	12.2	3.0
10-14	3.9	4.2	3.1	3.4	10-14	4.0	2.6	3.1	2.0	10-14	2.7	10.4	2.2
05-09	2.0	2.0	1.6	1.3	05-09	2.2	1.0	1.7	.9	05-09	2.5	9.5	2.1
01-04	.7	.8	.5	.01-04	.8	.4	.6	.2	01-04	1.3	3.7	1.1	2.9
N	9291	8901	8972	8568	N	9291	8901	8972	8568	N	9291	8901	8972

TABLE 21

## General Mechanic Composite

Percent Falling in Each Interval by Grade and Sex

<u>Percentile Range</u>	<u>11-Male</u>			<u>12-Male</u>			<u>Percentile Range</u>	<u>11-Male</u>			<u>12-Male</u>		
	<u>11-Female</u>	<u>12-Female</u>	<u>Percentile</u>	<u>11-Female</u>	<u>12-Female</u>	<u>Percentile</u>		<u>11-Male</u>	<u>12-Female</u>	<u>Percentile</u>	<u>11-Female</u>	<u>12-Female</u>	<u>Percentile</u>
95-99	.2	0	.3	0	95-99	.6	0	0	1.5	0	0	0	0
90-94	1.7	0	2.9	.1	90-94	2.8	0	5.1	.1	1	5.1	0	1
85-89	3.5	.2	5.0	.3	85-89	4.1	0	6.6	2	2	6.6	0	2
80-84	4.6	.2	5.7	.4	80-84	6.4	.5	7.7	.3	3	7.7	.5	3
75-79	4.6	.2	5.5	.5	75-79	6.3	.4	8.1	.5	5	8.1	.4	5
70-74	5.7	.6	6.7	.7	70-74	7.1	.4	7.9	.9	9	7.9	.4	9
65-69	6.5	.9	6.9	1.1	65-69	8.4	1.0	8.4	1.6	1.6	8.4	1.0	1.6
60-64	7.2	1.5	7.8	2.4	60-64	9.1	2.0	8.5	2.6	2.6	8.5	2.0	2.6
55-59	5.8	1.7	6.5	2.1	55-59	7.9	2.8	7.1	3.2	3.2	7.1	2.8	3.2
50-54	8.3	3.0	7.8	4.5	50-54	6.6	3.6	5.7	4.5	4.5	5.7	3.6	4.5
45-49	8.6	5.2	7.5	5.6	45-49	8.1	6.5	6.9	8.4	8.4	6.9	8.1	8.4
40-44	7.2	5.8	7.1	6.7	40-44	5.3	6.1	4.6	7.2	7.2	4.6	5.3	7.2
35-39	5.9	7.7	5.7	7.7	35-39	5.5	9.2	4.6	8.9	8.9	4.6	5.5	8.9
30-34	6.3	9.7	5.3	10.8	30-34	5.1	11.0	4.3	10.0	10.0	4.3	5.1	10.0
25-29	5.8	11.5	5.1	10.9	25-29	4.5	11.6	3.3	11.5	11.5	3.3	4.5	11.5
20-24	5.4	11.7	4.7	11.9	20-24	3.7	11.9	3.0	10.2	10.2	3.0	3.7	10.2
15-19	4.7	11.9	3.7	10.7	15-19	3.5	11.8	2.9	11.9	11.9	2.9	3.5	11.9
10-14	4.3	13.8	3.0	11.5	10-14	2.4	10.4	1.6	9.0	9.0	1.6	2.4	9.0
05-09	2.6	10.1	1.8	8.7	05-09	1.5	7.0	1.2	6.0	6.0	1.2	1.5	6.0
01-04	1.1	4.3	1.0	3.4	01-04	1.1	3.8	1.0	3.0	3.0	1.0	1.1	3.0
N	9291	9301	8972	8568	N	9291	9301	8972	8568	8568	8972	8972	8568

TABLE 22

## Motor Mechanics Composite

Percentage Falling in Each Interval by Grade and Sex

**TABLE 23**  
MEANS AND STANDARD DEVIATIONS OF ASVAB TEST SCORES BY AREA, GRADE AND SEX

*AREA I (Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, Rhode Island and Vermont)*

Part	10-M		10-F		11-M		11-F		12-M		12-F	
	M	S	M	S	M	S	M	S	M	S	M	S
1 (CS)	42.21	13.56	50.23	13.89	45.64	13.49	52.21	13.55	45.76	13.12	53.30	13.99
2 (WK)	16.68	6.00	17.06	5.50	18.69	5.12	18.91	4.97	18.93	5.10	19.18	4.90
3 (AR)	12.04	5.56	10.49	5.03	14.06	5.65	12.18	5.47	14.44	5.71	12.57	5.50
4 (TK)	12.06	4.87	5.91	3.16	12.93	4.99	8.28	3.38	13.38	5.24	6.20	3.29
5 (SP)	10.20	5.45	9.13	5.21	11.33	5.43	9.96	5.29	11.56	5.54	10.27	5.28
6 (MC)	12.59	4.44	9.14	3.82	13.49	4.32	9.80	3.76	13.57	4.49	9.66	3.81
7 (SI)	11.53	4.79	5.76	3.66	12.53	4.63	6.46	3.62	12.97	4.84	6.43	3.69
8 (AI)	9.26	5.64	3.62	3.51	10.51	5.80	4.38	3.63	11.71	6.16	4.55	3.77
9 (EI)	11.28	5.43	5.88	4.32	12.77	5.33	7.09	4.49	13.43	5.45	7.15	4.48
(N)	(3951)		(3952)		(6976)		(4896)		(13050)		(8375)	

TABLE 23 (Cont'd)

*AREA II (New York, Pennsylvania and Delaware)*

Part	10-M		10-F		11-M		11-F		12-M		12-F	
	M	S	M	S	M	S	M	S	M	S	M	S
1 (CS)	43.05	14.48	51.47	14.10	46.84	13.84	55.75	14.69	48.38	13.27	57.11	14.45
2 (WK)	16.42	6.05	17.37	5.35	18.21	5.47	18.38	5.13	18.78	5.05	19.40	4.55
3 (AR)	11.98	5.76	10.80	5.22	13.92	5.91	12.03	5.46	14.75	5.70	12.92	5.62
4 (TK)	12.42	4.96	5.83	3.16	12.82	5.13	5.83	3.16	13.66	5.21	6.23	3.49
5 (SP)	10.07	5.51	8.95	5.29	11.29	5.67	9.76	5.34	11.59	5.61	10.13	5.34
6 (MC)	12.24	4.56	8.87	3.82	13.10	4.52	9.37	3.86	13.66	4.42	9.69	3.87
7 (SI)	11.62	4.90	5.82	3.68	12.51	4.81	6.24	3.72	12.32	4.77	6.73	3.86
8 (AI)	9.08	5.56	3.62	3.54	10.48	5.80	4.12	3.64	11.92	5.99	4.89	3.94
9 (EI)	11.16	5.60	5.72	4.37	12.76	5.52	6.54	4.45	13.67	5.27	7.53	4.59
(N)	(6242)		(5377)		(11976)		(9216)		(25155)		(15297)	

TABLE 23 (Cont'd)

*AREA III (District of Columbia, Maryland, North Carolina, South Carolina, Virginia and West Virginia)*

Part	10-M		10-F		11-M		11-F		12-M		12-F	
	M	S	M	S	M	S	M	S	M	S	M	S
1 (CS)	40.55	14.36	48.46	15.04	43.83	13.58	49.85	14.19	44.12	13.88	50.53	14.93
2 (WK)	14.11	7.19	14.68	6.65	16.11	6.79	16.42	6.36	16.14	6.74	16.33	6.49
3 (AR)	10.06	5.69	8.74	5.01	11.89	6.03	10.23	5.49	12.28	6.08	10.29	5.56
4 (TK)	11.49	4.74	5.92	3.28	11.91	4.86	5.95	3.35	12.63	4.98	5.90	3.43
5 (SP)	8.27	5.41	7.87	5.05	9.78	5.62	8.66	5.27	9.43	5.63	8.20	5.27
6 (MC)	11.09	4.78	8.21	4.01	12.06	4.70	8.78	3.98	12.15	4.78	8.42	4.09
7 (SI)	10.14	4.86	5.58	3.76	11.01	4.75	5.84	3.75	11.42	4.89	5.74	3.82
8 (AI)	8.59	5.27	4.03	3.74	9.88	5.50	4.46	3.71	11.03	5.83	4.87	4.04
9 (EI)	10.18	5.46	5.89	4.34	11.56	5.49	6.43	4.45	12.14	5.46	6.96	4.49
(N)	(4573)		(4205)		(6839)		(5785)		(31609)		(24681)	

TABLE 23 (Cont'd)

AREA IV (Alabama, Florida, Georgia, Mississippi and Tennessee)

Part	10-M		10-F		11-M		11-F		12-M		12-F	
	M	S	M	S	M	S	M	S	M	S	M	S
1 (CS)	38.87	14.69	47.46	16.52	42.96	15.55	51.61	16.84	45.79	15.83	52.82	16.95
2 (WK)	13.76	7.52	14.43	7.23	15.53	7.09	15.90	6.68	15.88	6.92	16.17	6.51
3 (AR)	10.11	5.96	9.17	5.34	11.64	6.07	10.18	5.57	12.23	6.04	10.07	5.58
4 (TK)	11.37	4.92	5.87	3.41	12.47	4.90	8.22	3.70	13.03	4.94	8.57	3.87
5 (SP)	8.89	5.65	7.82	5.26	9.50	5.74	8.44	5.43	9.48	5.56	8.22	5.21
6 (MC)	10.89	5.20	8.00	4.35	12.00	4.97	8.53	4.20	12.33	4.81	8.66	4.18
7 (SI)	9.64	5.18	5.08	4.01	10.91	5.07	5.60	3.99	11.42	4.89	6.18	4.08
8 (AI)	7.89	5.69	3.35	3.57	10.03	5.82	4.43	4.09	11.25	5.86	5.25	4.45
9 (EI)	9.50	6.16	4.70	4.62	11.37	5.82	6.28	4.79	12.25	5.37	7.23	4.68
(N)	(3138)		(2720)		(8172)		(6527)		(46003)		(38526)	

TABLE 23 (Cont'd)

AREA V (Indiana, Kentucky, Michigan and Ohio)

Part	10-M		10-F		11-M		11-F		12-M		12-F	
	M	S	M	S	M	S	M	S	M	S	M	S
1 (CS)	41.80	14.25	49.41	15.35	45.05	13.77	51.55	14.08	47.30	13.54	54.36	13.95
2 (WK)	15.31	6.48	15.53	6.30	17.18	5.97	17.59	5.65	18.05	5.61	18.42	5.17
3 (AR)	11.02	5.89	9.81	5.23	13.00	5.92	11.24	5.57	14.08	5.83	11.87	5.57
4 (TK)	12.06	5.01	5.75	3.08	13.81	5.10	6.24	3.35	14.25	3.35	14.25	5.17
5 (SP)	9.39	5.42	8.29	5.22	10.83	5.62	9.64	5.30	11.07	5.60	9.70	5.23
6 (MC)	11.62	4.61	8.51	3.96	13.00	4.50	9.47	3.82	13.68	4.43	9.81	3.78
7 (SI)	11.01	4.87	5.55	3.75	12.83	4.79	6.57	3.80	13.37	4.71	6.85	3.79
8 (AI)	9.08	5.58	4.01	3.54	11.52	5.78	4.85	3.76	12.84	5.80	5.63	4.04
9 (EI)	10.61	5.64	5.31	4.33	12.58	5.34	6.82	4.45	13.53	5.07	7.73	4.41
(N)	(6379)		(5777)		(13471)		(9795)		(38323)		(25863)	

TABLE 23 (Cont'd)

AREA VI (Iowa, Minnesota, Montana, North Dakota, South Dakota and Wisconsin)

Part	10-M		10-F		11-M		11-F		12-M		12-F	
	M	S	M	S	M	S	M	S	M	S	M	S
1 (CS)	42.66	12.51	50.71	12.78	46.98	13.06	54.66	13.62	49.15	12.49	59.99	13.21
2 (WK)	16.15	6.04	17.05	5.37	17.96	5.30	18.92	4.55	18.82	4.89	19.59	4.30
3 (AR)	12.31	5.86	10.78	4.98	14.48	5.59	12.82	5.42	15.54	5.83	13.65	5.59
4 (TK)	13.69	4.74	6.21	3.43	14.70	4.79	6.35	3.40	15.61	4.79	6.40	3.42
5 (SP)	10.26	5.43	9.48	5.11	11.25	5.47	10.69	5.13	11.88	5.51	10.96	5.13
6 (MC)	13.43	4.44	9.98	3.75	14.36	4.26	10.53	3.63	14.90	4.24	10.79	3.62
7 (SI)	12.73	4.63	6.61	3.65	13.77	4.41	7.22	5.58	14.61	4.41	7.65	3.62
8 (AI)	10.54	5.58	4.10	3.76	13.01	5.62	5.22	3.75	14.57	5.67	5.55	3.88
9 (EI)	11.89	5.35	6.45	4.30	13.51	4.83	7.77	4.27	14.40	4.71	8.34	4.34
(N)	(2155)		(1864)		(7641)		(5806)		(21194)		(13600)	

TABLE 23 (Cont'd)

## AREA VII (Illinois, Kansas, Missouri and Nebraska)

Part	M	10-M	S	M	10-F	S	M	11-M	S	M	11-F	S	M	12-M	S	M	12-F	S
1 (CS)	41.90	14.22	48.79	14.75	46.60	13.41	54.16	13.47	48.43	13.03	55.87	13.70						
2 (WK)	15.11	6.69	15.22	6.49	17.96	5.62	18.44	5.13	18.51	5.31	18.85	5.02						
3 (AR)	10.77	5.85	9.28	5.25	13.53	5.92	11.83	5.51	14.29	5.91	12.19	5.84						
4 (TK)	11.87	5.06	5.51	3.03	13.35	5.11	6.05	3.20	14.36	3.20	14.36	5.20						
5 (SP)	9.37	5.35	8.23	5.06	11.07	5.47	9.94	5.18	11.27	5.56	10.04	5.26						
6 (MC)	11.61	4.73	8.33	4.03	13.39	4.43	9.82	3.75	13.88	4.41	9.98	3.83						
7 (SI)	10.91	5.22	5.00	3.78	12.87	4.67	6.42	3.58	13.85	4.72	6.55	3.67						
8 (AI)	8.61	5.65	3.39	3.42	11.46	5.80	4.70	3.58	12.94	5.97	5.05	3.70						
9 (EI)	10.39	5.74	4.81	4.25	12.71	5.22	6.86	4.27	13.58	5.09	7.43	4.37						
(N)		(5208)		(4780)		(13044)		(9798)		(26620)		(18323)						

TABLE 23 (Cont'd)

## AREA VIII (Arkansas, Louisiana, Oklahoma and Texas)

Part	M	10-M	S	M	10-F	S	M	11-M	S	M	11-F	S	M	12-M	S	M	12-F	S
1 (CS)	42.35	14.32	50.03	15.68	45.00	13.86	51.90	14.36	46.23	13.86	52.99	14.43						
2 (WK)	14.73	7.01	14.89	6.65	16.13	6.55	16.89	5.95	16.65	6.50	17.12	6.02						
3 (AR)	10.69	5.83	9.21	5.12	12.10	5.69	10.60	5.32	13.01	6.03	11.08	5.57						
4 (TK)	11.60	4.82	5.65	3.29	13.02	4.95	6.11	3.44	13.53	5.01	6.06	3.49						
5 (SP)	9.28	5.55	6.26	5.14	9.97	5.81	9.13	5.32	10.34	5.63	9.20	5.31						
6 (MC)	11.58	4.90	8.31	4.14	12.59	4.65	9.11	3.94	12.93	4.83	9.14	4.09						
7 (SI)	10.52	4.86	5.49	3.86	12.03	4.80	6.30	3.85	12.35	4.81	6.42	3.84						
8 (AI)	8.79	5.52	3.95	3.78	11.07	5.74	5.00	4.08	11.87	5.93	5.06	4.03						
9 (EI)	10.42	5.66	5.65	4.51	12.07	5.25	7.00	4.39	12.54	5.25	7.22	4.48						
(N)		(9276)		(7759)		(11844)		(9045)		(48550)		(37290)						

TABLE 23 (Cont'd)

## AREA IX (Arizona, Colorado, Idaho, New Mexico, Nevada, Utah and Wyoming)

Part	M	10-M	S	M	10-F	S	M	11-M	S	M	11-F	S	M	12-M	S	M	12-F	S
1 (CS)	42.04	12.45	47.28	12.62	44.89	12.32	50.76	12.99	46.55	12.81	52.95	13.50						
2 (WK)	15.65	6.49	16.10	6.13	17.55	5.92	17.96	5.46	17.80	6.10	18.17	5.76						
3 (AR)	11.70	5.73	10.20	6.34	13.46	5.85	11.60	5.50	13.98	6.08	12.03	5.81						
4 (TK)	12.89	4.57	6.13	3.24	14.48	4.79	6.15	3.30	14.95	4.98	6.40	3.43						
5 (SP)	10.16	5.31	8.98	4.95	11.48	5.44	10.19	5.03	11.83	5.55	10.44	5.19						
6 (MC)	12.93	4.38	8.89	4.24	14.09	4.34	9.79	4.14	14.33	4.48	9.88	4.28						
7 (SI)	12.07	4.53	6.02	3.94	13.83	4.50	6.81	3.96	14.08	4.57	7.03	4.05						
8 (AI)	9.59	5.42	3.75	3.71	12.50	5.67	4.76	3.72	13.52	6.09	4.97	3.98						
9 (EI)	11.28	5.35	5.52	4.45	13.28	5.12	6.88	4.59	13.67	5.19	7.47	4.62						
(N)		(3044)		(2626)		(4520)		(3273)		(10448)		(7442)						

TABLE 23 (Cont'd)

AREA X (Alaska, California, Hawaii, Oregon and Washington)

Part	10-M		10-F		11-M		11-F		12-M		12-F	
	M	S	M	S	M	S	M	S	M	S	M	S
1 (CS)	43.29	13.93	50.22	14.24	46.00	13.31	53.03	13.73	48.81	13.93	55.88	14.33
2 (WK)	16.75	6.16	16.99	5.99	18.31	5.67	18.82	5.25	18.76	5.63	19.25	5.29
3 (AR)	12.29	5.88	10.94	5.53	13.64	5.93	12.18	5.50	14.37	6.00	12.54	5.71
4 (TK)	12.93	4.94	6.02	3.31	13.99	5.27	6.13	3.37	14.72	5.27	6.36	3.51
5 (SP)	10.87	5.72	9.85	5.38	12.03	5.73	10.84	5.34	12.50	5.67	10.99	5.37
6 (MC)	12.87	4.65	9.53	3.85	13.92	4.61	10.28	3.89	14.23	4.61	10.22	3.90
7 (SI)	12.13	4.86	6.36	3.80	13.60	4.79	7.09	3.80	14.01	4.82	7.30	3.94
8 (AI)	9.63	5.83	4.08	3.73	12.23	6.00	5.04	3.89	13.49	6.29	5.43	4.05
9 (EI)	11.36	5.90	5.73	4.51	13.32	5.65	7.07	4.55	13.87	5.46	7.62	4.57
(N)	(5791)		(4396)		(10551)		(8586)		(19436)		(13774)	

Table 24

ASVAB TEST PERFORMANCE FOR  
STUDENTS TESTED NATION-WIDE, SCHOOL YEAR 1972-73

Subtest	N	Mean	SD
Coding Speed	873626	48.56	15.02
Word Knowledge	873645	17.09	6.25
Arithmetic Reasoning	873645	12.18	5.99
Tool Knowledge	873636	10.27	5.76
Space Perception	873637	9.95	5.59
Mechanical Comprehension	873637	11.35	4.85
Shop Information	873635	9.77	5.46
Automotive Information	873636	8.58	6.24
Electronic Information	873628	10.08	5.85