AFRL-RH-WP-TR-2020-0099

NEXT-GENERATION ARMED SERVICES VOCATIONAL APTITUDE BATTERY (ASVAB)

Adam S. Beatty
Maura I. Burke
Amanda J. Koch
D. Matthew Trippe

Human Resources Research Organization (HumRRO)

October 2020
Interim Report

DISTRIBUTION A. Approved for public release.

AIR FORCE RESEARCH LABORATORY
711TH HUMAN PERFORMANCE WING,
AIRMAN SYSTEMS DIRECTORATE,
WRIGHT-PATTERSON AIR FORCE BASE, OH 45433
AIR FORCE MATERIEL COMMAND
UNITED STATES AIR FORCE

NOTICE AND SIGNATURE PAGE

AFRL-RH-WP-TR-2020-0099 HAS BEEN REVIEWED AND IS APPROVED FOR PUBLICATION IN ACCORDANCE WITH ASSIGNED DISTRIBUTION STATEMENT.

__//signature//________________________
THOMAS R. CARRETTA
Work Unit Manager
Performance Optimization Branch
Airman Biosciences Division

__//signature//_____________________
LOGAN A. WILIAMS, PhD
Core Research Area Lead
Performance Optimization Branch
Airman Biosciences Division

REPORT DOCUMENTATION PAGE

Form Approved
OMB No. 0704-0188

1. REPORT DATE *(DD-MM-YY)* 31-10-2020

2. REPORT TYPE Interim

3. DATES COVERED *(From - To)* February 2019 – October 2020

4. TITLE AND SUBTITLE
Next-Generation Armed Services Vocational Aptitutude Battery (ASVAB)

5a. CONTRACT NUMBER FA8650-14-D-6500

5b. GRANT NUMBER

5c. PROGRAM ELEMENT NUMBER 62202F

5d. PROJECT NUMBER 5329

5e. TASK NUMBER 09

5f. WORK UNIT NUMBE H0SA (532909TC)

6. AUTHOR(S)
Adam S. Beatty, Maura I. Burke, Amanda J. Koch and D. Matthew Trippe*

7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)
*Human Resources Research Organization (HumRRO)
66 Canal Center Plaza, Suite 700
Alexandria, VA 22314-1578

8. PERFORMING ORGANIZATION REPORT NUMBER 2020 No. 086

9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)
Air Force Material Command
Air Force Research Laboratory
711th Human Performance Wing
Airman Systems Directorate
Airman Biosciences Division
Performance Optimization Branch
Wright-Patterson AFB, OH 45433

Infoscitex Corporation
4027 Colonel Glenn Highway, Suite 210
Dayton, OH 45431-1672

10. SPONSORING/MONITORING AGENCY ACRONYM(S) 711 HPW/RHBC

11. SPONSORING/MONITORING AGENCY REPORT NUMBER(S) AFRL-RH-WP-TR-2020-0099

12. DISTRIBUTION/AVAILABILITY STATEMENT
Approved for public release. 88ABW-2020-3628, cleared 18 November 2020

13. SUPPLEMENTARY NOTES
Report contains color.

14. ABSTRACT
The United States Air Force (USAF) uses the Armed Services Vocational Aptitude Battery (ASVAB) to select recruits and classify them into Air Force Specialties (AFSs). However, a variety of new assessments have been developed and proposed, and assessment time at Military Entrance Processing Stations (MEPS) is limited. As a result, the purpose of this project was to examine the impact of changes to the USAF Mechanical, Administrative, General, and Electronics (MAGE) ASVAB composites to make the best use of testing time.
This report describes a series of analyses to evaluate the projected impact of removing technical knowledge subtests from the Mechanical and Electronics composites, and adding subtests to the Administrative and General composites. Impact was primarily investigated in terms of predictive validity and subgroup differences. We found that for the Mechanical and Electronics composites, it was possible to choose alternatives that would likely decrease subgroup differences while not substantially reducing predictive validity. For the Administrative and General composites, differences between existing operational composites and alternatives were also found, but were less pronounced. In sum, this project presents potential alternative MAGE composites that could be implemented depending on the talent management objectives and priorities of the USAF

15. SUBJECT TERMS
Personnel selection, enlisted, prediction, composites, training performance, attrition

16. SECURITY CLASSIFICATION OF: a. REPORT	b. ABSTRACT	c. THIS PAGE	17. LIMITATION OF ABSTRACT:	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON (Monitor)
Unclassified	Unclassified	Unclassified	SAR	150	Thomas R. Carretta
					19b. TELEPHONE NUMBER *(Include Area Code)* N/A

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

1.0 SUMMARY

The United States Air Force (USAF), along with all other Services, uses the Armed Services Vocational Aptitude Battery (ASVAB) to select recruits and classify them into occupations (known as Air Force Specialties (AFSs), in the USAF). However, a variety of new assessments recently have been developed and proposed, and assessment time at Military Entrance Processing Stations (MEPS) is limited. As a result, it is important to explore the potential for modifying the use of the ASVAB. Accordingly, the purpose of the *Next-Generation Armed Services Vocational Aptitude Battery* project was to examine the impact of changes to the USAF Mechanical, Administrative, General, and Electronics (MAGE) composites. Specifically, this involved evaluating the impact on predictive validity, subgroup differences, and other relevant metrics of removing technical knowledge subtests and supplementing composites with additional ASVAB subtests

The USAF provided us with a large (*N* = 259,359) database of predictor, criterion, and demographic information on accessions who were administered the ASVAB between October 1999 and November 2016. We prepared and screened this data to properly format variables and remove records that exhibited any irregularities to obtain final analysis samples for each criterion we investigated. Our criteria were (a) final training grade for the awarding course, and (b) Months of Mission-Ready Service (MMRS), a tenure variable.

For each MAGE composite, we evaluated the performance of the current operational composite and a series of integer-weighted alternative composites (removing technical knowledge subtests and/or adding additional subtests) on a variety of metrics including predictive validity, subgroup differences, and projected practical impact. We generally conducted analyses within each AFS, and aggregated results to obtain overall cross-AFS estimates. Results for the MMRS criterion were generally poor, and we largely focused on the training grade criterion.

We found that for the M and E composites, the current composite exhibited the largest predictive validity estimates. All alternative composites were generally close however, ranging from 1-20% decrements in predictive validity. Alternative composites including Armed Forces Qualification Test (AFQT) subtests generally performed better relative to those that included Assembling Objects (AO). For subgroup differences and projected adverse impact ratios, however, we found that substantial benefits resulted from the alternative composites, and that technical knowledge subtests appear to be a major driver of subgroup differences.

The results were less pronounced for the A and G composites. These composites do not contain technical knowledge subtests, so only other general subtests were added when evaluating alternatives. Predictive validity differences were generally low (.00-.03 in either direction) when comparing composites, and subgroup differences either increased or decreased depending on the subtests added. Nonetheless, there were some potential alternative composites for modestly reducing subgroup differences while maintaining predictive validity.

We also investigated two approaches to developing the weights used to construct composites. The first was a content-oriented approach that used Natural Language Processing (NLP) and databases of task information for each AFS to obtain alternate composite weights and estimate validity. These composites exhibited predictive validity reasonably close to the core empirical

estimates presented in the report. The second approach was using standard Ordinary Least Squares (OLS) regression to obtain weights. Although this resulted in higher predictive validity estimates than the integer weights, they were only 2-4% higher, and this advantage would likely decrease due to shrinkage.

Overall, this project identified drivers of predictive validity and subgroup differences within the MAGE composites. It also resulted in evidence of some promising alternative MAGE composites that could be used depending on the talent management objectives and USAF priorities.

2.0 INTRODUCTION

Matching USAF enlisted applicants to the right job is important. The right person-job match can influence (a) an applicant's decision to join; and (b) the likelihood an applicant will complete Initial Military Training (IMT) and persist through the first term of service. For 40+ years, the USAF and the other services have primarily relied on the ASVAB to assess and match (or classify) enlisted applicants to AFSs that fit their aptitudes and knowledge of job-relevant subject areas (e.g., electronics, mechanical knowledge, general science, auto and shop information). More recently, the USAF has developed and is exploring the potential of new, alternative assessments to enhance person-job matching (e.g., Tailored Adaptive Personality Assessment System (TAPAS); Air Force Work Interests Navigator (AF-WIN); and Cyber Test (CT)). However, administering the existing ASVAB currently requires over two hours, significantly limiting the time for new, alternative assessments at the MEPS. In sum, test administration time at the MEPS is at a premium. Accordingly, freeing up time to administer new, alternative assessments requires potential changes to the existing ASVAB.

Making smart, informed changes to the ASVAB requires knowing (a) which existing ASVAB subtests best contribute to person-job matching effectiveness; and (b) how best to combine scores on selected ASVAB subtests to maximize the information from the scores for person-job matching, as well as other talent management objectives, where feasible.

Accordingly, the objectives of the current research were to examine:

(1) the impact of eliminating the technical knowledge tests (Auto and Shop Information (AS); General Science (GS); Electronics Information (EI); and Mechanical Comprehension (MC)) from the operational USAF Mechanical (M) and Electronics (E) composites, along with the potential for supplementing composites with alternative subtests;

(2) the impact of selected additions to the operational USAF General (G) and Administrative (A) composites; and

(3) how best to combine scores on a reduced subset of individual ASVAB subtests to maximize the information extracted from the scores for person-job matching, as well as other USAF talent management objectives (e.g., minimizing subgroup score differences by gender, race, or ethnicity).

3.0 DATA PREPARATION AND SCREENING

The original dataset provided contained a large sample (N = 259,359) of USAF accessions (ASVAB score dates from October 1999 through November 2016). The dataset included both pre-accession data (e.g., ASVAB subtest scores, demographic variables) and post-accession data (e.g., AFS qualifying and awarding technical training grades, attrition). Preparing the data for analysis consisted of the following: (a) selecting and constructing the needed predictor, criterion, and demographic variables for analysis and (b) screening and defining the analysis samples.

3.1 Analysis Variables

ASVAB subtest scores. ASVAB subtests include Arithmetic Reasoning (AR), Assembling Objects (AO), Auto and Shop Information (AS), Electronics Information (EI), General Science (GS), Mathematics Knowledge (MK), Mechanical Comprehension (MC), Paragraph Comprehension (PC), and Word Knowledge (WK). The Verbal Expression (VE) composite score is comprised of PC and WK. In the current research, we evaluated PC and WK separately to account for the possibility that the subtests have different patterns of relationships with variables of interest.

Armed Forces Qualification Test (AFQT). The AFQT is used by all U.S. services to qualify applicants for entrance into the military. The AFQT is calculated as AR + MK + 2VE.

Mechanical, Administrative, General, and Electronics (MAGE) composite scores. Existing MAGE composites are calculated as follows:

- Mechanical (M) = AR + MC + AS + 2VE
- Administrative (A) = MK + VE
- General (G) = AR + VE
- Electronics (E) = GS + AR + MK + EI

Air Force Specialty Code (AFSC). AFSCs are occupation codes used by the USAF. Three variables in the dataset contained AFSCs: one reflecting the qualifying course AFSC, one reflecting the awarding course AFSC, and one reflecting the most recent AFSC associated with Skill Level 3. There was also a date associated with each of these that identified (a) when an Airman's completion status was recorded for the qualifying and awarding courses, and (b) when they were recorded as having reached Skill Level 3 for the most recent AFSC. Our goal was to determine one AFSC per case. In order to define the AFSC, we focused primarily on the most recent AFSC and awarding course AFSC, largely using the qualifying AFSC as a quality assurance check on the other two AFSC variables. When determining an AFSC, we prioritized the most recent AFSC variable, but for individuals with missing values on this variable, we used the awarding course AFSC if available. In a small number of cases (n = 354), the most recent AFSC and awarding course AFSC were not available, and we used the qualifying course AFSC.

Technical Training Grades. We focused on the final school grade from Airmen's AFSC awarding course as the primary criterion for technical training performance. The database contained a variable indicating the outcome of the awarding course, which we used to identify individuals who had (a) graduated, and (b) had a valid end-of-course grade (176,679 out of the full 259,359 database fell into this category). Of this subset, we screened for valid percentage grades of 1-100 and used the resulting values as the final training grade criterion.

Months of Mission-Ready Service (MMRS). MMRS is a tenure-related criterion that also reflects Airmen's productive service. The dataset contained a variety of dates corresponding to tenure milestones including (a) date entered active duty, (b) the date at which Skill Levels 1, 3, 5, and 7 were reached, and (c) the date of separation. In line with previous research (Halper et al., 2010), we operationalized tenure as a function of the months of time spent in the USAF after reaching Skill Level 3 in the classified AFSC. Specifically, months spent at Skill Level 3 were assigned half-weight, and months spent at Skill Level 5 and beyond were assigned full weight. Specifically, MMRS was calculated as:

- MMRS = (months spent at Skill Level 3 * .5) + (months spent at Skill Level 5 and beyond)
- Because the focus for this research was on the initial term of enlistment, we instituted a ceiling of 48 months.

Gender. Gender was coded as Male or Female.

Race and Ethnicity. A variety of race categories were reported. In the current research, we included only the White and Black/African American categories as these were the only ones that had large enough sample sizes. Ethnicity was coded as Hispanic/Latino descent, not of Hispanic/Latino descent, or declined to respond. The combination of these variables resulted in the following three categories: Non-Hispanic White, Non-Hispanic Black, and Hispanic White.

3.2 Screening Rules for Analysis Samples

After identifying and preparing study variables, we constructed the analysis samples by screening the dataset. Due to the dataset being a compilation from multiple sources, there were several non-matching and/or inconsistent data patterns that we attempted to correct by instituting a variety of logical data cleaning rules.

3.2.1. General Sample Screening Rules

We began by verifying that the sample contained Airmen who had data for all ASVAB subtest, MAGE, and AFQT scores and no flags of prior service. We then conducted a series of screens using AFSC and training variables to ensure that (a) data points were logically consistent with each other, and (b) any potential indicators of prior service were identified and removed.

First, we screened out individuals whose qualifying course completion date was later than the awarding course completion date; because the awarding course date should be the most recent, it is possible that these individuals were prior service and had inadvertently been included in the dataset. Second, we removed Airmen where the most recent AFSC and the awarding AFSC differed, as these were potentially either prior service or reclassifications and it was unclear which AFSC they should be grouped with for analyses. Third, we screened out individuals where the awarding course date was more than six months away from the most recent AFSC date, again due to concerns about possible prior service. Finally, we screened out cases where there was a very large gap between the qualifying course completion date and the awarding course completion date. For instance, if there is a gap of ten years between these completion dates, the odds are high that the record is an instance of prior service. Because training course length varies by AFS, we operationalized this screening procedure as removing any Airman with a gap 2.5 standard deviations longer than the average gap for that AFS.

We then mapped AFSCs to the most recent Air Force Enlisted Classification Directory (AFECD); Air Force Personnel Center, 2019) from April 30, 2019 to identify job titles and MAGE entry requirements. AFSCs that could not be matched to any of the AFECD entries were excluded from our analyses. Airmen were excluded from our analyses if they had a missing value for all of: (a) the most recent AFSC, (b) the awarding course AFSC, and (c) the qualifying course AFSC. Appendix A, presents the AFSCs included in our analyses after this process, and which set of analyses they were included in.

3.2.2. Sample Screening Rules by Criterion

The requirements for appropriately using the training grade and MMRS criteria were different, resulting in separate screening procedures and analysis samples for each criterion.

Training Grade Analysis Sample. To obtain the analysis sample for the training grade criterion, we applied the following rules:

1. Only individuals with a valid AFSC as defined above were included so their data could be applied to a particular MAGE composite.
2. Only Individuals with a valid awarding course grade were included.

MMRS Analysis Sample. To obtain the analysis sample for the MMRS criterion, we applied the following rules:

1. Only individuals with a valid AFSC, as defined above, were included so their data could be applied to a particular MAGE composite.
2. Airmen who had an awarding course completion code of “Medical Reasons” or “Unsuitability” were also excluded, as these reasons for non-completion would not be under the Airman’s control and/or cognitively-based.
3. There were multiple dates indicating when an individual entered active duty. When these dates differed by more than six months, we screened these individuals out due to concerns about potential prior service and because the accuracy of dates was particularly important for the calculation of the MMRS variable.
4. Only individuals with a valid date of separation were included in the MMRS analyses. In order to reduce concerns about this date being provisional (i.e., the expected date of separation based on the enlistment term), we further screened out individuals whose date of separation was listed two months prior to when we received the separation data (i.e., a cap of October 1, 2019).

5. The sample was also screened based on a sequential longitudinal order of:

    a. Date reached Skill Level 1
    b. Date reached Skill Level 3
    c. Date reached Skill Level 5
    d. Date reached Skill Level 7
    e. Date of separation

    Airmen whose dates were in a different order (allowing for a one-month margin of error) were excluded from the sample.

6. Airmen without a valid Skill Level 3 date were also excluded. Without a Skill Level 3 date, their MMRS value would be either missing or 0 by default. The records of many of these cases indicate that they actually passed their awarding training course (and many of these had a separation date that was months, if not years, after passing their awarding training course). It was unclear why they would not have officially been recorded as having a date for progressing to Skill Level 3, and we did not want to potentially assign inaccurate values of 0.

Table 3.1 presents the sample sizes of Airmen screened out by using each of these screening rules, while descriptive statistics for key variables within these samples are reported in Appendix B. After the analysis variables and final analysis samples were created, we proceeded to analyses.

Table 3.1. Impact of Screening Rules on Sample Size

Screening Step	Resulting N	Final N
Initial Sample	259,359	
Invalid or Missing ASVAB Subtest, MAGE, and AFQT scores	258,687	
Qualifying Course After Awarding Course Date	255,081	
Most Recent AFSC and Awarding Course AFSC Differed	244,046	
Awarding Course Date more than Six Months Away from Most Recent AFSC Date	230,017	
Large Gap Between Qualifying Course and Awarding Course	228,915	
AFSCs could not be matched to AFECD Entries	200,466	
Training Grade Sample Screening		
Invalid or Missing Awarding Course Grade	149,495	
AFS Sample Size less than 100	149,050	
		149,050
MMRS Sample Screening		
Awarding Course Completion Code of "Medical Reasons" or "Unsuitability"	197,679	
Active Duty Dates Differed by more than Six Months	197,615	
No Valid Separation Date	125,513	
Separation Date After October 1, 2019	119,349	
Non-sequential Order of Skill Level, and Separation Dates	115,851	
Invalid/Missing Skill Level 3 Date	111,000	
AFS Sample Size less than 100	109,874	
		109,874

Note. Both the training grade sample and the MMRS sample start with the overall screened sample of 200,466. MMRS = Months of Mission-Ready Service.

4.0 EVALUATING ALTERNATIVE MECHANICAL AND ELECTRONICS COMPOSITES

The primary questions when investigating the Mechanical (M) and Electronics (E) composites were the extent to which (a) removing technical knowledge tests (i.e., Auto and Shop Information, AS, and Mechanical Comprehension, MC, from the M composite, and General Science, GS, and Electronics Information, EI, from the E composite) impacted predictive validity, subgroup differences, and other relevant metrics, and (b) whether the addition of more general ASVAB subtests (AO, MK, PC, and WK) could either offset or improve validity or reduce subgroup differences. The following sections present our analytic strategies for addressing these questions and results.

4.1 Predictive Validity

We first constructed the population (all 259,359 cases in the full dataset) variance-covariance (VCV) matrix among ASVAB subtests (all ASVAB subtests, including AO, and not limited to the ASVAB subtests that currently comprise the operational M and E composites) to allow for multivariate range restriction (MRR) corrections. This covariance matrix is presented in Table 4.1. We then estimated the observed (restricted) VCV matrix among ASVAB subtests and administrative criteria for each AFS that uses M or E for qualification and that had more than 100 cases in the cleaned final analysis sample. Each AFS-specific observed (restricted) VCV matrix was then corrected for MRR using the VCV ASVAB subtest matrix from the full dataset. This resulted in a corrected VCV matrix for each AFS that included covariances between the ASVAB subtests and the training grade and MMRS criteria.

Table 4.1. Full Dataset Variance-Covariance Matrix of ASVAB Subtests

	AO	AR	AS	EI	GS	MC	MK	PC	WK
AO	372.93	20.14	29.46	25.64	8.90	33.85	11.98	10.82	15.54
AR	20.14	39.04	12.31	18.45	17.88	22.59	21.31	12.19	12.00
AS	29.46	12.31	74.27	42.50	25.69	39.37	1.43	9.70	15.08
EI	25.64	18.45	42.50	68.84	34.01	38.49	10.37	15.84	23.13
GS	8.90	17.88	25.69	34.01	51.05	29.97	12.90	17.85	26.98
MC	33.85	22.59	39.37	38.49	29.97	59.85	13.12	14.74	19.24
MK	11.98	21.31	1.43	10.37	12.90	13.12	31.25	7.85	7.74
PC	10.82	12.19	9.70	15.84	17.85	14.74	7.85	31.02	17.63
WK	15.54	12.00	15.08	23.13	26.98	19.24	7.74	17.63	39.26

With the corrected VCV matrix for each AFS, we then applied composite algebra to create a series of composites, including different combinations of unit-weighted ASVAB subtests, adding AO, MK, PC, and WK (depending on whether they were in the original composite or not). This resulted in composite-level predictive validity estimates, keyed to each criterion. Next, we computed the delta in composite-level validity estimates between the operational M and E composites and the potential revised M and E composites for each AFS that currently uses M or

E scores for qualification[1]. Finally, we computed an *n*-weighted average of the AFS-level predictive validity estimates and deltas, grouped by M/E composite, to obtain an overall, cross-AFS estimate of the validity of each composite.

Table 4.2 presents aggregated predictive validity results for the M composite. For both criteria, the best prediction is achieved by the current composite with technical knowledge tests. However, the alternative composites are not dramatically lower in validity, particularly for training grades (e.g., a decrement of around 5-14%). The best performing composite for training grades (AR+PC+WK+MK) contains the same more general subtests included in the AFQT and adding AO to composites generally hurts validity. Alternatively, for MMRS, AO appears to aid in prediction, with the best-performing composites being AR+PC+WK+AO and AR+PC+WK+AO+MK. However, given the small validities, differences between composites for the MMRS criterion are probably not very meaningful.

More detailed results broken down by AFS are presented in Appendix C. Overall, results at the AFS level exhibit the same patterns as the aggregated results (i.e., the current composite tends to perform the best, with composites including AO performing worse and composites resembling the AFQT performing better). There are some exceptions, where for instance, composites containing AFQT subtests perform better than the current composite, or the magnitude of differences between the current composite and the alternative composites is larger. However, it appears that the aggregated results are generally a fairly accurate summary of the predictive validities of the composite within AFS and there is not wide variance.

Additionally, observed predicted validities (not corrected for MRR) are presented in Appendix D. Patterns from observed predicted validities are very similar to the corrected results, so we focused on corrected validities in this report.

Table 4.2. Aggregated Predictive Validity Results for the Mechanical Composite and Alternatives

	Training Grade		MMRS	
	Validity	Delta	Validity	Delta
Current Composite	.472		.073	
AR+PC+WK	.429	*-.043*	.046	*-.028*
AR+PC+WK+MK	.447	*-.025*	.048	*-.026*
AR+PC+WK+AO	.408	*-.064*	.057	*-.017*
AR+PC+WK+AO+MK	.432	*-.040*	.057	*-.017*

Note. Validities reported are sample-size weighted correlations between the composite and each criterion. Deltas represent the difference between the validity for the current composite and the alternative composite. MMRS = Months of Mission-Ready Service. Results for the Training Grade criterion are based on an aggregated sample size of 53,764 across 37 AFSs. Results for the MMRS criterion are based on an aggregated sample size of 38,359 across 40 AFS.

Table 4.3 presents these same results for the E composite. As with the M composite, the best prediction is achieved by the current composite with technical knowledge tests included.

[1] Some AFSs use multiple MAGE composite scores for qualification. For these AFS, we included them in analysis groups for all applicable composites.

However, some alternative composites approximate the current composite's validity, ranging from 1% to 20% decrements. Similar to the M composite, for the training grade criterion, AO generally harms validity, and the best-performing composites resemble the AFQT, whereas for the MMRS criterion AO tends to increase prediction slightly more than other subtests.

Table 4.3. Aggregated Predictive Validity Results for the Electronics Composite and Alternatives

	Training Grade		MMRS	
	Validity	Delta	Validity	Delta
Current Composite	.472		.060	
AR+MK	.401	*-.071*	.047	*-.013*
AR+MK+WK	.452	*-.020*	.044	*-.016*
AR+MK+PC	.447	*-.025*	.050	*-.010*
AR+MK+AO	.376	*-.095*	.055	*-.006*
AR+MK+PC+WK	.467	*-.005*	.046	*-.014*
AR+MK+AO+WK	.429	*-.043*	.051	*-.009*
AR+MK+AO+PC	.427	*-.044*	.056	*-.004*
AR+MK+AO+PC+WK	.452	*-.020*	.052	*-.008*

Note. Validities reported are sample-size weighted correlations between the composite and each criterion. Deltas represent the difference between the validity for the current composite and the alternative composite. MMRS = Months of Mission-Ready Service. Results for the Training Grade criterion are based on an aggregated sample size of 31,563 across 30 AFSs. Results for the MMRS criterion are based on an aggregated sample size of 19,503 across 25 AFSs.

There are some common threads with the validity results for the M and E composites. First, in terms of predictive validity, the current composites that include technical knowledge tests provide the highest validity. This is not surprising given the technical tests likely also tap previous experience and interest in those domains. Dropping the technical knowledge tests does not eliminate validity, however, and some alternative composites perform relatively closely. Also, both M and E composites present similar magnitude disparities between the training grades and MMRS criteria; training grades are much more predictable with the ASVAB subtests. This also is not very surprising given that training grades are more conceptually related to cognitive constructs, and several non-cognitive and situational factors can play into tenure decisions.

Validity is not the only important metric by which to evaluate prediction. The impact of prediction on subgroups, and the practical impact of validity differences are also critical to examine. The next sections describe our analyses to pursue these questions.

4.2 Subgroup Differences

In addition to validity, it is also important to know what effect each of the composites has on measures of subgroup differences. We primarily addressed this by estimating the population-level standardized group mean score differences (Cohen's *d*) for each composite by (a) gender (Male compared to Female), (b) race (Non-Hispanic White compared to Non-Hispanic Black), and (c) ethnicity (Non-Hispanic White compared to Hispanic White) among the accession population.[2] Similar to predictive validity, we computed the delta in these Cohen's *d* estimates

[2] Cohen's *d* is calculated as (majority mean – minority mean)/pooled standard deviation

between the current operational composites and alternative M and E composites for each of the subgroup comparisons.

Tables 4.4 and 4.5 present these results for the Mechanical and Electronics composites, respectively. For both composite groups, the largest mean differences are between Non-Hispanic Whites and Non-Hispanic Blacks, followed by Males and Females, and finally Non-Hispanic Whites and Hispanic Whites. The trend for both of these composite groups is striking: subgroup differences are by far the largest for the operational composite, and generally smallest when incorporating AO in revised composites. The technical knowledge subtests appear to be a driver of subgroup differences. These differences can be reduced by as much as 98% when examining alternative composites without these subtests included.

Table 4.4. Population Mean Standardized Differences (Cohen's *d*) for the Mechanical Composite and Alternatives

	Male/Female		NHW/NHB		NHW/HW	
	d	Delta	*d*	Delta	*d*	Delta
Current Composite	.841		1.147		.508	
AR+PC+WK	.343	*-.498*	.662	*-.485*	.316	*-.192*
AR+PC+WK+MK	.295	*-.546*	.586	*-.561*	.256	*-.252*
AR+PC+WK+AO	.235	*-.606*	.465	*-.682*	.137	*-.371*
AR+PC+WK+AO+MK	.227	*-.614*	.461	*-.686*	.127	*-.381*

Note. Values reported are mean standardized differences, computed as (majority mean – minority mean)/pooled standard deviation. They index the number of standard deviations units the majority group scores above the minority group. Deltas represent the difference between the *d*-value for the current composite and the alternative composite. NHB = Non-Hispanic Black, NHW = Non-Hispanic White, and HW = Hispanic White. Statistics were calculated based on the entire accession population included in the dataset.

Table 4.5. Population Mean Standardized Differences (Cohen's *d*) for the Electronics Composite and Alternatives

	Male/Female		NHW/NHB		NHW/HW	
	d	Delta	*d*	Delta	*d*	Delta
Current Composite	.724		.870		.358	
AR+MK	.290	*-.434*	.423	*-.447*	.094	*-.264*
AR+MK+WK	.311	*-.413*	.573	*-.297*	.237	*-.121*
AR+MK+PC	.286	*-.438*	.491	*-.379*	.157	*-.201*
AR+MK+AO	.186	*-.538*	.316	*-.554*	.007	*-.351*
AR+MK+PC+WK	.295	*-.429*	.586	*-.284*	.256	*-.102*
AR+MK+AO+WK	.217	*-.507*	.420	*-.450*	.095	*-.263*
AR+MK+AO+PC	.203	*-.521*	.376	*-.494*	.051	*-.307*
AR+MK+AO+PC+WK	.227	*-.497*	.461	*-.409*	.127	*-.231*

Note. Values reported are mean standardized differences, computed as (majority mean – minority mean)/pooled standard deviation. They index the number of standard deviations units the majority group scores above the minority group. Deltas represent the difference between the *d*-value for the current composite and the alternative composite. NHB = Non-Hispanic Black, NHW = Non-Hispanic White, and HW = Hispanic White. Statistics were calculated based on the entire accession population included in the dataset.

In addition to subgroup mean differences, we also calculated differential validity for the Male/Female and Non-Hispanic White/Non-Hispanic Black groups for the training grade criterion, as that criterion had much higher base validity. Differential validity was analyzed for all AFSs where the minority group sample size was at least 100. These results are presented in Appendix E.

4.3 Projected Impact

Although predictive validity and subgroup difference results provide valuable information on the expected effect from implementing different composites, it can also be useful to estimate the practical significance of using these composites by referencing the predicted criterion scores and anticipated adverse impact ratios. This type of information can provide further context for broader validity and subgroup difference results, and aid decision-making. We therefore conducted person-job matching (projected impact) analyses, simulating the assignment of enlisted recruits using the operational M and E composites to match recruits to AFS, compared to the use of the revised composites (e.g., Horst, 1954, 1955; Trippe et al., 2011; Zeidner et al., 1997). Given the more promising validity results, we focused our projected impact analyses on the training grade criterion.

First, we estimated AFS-specific prediction equations for generating mean predicted Final School Grades (FSG) for all AFSs with a sample size of over 100, and not limiting to only the AFSs that currently use M or E, operationally. We then applied these equations to the enlisted accession population to generate a FSG for all AFSs with a prediction equation. We then generated pass/fail indicators for cut scores to represent qualification for each AFS. For the operational composites, we used the operational cut scores, whereas for the revised composites, we calculated cut scores to be percentile equivalent to the operational cut scores.

For each AFS-by-ASVAB composite combination, we computed the following metrics:

1. Qualification Rate (QR), overall and by subgroup (gender, race, and ethnicity): Percentage of USAF accessions that would qualify for that AFSC.
2. QR Adverse Impact Ratio (AIR) by gender, race, and ethnicity: Computed as the QR of the subgroup divided by the QR of the referent group.
3. Mean on predicted FSG among selected group

We then aggregated results by MAGE grouping.

Tables 4.6 and 4.7 present the results of these projected impact analyses for the M and E composites. As with the predictive validity and subgroup difference results, the overall trends are very similar for the M and E composites. First, even though the predictive validity ranges from 1-20% lower (depending on the alternative composite) when dropping technical knowledge subtests, this does not carry through to dramatic differences in the mean predicted FSG. Alternatively, the subgroup difference results contribute to more meaningful results in related projected impact outcomes. The majority group qualification rates drop slightly, but the minority group qualification rates tend to increase to a greater degree. The combination of these changes results in substantial narrowing of the qualification rate adverse impact ratios (e.g., for the Female and Hispanic White subgroups, these differences are almost eliminated with some composites).

Table 4.6. Aggregated Projected Impact Results for the Mechanical Composite and Alternatives

	Qualification Rate						QR Adverse Impact Ratio			FSG
	Overall	Male	Female	NHW	NHB	HW	M/F	NHW/NHB	NHW/HW	
Current Composite	.710	.771	.477	.806	.414	.646	.606	.501	.793	89.572
AR+PC+WK	.717	.740	.624	.772	.546	.672	.836	.695	.864	89.417
AR+PC+WK+MK	.718	.737	.645	.762	.565	.686	.868	.730	.895	89.451
AR+PC+WK+AO	.714	.731	.647	.750	.569	.711	.877	.745	.942	89.171
AR+PC+WK+AO+MK	.719	.733	.665	.747	.590	.722	.901	.777	.961	89.181

Note. Aggregated projected impact results applying prediction equations and cut scores to the entire population included in the dataset. Qualification Rates represent the percentage of USAF accessions that would qualify for Mechanical AFS. QR Adverse Impact Ratios are the minority group QR/majority group QR. QR=Qualification Rate, NHW=Non-Hispanic White, NHB=Non-Hispanic Black, HW=Hispanic-White, FSG=Mean predicted Final School Grade of the qualified group.

Table 4.7. Aggregated Projected Impact Results for the Electronics Composite and Alternatives

	Qualification Rate						QR Adverse Impact Ratio			FSG
	Overall	Male	Female	NHW	NHB	HW	M/F	NHW/NHB	NHW/HW	
Current Composite	.743	.782	.589	.795	.564	.704	.715	.669	.867	89.497
AR+MK	.758	.772	.703	.774	.667	.758	.893	.836	.973	89.281
AR+MK+WK	.758	.774	.695	.789	.638	.734	.880	.776	.917	89.378
AR+MK+PC	.749	.762	.694	.772	.646	.740	.891	.804	.947	89.404
AR+MK+AO	.753	.764	.711	.767	.668	.767	.914	.840	.997	89.136
AR+MK+PC+WK	.752	.767	.693	.786	.632	.725	.883	.770	.907	89.430
AR+MK+AO+WK	.750	.762	.703	.773	.649	.750	.904	.803	.961	89.214
AR+MK+AO+PC	.745	.756	.702	.763	.654	.753	.909	.820	.979	89.228
AR+MK+AO+PC+WK	.748	.760	.702	.773	.645	.745	.904	.797	.952	89.261

Note. Aggregated projected impact results applying prediction equations and cut scores to the entire population included in the dataset. Qualification Rates represent the percentage of USAF accessions that would qualify for Electronics AFS. QR Adverse Impact Ratios are the minority group QR/majority group QR. QR=Qualification Rate, NHW=Non-Hispanic White, NHB=Non-Hispanic Black, HW=Hispanic-White, FSG=Mean predicted Final School Grade of the qualified group.

Full results broken down by AFS, are presented in Appendix F. Unlike the predictive validity results, where AFS-level analyses were largely similar, there is a wider variance in adverse impact ratios and predicted FSG across AFS because different AFS use different MAGE composite cut scores. However, comparing composite solutions within the same AFS, the patterns seen in the aggregated results tend to hold, and it is not the case that there are AFSs where the current composite results in better adverse impact ratios, for instance.

4.4 Overall Conclusions

Analyzing the cumulative projected impact of removing the technical knowledge subtests from the M and E composites, and potentially supplementing them with other ASVAB subtests, there are a few conclusions that can be drawn. First, maximal predictive validity (and face validity to some degree) is achieved by keeping the technical knowledge subtests as part of the composites. Second, inclusion of these technical subtests appears to lead to increased subgroup differences. Third, the projected impact of removing technical knowledge subtests seems likely to impact subgroup differences positively more than it negatively effects training grade outcomes, especially if other subtests, such as AO, are included in alternative composites. At the very least, results suggest that USAF has viable alternative composites to consider.

5.0 EVALUATING ALTERNATIVE ADMINISTRATIVE AND GENERAL COMPOSITES

The questions under investigation for the Administrative and General composites were similar to those for the Mechanical and Electronics composites. Our goal was to see how different composites would impact predictive validity, subgroup differences, and other relevant metrics. However, for these composites, rather than removing technical knowledge tests, we only investigated the potential impact of adding AO, AR, GS, and MK. Otherwise, the general methodology was identical.

5.1 Predictive Validity

We followed the same general method for estimating predictive validity of composites as described above for the Mechanical and Electronics composites (i.e., using MRR-corrected VCV matrices to construct composites and estimate predictive validity for each AFS, then aggregating within MAGE group).

Table 5.1 presents aggregated predictive validity results for the Administrative composite, while Table 5.2 presents these results for the General composite. Like with the M and E composite results, training grades were moderately predictable from the ASVAB composites, whereas MMRS exhibited very small correlations with the composites. Across both criteria, the impact of adding tests was minimal (i.e., around .00-.03 in either direction).[3] This is likely due to the intercorrelations between the subtests, and the more general focus of both operational composites: information from another general subtest will largely be redundant with the information already provided by the composite. That being said, the alternative composites that appear to provide the largest benefit look more like the AFQT, whereas the least predictive composites tend to include AO.

Table 5.1. Aggregated Predictive Validity Results for the Administrative Composite and Alternatives

	Training Grade		MMRS	
	Validity	Delta	Validity	Delta
Current Composite	.398		.009	
MK+PC+WK+GS	.390	*-.008*	.004	*-.005*
MK+PC+WK+AR	.415	*.017*	.012	*.004*
MK+PC+WK+AO	.375	*-.023*	.022	*.013*
MK+PC+WK+AR+GS	.409	*.010*	.009	*.000*
MK+PC+WK+AO+GS	.381	*-.018*	.016	*.007*
MK+PC+WK+AO+AR	.399	*.000*	.024	*.015*
MK+PC+WK+AO+AR+GS	.400	*.001*	.019	*.010*

Note. Validities reported are sample-size weighted correlations between the composite and each criterion. Deltas represent the difference between the validity for the current composite and the alternative composite. MMRS = Months of Mission-Ready Service. Results for the Training Grade criterion are based on an aggregated sample size of 25,623 across 16 AFSs. Results for the MMRS criterion are based on an aggregated sample size of 16,454 across 19 AFSs.

[3] Note that even though tests are being added in all cases for the A and G composites, it is still possible for predictive validity to be reduced due to integer-weighting and the addition of less valid predictors.

Table 5.2. Aggregated Predictive Validity Results for the General Composite and Alternatives

	Training Grade		MMRS	
	Validity	Delta	Validity	Delta
Current Composite	.429		.058	
AR+PC+WK+MK	.452	*.024*	.059	*.001*
AR+PC+WK+AO	.407	*-.021*	.066	*.008*
AR+PC+WK+GS	.441	*.012*	.057	*-.001*
AR+PC+WK+AO+MK	.434	*.005*	.067	*.009*
AR+PC+WK+GS+MK	.459	*.030*	.059	*.001*
AR+PC+WK+AO+GS	.427	*-.001*	.065	*.007*
AR+PC+WK+AO+GS+MK	.448	*.020*	.066	*.009*

Note. Validities reported are sample-size weighted correlations between the composite and each criterion. Deltas represent the difference between the validity for the current composite and the alternative composite. MMRS = Months of Mission-Ready Service. Results for the Training Grade criterion are based on an aggregated sample size of 76,469 across 37 AFSs. Results for the MMRS criterion are based on an aggregated sample size of 58,277 across 46 AFSs.

5.2 Subgroup Differences

We also calculated subgroup differences for the A and G composites, which are presented in Tables 5.3 and 5.4. As with the M and E composite results, even though predictive validity differences were not dramatic, the addition of other ASVAB subtests resulted in more substantial differences with respect to subgroup differences. Some combinations increased subgroup differences, while others reduced them. Generally, the inclusion of AO tended to reduce subgroup differences. We also calculated differential validity results for training grades for the A and G composites, which are presented in Appendix E.

Table 5.3. Population Mean Standardized Differences (Cohen's *d*) for the Administrative Composite and Alternatives

	Male/Female		NHW/NHB		NHW/HW	
	d	Delta	*d*	Delta	*d*	Delta
Current Composite	.154		.457		.224	
MK+PC+WK+GS	.337	*.183*	.662	*.205*	.350	*.126*
MK+PC+WK+AR	.295	*.141*	.586	*.129*	.256	*.032*
MK+PC+WK+AO	.146	*-.008*	.379	*-.078*	.107	*-.117*
MK+PC+WK+AR+GS	.400	*.246*	.701	*.244*	.327	*.103*
MK+PC+WK+AO+GS	.262	*.108*	.524	*.067*	.194	*-.030*
MK+PC+WK+AO+AR	.227	*.073*	.461	*.004*	.127	*-.097*
MK+PC+WK+AO+AR+GS	.321	*.167*	.579	*.122*	.202	*-.022*

Note. Values reported are mean standardized differences, computed as (majority mean – minority mean)/pooled standard deviation. They index the number of standard deviations units the majority group scores above the minority group. Deltas represent the difference between the d-value for the current composite and the alternative composite. NHB = Non-Hispanic Black, NHW = Non-Hispanic White, and HW = Hispanic White. Statistics are calculated based on the entire accession population included in the dataset.

Table 5.4. Population Mean Standardized Differences (Cohen's *d*) for the General Composite and Alternatives

	Male/Female		NHW/NHB		NHW/HW	
	d	Delta	*d*	Delta	*d*	Delta
Current Composite	.405		.709		.299	
AR+PC+WK+MK	.295	*-.110*	.586	*-.123*	.256	*-.043*
AR+PC+WK+AO	.235	*-.170*	.465	*-.244*	.137	*-.162*
AR+PC+WK+GS	.448	*.043*	.771	*.062*	.381	*.082*
AR+PC+WK+AO+MK	.227	*-.178*	.461	*-.248*	.127	*-.172*
AR+PC+WK+GS+MK	.400	*-.005*	.701	*-.008*	.327	*.028*
AR+PC+WK+AO+GS	.337	*-.068*	.596	*-.113*	.218	*-.081*
AR+PC+WK+AO+GS+MK	.321	*-.084*	.579	*-.130*	.202	*-.097*

Note. Values reported are mean standardized differences, computed as (majority mean – minority mean)/pooled standard deviation. They index the number of standard deviations units the majority group scores above the minority group. Deltas represent the difference between the d-value for the current composite and the alternative composite. NHB = Non-Hispanic Black, NHW = Non-Hispanic White, and HW = Hispanic White. Statistics are calculated based on the entire accession population included in the dataset.

5.3 Projected Impact Results and Conclusions

Finally, we conducted projected impact analyses for the A and G composites and their alternatives for the training grade criterion, which are presented in Tables 5.5 and 5.6. We excluded the MMRS criterion from these analyses since predictive validities were again very low. Unsurprisingly, given the low magnitude of predictive validity differences, we found that any differences in predictive validity did not translate to large differences on the predicted training grade criterion of those who qualify for these AFSs. However, whereas for the M and E composites it was possible to reduce qualification rate adverse impact ratios by considering alternate composites, the effects on the A and G composites were minimal, and often slightly harmful. Part of this effect is likely due to the already high qualification rates for AFSs that rely on the A and G composites for qualification. Additionally, the more dramatic results for M and E were also a result of dropping technical knowledge subtests. For the A and G composites, subtests were only added, and the ones that were added tended to be those more likely to be redundant. Those caveats aside, some composites with AO included (e.g., AR+PC+WK+AO and AR+PC+WK+AO+MK for the G composite) did appear to mildly reduce adverse impact ratios with minimal effects on predictive validity, so could potentially be considered as viable alternatives. As with the M and E composites, full results broken down by AFS are reported in Appendix F.

Table 5.5. Aggregated Projected Impact Results for the Administrative Composite and Alternatives

	Qualification Rate						QR Adverse Impact Ratio			FSG
	Overall	Male	Female	NHW	NHB	HW	M/F	NHW/NHB	NHW/HW	
Current Composite	.858	.861	.844	.873	.806	.841	.972	.902	.954	88.981
MK+PC+WK+GS	.861	.872	.818	.889	.778	.831	.923	.850	.921	88.936
MK+PC+WK+AR	.867	.875	.833	.887	.795	.852	.938	.873	.951	88.967
MK+PC+WK+AO	.863	.867	.846	.875	.809	.862	.966	.903	.978	88.819
MK+PC+WK+AR+GS	.862	.875	.808	.890	.768	.836	.905	.835	.928	88.966
MK+PC+WK+AO+GS	.862	.870	.829	.880	.794	.854	.940	.878	.961	88.825
MK+PC+WK+AO+AR	.860	.867	.833	.874	.798	.861	.948	.888	.978	88.853
MK+PC+WK+AO+AR+GS	.860	.871	.821	.880	.785	.854	.927	.866	.962	88.860

Note. Aggregated projected impact results applying prediction equations and cut scores to the entire population included in the dataset. Qualification Rates represent the percentage of USAF accessions that would qualify for Administrative AFSs. QR Adverse Impact Ratios are the minority group QR/majority group QR. QR = Qualification Rate, NHW = Non-Hispanic White, NHB = Non-Hispanic Black, HW = Hispanic-White, FSG=Mean predicted Final School Grade of the qualified group.

Table 5.6. Aggregated Projected Impact Results for the General Composite and Alternatives

	Qualification Rate						QR Adverse Impact Ratio			FSG
	Overall	Male	Female	NHW	NHB	HW	M/F	NHW/NHB	NHW/HW	
Current Composite	.839	.854	.781	.868	.742	.820	.891	.820	.929	87.066
AR+PC+WK+MK	.844	.854	.807	.866	.766	.828	.927	.854	.942	87.072
AR+PC+WK+AO	.843	.851	.809	.860	.773	.840	.932	.865	.964	86.938
AR+PC+WK+GS	.842	.859	.777	.878	.736	.810	.880	.804	.906	87.059
AR+PC+WK+AO+MK	.841	.849	.813	.857	.777	.841	.940	.874	.972	86.964
AR+PC+WK+GS+MK	.844	.858	.788	.874	.746	.818	.895	.820	.920	87.079
AR+PC+WK+AO+GS	.842	.854	.797	.865	.760	.833	.910	.843	.948	86.963
AR+PC+WK+AO+GS+MK	.842	.852	.800	.863	.763	.835	.917	.850	.955	86.990

Note. Aggregated projected impact results applying prediction equations and cut scores to the entire population included in the dataset. Qualification Rates represent the percentage of USAF accessions that would qualify for General AFSs. QR Adverse Impact Ratios are the minority group QR/majority group QR. QR = Qualification Rate, NHW = Non-Hispanic White, NHB = Non-Hispanic Black, HW = Hispanic-White, FSG = Mean predicted Final School Grade of the qualified group.

6.0 EVALUATING OTHER ALTERNATIVE MAGE COMPOSITES: CONTENT-ORIENTED APPROACH

In an effort to combine ASVAB subtests while meeting other talent management objectives (e.g., reducing subgroup differences and increasing predictive validity), we explored a machine learning approach for constructing alternative MAGE composites. More specifically, NLP procedures were employed to predict mean importance ratings for knowledges and abilities that relate to ASVAB subtests for each AFS. The mean importance ratings were rescaled and used to calculate nominal weights for the current MAGE composites and candidate alternative ASVAB composites. These weights were then applied to ASVAB standard scores to construct alternate MAGE composites for evaluation. The contents of this section provide details about the procedures, summary results of those analyses, and a description of how this alternative approach compares to the integer-weighted composites described in previous sections.

The purpose for employing an alternative composite creation strategy was to capitalize on advances in NLP when large, text-based datasets are available. Similar investigations using text data in selection contexts have been implemented (Campion et al., 2016; Putka, 2018) and set a precedent for its application here. For the purposes of this effort, a text-based dataset, containing occupational information for military classifications (e.g., AFS), was available from the Department of Defense (DoD) Occupational Database (ODB). This NLP approach to analyzing occupational data is conceptually similar to a content validation perspective whereby meaningful expert ratings are generated as they relate to knowledge on ASVAB subtests.

Content validation is a process where expert judges evaluate a test's content with respect to the domain (e.g., knowledge) the test is used to assess (Fitzpatrick, 1983). Evidence to support content validation is often in the form of a Content Validation Ratio (CVR), a formula that considers subject matter expert (SME) evaluations of an item's essentialness. SME ratings are quantitative indicators of these domains or constructs that tend to contain very specific information about a specific construct. Alternatively, job descriptions and task lists are qualitative indicators of constructs, such as knowledge. These qualitative indicators are generally more nuanced and contain a broad array of information about an occupation. More specifically, a rating scale typically indicates only one targeted knowledge or ability whereas a high-quality job description and task list will usually reflect many different knowledges and abilities through text. Arguably, one NLP approach to establishing content-related evidence is the generation of meaningful quantitative indicators from job descriptions and task lists. By adjusting the quantitative indicators, one can pursue analyses as they relate to selection and talent management objectives.

6.1 Data Preparation

6.1.1. Model Development

Using 963 occupations from the U.S. Department of Labor's Occupational Information Network (O*NET), we were able to train a machine to accurately estimate knowledge, skills, abilities, and other (KSAO) ratings for jobs using job descriptions and task information as the only input to the model. Further, the KSAO predictions generated in that study cross-validated with SME ratings for knowledge and abilities of .74 and .75, respectively (Putka, 2018). Importantly, because the model developed using O*NET data was found to also produce meaningful results when applied to occupations *independent* of O*NET data, the use of this model is deemed applicable here.

6.1.2. DoD's Occupational Database

We used DoD's ODB to obtain AFS-level occupational task descriptions. In order to run NLP-related analyses using this qualitative dataset, we conducted a series of data cleaning steps which included ensuring all AFS text information was one block of text for each occupation, removing job description headers and numbering, and filtering the file to only include Air Force enlisted occupations.

After completing the initial cleaning steps, each occupation's text was further processed using R's *koRpus* package to convert the text into a reduced set of language-based predictor variables. *koRpus* was first used to (a) remove "stop words" from each occupation's text. "Stop words," are words that serve only a functional purpose in a sentence, such as linking clauses together, occur with frequency in most texts, and include words such as "and", "for", "such", and "the". A complete list of stop words detected by R's *tm* text mining package and removed in this study is provided in Landers (2017).

Next, *koRpus* was used to convert remaining words into their lemmas (the base form of a word) through a process called lemmatization. This step is necessary because within task statements, several forms of a word appear that differ because they are variants of the same word root. Examples include, *investigate*, *investigates*, *investigated*, *investigating*. All of these variants concern the word root, *investigate*. To map each word within an AFS's occupational text block to its lemma, we used *TreeTagger* within R's *koRpus*. When no lemma could be identified, the original word was retained. Then, the relative frequency with which each remaining lemma (or word) appeared in each occupation's text (i.e., dividing the frequency of a lemma in text by the number of words in text) was computed and served as predictor information for input into the model.

Once the predictor variables were set up, we placed them into a model, described in the above Model Development section, to predict knowledge and ability ratings for each AFS. The generated knowledge and ability ratings range from 1 (not important) to 5 (extremely important). Because the model predicts importance estimates for knowledges and abilities, there was a need to cross-walk that information onto ASVAB subtests. Table 6.1 illustrates the rational linkage between knowledges and abilities and ASVAB subtests.

Table 6.1. Crosswalk of ASVAB Subtest with O*NET Knowledge and/or Ability Category

ASVAB Subtest	O*NET Descriptor
Assembling Objects (AO)	Visualization (Ability)
Arithmetic Reasoning (AR)	Mathematical Reasoning (Ability)
Auto and Shop Information (AS)	Mechanical (Knowledge); Computers and Electronics (Knowledge)
Coding Speed (CS)	Perceptual Speed (Ability)
Electronics Information (EI)	Computers and Electronics (Knowledge)
General Science (GS)	Biology (Knowledge); Chemistry (Knowledge); Physics (Knowledge)
Mechanical Comprehension (MC)	Mechanical (Knowledge)
Mathematics Knowledge (MK)	Mathematics (Knowledge)
Paragraph Comprehension (PC)	Written Comprehension (Ability)
Verbal Expression (VE)	Written Expression (Ability)
Word Knowledge (WK)	English Language (Knowledge)

Note. Knowledge refers to an organized set of principles and facts applying in general domains. Ability refers to enduring attributes of the individual that influence performance.

6.2 Analyses

In order to use the quantitative ratings resulting from the model for analysis purposes, the importance ratings were rescaled to generate equivalent integer weights and were treated as target effective weights. The rescaling process involved subtracting mean importance ratings by 3, which put them on a scale of 0 to 2. Specifically, this set mean ratings less than 3 to 0, and rescaled ratings greater than 3 to have a maximum value of 2. Using the target effective weights and Air Force population-level ASVAB subtest variance-covariance matrix, we generated nominal weights and applied them to the variables forming the composite (Wang & Stanley, 1970). When nominal weights are applied to ASVAB standard scores, the result is a weighted sum of standard scores for alternative MAGE composites. See Appendix G, Tables G.1 through G.4 for the resulting nominal weights by candidate composite. It is noteworthy to point out that the translation of rescaled importance ratings into nominal weights resulted in eighting for some ASVAB subtests. More specifically, this procedure resulted in some subtests that contribute to a composite receiving a weight of zero and therefore, impacting the contribution of the subtest's standard score in the resulting weighted sum of standard scores. We applied the resulting weights to ASVAB subset scores to generate scores on the content-oriented composites and then conducted the same validity analyses, documented in the preceding sections, to evaluate the composites.

6.3 Results

The original purpose of this effort was to explore whether alternative ASVAB composites could be identified using newer research methods (i.e., machine learning). Because there was a shift towards exploring multiple combinations of ASVAB subtests, a renewed purpose for this effort was determining the comparability of validity estimates using NLP with the empirical procedures covered in the previous sections.

In general, composites constructed using the content-oriented approach yielded predictive validity estimates with training grade that closely approximated those estimated using an empirical approach. More specifically, the average absolute differences in estimates between approaches were .13, .12, .12, and .10 for Mechanical, Administrative, General, and Electronics ASVAB subtest composites, respectively. The validity estimates resulting from this approach for each MAGE composite are illustrated in Tables G.5 through G.8. A box plot summary comparison of both approaches is illustrated in Figures 6.1 and 6.2.

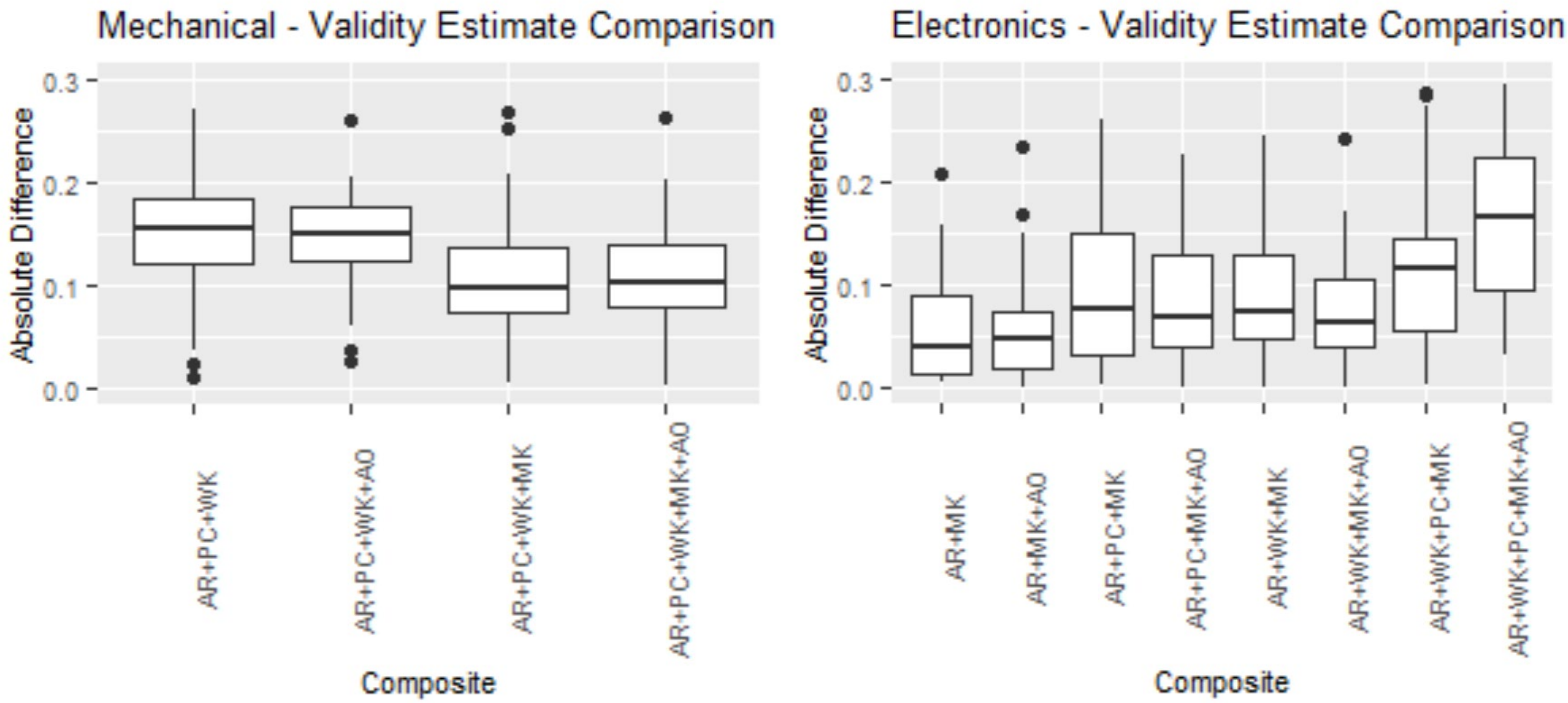

Figure 6.1. Summary Box Plot of Absolute Differences Between Empirical and Content-Oriented Approaches for Mechanical and Electronics Composites

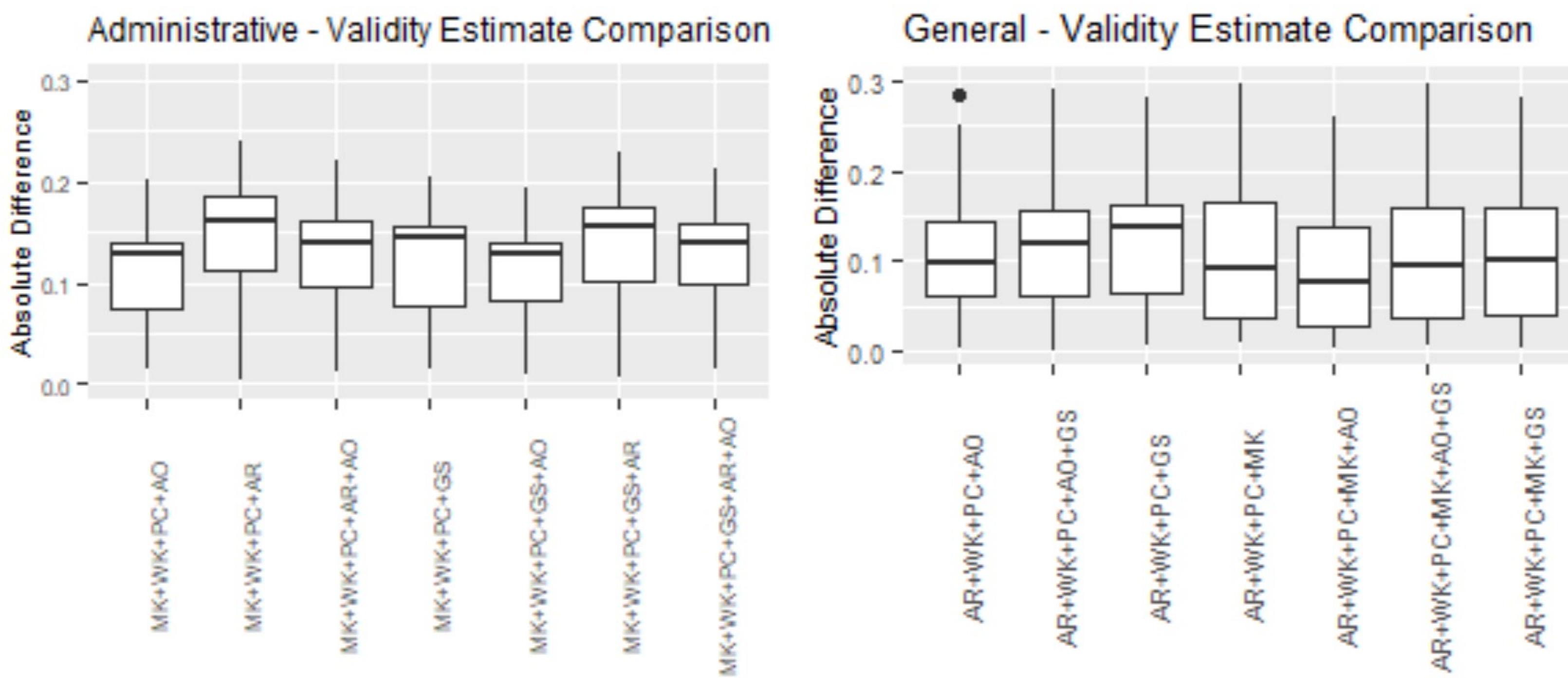

Figure 6.2. Summary Box Plot of Absolute Differences Between Empirical and Content-Oriented Approaches for Administrative and General Composites

In comparing approaches, there were fewer observable patterns with respect to alignment of validity estimates across alternative composites within a MAGE composite. Stated alternatively, the subtest composites with the lowest absolute difference in predictive validity across approaches generally differed across AFS. For example, within Mechanical, a composite validity coefficient that closely approximated the value estimated using a traditional approach for one AFS was not always consistent across other AFS. Within an AFS, in a majority of cases, the lowest absolute difference between both approaches was observed in the hundredths decimal place. This finding would suggest this alternative approach, when text-based data is available, is suitable for considering candidate composites at the AFS-level.

6.4 Conclusion

In summary, NLP procedures were employed to translate large datasets with qualitative occupational information into quantitative ratings that were used for constructing composites. In general, the application of these newer analytical procedures resulted in findings that generally aligned with those calculated from empirical data. This effort illustrates that when quantitative data is unavailable, text-based information can be used to estimate validity coefficients with close accuracy to a traditional approach at the AFS-level. However, this finding did not pan out at the composite level and within the broader MAGE groupings. Importantly, when it is the case that large-scale quantitative data are available for use in a validation effort, those data should take precedence over text-based analysis; although our results suggest that NLP-based results could be a viable starting point.

7.0 EVALUATING OTHER ALTERNATIVE MAGE COMPOSITES: OPTIMAL WEIGHTING APPROACH

We also constructed alternative MAGE composites with optimal, empirically-estimated weights. Data for estimation were identical to those described above (i.e., same starting sample, same corrected covariance matrices as input), except that we used multiple predictive modeling methods to estimate optimal weights. One of the predictive modeling methods we tried was standard OLS regression. We also tried applying several machine learning algorithms (e.g., CART, gbm, adaboost) in some of the larger sample-size AFSs to attempt to capitalize on interactions. However, this only resulted in validity increments over OLS at the thousandth place. We hypothesized that this was due to the high intercorrelations and similar construct space shared by the ASVAB subtests. As a result, we only present aggregated OLS results below in Tables 7.1 through 7.4.

Table 7.1. Aggregated Multiple Regression Results for the Mechanical Composite and Alternatives

	Training Grade		MMRS	
	Validity	Delta	Validity	Delta
Current Composite	.472		.073	
Current Composite - OLS	.495	*.023*	.117	*.044*
AR+PC+WK	.440	*-.032*	.074	*.001*
AR+PC+WK+MK	.451	*-.021*	.080	*.007*
AR+PC+WK+AO	.441	*-.031*	.088	*.015*
AR+PC+WK+AO+MK	.452	*-.020*	.093	*.020*

Note. Validities reported are sample-size weighted multiple Rs for the composite predicting each criterion. The Current Composite row represents the current operational composite, whereas the Current Composite – OLS row presents results obtained from an OLS composite of the ASVAB subtests comprising the current composite. Deltas represent the difference between the validity for the current composite and the alternative composite. MMRS = Months of Mission-Ready Service. Results for the Training Grade criterion are based on an aggregated sample size of 53,764 across 37 AFSs. Results for the MMRS criterion are based on an aggregated sample size of 38,359 across 40 AFSs.

Table 7.2. Aggregated Multiple Regression Results for the Electronics Composite and Alternatives

	Training Grade		MMRS	
	Validity	Delta	Validity	Delta
Current Composite	.472		.060	
Current Composite – OLS	.492	*.020*	.117	*.057*
AR+MK	.408	*-.064*	.073	*.013*
AR+MK+WK	.457	*-.015*	.084	*.024*
AR+MK+PC	.452	*-.020*	.083	*.023*
AR+MK+AO	.411	*-.061*	.091	*.031*
AR+MK+PC+WK	.472	*.000*	.093	*.033*
AR+MK+AO+WK	.459	*-.013*	.099	*.039*
AR+MK+AO+PC	.454	*-.018*	.098	*.038*
AR+MK+AO+PC+WK	.473	*.001*	.107	*.047*

Note. Validities reported are sample-size weighted multiple Rs for the composite predicting each criterion. The Current Composite row represents the current operational composite, whereas the Current Composite – OLS row presents results obtained from an OLS composite of the ASVAB subtests comprising the current composite. Deltas represent the difference between the validity for the current composite and the alternative composite. MMRS = Months of Mission-Ready Service. Results for the Training Grade criterion are based on an aggregated sample size of 31,563 across 30 AFSs. Results for the MMRS criterion are based on an aggregated sample size of 19,503 across 25 AFSs.

Table 7.3. Aggregated Multiple Regression Results for the Administrative Composite and Alternatives

	Training Grade		MMRS	
	Validity	Delta	Validity	Delta
Current Composite	.398		.009	
Current Composite – OLS	.409	*.011*	.075	*.066*
MK+PC+WK+GS	.413	*.015*	.088	*.079*
MK+PC+WK+AR	.421	*.023*	.084	*.075*
MK+PC+WK+AO	.411	*.013*	.093	*.084*
MK+PC+WK+AR+GS	.423	*.025*	.096	*.087*
MK+PC+WK+AO+GS	.415	*.017*	.105	*.096*
MK+PC+WK+AO+AR	.422	*.024*	.101	*.092*
MK+PC+WK+AO+AR+GS	.424	*.026*	.112	*.103*

Note. Validities reported are sample-size weighted multiple Rs for the composite predicting each criterion. The Current Composite row represents the current operational composite, whereas the Current Composite – OLS row presents results obtained from an OLS composite of the ASVAB subtests comprising the current composite. Deltas represent the difference between the validity for the current composite and the alternative composite. MMRS = Months of Mission-Ready Service. Results for the Training Grade criterion are based on an aggregated sample size of 25,623 across 16 AFSs. Results for the MMRS criterion are based on an aggregated sample size of 16,454 across 19 AFSs.

Table 7.4. Aggregated Multiple Regression Results for the General Composite and Alternatives

	Training Grade		MMRS	
	Validity	Delta	Validity	Delta
Current Composite	.429		.058	
Current Composite - OLS	.439	*.010*	.091	*.033*
AR+PC+WK+MK	.458	*.029*	.095	*.037*
AR+PC+WK+AO	.441	*.012*	.102	*.044*
AR+PC+WK+GS	.450	*.021*	.096	*.038*
AR+PC+WK+AO+MK	.460	*.031*	.106	*.048*
AR+PC+WK+GS+MK	.467	*.038*	.100	*.042*
AR+PC+WK+AO+GS	.452	*.023*	.107	*.049*
AR+PC+WK+AO+GS+MK	.469	*.040*	.111	*.053*

Note. Validities reported are sample-size weighted multiple Rs for the composite predicting each criterion. The Current Composite row represents the current operational composite, whereas the Current Composite – OLS row presents results obtained from an OLS composite of the ASVAB subtests comprising the current composite. Deltas represent the difference between the validity for the current composite and the alternative composite. MMRS = Months of Mission-Ready Service. Results for the Training Grade criterion are based on an aggregated sample size of 76,469 across 37 AFSs. Results for the MMRS criterion are based on an aggregated sample size of 58,277 across 46 AFSs.

Tables 7.1 through 7.4 present the aggregated current composite results (previously presented in Tables 4.2, 4.3, 5.1, and 5.2) and compares them to OLS results from (a) the ASVAB subtests making up the current operational composite, and (b) the previously investigated alternative composites. AFS-level results are presented in Appendix H. The comparison of aggregated results indicates that a modest improvement in predictive validity can be obtained from using optimal weights over integer weights. The most direct example can be seen by comparing the results from the current integer-weighted composite with the same subtests composited with OLS regression, where increments in training grade predictive validity range from 2% to 4%. However, as can be seen when examining the OLS weights (presented in Appendix I), this validity gain often is a result of some subtests being weighted near-zero or negatively.

Additionally, since OLS weights are empirically derived, they will be subject to shrinkage, reducing the validity increments. Given (a) conceptual difficulties with weighting a predictor negatively, (b) the operational simplicity and precedent for using integer weights, and (c) the likely reduction in validity as a result of shrinkage, optimal weighting seems unlikely to be an attractive alternative.

8.0 CONCLUSION

In sum, this report presents the results of a series of investigations to examine the effects of modifications to the operational MAGE composites used by the USAF. For the M and E composites, the question was what effects removing technical knowledge subtests would have on personnel management metrics, such as validity and subgroup differences, and what the effects of adding alternative ASVAB subtests would be. A summary of key, discriminating results for the training grade criterion is presented in Table 8.1

Table 8.1. Summary of Key Results on Training Grade Criterion from Previous Sections

		Cohen's *d*			QR Adverse Impact Ratio		
	Validity	M/F	NHW/NHB	NHW/HW	M/F	NHW/NHB	NHW/HW
Mechanical Composite							
Current Composite	.472	.841	1.147	.508	.606	.501	.793
AR+PC+WK	.429	.343	.662	.316	.836	.695	.864
AR+PC+WK+MK	.447	.295	.586	.256	.868	.730	.895
AR+PC+WK+AO	.408	.235	.465	.137	.877	.745	.942
AR+PC+WK+AO+MK	.432	.227	.461	.127	.901	.777	.961
Electronics Composite							
Current Composite	.472	.724	.870	.358	.715	.669	.867
AR+MK	.401	.290	.423	.094	.893	.836	.973
AR+MK+WK	.452	.311	.573	.237	.880	.776	.917
AR+MK+PC	.447	.286	.491	.157	.891	.804	.947
AR+MK+AO	.376	.186	.316	.007	.914	.840	.997
AR+MK+PC+WK	.467	.295	.586	.256	.883	.770	.907
AR+MK+AO+WK	.429	.217	.420	.095	.904	.803	.961
AR+MK+AO+PC	.427	.203	.376	.051	.909	.820	.979
AR+MK+AO+PC+WK	.452	.227	.461	.127	.904	.797	.952
Administrative Composite							
Current Composite	.398	.154	.457	.224	.972	.902	.954
MK+PC+WK+GS	.390	.337	.662	.350	.923	.850	.921
MK+PC+WK+AR	.415	.295	.586	.256	.938	.873	.951
MK+PC+WK+AO	.375	.146	.379	.107	.966	.903	.978
MK+PC+WK+AR+GS	.409	.400	.701	.327	.905	.835	.928
MK+PC+WK+AO+GS	.381	.262	.524	.194	.940	.878	.961
MK+PC+WK+AO+AR	.399	.227	.461	.127	.948	.888	.978
MK+PC+WK+AO+AR+GS	.400	.321	.579	.202	.927	.866	.962
General Composite							
Current Composite	.429	.405	.709	.299	.891	.820	.929
AR+PC+WK+MK	.452	.295	.586	.256	.927	.854	.942
AR+PC+WK+AO	.407	.235	.465	.137	.932	.865	.964
AR+PC+WK+GS	.441	.448	.771	.381	.880	.804	.906
AR+PC+WK+AO+MK	.434	.227	.461	.127	.940	.874	.972
AR+PC+WK+GS+MK	.459	.400	.701	.327	.895	.820	.920
AR+PC+WK+AO+GS	.427	.337	.596	.218	.910	.843	.948
AR+PC+WK+AO+GS+MK	.448	.321	.579	.202	.917	.850	.955

Note. Validities are the aggregated cross-AFS predictive validity results for the training grade criterion. *d* = Cohen's standardized mean difference, QR = Qualification Rate, M = Male, F = Female, NHW = Non-Hispanic White, NHB = Non-Hispanic Black, and HW = Hispanic White.

We found that it was possible to remove the technical knowledge subtests and retain the majority of the validity from these composites, and that including alternate subtests, particularly AO, had the potential to reduce subgroup differences and adverse impact. For the A and G composites, the focus was the impact of adding other non-technical subtests to these composites. We generally found that the impact on validity and subgroup differences was minimal, though there were some composites, again involving AO, that would minimally harm validity, while having a small effect in reducing subgroup differences. The choice between the alternative solutions for any of the MAGE composites should be based on the goals and tolerance for trade-offs that the USAF has. The results of projected impact analyses, however, suggest that the validity differences would not result in very strong overall practical effects on the training grade outcome.

We also investigated alternative approaches to developing composites. First, we analyzed the viability of an NLP, or content-oriented, approach, using occupational textual data as input. In general, we found that this approach came reasonably close to replicating validity results from empirical data at the AFS level. This opens the possibility of using job-analytic data to gain an approximation of what validity would be in situations where there is not adequate quantitative data available for analyses. However, empirical data should generally be preferred over textual data if it is available.

Our second alternative approach was to examine the effects of differential weighting on composite development. The results of this investigation suggested that any validity gains from shifting from integer-weighting to optimal weighting would likely be minimal and there did not appear to be a compelling reason to shift from the status quo of integer weights.

There are a few limitations and considerations to note. First, the current MAGE composites, particularly M and E, have some degree of conceptual independence from one another. Many of the alternate composites investigated were more heavily overlapping;. To the extent that these were chosen, it could muddy distinctions between the composites. Second, the analyses largely focused on training grades as a criterion. MMRS was investigated as well, but did not appear to be highly related to the ASVAB composites, so it was excluded from many follow-up analyses and summaries. There may be other criteria of importance to the USAF that could be considered before any final decisions on composites are made. Third, we primarily focused on overall and/or aggregated results. In addition, we investigated AFS-specific results and found that patterns largely mirrored the aggregate conclusions. However, there was variance in the magnitude of the AFS-level results, and we recommend stakeholders review these results as well. Finally, our empirical investigation regarding weights was limited to (a) the current composite, (b) integer weights, and (c) OLS regression weights. It is possible there might be other weights that could improve metric performance depending on the USAF's goals (e.g., if minimizing subgroup differences was deemed paramount, AO could receive more weight in composites).

Despite these caveats, this project shed light on drivers of validity and subgroup differences within the MAGE composites. Alternate composites were investigated, which suggest that there may be viable alternatives to the operational MAGE composites. Future research could expand the criteria investigated, and the range of weights applied to composite development.

9.0 REFERENCES

Air Force Personnel Center (2019). *Air Force Enlisted Classification Directory*.

Campion, M. C., Campion, M. A., Campion, E. D., & Reider, M. H. (2016). Initial investigation into computer scoring of candidate essays for personnel selection. *Journal of Applied Psychology, 101,* 958-975.

Fitzpatrick, A. R (1983). The meaning of content validity. *Applied Psychological Measurement, 7*, 3-13.

Halper, M. L., Goodman, T. M., & Alley, W. E. (2010). *Months of Mission-Ready Service*.

Horst, P. (1954). A technique for the development of a differential predictor battery. *Psychological Monographs: General and Applied, 68*, 1-31.

Horst, P. S. (1955). A technique for the development of an absolute prediction battery. *Psychological Monographs: General and Applied*, *69*, 1-22.

Landers, R. N. (2017, April). A crash course in natural language processing. *The Industrial-Organizational Psychologist,* https://www.siop.org/Research-Publications/TIP/TIP-Back-Issues/2017/April/ArtMID/20299/ArticleID/919/Crash-Course-in-I-O-Technology

Putka, D. J. (2018, September). *10,000 job analyses per hour: A language-based approach to synthesizing KSA and Interest Ratings*. Symposium conducted at the meeting of the Personnel Testing Council of Metropolitan Washington.

Trippe, D. M., Caramagno, J. P., Allen, M. T., & Ingerick, M. J. (2011). Initial evidence for the predictive validity and classification potential of the TAPAS. In D. J. Knapp, T. S. Heffner, & L. White (Eds.), *Tier One Performance Screen initial operational test and evaluation: Early results* (Technical Report 1283, pp. 40-53). Arlington, VA: U.S. Army Research Institute for the Behavioral and Social Sciences.

Wang, M. W. & Stanley, J. C. (1970). Differential weighting: A review of methods and empirical studies. *Review of Educational Research, 40*, 663-705.

Zeidner, J., Johnson, C. D., & Scholarios, D. M. (1997). Evaluating military selection and classification systems in the multiple job context. *Military Psychology, 9,* 169-186.

LIST OF ACRONYMS, ABBREVIATIONS, AND SYMBOLS

A	Administrative composite
AFECD	Air Force Enlisted Classification Directory
AFQT	Armed Forces Qualification Test composite
AFS	Air Force Specialty
AFSC	Air Force Specialty Code
AF-WIN	Air Force Work Interests Navigator
AIR	Adverse Impact Ratio
AO	Assembling Objects subtest
AR	Arithmetic Reasoning subtest
AS	Auto and Shop Information subtest
ASVAB	Armed Services Vocational Aptitude Battery
CT	Cyber Test
CVR	Content Validation Ratio
d	Cohen's *d* – Standardized Mean Difference
DoD	Department of Defense
E	Electronics composite
EI	Electronics Information subtest
FSG	Final School Grade
G	General composite
GS	General Science subtest
HW	Hispanic, White
IMT	Initial Military Training
KSAO	Knowledge, Skills, Abilities, and Other
M	Mechanical composite
M/F	Male/Female
MAGE	Mechanical, Administrative, General, and Electronics
MC	Mechanical Comprehension subtest
MEPS	Military Entrance Processing Stations
MK	Mathematics Knowledge subtest
MMRS	Months of Mission-Ready Service
MRR	Multivariate Range Restriction
N	Sample Size in Full Dataset
n	Sample Size of Subset
NHB	Non-Hispanic, Black
NHW	Non-Hispanic, White
NLP	Natural Language Processing
O*NET	Occupational Information Network

ODB	Occupational Database
OLS	Ordinary Least Squares
PC	Paragraph Comprehension subtest
QR	Qualification Rate
SD	Standard Deviation
SME	Subject Matter Expert
TAPAS	Tailored Adaptive Personality Assessment System
USAF	United States Air Force
VCV	Variance Covariance
VE	Verbal Expression composite
WK	Word Knowledge subtest

APPENDIX A – LIST OF CODED AFS AND ANALYSIS SAMPLE INCLUSION STATUS

AFSC	Job Title	MAGE Qualification Score				Sample Size	Training Grade Sample	MMRS Sample
		M	A	G	E			
1A0X1	In-Flight Refueling Specialist			55		484	Y	Y
1A1X1	Flight Engineer			57		27		
1A2X1	Aircraft Loadmaster			57		1,487	Y	Y
1A3X1	Airborne Mission Systems Specialist				70	1,302	Y	Y
1A6X1	Flight Attendant		50			10		
1A8X1	Airborne Cryptologic Language Analyst			72		1,382	Y	Y
1A8X2	Airborne ISR Operator			72		285	Y	Y
1A9X1	Special Mission Aviator	60		57		93		
1B4X1	Cyber Warfare Operations			64		17		
1C0X2	Aviation Resource Management		50			1,553	Y	Y
1C1X1	Air Traffic Control			55		3,898	Y	Y
1C2X1	Combat Control	55		55		479	Y	Y
1C3X1	Command & Control Operations		55	57		871	Y	Y
1C4X1	Tactical Air Control Party (TACP)			49		1,106	Y	Y
1C5X1	Command & Control Battle Management Ops			55		932	Y	Y
1C6X1	Space Systems Operations				70	784	Y	Y
1C7X1	Airfield Management	40		50		710	Y	Y
1C8X3	Radar, Airfield & Weather Systems (RAWS)				70	1,011	Y	Y
1N0X1	All Source Intelligence		64			2,708	Y	Y
1N1X1A	Geospatial Intelligence - Imagery Analyst			66		2,370	Y	Y
1N2X1A	Signals Intelligence Analyst - Electronic		72			997	Y	Y
1N2X1C	Signals Intelligence Analyst - Communications		72			519	Y	Y
1N3X1	Cryptologic Language Analyst			72		2,672	Y	Y
1N4X1A	Fusion Analyst - Digital Network Analyst			62		963	Y	Y
1N4X1B	Fusion Analyst - Analysis and Production			62		503	Y	Y
1N7X1	Human Intelligence Specialist			72		3		
1P0X1	Aircrew Flight Equipment	40				1,719	Y	Y
1S0X1	Safety		57			19		
1T0X1	Survival, Evasion, Resistance, and Escape			55		260		Y
1T2X1	Pararescue			44		386	Y	Y
1U0X1	Sensor Operator			64	54	480		Y
1W0X1	Weather			66	50	2,121	Y	Y
1Z4X1	Special Reconnaissance			66	50	61		
2A0X1	Avionics Test Station and Components				70	951	Y	Y
2A2X1	SOF/PR Integrated Communication/Navigation/Mission Systems				70	254	Y	
2A2X2	SOF/PR Integrated Instrument & Flight Control Systems				70	191	Y	
2A2X3	SOF/PR Integrated Electronic Warfare Systems				70	160	Y	
2A3X3	Tactical Aircraft Maintenance	47				4,656		Y
2A3X3L	Tactical Aircraft Maintenance - F-15	47				591		Y
2A3X3M	Tactical Aircraft Maintenance - F-16	47				597		Y
2A3X4	Fighter Aircraft Integrated Avionics				70	1,406	Y	Y
2A3X5	Advanced Fighter Aircraft Integrated Avionics				70	1,081	Y	Y
2A3X7	Tactical Aircraft Maintenance (5th Generation)	47				355		Y

AFSC	Job Title	MAGE Qualification Score				Sample Size	Training Grade Sample	MMRS Sample
		M	A	G	E			
2A3X8	Remotely Piloted Aircraft Maintenance	47				150	Y	
2A5X1	Airlift/Special Mission Aircraft Maintenance	47				7,657	Y	Y
2A5X2B	Helicopter/Tiltrotor Aircraft Maintenance - H-60	56				445	Y	Y
2A5X2D	Helicopter/Tiltrotor Aircraft Maintenance - CV-22	51				216	Y	Y
2A5X4	Refuel/Bomber Aircraft Maintenance	47				1,433	Y	Y
2A6X1	Aerospace Propulsion	56				4,602	Y	Y
2A6X2	Aerospace Ground Equipment	47			28	3,464	Y	Y
2A6X3	Aircrew Egress Systems	56				517	Y	Y
2A6X4	Aircraft Fuel Systems	47				1,873	Y	Y
2A6X5	Aircraft Hydraulic Systems	56				1,813	Y	Y
2A6X6	Aircraft Electrical and Environmental Systems	41			61	3,159	Y	Y
2A7X1	Aircraft Metals Technology	47				648	Y	Y
2A7X2	Nondestructive Inspection	42				715	Y	Y
2A7X3	Aircraft Structural Maintenance	47				2,256	Y	Y
2A7X5	Low Observable Aircraft Structural Maintenance	47				410	Y	Y
2A8X1	Mobility Air Forces Integrated Comm/Nav/Mission Sys				70	279	Y	
2A8X2	Mobility Air Forces Integrated Instrument & Flt Control Sys				70	294	Y	Y
2A9X1	Bomber/Special Integrated Comm/Nav/Mission Sys				70	149	Y	
2A9X2	Bomber/Special Integrated Instrument & Flt Control Sys				70	143	Y	
2A9X3	Bomber/special Electronic Warfare & Radar Surveillance Integrated Avionics				70	263	Y	Y
2F0X1	Fuels	47		38		3,047	Y	Y
2G0X1	Logistics Plans		56			444	Y	Y
2M0X1	Missile and Space Systems Elect Maintenance				70	669	Y	Y
2M0X2	Missile and Space Systems Maintenance	47				457	Y	Y
2M0X3	Missile and Space Facilities PRECISION MEASUREMENT				70	353	Y	Y
2P0X1	Precision Measurement Equipment Laboratory				70	695	Y	Y
2R0X1	Maintenance Management Analysis			55		535	Y	Y
2R1X1	Maintenance Management Production			44		739	Y	Y
2S0X1	Materiel Management		41	44		5,595	Y	Y
2T0X1	Traffic Management		35			1,564	Y	Y
2T1X1	Ground Transportation	40				2,157	Y	Y
2T2X1	Air Transportation	47	28			4,151	Y	Y
2T3X1	Mission Generation Vehicular Equipment Maintenance	47				1,550	Y	Y
2T3X1A	Mission Generation Vehicular Equipment Maintenance - Firefighting and Refueling Vehicle & Equipment Maintenance	40				232	Y	Y
2T3X1C	Mission Generation Vehicular Equipment Maintenance - Material Handling Equipment (MHE)/463L Maintenance	40				263	Y	Y
2T3X7	Fleet Management and Analysis		41			470	Y	Y
2W0X1	Munitions Systems	60		57		5,844	Y	Y
2W1X1	Aircraft Armament Systems	60			45	5,756	Y	Y
2W2X1	Nuclear Weapons	60				654	Y	Y

AFSC	Job Title	MAGE Qualification Score				Sample Size	Training Grade Sample	MMRS Sample
		M	A	G	E			
3D0X1	Knowledge Operations Management		64			3,793	Y	Y
3D0X2	Cyber Systems Operations			64		2,767	Y	Y
3D0X3	Cyber Surety			64		805		Y
3D0X4	Computer Systems Programming			64		262	Y	Y
3D1X1	Client Systems				60	1,970	Y	Y
3D1X2	Cyber Transport Systems				70	2,400	Y	Y
3D1X3	RF Transmission Systems				70	2,777	Y	Y
3D1X7	Cable and Antenna Systems	55			55	499	Y	Y
3E0X1	Electrical Systems	35			35	1,093	Y	Y
3E0X2	Electrical Power Production	56			40	1,180	Y	Y
3E1X1	Heating, Ventilation, AC, & Refrigeration	47			28	1,189	Y	Y
3E2X1	Pavements and Construction Equipment	40				1,584	Y	Y
3E3X1	Structural	47				1,413	Y	Y
3E4X1	Water and Fuel Systems Maintenance	47			28	1,329	Y	Y
3E4X3	Pest Management			38		181	Y	
3E5X1	Engineering			49		805	Y	Y
3E6X1	Operations Management			44		400	Y	Y
3E7X1	Fire Protection			38		3,627	Y	Y
3E8X1	Explosive Ordnance Disposal	60		64		742	Y	Y
3E9X1	Emergency Management			62		479	Y	Y
3F0X1	Personnel		41			3,352	Y	Y
3F1X1	Services			24		3,997	Y	Y
3F2X1	Education and Training		62			27		
3F3X1	Manpower			66		11		
3F4X1	Equal Opportunity		41	44		6		
3F5X1	Administration		47			376	Y	
3N0X2	Broadcast Journalist			72		354		Y
3N0X5	Photojournalist			72		215		
3N1X1	Regional Band		21	24		31		
3N2X1	Premier Band		21	24		47		
3P0X1	Security Forces			30		32,656	Y	Y
3P0X1A	Security Forces - Military Working Dog Handler			33		25		
3P0X1B	Security Forces - Combat Arms	35				9		
4A0X1	Health Services Management			44		2,387	Y	Y
4A1X1	Medical Materiel		48			857	Y	Y
4A2X1	Biomedical Equipment	60			70	404	Y	Y
4B0X1	Bioenvironmental Engineering			49		765		Y
4C0X1	Mental Health Service		57			790	Y	Y
4D0X1	Diet Therapy			44		260	Y	Y
4E0X1	Public Health		48			1,055		Y
4H0X1	Cardiopulmonary Laboratory			44		277		Y
4J0X2	Physical Medicine		51			267	Y	Y
4M0X1	Aerospace and Operational Physiology		48			224		Y
4N0X1	Aerospace Medical Service			50		5,550		Y
4N1X1	Surgical Service		50			533		Y
4N1X1D	Surgical Service - Otolaryngology			44		8		
4P0X1	Pharmacy		48			681		Y

AFSC	Job Title	MAGE Qualification Score				Sample Size	Training Grade Sample	MMRS Sample
		M	A	G	E			
4R0X1	Diagnostic Imaging			44		630		Y
4T0X1	Medical Laboratory			62		838		Y
4T0X2	Histopathology			44		63		
4V0X1	Ophthalmic		57			158		
4Y0X1	Dental Assistant			44		1,753	Y	Y
4Y0X2	Dental Laboratory			66		284	Y	Y
5J0X1	Paralegal			51		348		Y
5R0X1	Religious Affairs		35	44		39		
6C0X1	Contracting			72		1,213	Y	Y
6F0X1	Financial Management & Comptroller			57		1,924	Y	Y
7S0X1	Special Investigations			44		25		

APPENDIX B – DESCRIPTIVE STATISTICS FOR ANALYSIS SAMPLES

Table B.1. Descriptive Statistics for Full Sample

	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12
1. AO	51.104	19.311												
2. AR	55.575	6.248	.167											
3. AS	50.206	8.618	.177	.229										
4. EI	54.132	8.297	.160	.356	.594									
5. GS	54.646	7.145	.065	.400	.417	.574								
6. MC	55.572	7.736	.227	.467	.591	.600	.542							
7. MK	56.967	5.590	.111	.610	.030	.224	.323	.303						
8. PC	55.391	5.569	.101	.350	.202	.343	.449	.342	.252					
9. WK	53.463	6.266	.128	.306	.279	.445	.603	.397	.221	.505				
10. MAGE_M	64.407	20.422	.225	.622	.704	.676	.682	.809	.356	.596	.696			
11. MAGE_A	70.106	15.351	.142	.599	.190	.419	.585	.446	.789	.634	.710	.694		
12. MAGE_G	67.826	17.311	.170	.838	.308	.482	.601	.532	.521	.652	.707	.833	.823	
13. MAGE_E	70.150	18.067	.155	.732	.460	.758	.776	.639	.632	.446	.514	.796	.755	.797

Note. Sample sizes for ASVAB subtests are 259,359. Sample sizes for M, A, and G composites are 258,700. Sample size for E composite is 258,699. SD = standard deviation.

Table B.2. Subgroup Frequencies for Full Sample

Gender	
Male	205,773
Female	53,586
Race/Ethnicity	
Non-Hispanic White	161,523
Non-Hispanic Black	37,801
Hispanic White	32,716

Table B.3. Descriptive Statistics for Training Grade Analysis Sample

	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12	13
1. AO	50.898	19.396													
2. AR	55.269	6.314	.164												
3. AS	50.076	8.660	.177	.241											
4. EI	53.790	8.325	.159	.365	.599										
5. GS	54.272	7.220	.060	.410	.427	.580									
6. MC	55.346	7.771	.225	.479	.595	.606	.551								
7. MK	56.812	5.565	.108	.606	.032	.225	.325	.305							
8. PC	55.148	5.609	.097	.359	.215	.356	.459	.353	.254						
9. WK	53.087	6.298	.125	.319	.294	.460	.612	.411	.227	.512					
10. MAGE_M	63.268	20.803	.219	.632	.710	.683	.689	.813	.356	.603	.705				
11. MAGE_A	69.200	15.476	.137	.602	.203	.431	.593	.457	.787	.639	.717	.700			
12. MAGE_G	66.576	17.721	.165	.842	.326	.496	.610	.547	.518	.656	.714	.841	.824		
13. MAGE_E	69.034	18.407	.150	.737	.471	.762	.781	.649	.629	.457	.528	.803	.760	.804	
14. Training Grade	87.303	6.135	.079	.316	.248	.309	.321	.304	.290	.283	.284	.397	.386	.384	.408

Note. Sample size is 149,050. SD = standard deviation.

Table B.4. Subgroup Frequencies for Training Grade Analysis Sample

Gender	
Male	119,976
Female	29,074
Race/Ethnicity	
Non-Hispanic White	91,244
Non-Hispanic Black	22,815
Hispanic White	19,130

Table B.5. Descriptive Statistics for MMRS Analysis Sample

	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12	13
1. AO	51.220	18.855													
2. AR	55.259	6.315	.171												
3. AS	50.018	8.605	.167	.230											
4. EI	53.754	8.271	.152	.358	.593										
5. GS	54.319	7.148	.066	.401	.419	.576									
6. MC	55.263	7.750	.223	.468	.588	.599	.539								
7. MK	56.644	5.637	.117	.615	.029	.223	.324	.306							
8. PC	55.259	5.564	.104	.353	.198	.345	.443	.337	.256						
9. WK	53.285	6.243	.124	.309	.280	.451	.604	.395	.228	.499					
10. MAGE_M	63.449	20.519	.221	.627	.704	.679	.681	.808	.363	.593	.697				
11. MAGE_A	69.219	15.529	.146	.604	.187	.420	.582	.445	.794	.632	.710	.695			
12. MAGE_G	66.909	17.530	.172	.842	.307	.485	.598	.530	.529	.650	.706	.834	.824		
13. MAGE_E	68.894	18.340	.156	.736	.459	.757	.776	.638	.637	.448	.520	.799	.759	.801	
14. MMRS	37.012	15.395	.049	.067	.082	.074	.050	.079	.054	.052	.037	.089	.062	.068	.080

Note. Sample size is 109,874. SD = standard deviation.

Table B.6. Subgroup Frequencies for MMRS Analysis Sample

Gender	
Male	86,093
Female	23,781
Race/Ethnicity	
Non-Hispanic White	69,163
Non-Hispanic Black	16.096
Hispanic White	13,562

APPENDIX C – PREDICTIVE VALIDITY RESULTS BY AFS

Table C.1. Predictive Validity Results for Training Grade Criterion by AFS for Mechanical Composite

AFSC	Sample Size	Criterion Mean	Criterion SD	Predictive Validity				
				Current Composite	AR+PC+WK	AR+PC+WK+MK	AR+PC+WK+AO	AR+PC+WK+AO+MK
1C2X1	412	86.330	10.274	.148	.196	.226	.169	.203
1C7X1	662	84.760	5.798	.405	.393	.426	.385	.420
1P0X1	1,618	89.518	5.156	.475	.429	.456	.420	.451
2A3X8	125	87.560	5.576	.499	.493	.501	.458	.476
2A5X1	1,306	87.394	6.706	.455	.370	.374	.343	.355
2A5X2B	420	90.719	5.325	.366	.359	.360	.348	.354
2A5X2D	198	88.167	5.056	.320	.252	.232	.200	.194
2A5X4	772	86.522	5.801	.582	.480	.499	.450	.477
2A6X1	4,369	87.674	5.456	.468	.391	.401	.377	.392
2A6X2	3,197	87.927	4.555	.549	.500	.517	.480	.504
2A6X3	485	87.186	5.022	.301	.280	.309	.293	.320
2A6X4	1,799	88.511	5.297	.486	.422	.444	.410	.436
2A6X5	1,738	88.639	5.193	.446	.397	.410	.377	.396
2A6X6	3,001	90.530	4.832	.570	.509	.537	.492	.525
2A7X1	576	88.186	9.720	.215	.246	.266	.213	.240
2A7X2	676	88.175	5.023	.488	.476	.514	.455	.499
2A7X3	2,138	89.122	5.023	.520	.461	.471	.439	.456
2A7X5	385	87.844	5.289	.545	.427	.440	.414	.433
2F0X1	2,876	89.605	5.253	.430	.391	.415	.371	.400
2M0X2	419	93.200	3.030	.436	.417	.434	.408	.429
2T1X1	1,544	86.622	4.857	.444	.428	.436	.406	.422
2T2X1	3,921	88.046	5.371	.448	.455	.476	.427	.455
2T3X1	1,482	88.653	5.607	.414	.312	.319	.304	.315
2T3X1A	219	87.082	5.536	.362	.329	.341	.318	.334
2T3X1C	250	92.288	4.860	.308	.324	.334	.338	.348
2W0X1	5,577	89.584	4.847	.463	.454	.478	.427	.458
2W1X1	5,459	89.296	4.600	.484	.443	.463	.418	.444
2W2X1	587	93.204	2.899	.497	.430	.436	.405	.419
3D1X7	475	90.686	3.945	.521	.447	.461	.419	.441
3E0X1	1,044	87.810	4.996	.546	.500	.543	.465	.515
3E0X2	1,124	86.716	4.519	.529	.435	.449	.428	.447
3E1X1	1,151	88.662	4.441	.494	.437	.460	.411	.440
3E2X1	1,276	89.837	4.428	.449	.413	.417	.386	.398
3E3X1	786	86.615	4.947	.429	.403	.413	.379	.396
3E4X1	1,250	88.850	4.665	.521	.472	.473	.437	.450
3E8X1	231	93.857	4.873	.395	.318	.313	.308	.309
4A2X1	216	90.463	3.266	.436	.365	.417	.428	.467

Note. Validities reported are correlations between the composite and the criterion. SD = standard deviation.

Table C.2. Predictive Validity Results for MMRS Criterion by AFS for Mechanical Composite

AFSC	Sample Size	Criterion Mean	Criterion SD	Predictive Validity				
				Current Composite	AR+PC+WK	AR+PC+WK+MK	AR+PC+WK+AO	AR+PC+WK+AO+MK
1C2X1	171	39.001	13.617	-.096	-.091	-.086	-.107	-.101
1C7X1	423	36.392	15.833	.125	.097	.108	.109	.118
1P0X1	927	34.257	17.031	.013	-.005	.027	.020	.045
2A3X3	2,910	37.026	16.002	.074	.046	.053	.063	.067
2A3X3L	234	32.007	16.407	.200	.149	.134	.132	.123
2A3X3M	199	33.017	14.874	.109	.048	.030	.052	.035
2A3X7	137	32.767	15.820	.188	.199	.228	.213	.239
2A5X1	4,204	37.746	15.227	.117	.087	.089	.094	.096
2A5X2B	239	37.542	15.420	.132	-.004	.002	.025	.026
2A5X2D	101	36.480	15.023	.304	.237	.240	.214	.223
2A5X4	572	33.235	15.445	.078	.058	.070	.061	.072
2A6X1	2,421	37.066	15.553	.071	.037	.039	.058	.057
2A6X2	1,918	36.398	15.789	.102	.041	.047	.064	.066
2A6X3	272	38.242	14.798	.018	.038	.048	.059	.064
2A6X4	1,050	35.059	16.350	.140	.095	.096	.095	.097
2A6X5	963	37.446	14.881	.099	.082	.076	.089	.083
2A6X6	1,705	38.530	14.518	.103	.075	.074	.083	.081
2A7X1	310	36.147	15.558	.069	.019	.022	.041	.039
2A7X2	393	35.815	16.215	.025	.064	.069	.052	.059
2A7X3	1,227	36.630	15.903	.124	.081	.066	.096	.081
2A7X5	184	35.638	15.395	.235	.155	.156	.124	.132
2F0X1	1,688	37.350	15.273	.017	-.016	-.010	.000	.002
2M0X2	219	34.673	15.905	.144	.142	.145	.169	.169
2T1X1	1,249	36.044	16.035	.059	.031	.031	.034	.034
2T2X1	2,350	38.053	14.751	.035	.019	.018	.028	.026
2T3X1	739	37.104	15.500	.048	.012	.003	.018	.008
2T3X1A	104	37.471	15.572	.144	.085	.092	.060	.072
2T3X1C	136	36.185	15.275	.077	.044	.023	.067	.044
2W0X1	3,122	35.886	15.918	.102	.082	.076	.094	.087
2W1X1	3,166	37.169	15.346	.026	-.014	-.003	-.004	.004
2W2X1	356	37.339	15.202	-.012	-.011	.006	-.016	.000
3D1X7	222	37.599	15.038	.023	.056	.079	.025	.052
3E0X1	571	38.550	14.440	-.049	-.041	-.035	-.058	-.049
3E0X2	639	38.363	14.539	.062	.035	.040	.067	.066
3E1X1	641	38.008	14.576	.047	.052	.048	.056	.052
3E2X1	832	37.806	15.087	.098	.101	.078	.111	.090
3E3X1	687	38.351	14.267	.079	.079	.070	.079	.072
3E4X1	644	37.186	14.982	.055	.019	.004	.027	.012
3E8X1	216	41.742	11.795	-.044	-.109	-.067	-.057	-.029
4A2X1	218	39.972	13.385	-.181	-.129	-.133	-.091	-.103

Note. Validities reported are correlations between the composite and the criterion. SD = standard deviation.

Table C.3. Predictive Validity Results for Training Grade Criterion by AFS for Electronics Composite

AFSC	Sample Size	Criterion Mean	Criterion SD	Predictive Validity								
				Current Composite	AR+MK	AR+MK +WK	AR+MK +PC	AR+MK +AO	AR+MK+ PC+WK	AR+MK+ AO+WK	AR+MK+ AO+PC	AR+MK+AO +PC+WK
1A3X1	1,177	92.981	3.930	.287	.313	.353	.377	.294	.387	.335	.358	.373
1C6X1	733	92.035	4.309	.315	.268	.298	.296	.252	.306	.283	.284	.297
1C8X3	942	89.162	4.875	.327	.341	.374	.377	.333	.386	.366	.371	.383
1W0X1	1,960	89.006	4.886	.516	.464	.514	.509	.446	.526	.497	.496	.517
2A0X1	904	88.894	5.194	.398	.347	.401	.386	.344	.411	.394	.383	.409
2A2X1	225	90.493	3.800	.646	.533	.576	.580	.505	.590	.553	.559	.576
2A2X2	168	91.149	3.965	.478	.402	.428	.463	.404	.459	.430	.462	.463
2A2X3	138	87.630	4.128	.335	.385	.386	.427	.351	.408	.362	.400	.391
2A3X4	1,312	89.843	4.365	.482	.420	.451	.463	.381	.468	.420	.433	.445
2A3X5	1,022	90.824	4.476	.463	.377	.415	.410	.337	.423	.381	.380	.399
2A6X2	3,197	87.927	4.555	.526	.439	.504	.489	.418	.518	.482	.473	.505
2A6X6	3,001	90.530	4.832	.580	.477	.533	.518	.454	.541	.512	.501	.529
2A8X1	260	90.408	3.756	.255	.222	.275	.276	.189	.300	.242	.245	.274
2A8X2	275	90.822	4.151	.464	.363	.422	.450	.339	.469	.398	.425	.449
2A9X1	142	90.261	3.494	.562	.370	.431	.435	.350	.459	.409	.416	.444
2A9X2	133	90.782	4.427	.369	.357	.422	.434	.283	.460	.356	.369	.406
2A9X3	234	88.103	4.285	.493	.393	.469	.441	.378	.480	.450	.428	.469
2M0X1	602	91.945	4.215	.516	.442	.517	.513	.436	.546	.507	.506	.540
2M0X3	328	91.546	3.871	.384	.342	.399	.368	.328	.398	.384	.358	.390
2P0X1	649	87.664	5.252	.605	.540	.583	.576	.482	.587	.535	.533	.554
2W1X1	5,459	89.296	4.600	.478	.396	.448	.442	.367	.463	.421	.419	.445
3D1X1	569	87.775	4.612	.154	.182	.237	.242	.157	.268	.210	.216	.246
3D1X2	334	87.955	6.772	.244	.164	.237	.226	.117	.267	.190	.182	.228
3D1X3	2,539	88.917	4.718	.441	.381	.436	.429	.359	.451	.413	.410	.436
3D1X7	475	90.686	3.945	.516	.397	.462	.432	.365	.465	.431	.408	.444
3E0X1	1,044	87.810	4.996	.579	.508	.540	.545	.459	.549	.500	.508	.521
3E0X2	1,124	86.716	4.519	.506	.402	.436	.448	.395	.455	.429	.442	.452
3E1X1	1,151	88.662	4.441	.486	.401	.449	.437	.369	.456	.420	.412	.436
3E4X1	1,250	88.850	4.665	.510	.381	.447	.442	.348	.471	.415	.413	.447
4A2X1	216	90.463	3.266	.278	.277	.329	.312	.363	.338	.395	.382	.395

Note. Validities reported are correlations between the composite and the criterion. SD = standard deviation.

Table C.4. Predictive Validity Results for MMRS Criterion by AFS for Electronics Composite

AFSC	Sample Size	Criterion Mean	Criterion SD	Predictive Validity								
				Current Composite	AR+MK	AR+MK +WK	AR+MK +PC	AR+MK +AO	AR+MK+ PC+WK	AR+MK+ AO+WK	AR+MK+ AO+PC	AR+MK+AO +PC+WK
1A3X1	705	39.513	14.083	.070	.044	.042	.053	.062	.048	.057	.067	.060
1C6X1	431	37.765	14.718	-.030	-.008	-.014	-.045	.038	-.042	.024	-.003	-.008
1C8X3	548	37.467	14.525	.084	.043	.034	.050	.051	.040	.042	.056	.046
1U0X1	320	39.813	13.345	.177	.018	.040	.070	.022	.077	.041	.067	.074
1W0X1	1,134	39.606	13.689	.141	.117	.132	.126	.113	.133	.128	.123	.131
2A0X1	525	38.507	13.990	-.145	-.092	-.112	-.077	-.070	-.094	-.092	-.063	-.081
2A3X4	767	36.269	15.873	.241	.236	.238	.220	.223	.219	.230	.215	.217
2A3X5	609	39.827	13.936	.064	.135	.099	.098	.115	.073	.089	.088	.069
2A6X2	1,918	36.398	15.789	.067	.061	.056	.056	.086	.051	.077	.078	.070
2A6X6	1,705	38.530	14.518	.068	.049	.052	.070	.062	.067	.062	.078	.075
2A8X2	113	35.932	13.748	.021	.011	-.001	-.006	.089	-.012	.066	.060	.044
2A9X3	104	37.033	13.811	.731	.412	.476	.473	.386	.499	.450	.450	.481
2M0X1	358	38.091	14.505	.001	.003	.019	.016	.028	.026	.038	.035	.041
2M0X3	187	35.497	15.693	.073	.093	.089	.079	.097	.076	.094	.086	.082
2P0X1	390	38.949	14.793	-.091	-.032	-.066	-.042	-.056	-.066	-.081	-.061	-.079
2W1X1	3,166	37.169	15.346	.021	.007	-.007	.010	.017	-.002	.003	.018	.006
3D1X1	999	39.498	13.614	.147	.143	.142	.127	.113	.126	.119	.107	.110
3D1X2	1,118	39.481	13.135	.078	.034	.038	.051	.013	.050	.021	.032	.035
3D1X3	1,471	39.003	14.411	.077	.032	.041	.037	.058	.042	.062	.058	.060
3D1X7	222	37.599	15.038	.041	.084	.079	.098	.043	.089	.047	.064	.062
3E0X1	571	38.550	14.440	-.027	-.011	-.051	-.015	-.037	-.045	-.067	-.036	-.060
3E0X2	639	38.363	14.539	.071	.056	.061	.050	.093	.053	.091	.082	.080
3E1X1	641	38.008	14.576	.022	.037	.041	.039	.044	.041	.047	.045	.046
3E4X1	644	37.186	14.982	.002	-.043	-.010	-.024	-.023	-.001	.001	-.012	.006
4A2X1	218	39.972	13.385	-.200	-.132	-.158	-.134	-.084	-.150	-.116	-.096	-.118

Note. Validities reported are correlations between the composite and the criterion. SD = standard deviation.

Table C.5. Predictive Validity Results for Training Grade Criterion by AFS for Administrative Composite

AFSC	Sample Size	Criterion Mean	Criterion SD	Predictive Validity							
				Current Composite	MK+PC+ WK+GS	MK+PC+ WK+AR	MK+PC+ WK+AO	MK+PC+ WK+AR+ GS	MK+PC+ WK+AO+ GS	MK+PC+WK +AO+AR	MK+PC+WK+ AO+AR+GS
1C0X2	1,469	85.978	6.449	.385	.363	.395	.354	.384	.354	.379	.375
1C3X1	818	86.995	5.672	.366	.377	.400	.362	.393	.367	.383	.384
1N0X1	2,460	88.338	4.907	.461	.459	.479	.435	.473	.442	.455	.459
1N2X1A	522	91.128	4.503	.489	.505	.524	.470	.529	.491	.504	.517
1N2X1C	434	91.461	3.776	.339	.299	.360	.325	.331	.304	.355	.334
2G0X1	405	87.252	6.088	.339	.295	.352	.284	.331	.278	.326	.314
2S0X1	5,350	88.084	5.726	.410	.396	.419	.385	.414	.391	.407	.408
2T0X1	1,475	87.099	5.544	.462	.433	.469	.403	.458	.409	.437	.438
2T2X1	3,921	88.046	5.371	.446	.468	.473	.429	.483	.453	.453	.470
2T3X7	452	87.522	6.360	.428	.426	.466	.405	.451	.405	.437	.433
3D0X1	3,618	85.981	6.009	.355	.331	.358	.313	.349	.316	.336	.335
3F0X1	3,197	88.626	6.274	.296	.286	.320	.301	.307	.294	.321	.313
3F5X1	353	88.805	5.793	.262	.233	.288	.281	.261	.255	.302	.278
4A1X1	610	82.910	5.719	.399	.396	.426	.380	.414	.380	.403	.400
4C0X1	396	87.634	5.047	.531	.536	.542	.515	.531	.514	.514	.514
4J0X2	143	85.441	5.212	.528	.574	.580	.570	.581	.579	.578	.585

Note. Validities reported are correlations between the composite and the criterion. SD = standard deviation.

Table C.6. Predictive Validity Results for MMRS Criterion by AFS for Administrative Composite

AFSC	Sample Size	Criterion Mean	Criterion SD	Predictive Validity							
				Current Composite	MK+PC+WK+GS	MK+PC+WK+AR	MK+PC+WK+AO	MK+PC+WK+AR+GS	MK+PC+WK+AO+GS	MK+PC+WK+AO+AR	MK+PC+WK+AO+AR+GS
1C0X2	828	34.953	16.379	-.001	-.020	.006	.005	-.009	-.011	.012	-.002
1C3X1	470	35.578	15.819	.055	.010	.056	.034	.031	.012	.053	.031
1N0X1	1,420	39.302	13.810	.054	.059	.067	.076	.072	.080	.087	.089
1N2X1A	577	40.412	13.682	.010	.024	.038	-.017	.054	.012	.024	.041
1N2X1C	235	38.154	14.321	-.044	-.079	-.084	-.051	-.094	-.069	-.073	-.085
2G0X1	231	37.502	15.653	.037	.027	.000	.032	.004	.031	.006	.009
2S0X1	3,101	37.186	15.534	-.025	-.019	-.028	-.025	-.020	-.017	-.025	-.018
2T0X1	807	36.655	15.805	-.137	-.100	-.115	-.067	-.105	-.068	-.080	-.078
2T2X1	2,350	38.053	14.751	.017	.018	.025	.035	.019	.027	.033	.026
2T3X7	228	31.447	17.415	.160	.135	.149	.187	.138	.168	.180	.166
3D0X1	2,112	35.907	16.473	.033	.023	.031	.063	.024	.050	.056	.046
3F0X1	1,530	34.633	16.421	-.038	-.055	-.034	-.028	-.045	-.042	-.022	-.035
4A1X1	484	38.630	14.748	.004	-.032	.006	-.022	-.012	-.037	-.002	-.018
4C0X1	491	33.993	16.313	.166	.164	.188	.176	.177	.168	.187	.179
4E0X1	575	36.719	15.336	-.004	-.033	-.008	.032	-.032	-.002	.021	-.006
4J0X2	140	37.780	15.216	.167	.149	.213	.197	.179	.165	.221	.190
4M0X1	136	35.817	16.168	.204	.184	.231	.223	.210	.203	.244	.224
4N1X1	331	36.608	15.298	.079	.040	.064	.020	.058	.023	.044	.043
4P0X1	408	35.754	15.787	-.051	-.045	-.058	.001	-.050	-.003	-.014	-.015

Note. Validities reported are correlations between the composite and the criterion. SD = standard deviation.

Table C.7. Predictive Validity Results for Training Grade Criterion by AFS for General Composite

AFSC	Sample Size	Criterion Mean	Criterion SD	Predictive Validity							
				Current Composite	AR+PC+ WK+MK	AR+PC+ WK+AO	AR+PC+WK +GS	AR+PC+WK +AO+MK	AR+PC+WK +GS+MK	AR+PC+WK +AO+GS	AR+PC+WK+ AO+GS+MK
1A0X1	364	94.676	2.987	.435	.419	.402	.425	.392	.413	.402	.396
1A2X1	887	94.379	3.009	.292	.334	.286	.303	.330	.340	.305	.340
1A8X1	1,316	89.477	6.544	.058	.046	.071	.073	.055	.058	.079	.065
1A8X2	260	91.800	3.416	.673	.650	.630	.624	.645	.638	.626	.641
1C1X1	2,644	86.419	6.633	.365	.384	.353	.366	.375	.383	.361	.380
1C2X1	412	86.330	10.274	.151	.200	.144	.193	.179	.216	.174	.200
1C3X1	818	86.995	5.672	.338	.389	.346	.362	.372	.383	.351	.374
1C4X1	873	84.427	9.102	.227	.232	.215	.267	.213	.257	.247	.242
1C5X1	902	87.541	5.920	.392	.424	.364	.425	.396	.444	.401	.423
1C7X1	662	84.760	5.798	.382	.416	.375	.389	.411	.418	.389	.418
1N1X1A	2,205	88.671	4.237	.460	.481	.460	.476	.482	.493	.481	.498
1N3X1	2,476	88.181	6.220	.186	.189	.186	.193	.189	.194	.194	.196
1N4X1A	917	93.529	3.442	.479	.511	.465	.480	.503	.512	.479	.510
1N4X1B	448	91.366	3.544	.525	.548	.504	.507	.537	.536	.505	.534
1T2X1	356	82.253	10.926	.012	.040	.036	.068	.025	.054	.052	.041
1W0X1	1,960	89.006	4.886	.531	.544	.504	.532	.534	.555	.528	.552
2F0X1	2,876	89.605	5.253	.390	.411	.368	.402	.396	.422	.392	.414
2R0X1	507	88.363	5.214	.379	.416	.363	.367	.404	.404	.363	.399
2R1X1	702	87.152	5.306	.346	.380	.352	.339	.374	.361	.339	.361
2S0X1	5,350	88.084	5.726	.368	.415	.355	.370	.403	.410	.365	.405
2W0X1	5,577	89.584	4.847	.450	.477	.426	.467	.457	.488	.452	.476
3D0X2	227	86.264	6.118	.454	.470	.433	.484	.441	.482	.457	.462
3D0X4	248	89.375	4.997	.109	.182	.161	.156	.211	.201	.188	.226
3E4X3	175	90.389	4.706	.385	.415	.358	.442	.402	.468	.430	.458
3E5X1	629	86.409	7.128	.257	.277	.234	.272	.263	.292	.260	.281
3E6X1	383	86.794	5.677	.367	.404	.351	.376	.387	.404	.365	.394
3E7X1	3,384	89.158	3.926	.487	.485	.484	.516	.482	.509	.514	.510
3E8X1	231	93.857	4.873	.256	.255	.243	.263	.249	.265	.259	.263
3E9X1	162	87.747	5.429	.465	.496	.435	.501	.470	.522	.479	.504
3F1X1	3,751	84.073	5.988	.390	.430	.364	.399	.403	.428	.379	.410
3P0X1	29,141	82.911	5.913	.497	.518	.461	.513	.488	.528	.488	.508
4A0X1	1,383	85.205	5.307	.456	.492	.448	.473	.476	.494	.463	.486
4D0X1	164	81.463	5.454	.561	.608	.581	.553	.619	.591	.573	.608
4Y0X1	1,029	84.114	5.716	.460	.487	.438	.466	.472	.492	.457	.484
4Y0X2	128	87.430	4.576	.487	.424	.366	.390	.396	.414	.370	.396
6C0X1	1,118	85.125	5.859	.541	.578	.533	.543	.564	.568	.537	.564
6F0X1	1,804	89.256	5.253	.371	.413	.388	.352	.424	.390	.371	.405

Note. Validities reported are correlations between the composite and the criterion. SD = standard deviation.

Table C.8. Predictive Validity Results for MMRS Criterion by AFS for General Composite

AFSC	Sample Size	Criterion Mean	Criterion SD	Predictive Validity							
				Current Composite	AR+PC+WK+MK	AR+PC+WK+AO	AR+PC+WK+GS	AR+PC+WK+AO+MK	AR+PC+WK+GS+MK	AR+PC+WK+AO+GS	AR+PC+WK+AO+GS+MK
1A0X1	268	39.461	13.138	.176	.162	.192	.225	.151	.183	.210	.175
1A2X1	792	39.107	13.625	.033	.040	.080	.039	.076	.042	.074	.072
1A8X1	724	38.872	12.952	-.034	-.034	-.041	-.038	-.026	-.025	-.030	-.019
1A8X2	158	40.750	12.041	-.139	-.096	-.054	-.156	-.027	-.115	-.084	-.057
1C1X1	2,355	38.750	14.935	-.053	-.032	-.028	-.046	-.020	-.036	-.033	-.026
1C2X1	171	39.001	13.617	-.009	-.008	-.027	.011	-.024	.008	-.007	-.007
1C3X1	470	35.578	15.819	.057	.053	.035	.012	.049	.028	.012	.027
1C4X1	478	42.031	12.064	.015	.008	.005	.028	.006	.026	.025	.024
1C5X1	538	38.742	14.606	.087	.090	.096	.094	.097	.095	.101	.101
1C7X1	423	36.392	15.833	.132	.122	.123	.100	.131	.111	.112	.121
1N1X1A	1,288	39.158	13.733	.092	.083	.092	.086	.089	.084	.091	.089
1N3X1	1,504	40.865	12.509	.202	.186	.169	.178	.170	.177	.164	.166
1N4X1A	514	41.391	12.601	.092	.118	.082	.076	.102	.095	.065	.085
1N4X1B	162	36.505	14.494	.374	.339	.297	.322	.314	.334	.302	.317
1T0X1	108	40.727	14.349	-.167	-.207	-.135	-.186	-.172	-.210	-.155	-.183
1T2X1	125	34.618	14.673	-.194	-.147	-.230	-.210	-.152	-.143	-.210	-.149
1U0X1	320	39.813	13.345	.054	.025	.054	.079	.024	.047	.073	.045
1W0X1	1,134	39.606	13.689	.150	.141	.135	.140	.139	.142	.139	.142
2F0X1	1,688	37.350	15.273	-.020	-.007	.003	-.019	.005	-.014	-.006	-.003
2R0X1	299	36.729	15.528	.135	.130	.122	.113	.124	.117	.110	.114
2R1X1	414	34.656	16.754	.060	.118	.086	.089	.107	.108	.083	.101
2S0X1	3,101	37.186	15.534	-.028	-.023	-.024	-.018	-.019	-.015	-.016	-.013
2W0X1	3,122	35.886	15.918	.081	.075	.093	.081	.086	.076	.092	.086
3D0X2	1,304	38.979	13.722	.045	.052	.065	.032	.071	.043	.052	.060
3D0X3	397	37.396	14.136	.166	.136	.115	.127	.124	.133	.117	.125
3D0X4	146	40.290	11.844	-.394	-.378	-.358	-.419	-.339	-.393	-.381	-.364
3E5X1	433	38.624	14.002	-.084	-.062	-.088	-.077	-.066	-.059	-.080	-.063
3E6X1	201	33.625	17.440	.194	.217	.226	.194	.231	.203	.211	.218
3E7X1	2,274	38.407	14.578	.050	.046	.062	.053	.053	.047	.060	.054
3E8X1	216	41.742	11.795	-.084	-.080	-.066	-.132	-.040	-.099	-.089	-.065
3E9X1	277	39.193	14.816	.237	.257	.241	.262	.250	.266	.256	.262
3F1X1	2,421	33.109	16.884	.049	.065	.089	.053	.085	.055	.074	.073
3N0X2	205	38.589	13.916	.209	.131	.178	.189	.134	.148	.188	.151
3P0X1	20,959	35.713	16.025	.082	.078	.088	.084	.085	.082	.091	.089
4A0X1	1,383	34.289	16.828	.138	.145	.163	.139	.161	.141	.156	.156
4B0X1	419	36.513	15.554	.089	.080	.055	.074	.063	.078	.057	.064
4D0X1	169	35.904	16.613	.043	.095	.045	.056	.077	.083	.043	.070
4H0X1	176	41.492	11.712	-.052	-.032	-.006	-.035	.003	-.023	-.001	.005
4N0X1	3,095	38.345	14.450	-.025	-.012	-.007	-.024	.003	-.013	-.008	.000
4R0X1	335	38.448	14.139	-.048	-.042	-.042	-.057	-.028	-.042	-.042	-.031

AFSC	Sample Size	Criterion Mean	Criterion SD	Predictive Validity							
				Current Composite	AR+PC+WK+MK	AR+PC+WK+AO	AR+PC+WK+GS	AR+PC+WK+AO+MK	AR+PC+WK+GS+MK	AR+PC+WK+AO+GS	AR+PC+WK+AO+GS+MK
4T0X1	462	36.395	15.196	.057	.050	.060	.042	.058	.043	.051	.051
4Y0X1	1,057	34.655	16.486	.040	.059	.041	.050	.052	.058	.045	.053
4Y0X2	135	37.710	14.499	.502	.408	.376	.383	.399	.402	.379	.399
5J0X1	204	35.268	15.625	.024	-.019	-.005	.000	-.022	-.016	-.005	-.020
6C0X1	735	38.120	14.080	.090	.098	.116	.080	.126	.094	.109	.118
6F0X1	1,118	35.402	15.912	.001	.007	.027	-.014	.029	-.006	.009	.014

Note. Validities reported are correlations between the composite and the criterion. SD = standard deviation.

APPENDIX D – OBSERVED PREDICTIVE VALIDITY RESULTS BY AFS

Table D.1. Predictive Validity Results for Training Grade Criterion by AFS for Mechanical Composite - Observed

AFSC	Sample Size	Criterion Mean	Criterion SD	Predictive Validity				
				Current Composite	AR+PC+WK	AR+PC+WK+MK	AR+PC+WK+AO	AR+PC+WK+AO+MK
1C2X1	412	86.330	10.274	.153	.206	.231	.181	.209
1C7X1	662	84.760	5.798	.332	.312	.354	.304	.348
1P0X1	1,618	89.518	5.156	.387	.332	.371	.322	.365
2A3X8	125	87.560	5.576	.479	.479	.476	.453	.465
2A5X1	1,306	87.394	6.706	.381	.277	.289	.251	.268
2A5X2B	420	90.719	5.325	.284	.278	.285	.267	.279
2A5X2D	198	88.167	5.056	.250	.157	.143	.094	.096
2A5X4	772	86.522	5.801	.483	.330	.368	.294	.341
2A6X1	4,369	87.674	5.456	.409	.323	.342	.307	.331
2A6X2	3,197	87.927	4.555	.428	.354	.381	.337	.371
2A6X3	485	87.186	5.022	.233	.163	.193	.180	.208
2A6X4	1,799	88.511	5.297	.376	.285	.324	.276	.317
2A6X5	1,738	88.639	5.193	.331	.256	.281	.240	.271
2A6X6	3,001	90.530	4.832	.440	.375	.397	.362	.389
2A7X1	576	88.186	9.720	.200	.240	.262	.203	.234
2A7X2	676	88.175	5.023	.441	.429	.472	.410	.458
2A7X3	2,138	89.122	5.023	.418	.349	.366	.326	.349
2A7X5	385	87.844	5.289	.441	.300	.325	.279	.311
2F0X1	2,876	89.605	5.253	.322	.278	.309	.255	.292
2M0X2	419	93.200	3.030	.392	.373	.396	.355	.387
2T1X1	1,544	86.622	4.857	.342	.320	.332	.293	.313
2T2X1	3,921	88.046	5.371	.338	.354	.383	.323	.361
2T3X1	1,482	88.653	5.607	.323	.190	.206	.184	.202
2T3X1A	219	87.082	5.536	.246	.163	.196	.145	.180
2T3X1C	250	92.288	4.860	.220	.219	.236	.237	.251
2W0X1	5,577	89.584	4.847	.361	.353	.382	.326	.363
2W1X1	5,459	89.296	4.600	.465	.433	.447	.405	.426
2W2X1	587	93.204	2.899	.353	.275	.294	.259	.280
3D1X7	475	90.686	3.945	.427	.366	.377	.336	.357
3E0X1	1,044	87.810	4.996	.512	.461	.507	.420	.475
3E0X2	1,124	86.716	4.519	.390	.270	.297	.263	.291
3E1X1	1,151	88.662	4.441	.470	.412	.436	.384	.413
3E2X1	1,276	89.837	4.428	.367	.319	.324	.284	.299
3E3X1	786	86.615	4.947	.369	.331	.346	.302	.326
3E4X1	1,250	88.850	4.665	.392	.324	.333	.294	.311
3E8X1	231	93.857	4.873	.198	.119	.126	.108	.118
4A2X1	216	90.463	3.266	.408	.335	.373	.383	.414

AFSC	Sample Size	Criterion Mean	Criterion SD	Predictive Validity				
				Current Composite	AR+PC+WK	AR+PC+WK+MK	AR+PC+WK+AO	AR+PC+WK+AO+MK
Aggregated				.385	.334	.357	.312	.342

Note. Validities reported are observed correlations between the composite and the criterion. The aggregated entry is the sample-size weighted mean of the AFS results. SD = standard deviation.

Table D.2. Predictive Validity Results for MMRS Criterion by AFS for Mechanical Composite – Observed

AFSC	Sample Size	Criterion Mean	Criterion SD	Predictive Validity				
				Current Composite	AR+PC+WK	AR+PC+WK+MK	AR+PC+WK+AO	AR+PC+WK+AO+MK
1C2X1	171	39.001	13.617	-.034	-.048	-.048	-.059	-.059
1C7X1	423	36.392	15.833	.098	.080	.097	.094	.107
1P0X1	927	34.257	17.031	.007	-.016	.022	.013	.042
2A3X3	2,910	37.026	16.002	.067	.029	.038	.047	.052
2A3X3L	234	32.007	16.407	.126	.097	.090	.080	.079
2A3X3M	199	33.017	14.874	.077	.023	.009	.025	.012
2A3X7	137	32.767	15.820	.154	.168	.200	.193	.218
2A5X1	4,204	37.746	15.227	.092	.057	.062	.065	.068
2A5X2B	239	37.542	15.420	.057	-.105	-.088	-.074	-.066
2A5X2D	101	36.480	15.023	.135	.105	.099	.086	.086
2A5X4	572	33.235	15.445	.064	.037	.052	.042	.055
2A6X1	2,421	37.066	15.553	.060	.022	.025	.043	.042
2A6X2	1,918	36.398	15.789	.080	-.015	-.005	.015	.018
2A6X3	272	38.242	14.798	.030	.033	.042	.056	.061
2A6X4	1,050	35.059	16.350	.098	.039	.045	.040	.046
2A6X5	963	37.446	14.881	.076	.047	.044	.058	.054
2A6X6	1,705	38.530	14.518	.089	.056	.054	.066	.063
2A7X1	310	36.147	15.558	.059	-.005	-.001	.022	.021
2A7X2	393	35.815	16.215	.022	.062	.068	.050	.059
2A7X3	1,227	36.630	15.903	.094	.038	.022	.056	.039
2A7X5	184	35.638	15.395	.190	.100	.097	.058	.063
2F0X1	1,688	37.350	15.273	.012	-.030	-.023	-.013	-.011
2M0X2	219	34.673	15.905	.117	.115	.113	.150	.145
2T1X1	1,249	36.044	16.035	.040	.004	.006	.007	.008
2T2X1	2,350	38.053	14.751	.024	.001	.001	.011	.009
2T3X1	739	37.104	15.500	.036	-.006	-.017	.000	-.011
2T3X1A	104	37.471	15.572	.131	.030	.046	-.007	.015
2T3X1C	136	36.185	15.275	.073	.037	.014	.060	.036
2W0X1	3,122	35.886	15.918	.082	.053	.047	.066	.059
2W1X1	3,166	37.169	15.346	.019	-.016	-.006	-.005	.002
2W2X1	356	37.339	15.202	.035	.018	.027	.012	.021
3D1X7	222	37.599	15.038	.040	.062	.080	.031	.053
3E0X1	571	38.550	14.440	-.049	-.035	-.023	-.052	-.039
3E0X2	639	38.363	14.539	.065	.023	.030	.051	.052
3E1X1	641	38.008	14.576	.033	.040	.039	.046	.045
3E2X1	832	37.806	15.087	.072	.078	.053	.090	.067
3E3X1	687	38.351	14.267	.062	.065	.054	.065	.056

AFSC	Sample Size	Criterion Mean	Criterion SD	Predictive Validity				
				Current Composite	AR+PC+WK	AR+PC+WK+MK	AR+PC+WK+AO	AR+PC+WK+AO+MK
3E4X1	644	37.186	14.982	.021	-.027	-.045	-.022	-.039
3E8X1	216	41.742	11.795	.041	-.026	.001	.009	.026
4A2X1	218	39.972	13.385	-.060	-.022	-.034	.011	-.006
Aggregated				.059	.024	.027	.036	.037

Note. Validities reported are observed correlations between the composite and the criterion. The aggregated entry is the sample-size weighted mean of the AFS results. SD = standard deviation.

Table D.3. Predictive Validity Results for Training Grade Criterion by AFS for Electronics Composite - Observed

AFSC	Sample Size	Criterion Mean	Criterion SD	Predictive Validity								
				Current Composite	AR+MK	AR+MK +WK	AR+MK +PC	AR+MK +AO	AR+MK+ PC+WK	AR+MK+ AO+WK	AR+MK+ AO+PC	AR+MK+AO +PC+WK
1A3X1	1,177	92.981	3.930	.293	.328	.370	.388	.313	.399	.350	.372	.384
1C6X1	733	92.035	4.309	.255	.225	.254	.257	.219	.266	.246	.249	.261
1C8X3	942	89.162	4.875	.301	.307	.349	.354	.312	.366	.346	.351	.363
1W0X1	1,960	89.006	4.886	.413	.358	.410	.407	.357	.429	.401	.400	.422
2A0X1	904	88.894	5.194	.292	.244	.307	.295	.263	.324	.312	.304	.329
2A2X1	225	90.493	3.800	.436	.352	.387	.401	.348	.403	.385	.392	.401
2A2X2	168	91.149	3.965	.347	.245	.276	.324	.288	.320	.311	.349	.345
2A2X3	138	87.630	4.128	.271	.324	.338	.372	.294	.358	.314	.349	.344
2A3X4	1,312	89.843	4.365	.331	.287	.325	.345	.271	.351	.306	.323	.335
2A3X5	1,022	90.824	4.476	.322	.247	.284	.287	.221	.300	.259	.263	.280
2A6X2	3,197	87.927	4.555	.410	.336	.374	.367	.315	.381	.355	.352	.371
2A6X6	3,001	90.530	4.832	.438	.319	.379	.373	.312	.397	.366	.363	.389
2A8X1	260	90.408	3.756	.267	.181	.240	.245	.156	.271	.208	.212	.240
2A8X2	275	90.822	4.151	.379	.225	.306	.344	.233	.375	.299	.340	.368
2A9X1	142	90.261	3.494	.312	.178	.231	.248	.167	.271	.217	.229	.255
2A9X2	133	90.782	4.427	.382	.319	.420	.416	.261	.459	.361	.355	.410
2A9X3	234	88.103	4.285	.383	.289	.369	.337	.298	.380	.365	.348	.385
2M0X1	602	91.945	4.215	.372	.310	.408	.405	.341	.449	.416	.417	.454
2M0X3	328	91.546	3.871	.315	.265	.336	.300	.260	.339	.321	.293	.329
2P0X1	649	87.664	5.252	.477	.420	.478	.473	.380	.491	.435	.438	.461
2W1X1	5,459	89.296	4.600	.456	.357	.424	.420	.326	.447	.394	.393	.426
3D1X1	569	87.775	4.612	.299	.312	.372	.368	.280	.396	.343	.337	.371
3D1X2	334	87.955	6.772	.307	.210	.287	.266	.173	.307	.249	.230	.276
3D1X3	2,539	88.917	4.718	.361	.288	.357	.350	.281	.380	.342	.337	.368
3D1X7	475	90.686	3.945	.415	.321	.372	.352	.292	.377	.346	.326	.357
3E0X1	1,044	87.810	4.996	.533	.456	.493	.504	.396	.507	.446	.457	.475
3E0X2	1,124	86.716	4.519	.360	.285	.284	.312	.272	.297	.275	.301	.291
3E1X1	1,151	88.662	4.441	.465	.359	.424	.409	.325	.436	.391	.379	.413
3E4X1	1,250	88.850	4.665	.385	.276	.314	.316	.245	.333	.286	.288	.311
4A2X1	216	90.463	3.266	.354	.337	.372	.355	.396	.373	.421	.401	.414
Aggregated				.393	.320	.372	.371	.303	.391	.353	.354	.378

Note. Validities reported are observed correlations between the composite and the criterion. The aggregated entry is the sample-size weighted mean of the AFS results. SD = standard deviation.

Table D.4. Predictive Validity Results for MMRS Criterion by AFS for Electronics Composite - Observed

AFSC	Sample Size	Criterion Mean	Criterion SD	Predictive Validity								
				Current Composite	AR+MK	AR+MK +WK	AR+MK +PC	AR+MK +AO	AR+MK+ PC+WK	AR+MK+ AO+WK	AR+MK+ AO+PC	AR+MK+AO +PC+WK
1A3X1	705	39.513	14.083	.033	.013	.009	.020	.032	.015	.025	.034	.027
1C6X1	431	37.765	14.718	-.006	.007	.006	-.015	.048	-.011	.038	.021	.017
1C8X3	548	37.467	14.525	.003	-.020	-.034	-.012	-.007	-.024	-.021	-.002	-.014
1U0X1	320	39.813	13.345	.097	-.022	-.002	.030	-.016	.036	-.001	.027	.033
1W0X1	1,134	39.606	13.689	.072	.060	.071	.067	.060	.073	.070	.067	.073
2A0X1	525	38.507	13.990	.017	.023	.010	.041	.037	.026	.024	.049	.035
2A3X4	767	36.269	15.873	.118	.142	.140	.127	.136	.123	.136	.124	.122
2A3X5	609	39.827	13.936	.071	.139	.111	.109	.115	.089	.095	.094	.079
2A6X2	1,918	36.398	15.789	.030	.025	.005	.009	.053	-.005	.031	.035	.018
2A6X6	1,705	38.530	14.518	.056	.036	.037	.059	.051	.054	.049	.069	.063
2A8X2	113	35.932	13.748	.085	.021	.035	.018	.110	.028	.106	.088	.086
2A9X3	104	37.033	13.811	.191	-.057	-.018	-.015	.007	.008	.028	.028	.042
2M0X1	358	38.091	14.505	.050	.044	.066	.061	.070	.073	.084	.079	.087
2M0X3	187	35.497	15.693	.159	.147	.157	.130	.147	.136	.155	.134	.139
2P0X1	390	38.949	14.793	.041	.067	.048	.054	.059	.039	.043	.050	.037
2W1X1	3,166	37.169	15.346	.010	.001	-.012	.005	.012	-.006	-.001	.014	.002
3D1X1	999	39.498	13.614	.115	.115	.114	.099	.088	.098	.093	.080	.083
3D1X2	1,118	39.481	13.135	.023	-.014	-.011	.007	-.029	.005	-.024	-.009	-.007
3D1X3	1,471	39.003	14.411	.053	.007	.018	.017	.035	.023	.039	.039	.040
3D1X7	222	37.599	15.038	.020	.063	.068	.081	.024	.080	.036	.048	.053
3E0X1	571	38.550	14.440	.000	.018	-.027	.011	-.010	-.023	-.046	-.011	-.039
3E0X2	639	38.363	14.539	.056	.042	.040	.031	.069	.030	.064	.056	.052
3E1X1	641	38.008	14.576	.016	.033	.038	.036	.041	.039	.045	.043	.045
3E4X1	644	37.186	14.982	-.036	-.076	-.051	-.066	-.062	-.045	-.043	-.056	-.039
4A2X1	218	39.972	13.385	-.063	-.032	-.044	-.024	.010	-.034	-.008	.009	-.006
Aggregated				.040	.029	.025	.032	.038	.027	.033	.039	.034

Note. Validities reported are observed correlations between the composite and the criterion. The aggregated entry is the sample-size weighted mean of the AFS results. SD = standard deviation.

Table D.5. Predictive Validity Results for Training Grade Criterion by AFS for Administrative Composite - Observed

AFSC	Sample Size	Criterion Mean	Criterion SD	Predictive Validity							
				Current Composite	MK+PC+ WK+GS	MK+PC+ WK+AR	MK+PC+ WK+AO	MK+PC+ WK+AR+ GS	MK+PC+ WK+AO+ GS	MK+PC+WK +AO+AR	MK+PC+WK+ AO+AR+GS
1C0X2	1,469	85.978	6.449	.323	.306	.345	.295	.331	.297	.326	.323
1C3X1	818	86.995	5.672	.362	.369	.390	.352	.383	.357	.372	.373
1N0X1	2,460	88.338	4.907	.407	.411	.427	.390	.423	.396	.406	.410
1N2X1A	522	91.128	4.503	.366	.390	.408	.359	.415	.378	.389	.402
1N2X1C	434	91.461	3.776	.274	.239	.306	.266	.272	.239	.298	.271
2G0X1	405	87.252	6.088	.284	.261	.326	.244	.304	.243	.299	.288
2S0X1	5,350	88.084	5.726	.328	.311	.339	.302	.334	.308	.328	.330
2T0X1	1,475	87.099	5.544	.387	.360	.412	.329	.398	.338	.375	.377
2T2X1	3,921	88.046	5.371	.357	.369	.383	.334	.390	.354	.361	.376
2T3X7	452	87.522	6.360	.289	.265	.334	.253	.312	.251	.302	.294
3D0X1	3,618	85.981	6.009	.303	.279	.314	.260	.302	.263	.290	.288
3F0X1	3,197	88.626	6.274	.214	.201	.250	.224	.232	.214	.253	.241
3F5X1	353	88.805	5.793	.198	.168	.237	.237	.206	.206	.262	.234
4A1X1	610	82.910	5.719	.277	.259	.301	.242	.286	.240	.273	.267
4C0X1	396	87.634	5.047	.433	.451	.449	.429	.441	.428	.420	.423
4J0X2	143	85.441	5.212	.395	.411	.435	.425	.432	.430	.450	.450
Aggregated				.324	.314	.346	.302	.338	.306	.330	.330

Note. Validities reported are observed correlations between the composite and the criterion. The aggregated entry is the sample-size weighted mean of the AFS results. SD = standard deviation.

Table D.6. Predictive Validity Results for MMRS Criterion by AFS for Administrative Composite - Observed

AFSC	Sample Size	Criterion Mean	Criterion SD	Predictive Validity							
				Current Composite	MK+PC+ WK+GS	MK+PC+ WK+AR	MK+PC+ WK+AO	MK+PC+ WK+AR+ GS	MK+PC+ WK+AO+ GS	MK+PC+WK +AO+AR	MK+PC+WK+ AO+AR+GS
1C0X2	828	34.953	16.379	-.008	-.022	.006	.007	-.009	-.010	.016	.000
1C3X1	470	35.578	15.819	.035	-.003	.038	.020	.016	-.001	.037	.016
1N0X1	1,420	39.302	13.810	.049	.056	.062	.069	.069	.076	.080	.084
1N2X1A	577	40.412	13.682	.007	.022	.036	-.014	.052	.014	.025	.042
1N2X1C	235	38.154	14.321	-.011	-.048	-.049	-.013	-.064	-.037	-.038	-.054
2G0X1	231	37.502	15.653	-.008	-.019	-.038	-.003	-.039	-.012	-.029	-.032
2S0X1	3,101	37.186	15.534	-.012	-.004	-.014	-.010	-.005	-.001	-.010	-.002
2T0X1	807	36.655	15.805	-.127	-.086	-.108	-.060	-.093	-.055	-.072	-.067
2T2X1	2,350	38.053	14.751	-.005	-.007	.001	.010	-.006	.001	.009	.001
2T3X7	228	31.447	17.415	.118	.090	.117	.161	.103	.138	.160	.142
3D0X1	2,112	35.907	16.473	.019	.003	.013	.051	.004	.033	.042	.029
3F0X1	1,530	34.633	16.421	-.039	-.064	-.034	-.026	-.051	-.047	-.018	-.037
4A1X1	484	38.630	14.748	.012	-.029	.022	-.014	-.005	-.034	.010	-.011
4C0X1	491	33.993	16.313	.123	.121	.147	.133	.134	.124	.144	.135
4E0X1	575	36.719	15.336	.019	-.007	.018	.049	-.007	.016	.039	.013
4J0X2	140	37.780	15.216	.123	.085	.146	.128	.111	.096	.151	.119
4M0X1	136	35.817	16.168	.166	.166	.206	.192	.191	.180	.214	.201
4N1X1	331	36.608	15.298	.069	.041	.069	.025	.062	.028	.052	.049
4P0X1	408	35.754	15.787	-.032	-.028	-.038	.012	-.030	.010	.003	.002
Aggregated				.004	-.002	.008	.018	.004	.011	.021	.015

Note. Validities reported are observed correlations between the composite and the criterion. The aggregated entry is the sample-size weighted mean of the AFS results. SD = standard deviation.

Table D.7. Predictive Validity Results for Training Grade Criterion by AFS for General Composite - Observed

AFSC	Sample Size	Criterion Mean	Criterion SD	Predictive Validity							
				Current Composite	AR+PC+ WK+MK	AR+PC+ WK+AO	AR+PC+WK +GS	AR+PC+WK +AO+MK	AR+PC+WK +GS+MK	AR+PC+WK +AO+GS	AR+PC+WK+ AO+GS+MK
1A0X1	364	94.676	2.987	.394	.382	.360	.387	.353	.376	.360	.356
1A2X1	887	94.379	3.009	.268	.317	.265	.282	.313	.323	.283	.322
1A8X1	1,316	89.477	6.544	.128	.117	.138	.142	.123	.127	.145	.132
1A8X2	260	91.800	3.416	.410	.407	.399	.371	.419	.390	.386	.407
1C1X1	2,644	86.419	6.633	.275	.301	.267	.279	.292	.299	.274	.295
1C2X1	412	86.330	10.274	.175	.231	.181	.227	.209	.245	.208	.228
1C3X1	818	86.995	5.672	.348	.390	.345	.363	.372	.383	.352	.373
1C4X1	873	84.427	9.102	.214	.217	.199	.247	.199	.239	.227	.224
1C5X1	902	87.541	5.920	.355	.389	.318	.386	.356	.409	.359	.386
1C7X1	662	84.760	5.798	.319	.354	.304	.314	.348	.354	.315	.353
1N1X1A	2,205	88.671	4.237	.375	.407	.384	.401	.414	.423	.409	.431
1N3X1	2,476	88.181	6.220	.149	.159	.154	.160	.159	.163	.162	.165
1N4X1A	917	93.529	3.442	.386	.419	.379	.392	.416	.424	.393	.424
1N4X1B	448	91.366	3.544	.455	.486	.437	.440	.474	.474	.437	.470
1T2X1	356	82.253	10.926	.064	.083	.079	.107	.070	.094	.092	.083
1W0X1	1,960	89.006	4.886	.406	.429	.388	.418	.422	.443	.414	.441
2F0X1	2,876	89.605	5.253	.277	.309	.255	.291	.292	.319	.278	.308
2R0X1	507	88.363	5.214	.338	.377	.322	.325	.363	.363	.321	.357
2R1X1	702	87.152	5.306	.231	.250	.225	.201	.247	.227	.209	.231
2S0X1	5,350	88.084	5.726	.283	.339	.272	.282	.328	.334	.283	.330
2W0X1	5,577	89.584	4.847	.347	.382	.326	.373	.363	.397	.356	.384
3D0X2	227	86.264	6.118	.458	.476	.433	.482	.448	.486	.455	.466
3D0X4	248	89.375	4.997	.187	.275	.248	.255	.293	.298	.280	.315
3E4X3	175	90.389	4.706	.334	.372	.282	.393	.345	.436	.379	.421
3E5X1	629	86.409	7.128	.272	.293	.261	.297	.282	.310	.288	.301
3E6X1	383	86.794	5.677	.320	.357	.313	.328	.342	.358	.326	.351
3E7X1	3,384	89.158	3.926	.454	.445	.452	.482	.443	.470	.481	.473
3E8X1	231	93.857	4.873	.117	.126	.108	.132	.118	.135	.125	.130
3E9X1	162	87.747	5.429	.378	.416	.348	.421	.391	.446	.394	.425
3F1X1	3,751	84.073	5.988	.310	.359	.285	.322	.327	.358	.302	.338
3P0X1	29,141	82.911	5.913	.461	.484	.423	.478	.449	.496	.452	.474
4A0X1	1,383	85.205	5.307	.375	.412	.364	.390	.395	.416	.382	.407
4D0X1	164	81.463	5.454	.441	.498	.473	.418	.513	.469	.454	.496
4Y0X1	1,029	84.114	5.716	.360	.391	.335	.365	.376	.397	.357	.390

AFSC	Sample Size	Criterion Mean	Criterion SD	Predictive Validity							
				Current Composite	AR+PC+ WK+MK	AR+PC+ WK+AO	AR+PC+WK +GS	AR+PC+WK +AO+MK	AR+PC+WK +GS+MK	AR+PC+WK +AO+GS	AR+PC+WK+ AO+GS+MK
4Y0X2	128	87.430	4.576	.079	.043	-.016	-.008	.032	.032	-.015	.024
6C0X1	1,118	85.125	5.859	.389	.437	.386	.394	.423	.426	.387	.421
6F0X1	1,804	89.256	5.253	.320	.366	.334	.297	.374	.339	.314	.352
Aggregated				.370	.398	.349	.384	.378	.406	.371	.394

Note. Validities reported are observed correlations between the composite and the criterion. The aggregated entry is the sample-size weighted mean of the AFS results. SD = standard deviation.

Table D.8. Predictive Validity Results for MMRS Criterion by AFS for General Composite - Observed

AFSC	Sample Size	Criterion Mean	Criterion SD	Predictive Validity							
				Current Composite	AR+PC+ WK+MK	AR+PC+ WK+AO	AR+PC+ WK+GS	AR+PC+WK +AO+MK	AR+PC+WK +GS+MK	AR+PC+WK +AO+GS	AR+PC+WK+ AO+GS+MK
1A0X1	268	39.461	13.138	.114	.114	.143	.172	.110	.135	.160	.130
1A2X1	792	39.107	13.625	.031	.038	.076	.039	.072	.041	.072	.069
1A8X1	724	38.872	12.952	.065	.067	.053	.064	.070	.078	.067	.079
1A8X2	158	40.750	12.041	-.015	.034	.071	-.028	.103	.013	.041	.072
1C1X1	2,355	38.750	14.935	-.010	.011	.011	-.002	.019	.007	.007	.014
1C2X1	171	39.001	13.617	-.050	-.048	-.059	-.028	-.059	-.032	-.040	-.042
1C3X1	470	35.578	15.819	.040	.038	.027	.003	.037	.016	.004	.016
1C4X1	478	42.031	12.064	.009	.002	-.002	.021	.000	.019	.018	.017
1C5X1	538	38.742	14.606	.070	.078	.085	.080	.088	.083	.089	.091
1C7X1	423	36.392	15.833	.099	.097	.094	.064	.107	.082	.079	.093
1N1X1A	1,288	39.158	13.733	.036	.033	.043	.034	.043	.035	.043	.043
1N3X1	1,504	40.865	12.509	.068	.058	.046	.049	.047	.049	.040	.041
1N4X1A	514	41.391	12.601	.124	.149	.112	.103	.132	.123	.091	.112
1N4X1B	162	36.505	14.494	.223	.204	.161	.185	.185	.202	.171	.190
1T0X1	108	40.727	14.349	-.158	-.176	-.120	-.161	-.149	-.180	-.137	-.159
1T2X1	125	34.618	14.673	-.109	-.057	-.137	-.135	-.067	-.071	-.138	-.079
1U0X1	320	39.813	13.345	.065	.036	.060	.084	.033	.054	.075	.050
1W0X1	1,134	39.606	13.689	.077	.073	.068	.071	.073	.075	.071	.075
2F0X1	1,688	37.350	15.273	-.037	-.023	-.013	-.038	-.011	-.031	-.024	-.020
2R0X1	299	36.729	15.528	.094	.096	.090	.075	.093	.080	.075	.080
2R1X1	414	34.656	16.754	.008	.058	.031	.026	.054	.047	.026	.046
2S0X1	3,101	37.186	15.534	-.023	-.014	-.017	-.011	-.010	-.005	-.007	-.002
2W0X1	3,122	35.886	15.918	.052	.047	.066	.054	.059	.049	.065	.060
3D0X2	1,304	38.979	13.722	.041	.050	.060	.029	.068	.041	.049	.057
3D0X3	397	37.396	14.136	.063	.038	.025	.028	.035	.037	.027	.035
3D0X4	146	40.290	11.844	.006	.036	.042	.003	.048	.015	.019	.028
3E5X1	433	38.624	14.002	-.056	-.032	-.054	-.043	-.036	-.028	-.046	-.032
3E6X1	201	33.625	17.440	.182	.202	.220	.170	.223	.182	.199	.205
3E7X1	2,274	38.407	14.578	.047	.039	.057	.049	.047	.041	.056	.048
3E8X1	216	41.742	11.795	.004	.001	.009	-.036	.026	-.013	-.007	.010
3E9X1	277	39.193	14.816	.183	.204	.191	.208	.200	.215	.203	.211
3F1X1	2,421	33.109	16.884	.012	.027	.055	.010	.052	.014	.036	.036
3N0X2	205	38.589	13.916	-.012	-.070	-.002	-.012	-.046	-.052	.004	-.034
3P0X1	20,959	35.713	16.025	.075	.070	.080	.075	.077	.073	.083	.080
4A0X1	1,383	34.289	16.828	.109	.116	.137	.111	.134	.113	.130	.130
4B0X1	419	36.513	15.554	.072	.066	.040	.059	.049	.064	.044	.051
4D0X1	169	35.904	16.613	.055	.113	.055	.075	.092	.106	.060	.092
4H0X1	176	41.492	11.712	.001	.021	.026	.011	.043	.029	.034	.047
4N0X1	3,095	38.345	14.450	-.016	-.002	.000	-.017	.013	-.003	-.002	.009

AFSC	Sample Size	Criterion Mean	Criterion SD	Predictive Validity							
				Current Composite	AR+PC+ WK+MK	AR+PC+ WK+AO	AR+PC+ WK+GS	AR+PC+WK +AO+MK	AR+PC+WK +GS+MK	AR+PC+WK +AO+GS	AR+PC+WK+ AO+GS+MK
4R0X1	335	38.448	14.139	-.042	-.036	-.038	-.057	-.019	-.038	-.040	-.024
4T0X1	462	36.395	15.196	-.025	-.031	-.016	-.038	-.017	-.036	-.024	-.024
4Y0X1	1,057	34.655	16.486	.019	.035	.015	.027	.027	.035	.020	.029
4Y0X2	135	37.710	14.499	.037	-.014	-.027	-.049	.010	-.015	-.026	.003
5J0X1	204	35.268	15.625	.003	-.029	-.015	-.012	-.030	-.026	-.014	-.027
6C0X1	735	38.120	14.080	.050	.061	.075	.039	.088	.057	.069	.081
6F0X1	1,118	35.402	15.912	.029	.038	.050	.009	.057	.021	.031	.039
Aggregated				.045	.047	.054	.044	.055	.047	.053	.054

Note. Validities reported are observed correlations between the composite and the criterion. The aggregated entry is the sample-size weighted mean of the AFS results. SD = standard deviation.

APPENDIX E – DIFFERENTIAL VALIDITY RESULTS BY AFS

Table E.1. Differential Validity Results for Training Grade Criterion by AFS for Mechanical Composite: Male/Female

AFSC	Subgroup	Sample Size	Criterion Mean	Criterion SD	Predictive Validity				
					Current Composite	AR+PC+WK	AR+PC+WK+MK	AR+PC+WK+AO	AR+PC+WK+AO+MK
1C7X1	*Male*	426	85.052	5.899	.402	.401	.454	.393	.446
	Female	236	84.233	5.585	.432	.392	.387	.389	.389
1P0X1	*Male*	1,353	89.698	5.029	.469	.428	.461	.426	.461
	Female	265	88.596	5.683	.535	.409	.394	.373	.370
2A6X1	*Male*	4,052	87.746	5.458	.475	.390	.401	.375	.391
	Female	317	86.760	5.353	.389	.428	.430	.429	.435
2A6X2	*Male*	2,822	88.033	4.559	.553	.503	.517	.478	.500
	Female	375	87.131	4.454	.532	.512	.545	.520	.554
2A6X4	*Male*	1,614	88.665	5.325	.488	.420	.440	.406	.432
	Female	185	87.168	4.859	.511	.513	.537	.510	.538
2A6X6	*Male*	2,781	90.679	4.811	.568	.511	.540	.493	.527
	Female	220	88.655	4.718	.415	.327	.370	.331	.372
2A7X2	*Male*	530	88.494	5.048	.490	.484	.515	.460	.497
	Female	146	87.014	4.769	.370	.366	.424	.351	.409
2A7X3	*Male*	2,010	89.147	5.042	.527	.462	.471	.440	.456
	Female	128	88.734	4.726	.393	.383	.421	.371	.411
2F0X1	*Male*	2,663	89.707	5.241	.434	.394	.418	.371	.401
	Female	213	88.319	5.245	.152	.190	.222	.215	.241
2T1X1	*Male*	1,374	86.700	4.808	.442	.423	.428	.398	.411
	Female	170	85.988	5.208	.506	.569	.595	.580	.607
2T2X1	*Male*	3,456	88.000	5.368	.464	.461	.480	.429	.456
	Female	465	88.389	5.388	.391	.395	.427	.398	.430
2W0X1	*Male*	4,881	89.800	4.776	.470	.462	.482	.437	.464
	Female	696	88.063	5.067	.303	.351	.404	.311	.370
2W1X1	*Male*	4,794	89.419	4.585	.499	.452	.470	.426	.451
	Female	665	88.412	4.614	.446	.409	.432	.391	.419

Note. Validities reported are correlations between the composite and the training grade criterion within the indicated subgroup. SD = standard deviation.

Table E.2. Differential Validity Results for Training Grade Criterion by AFS for Mechanical Composite: Non-Hispanic White/Non-Hispanic Black

AFSC	Subgroup	Sample Size	Criterion Mean	Criterion SD	Predictive Validity				
					Current Composite	AR+PC+WK	AR+PC+WK+MK	AR+PC+WK+AO	AR+PC+WK+AO+MK
1C7X1	*NHW*	407	85.388	5.831	.372	.376	.420	.374	.417
	NHB	103	83.350	5.535	.540	.510	.527	.534	.550
1P0X1	*NHW*	971	89.793	4.998	.465	.429	.451	.412	.440
	NHB	252	87.889	5.645	.494	.495	.543	.506	.553
2A5X1	*NHW*	934	87.854	6.687	.458	.363	.368	.342	.354
	NHB	119	85.042	7.078	.383	.446	.472	.408	.444
2A6X1	*NHW*	2,978	88.097	5.416	.476	.408	.415	.390	.404
	NHB	445	85.236	5.510	.384	.316	.362	.295	.343
2A6X2	*NHW*	2,080	88.221	4.607	.561	.507	.518	.485	.503
	NHB	387	86.318	4.025	.529	.527	.540	.507	.527
2A6X4	*NHW*	1,154	88.870	5.251	.492	.432	.441	.418	.433
	NHB	275	87.215	5.240	.388	.373	.417	.359	.406
2A6X5	*NHW*	1,256	88.886	5.235	.475	.416	.420	.394	.406
	NHB	136	87.096	5.336	.336	.353	.372	.316	.344
2A6X6	*NHW*	1,943	91.005	4.753	.596	.536	.561	.514	.545
	NHB	358	88.492	4.764	.517	.482	.510	.469	.501
2A7X2	*NHW*	374	88.564	5.150	.467	.465	.501	.439	.481
	NHB	114	87.053	4.396	.524	.589	.596	.553	.572
2A7X3	*NHW*	1,485	89.463	4.946	.502	.435	.453	.420	.444
	NHB	203	86.818	4.819	.555	.539	.524	.511	.508
2F0X1	*NHW*	1,984	89.800	5.207	.454	.408	.424	.384	.406
	NHB	349	88.195	5.112	.370	.377	.410	.364	.400
2T1X1	*NHW*	1,003	86.952	4.759	.448	.441	.457	.418	.441
	NHB	200	85.310	4.812	.443	.426	.410	.388	.385
2T2X1	*NHW*	2,645	88.353	5.265	.450	.464	.480	.437	.462
	NHB	404	86.455	5.613	.354	.389	.423	.363	.402
2T3X1	*NHW*	1,082	88.849	5.506	.434	.327	.333	.311	.322
	NHB	108	87.185	6.193	.508	.325	.319	.372	.361
2W0X1	*NHW*	4,045	89.805	4.782	.474	.463	.483	.441	.468
	NHB	422	87.979	5.052	.444	.418	.418	.386	.396
2W1X1	*NHW*	3,400	89.885	4.516	.504	.458	.474	.432	.455
	NHB	765	87.404	4.379	.432	.416	.451	.367	.411
3E0X1	*NHW*	554	88.749	4.863	.576	.525	.563	.484	.531
	NHB	190	85.716	4.787	.571	.557	.590	.559	.594
3E1X1	*NHW*	628	89.400	4.348	.483	.442	.451	.405	.424
	NHB	232	86.668	3.913	.561	.521	.544	.496	.526

AFSC	Subgroup	Sample Size	Criterion Mean	Criterion SD	Predictive Validity				
					Current Composite	AR+PC+WK	AR+PC+WK+MK	AR+PC+WK+AO	AR+PC+WK+AO+MK
3E2X1	*NHW*	880	90.290	4.322	.441	.407	.414	.386	.400
	NHB	150	87.460	4.449	.192	.195	.188	.185	.183
3E4X1	*NHW*	812	89.321	4.636	.544	.480	.476	.438	.446
	NHB	147	87.122	4.432	.343	.454	.475	.446	.471

Note. Validities reported are correlations between the composite and the training grade criterion within the indicated subgroup. NHB=Non-Hispanic Black, NHW=Non-Hispanic White. SD = standard deviation.

Table E.3. Differential Validity Results for Training Grade Criterion by AFS for Electronics Composite: Male/Female

AFSC	Subgroup	Sample Size	Criterion Mean	Criterion SD	Predictive Validity								
					Current Composite	AR+MK	AR+MK +WK	AR+MK +PC	AR+MK +AO	AR+MK+ PC+WK	AR+MK+ AO+WK	AR+MK+ AO+PC	AR+MK+AO +PC+WK
1A3X1	*Male*	1,030	93.055	3.918	.267	.314	.349	.379	.286	.384	.324	.352	.364
	Female	147	92.463	3.992	.277	.202	.280	.273	.270	.315	.327	.323	.353
1C6X1	*Male*	615	92.280	4.258	.226	.215	.234	.226	.214	.234	.233	.227	.235
	Female	118	90.763	4.367	.532	.348	.395	.408	.267	.423	.325	.339	.367
1W0X1	*Male*	1,485	89.380	4.792	.467	.440	.491	.487	.425	.506	.476	.475	.497
	Female	475	87.836	4.997	.562	.500	.537	.537	.478	.544	.518	.521	.535
2A6X2	*Male*	2,822	88.033	4.559	.523	.438	.501	.491	.413	.518	.476	.470	.502
	Female	375	87.131	4.454	.543	.465	.535	.486	.475	.524	.537	.498	.533
2A6X6	*Male*	2,781	90.679	4.811	.580	.480	.538	.520	.457	.545	.516	.503	.532
	Female	220	88.655	4.718	.526	.434	.463	.491	.431	.490	.461	.487	.491
2W1X1	*Male*	4,794	89.419	4.585	.493	.402	.454	.452	.372	.471	.426	.427	.452
	Female	665	88.412	4.614	.456	.392	.452	.418	.369	.450	.429	.403	.436
3D1X3	*Male*	2,352	88.995	4.707	.437	.374	.431	.424	.352	.448	.408	.405	.433
	Female	187	87.936	4.762	.565	.519	.545	.527	.475	.532	.511	.498	.511

Note. Validities reported are correlations between the composite and the training grade criterion within the indicated subgroup. SD = standard deviation.

Table E.4. Differential Validity Results for Training Grade Criterion by AFS for Electronics Composite: Non-Hispanic White/Non-Hispanic Black

AFSC	Subgroup	Sample Size	Criterion Mean	Criterion SD	Predictive Validity								
					Current Composite	AR+MK	AR+MK +WK	AR+MK +PC	AR+MK +AO	AR+MK+ PC+WK	AR+MK+ AO+WK	AR+MK+ AO+PC	AR+MK+AO +PC+WK
1A3X1	*NHW*	821	93.066	4.018	.344	.350	.400	.413	.326	.430	.377	.390	.412
	NHB	108	92.407	3.744	.221	.248	.261	.319	.220	.308	.239	.291	.288
1C6X1	*NHW*	452	92.265	4.401	.328	.292	.317	.317	.283	.324	.309	.311	.320
	NHB	103	90.806	4.477	.063	.075	.109	.133	.069	.145	.100	.121	.135
1W0X1	*NHW*	1,426	89.297	4.854	.534	.470	.523	.515	.445	.534	.500	.495	.520
	NHB	169	87.266	4.578	.279	.297	.351	.363	.280	.384	.332	.344	.369
2A0X1	*NHW*	573	89.138	5.190	.413	.361	.420	.412	.354	.438	.410	.405	.433
	NHB	104	87.750	5.161	.031	.071	.146	.118	.063	.166	.130	.107	.153
2A3X4	*NHW*	890	90.128	4.192	.475	.422	.468	.475	.384	.489	.434	.443	.464
	NHB	115	88.061	4.710	.348	.475	.425	.436	.445	.391	.412	.424	.389
2A6X2	*NHW*	2,080	88.221	4.607	.527	.431	.500	.488	.410	.519	.477	.470	.504
	NHB	387	86.318	4.025	.471	.427	.497	.462	.405	.498	.474	.446	.484
2A6X6	*NHW*	1,943	91.005	4.753	.616	.492	.561	.539	.466	.570	.535	.519	.554
	NHB	358	88.492	4.764	.450	.405	.443	.475	.393	.479	.431	.461	.471
2W1X1	*NHW*	3,400	89.885	4.516	.496	.394	.458	.446	.367	.475	.430	.423	.456
	NHB	765	87.404	4.379	.432	.373	.403	.409	.308	.414	.349	.357	.374
3D1X3	*NHW*	1,681	89.284	4.741	.429	.378	.438	.434	.358	.459	.416	.415	.444
	NHB	318	87.142	4.614	.558	.459	.481	.492	.380	.490	.418	.430	.443
3E0X1	*NHW*	554	88.749	4.863	.601	.520	.566	.557	.466	.571	.520	.515	.539
	NHB	190	85.716	4.787	.568	.485	.528	.551	.489	.558	.530	.553	.563
3E1X1	*NHW*	628	89.400	4.348	.447	.353	.422	.420	.319	.451	.388	.389	.425
	NHB	232	86.668	3.913	.644	.551	.625	.589	.518	.624	.593	.565	.605
3E4X1	*NHW*	812	89.321	4.636	.505	.374	.449	.438	.334	.474	.410	.403	.444
	NHB	147	87.122	4.432	.414	.371	.417	.441	.365	.453	.409	.432	.447

Note. Validities reported are correlations between the composite and the training grade criterion within the indicated subgroup. NHB=Non-Hispanic Black, NHW=Non-Hispanic White. SD = standard deviation.

Table E.5. Differential Validity Results for Training Grade Criterion by AFS for Administrative Composite: Male/Female

AFSC	Subgroup	Sample Size	Criterion Mean	Criterion SD	Predictive Validity							
					Current Composite	MK+PC+ WK+GS	MK+PC+ WK+AR	MK+PC+ WK+AO	MK+PC+W K+AR+GS	MK+PC+W K+AO+GS	MK+PC+W K+AO+AR	MK+PC+WK+ AO+AR+GS
1C0X2	*Male*	753	86.236	6.469	.360	.343	.379	.328	.365	.326	.355	.349
	Female	716	85.705	6.421	.395	.364	.389	.357	.387	.365	.383	.386
1C3X1	*Male*	478	86.935	5.605	.374	.402	.424	.379	.425	.393	.409	.417
	Female	340	87.079	5.771	.373	.391	.409	.365	.407	.375	.387	.393
1N0X1	*Male*	1,699	88.583	4.759	.488	.484	.494	.447	.493	.460	.464	.473
	Female	761	87.791	5.183	.411	.404	.450	.412	.429	.401	.438	.425
2G0X1	*Male*	205	87.985	6.171	.299	.290	.323	.292	.303	.280	.306	.294
	Female	200	86.500	5.923	.261	.164	.242	.135	.220	.134	.202	.191
2S0X1	*Male*	3,391	88.008	5.734	.413	.408	.426	.390	.424	.399	.411	.416
	Female	1,959	88.217	5.712	.399	.371	.405	.368	.398	.372	.398	.397
2T0X1	*Male*	993	87.013	5.592	.438	.415	.453	.380	.445	.390	.419	.422
	Female	482	87.276	5.445	.549	.526	.561	.492	.554	.504	.529	.534
2T2X1	*Male*	3,456	88.000	5.368	.443	.468	.476	.424	.487	.451	.453	.472
	Female	465	88.389	5.388	.468	.491	.485	.476	.499	.498	.488	.505
2T3X7	*Male*	290	87.372	6.485	.408	.414	.460	.383	.449	.391	.427	.428
	Female	162	87.790	6.140	.515	.511	.546	.501	.525	.492	.518	.510
3D0X1	*Male*	1,826	85.840	5.872	.358	.332	.358	.324	.351	.326	.346	.345
	Female	1,792	86.124	6.143	.395	.387	.415	.351	.409	.361	.382	.387
3F0X1	*Male*	1,365	88.341	6.398	.281	.282	.301	.298	.298	.298	.312	.310
	Female	1,832	88.838	6.174	.326	.316	.361	.320	.346	.315	.352	.343
3F5X1	*Male*	230	88.561	5.787	.215	.211	.254	.255	.236	.237	.273	.256
	Female	123	89.260	5.800	.366	.269	.344	.312	.310	.283	.348	.319
4A1X1	*Male*	337	82.531	5.694	.375	.390	.387	.320	.393	.345	.338	.357
	Female	273	83.377	5.726	.472	.485	.547	.496	.530	.492	.543	.533
4C0X1	*Male*	186	86.844	5.077	.538	.578	.576	.509	.577	.529	.521	.537
	Female	210	88.333	4.927	.571	.574	.586	.567	.576	.565	.570	.570

Note. Validities reported are correlations between the composite and the training grade criterion within the indicated subgroup. SD = standard deviation.

Table E.6. Differential Validity Results for Training Grade Criterion by AFS for Administrative Composite: Non-Hispanic White/Non-Hispanic Black

AFSC	Subgroup	Sample Size	Criterion Mean	Criterion SD	Predictive Validity							
					Current Composite	MK+PC+ WK+GS	MK+PC+ WK+AR	MK+PC+ WK+AO	MK+PC+W K+AR+GS	MK+PC+W K+AO+GS	MK+PC+W K+AO+AR	MK+PC+WK+ AO+AR+GS
1C0X2	*NHW*	633	86.397	6.355	.375	.336	.385	.329	.365	.322	.362	.351
	NHB	442	85.434	6.234	.249	.231	.251	.227	.244	.226	.241	.239
1C3X1	*NHW*	491	87.316	5.866	.375	.379	.415	.352	.405	.358	.386	.387
	NHB	132	86.598	5.091	.190	.172	.193	.218	.190	.211	.229	.222
1N0X1	*NHW*	1,611	88.529	4.841	.461	.471	.474	.442	.476	.455	.452	.462
	NHB	279	87.918	4.983	.478	.463	.535	.447	.517	.449	.509	.502
2S0X1	*NHW*	2,164	88.202	5.746	.423	.419	.437	.416	.433	.420	.432	.434
	NHB	1,677	87.677	5.642	.415	.412	.427	.382	.427	.395	.404	.412
2T0X1	*NHW*	650	87.332	5.618	.432	.419	.444	.399	.438	.406	.424	.427
	NHB	395	86.428	5.350	.486	.441	.485	.402	.464	.400	.435	.429
2T2X1	*NHW*	2,645	88.353	5.265	.451	.481	.478	.439	.493	.467	.460	.481
	NHB	404	86.455	5.613	.395	.386	.409	.378	.395	.372	.389	.383
2T3X7	*NHW*	182	86.670	6.398	.459	.500	.548	.478	.534	.482	.520	.518
	NHB	130	88.000	6.359	.455	.444	.465	.387	.463	.405	.419	.430
3D0X1	*NHW*	1,348	86.196	6.011	.386	.387	.395	.354	.395	.366	.369	.378
	NHB	1,245	85.666	5.733	.320	.278	.309	.260	.296	.258	.283	.278
3F0X1	*NHW*	1,145	88.598	6.450	.343	.336	.361	.356	.349	.348	.366	.359
	NHB	1,088	88.116	6.007	.286	.249	.295	.265	.271	.247	.285	.268
3F5X1	*NHW*	155	88.787	6.076	.156	.157	.195	.242	.178	.214	.247	.224
	NHB	106	88.462	5.131	.482	.442	.515	.470	.468	.432	.493	.458
4A1X1	*NHW*	296	83.179	5.420	.376	.367	.391	.321	.375	.322	.339	.337
	NHB	149	82.195	5.807	.448	.467	.486	.470	.485	.477	.489	.493

Note. Validities reported are correlations between the composite and the training grade criterion within the indicated subgroup. NHB=Non-Hispanic Black, NHW=Non-Hispanic White. SD = standard deviation.

Table E.7. Differential Validity Results for Training Grade Criterion by AFS for General Composite: Male/Female

AFSC	Subgroup	Sample Size	Criterion Mean	Criterion SD	Predictive Validity							
					Current Composite	AR+PC+WK+MK	AR+PC+WK+AO	AR+PC+WK+GS	AR+PC+WK+AO+MK	AR+PC+WK+GS+MK	AR+PC+WK+AO+GS	AR+PC+WK+AO+GS+MK
1A2X1	*Male*	750	94.471	3.009	.274	.315	.270	.281	.312	.317	.284	.318
	Female	137	93.876	2.972	.381	.462	.399	.455	.458	.499	.455	.497
1A8X1	*Male*	1,027	89.758	6.446	.131	.116	.140	.136	.126	.125	.145	.133
	Female	289	88.481	6.801	-.093	-.104	-.073	-.060	-.096	-.082	-.057	-.078
1C1X1	*Male*	2,211	86.540	6.631	.361	.386	.350	.364	.376	.385	.359	.381
	Female	433	85.801	6.611	.356	.338	.337	.332	.336	.332	.333	.334
1C3X1	*Male*	478	86.935	5.605	.359	.403	.366	.389	.389	.406	.379	.398
	Female	340	87.079	5.771	.369	.413	.369	.395	.391	.410	.378	.396
1C5X1	*Male*	616	88.208	5.887	.406	.438	.387	.438	.418	.458	.421	.444
	Female	286	86.105	5.741	.326	.380	.300	.359	.344	.388	.329	.362
1C7X1	*Male*	426	85.052	5.899	.404	.450	.388	.402	.442	.448	.403	.447
	Female	236	84.233	5.585	.326	.343	.343	.352	.345	.352	.356	.357
1N1X1A	*Male*	1,518	89.202	4.216	.482	.500	.470	.502	.489	.515	.496	.511
	Female	687	87.499	4.048	.420	.448	.437	.417	.465	.446	.441	.465
1N3X1	*Male*	1,643	88.460	5.836	.118	.129	.137	.128	.138	.130	.138	.139
	Female	833	87.633	6.886	.267	.260	.242	.271	.248	.272	.260	.263
1N4X1A	*Male*	709	93.717	3.241	.501	.519	.485	.508	.511	.528	.506	.527
	Female	208	92.889	3.997	.378	.471	.393	.368	.466	.438	.376	.441
1N4X1B	*Male*	335	91.561	3.529	.492	.513	.461	.480	.494	.506	.468	.496
	Female	113	90.788	3.539	.610	.637	.608	.587	.641	.620	.601	.632
1W0X1	*Male*	1,485	89.380	4.792	.509	.526	.488	.509	.517	.532	.506	.529
	Female	475	87.836	4.997	.576	.591	.536	.579	.580	.612	.574	.607
2F0X1	*Male*	2,663	89.707	5.241	.393	.412	.367	.404	.396	.424	.392	.414
	Female	213	88.319	5.245	.261	.327	.313	.286	.340	.314	.305	.329
2R0X1	*Male*	367	88.444	5.242	.407	.438	.378	.373	.425	.416	.369	.411
	Female	140	88.150	5.152	.324	.371	.341	.377	.365	.393	.374	.390
2R1X1	*Male*	450	87.022	5.411	.384	.407	.388	.384	.397	.392	.379	.389
	Female	252	87.385	5.115	.333	.372	.325	.308	.367	.349	.312	.351
2S0X1	*Male*	3,391	88.008	5.734	.372	.421	.360	.382	.406	.420	.374	.412
	Female	1,959	88.217	5.712	.368	.402	.345	.352	.395	.396	.353	.395
2W0X1	*Male*	4,881	89.800	4.776	.456	.481	.435	.472	.462	.491	.459	.480
	Female	696	88.063	5.067	.396	.447	.356	.410	.412	.452	.383	.428
3E5X1	*Male*	510	86.557	6.985	.299	.316	.274	.316	.301	.333	.303	.323
	Female	119	85.773	7.710	.149	.151	.105	.135	.135	.157	.122	.145
3E6X1	*Male*	255	87.004	5.661	.397	.422	.367	.423	.392	.437	.398	.416
	Female	128	86.375	5.708	.314	.398	.332	.294	.395	.356	.304	.361
3F1X1	*Male*	2,102	83.685	5.910	.408	.435	.372	.418	.406	.441	.395	.421
	Female	1,649	84.567	6.052	.405	.452	.386	.413	.427	.446	.396	.430
3P0X1	*Male*	23,676	83.269	5.908	.496	.518	.461	.513	.487	.528	.487	.507
	Female	5,465	81.359	5.679	.465	.491	.429	.471	.466	.497	.452	.481

AFSC	Subgroup	Sample Size	Criterion Mean	Criterion SD	Predictive Validity							
					Current Composite	AR+PC+ WK+MK	AR+PC+ WK+AO	AR+PC+WK +GS	AR+PC+WK +AO+MK	AR+PC+WK +GS+MK	AR+PC+WK +AO+GS	AR+PC+WK+ AO+GS+MK
4A0X1	*Male*	570	84.553	5.441	.467	.501	.449	.486	.481	.509	.472	.497
	Female	813	85.663	5.165	.498	.513	.479	.508	.498	.520	.498	.512
4Y0X1	*Male*	400	83.638	5.893	.439	.483	.431	.459	.474	.494	.457	.491
	Female	629	84.417	5.584	.502	.512	.465	.501	.493	.520	.487	.508
6C0X1	*Male*	872	85.104	5.841	.634	.646	.604	.623	.627	.641	.612	.633
	Female	246	85.199	5.933	.148	.275	.208	.204	.268	.258	.205	.256
6F0X1	*Male*	1,155	88.869	5.284	.393	.433	.400	.375	.439	.414	.390	.425
	Female	649	89.945	5.131	.406	.431	.421	.389	.443	.414	.408	.430

Note. Validities reported are correlations between the composite and the training grade criterion within the indicated subgroup. SD = standard deviation.

Table E.8. Differential Validity Results for Training Grade Criterion by AFS for General Composite: Non-Hispanic White/Non-Hispanic Black

AFSC	Subgroup	Sample Size	Criterion Mean	Criterion SD	Predictive Validity							
					Current Composite	AR+PC+ WK+MK	AR+PC+ WK+AO	AR+PC+WK +GS	AR+PC+WK +AO+MK	AR+PC+WK +GS+MK	AR+PC+WK +AO+GS	AR+PC+WK+ AO+GS+MK
1C1X1	*NHW*	1,791	86.619	6.649	.362	.386	.360	.362	.380	.380	.362	.381
	NHB	259	85.517	6.030	.357	.385	.376	.361	.387	.373	.368	.380
1C3X1	*NHW*	491	87.316	5.866	.370	.406	.348	.374	.378	.397	.353	.379
	NHB	132	86.598	5.091	.272	.341	.339	.303	.363	.330	.331	.353
1C5X1	*NHW*	554	88.099	5.859	.418	.455	.401	.452	.428	.469	.430	.450
	NHB	136	85.721	5.749	.258	.299	.256	.305	.288	.326	.296	.318
1C7X1	*NHW*	407	85.388	5.831	.397	.418	.372	.381	.415	.418	.385	.421
	NHB	103	83.350	5.535	.448	.554	.543	.518	.570	.546	.540	.565
1N1X1A	*NHW*	1,471	89.024	4.194	.464	.489	.465	.474	.490	.495	.480	.501
	NHB	199	86.573	3.930	.438	.460	.423	.436	.463	.470	.445	.477
1N3X1	*NHW*	1,759	88.524	6.091	.088	.098	.092	.112	.092	.109	.106	.104
	NHB	143	85.783	8.339	.224	.226	.229	.235	.240	.244	.249	.256
1W0X1	*NHW*	1,426	89.297	4.854	.559	.562	.518	.557	.546	.576	.546	.568
	NHB	169	87.266	4.578	.338	.378	.353	.357	.367	.370	.351	.365
2F0X1	*NHW*	1,984	89.800	5.207	.402	.421	.381	.423	.404	.437	.409	.426
	NHB	349	88.195	5.112	.347	.384	.341	.351	.375	.380	.349	.377
2R1X1	*NHW*	362	87.298	5.222	.362	.410	.364	.351	.396	.382	.346	.377
	NHB	168	86.762	5.506	.147	.106	.097	.088	.099	.091	.084	.088
2S0X1	*NHW*	2,164	88.202	5.746	.394	.431	.392	.398	.426	.428	.399	.429
	NHB	1,677	87.677	5.642	.367	.415	.345	.377	.393	.415	.362	.401
2W0X1	*NHW*	4,045	89.805	4.782	.459	.481	.439	.477	.465	.494	.466	.485
	NHB	422	87.979	5.052	.419	.414	.384	.434	.392	.433	.414	.418
3E7X1	*NHW*	2,302	89.705	3.841	.488	.487	.486	.516	.485	.511	.516	.513
	NHB	369	86.902	3.441	.337	.335	.333	.376	.328	.364	.368	.360
3F1X1	*NHW*	1,628	84.477	5.973	.398	.451	.380	.421	.419	.449	.396	.428
	NHB	1,117	83.433	5.971	.367	.399	.324	.362	.358	.387	.329	.358
3P0X1	*NHW*	17,192	83.625	5.928	.489	.512	.458	.508	.483	.523	.484	.503
	NHB	5,023	80.833	5.548	.502	.529	.464	.519	.496	.539	.493	.517
4A0X1	*NHW*	626	85.663	5.303	.494	.536	.504	.530	.522	.542	.521	.536
	NHB	336	84.095	5.099	.459	.504	.440	.463	.483	.497	.449	.485
4Y0X1	*NHW*	501	84.471	5.803	.486	.508	.479	.484	.504	.505	.486	.508
	NHB	246	82.630	5.287	.393	.427	.373	.404	.402	.425	.385	.409
6C0X1	*NHW*	732	85.348	5.811	.547	.580	.540	.547	.565	.568	.540	.563
	NHB	130	83.954	6.354	.362	.436	.391	.381	.440	.427	.394	.436
6F0X1	*NHW*	872	89.469	5.221	.375	.414	.427	.377	.441	.398	.410	.426
	NHB	439	88.351	5.440	.306	.349	.283	.272	.338	.323	.271	.320

Note. Validities reported are correlations between the composite and the training grade criterion within the indicated subgroup. NHB=Non-Hispanic Black, NHW=Non-Hispanic White. SD = standard deviation.

APPENDIX F – PROJECTED IMPACT RESULTS BY AFS

Table F.1. Projected Impact Results by AFS for Mechanical Composite: Current Composite

AFSC	Sample Size	Qualification Rate						QR Adverse Impact Ratio			FSG
		Overall	Male	Female	NHW	NHB	HW	M/F	NHW/NHB	NHW/HW	
1C2X1	412	.640	.707	.379	.748	.312	.559	.536	.418	.747	86.129
1C7X1	662	.855	.901	.677	.925	.619	.822	.751	.669	.888	85.628
1P0X1	1,618	.855	.901	.677	.925	.619	.822	.751	.669	.888	91.045
2A3X8	125	.757	.817	.524	.851	.458	.698	.641	.538	.820	87.470
2A5X1	1,306	.757	.817	.524	.851	.458	.698	.641	.538	.820	87.706
2A5X2B	420	.624	.692	.363	.734	.297	.542	.524	.405	.738	90.819
2A5X2D	198	.699	.764	.449	.802	.381	.629	.587	.474	.784	87.798
2A5X4	772	.757	.817	.524	.851	.458	.698	.641	.538	.820	87.445
2A6X1	4,369	.624	.692	.363	.734	.297	.542	.524	.405	.738	88.313
2A6X2	3,197	.757	.817	.524	.851	.458	.698	.641	.538	.820	89.041
2A6X3	485	.624	.692	.363	.734	.297	.542	.524	.405	.738	87.648
2A6X4	1,799	.757	.817	.524	.851	.458	.698	.641	.538	.820	89.670
2A6X5	1,738	.624	.692	.363	.734	.297	.542	.524	.405	.738	89.100
2A6X6	3,001	.844	.892	.657	.918	.599	.808	.737	.652	.881	90.054
2A7X1	576	.757	.817	.524	.851	.458	.698	.641	.538	.820	88.962
2A7X2	676	.832	.883	.637	.910	.578	.793	.721	.635	.872	89.357
2A7X3	2,138	.757	.817	.524	.851	.458	.698	.641	.538	.820	89.806
2A7X5	385	.757	.817	.524	.851	.458	.698	.641	.538	.820	88.322
2F0X1	2,876	.757	.817	.524	.851	.458	.698	.641	.538	.820	90.624
2M0X2	419	.757	.817	.524	.851	.458	.698	.641	.538	.820	93.459
2T1X1	1,544	.855	.901	.677	.925	.619	.822	.751	.669	.888	87.731
2T2X1	3,921	.757	.817	.524	.851	.458	.698	.641	.538	.820	89.314
2T3X1	1,482	.757	.817	.524	.851	.458	.698	.641	.538	.820	88.710
2T3X1A	219	.855	.901	.677	.925	.619	.822	.751	.669	.888	87.628
2T3X1C	250	.855	.901	.677	.925	.619	.822	.751	.669	.888	92.783
2W0X1	5,577	.564	.632	.301	.674	.242	.475	.477	.358	.704	90.549
2W1X1	5,459	.564	.632	.301	.674	.242	.475	.477	.358	.704	91.035
2W2X1	587	.564	.632	.301	.674	.242	.475	.477	.358	.704	93.149
3D1X7	475	.640	.707	.379	.748	.312	.559	.536	.418	.747	91.407
3E0X1	1,044	.911	.944	.783	.961	.737	.893	.829	.767	.929	88.857
3E0X2	1,124	.624	.692	.363	.734	.297	.542	.524	.405	.738	86.651
3E1X1	1,151	.757	.817	.524	.851	.458	.698	.641	.538	.820	90.406
3E2X1	1,276	.855	.901	.677	.925	.619	.822	.751	.669	.888	90.562
3E3X1	786	.757	.817	.524	.851	.458	.698	.641	.538	.820	87.004
3E4X1	1,250	.757	.817	.524	.851	.458	.698	.641	.538	.820	89.811
3E8X1	231	.564	.632	.301	.674	.242	.475	.477	.358	.704	92.916
4A2X1	216	.564	.632	.301	.674	.242	.475	.477	.358	.704	89.917

Note. Qualification Rates represent the percentage of USAF accessions that would qualify for Mechanical AFS. QR Adverse Impact Ratios are the minority group QR/majority group QR. QR=Qualification Rate, NHW=Non-Hispanic White, NHB=Non-Hispanic Black, HW=Hispanic-White, FSG=Mean predicted Final School Grade of the qualified group.

Table F.2. Projected Impact Results by AFS for Mechanical Composite: AR+PC+WK

AFSC	Sample Size	Qualification Rate						QR Adverse Impact Ratio			FSG
		Overall	Male	Female	NHW	NHB	HW	M/F	NHW/NHB	NHW/HW	
1C2X1	412	.653	.681	.548	.718	.455	.599	.805	.635	.835	86.321
1C7X1	662	.860	.877	.797	.898	.743	.832	.909	.827	.926	85.535
1P0X1	1,618	.860	.877	.797	.898	.743	.832	.909	.827	.926	90.930
2A3X8	125	.764	.787	.675	.817	.598	.723	.858	.731	.884	87.363
2A5X1	1,306	.764	.787	.675	.817	.598	.723	.858	.731	.884	87.381
2A5X2B	420	.625	.653	.516	.690	.424	.569	.791	.614	.824	90.774
2A5X2D	198	.709	.735	.610	.769	.525	.662	.831	.683	.861	87.603
2A5X4	772	.764	.787	.675	.817	.598	.723	.858	.731	.884	87.106
2A6X1	4,369	.625	.653	.516	.690	.424	.569	.791	.614	.824	88.037
2A6X2	3,197	.764	.787	.675	.817	.598	.723	.858	.731	.884	88.863
2A6X3	485	.625	.653	.516	.690	.424	.569	.791	.614	.824	87.500
2A6X4	1,799	.764	.787	.675	.817	.598	.723	.858	.731	.884	89.462
2A6X5	1,738	.625	.653	.516	.690	.424	.569	.791	.614	.824	88.900
2A6X6	3,001	.860	.877	.797	.898	.743	.832	.909	.827	.926	89.848
2A7X1	576	.764	.787	.675	.817	.598	.723	.858	.731	.884	89.042
2A7X2	676	.838	.856	.769	.880	.708	.808	.898	.805	.918	89.292
2A7X3	2,138	.764	.787	.675	.817	.598	.723	.858	.731	.884	89.631
2A7X5	385	.764	.787	.675	.817	.598	.723	.858	.731	.884	88.026
2F0X1	2,876	.764	.787	.675	.817	.598	.723	.858	.731	.884	90.490
2M0X2	419	.764	.787	.675	.817	.598	.723	.858	.731	.884	93.410
2T1X1	1,544	.860	.877	.797	.898	.743	.832	.909	.827	.926	87.667
2T2X1	3,921	.764	.787	.675	.817	.598	.723	.858	.731	.884	89.275
2T3X1	1,482	.764	.787	.675	.817	.598	.723	.858	.731	.884	88.407
2T3X1A	219	.860	.877	.797	.898	.743	.832	.909	.827	.926	87.495
2T3X1C	250	.860	.877	.797	.898	.743	.832	.909	.827	.926	92.713
2W0X1	5,577	.570	.599	.457	.637	.364	.511	.763	.571	.803	90.482
2W1X1	5,459	.570	.599	.457	.637	.364	.511	.763	.571	.803	90.866
2W2X1	587	.570	.599	.457	.637	.364	.511	.763	.571	.803	92.982
3D1X7	475	.653	.681	.548	.718	.455	.599	.805	.635	.835	91.182
3E0X1	1,044	.915	.926	.872	.941	.834	.897	.941	.885	.953	88.779
3E0X2	1,124	.625	.653	.516	.690	.424	.569	.791	.614	.824	86.339
3E1X1	1,151	.764	.787	.675	.817	.598	.723	.858	.731	.884	90.255
3E2X1	1,276	.860	.877	.797	.898	.743	.832	.909	.827	.926	90.502
3E3X1	786	.764	.787	.675	.817	.598	.723	.858	.731	.884	86.888
3E4X1	1,250	.764	.787	.675	.817	.598	.723	.858	.731	.884	89.655
3E8X1	231	.570	.599	.457	.637	.364	.511	.763	.571	.803	92.661
4A2X1	216	.570	.599	.457	.637	.364	.511	.763	.571	.803	89.682

Note. Qualification Rates represent the percentage of USAF accessions that would qualify for Mechanical AFS. QR Adverse Impact Ratios are the minority group QR/majority group QR. QR=Qualification Rate, NHW=Non-Hispanic White, NHB=Non-Hispanic Black, HW=Hispanic-White, FSG=Mean predicted Final School Grade of the qualified group.

Table F.3. Projected Impact Results by AFS for Mechanical Composite: AR+PC+WK+MK

AFSC	Sample Size	Qualification Rate						QR Adverse Impact Ratio			FSG
		Overall	Male	Female	NHW	NHB	HW	M/F	NHW/NHB	NHW/HW	
1C2X1	412	.653	.676	.567	.705	.475	.614	.838	.674	.871	86.493
1C7X1	662	.871	.882	.827	.896	.776	.856	.938	.866	.955	85.559
1P0X1	1,618	.871	.882	.827	.896	.776	.856	.938	.866	.955	90.935
2A3X8	125	.767	.785	.699	.808	.621	.740	.890	.768	.916	87.358
2A5X1	1,306	.767	.785	.699	.808	.621	.740	.890	.768	.916	87.367
2A5X2B	420	.631	.654	.542	.684	.448	.589	.829	.655	.861	90.754
2A5X2D	198	.699	.720	.619	.747	.530	.664	.859	.710	.889	87.557
2A5X4	772	.767	.785	.699	.808	.621	.740	.890	.768	.916	87.134
2A6X1	4,369	.631	.654	.542	.684	.448	.589	.829	.655	.861	88.037
2A6X2	3,197	.767	.785	.699	.808	.621	.740	.890	.768	.916	88.880
2A6X3	485	.631	.654	.542	.684	.448	.589	.829	.655	.861	87.568
2A6X4	1,799	.767	.785	.699	.808	.621	.740	.890	.768	.916	89.499
2A6X5	1,738	.631	.654	.542	.684	.448	.589	.829	.655	.861	88.911
2A6X6	3,001	.853	.865	.804	.880	.747	.836	.929	.849	.949	89.924
2A7X1	576	.767	.785	.699	.808	.621	.740	.890	.768	.916	89.121
2A7X2	676	.832	.847	.778	.863	.716	.813	.919	.829	.942	89.386
2A7X3	2,138	.767	.785	.699	.808	.621	.740	.890	.768	.916	89.634
2A7X5	385	.767	.785	.699	.808	.621	.740	.890	.768	.916	88.038
2F0X1	2,876	.767	.785	.699	.808	.621	.740	.890	.768	.916	90.532
2M0X2	419	.767	.785	.699	.808	.621	.740	.890	.768	.916	93.425
2T1X1	1,544	.871	.882	.827	.896	.776	.856	.938	.866	.955	87.639
2T2X1	3,921	.767	.785	.699	.808	.621	.740	.890	.768	.916	89.313
2T3X1	1,482	.767	.785	.699	.808	.621	.740	.890	.768	.916	88.410
2T3X1A	219	.871	.882	.827	.896	.776	.856	.938	.866	.955	87.480
2T3X1C	250	.871	.882	.827	.896	.776	.856	.938	.866	.955	92.702
2W0X1	5,577	.565	.590	.470	.621	.375	.518	.797	.604	.833	90.575
2W1X1	5,459	.565	.590	.470	.621	.375	.518	.797	.604	.833	90.936
2W2X1	587	.565	.590	.470	.621	.375	.518	.797	.604	.833	93.001
3D1X7	475	.653	.676	.567	.705	.475	.614	.838	.674	.871	91.208
3E0X1	1,044	.912	.920	.880	.930	.842	.901	.957	.905	.969	88.845
3E0X2	1,124	.631	.654	.542	.684	.448	.589	.829	.655	.861	86.350
3E1X1	1,151	.767	.785	.699	.808	.621	.740	.890	.768	.916	90.286
3E2X1	1,276	.871	.882	.827	.896	.776	.856	.938	.866	.955	90.471
3E3X1	786	.767	.785	.699	.808	.621	.740	.890	.768	.916	86.896
3E4X1	1,250	.767	.785	.699	.808	.621	.740	.890	.768	.916	89.637
3E8X1	231	.565	.590	.470	.621	.375	.518	.797	.604	.833	92.654
4A2X1	216	.565	.590	.470	.621	.375	.518	.797	.604	.833	89.802

Note. Qualification Rates represent the percentage of USAF accessions that would qualify for Mechanical AFS. QR Adverse Impact Ratios are the minority group QR/majority group QR. QR=Qualification Rate, NHW=Non-Hispanic White, NHB=Non-Hispanic Black, HW=Hispanic-White, FSG=Mean predicted Final School Grade of the qualified group.

Table F.4. Projected Impact Results by AFS for Mechanical Composite: AR+PC+WK+AO

AFSC	Sample Size	Qualification Rate						QR Adverse Impact Ratio			FSG
		Overall	Male	Female	NHW	NHB	HW	M/F	NHW/NHB	NHW/HW	
1C2X1	412	.646	.669	.558	.696	.459	.632	.833	.660	.908	85.917
1C7X1	662	.858	.863	.840	.866	.809	.877	.974	.935	1.012	85.296
1P0X1	1,618	.858	.863	.840	.866	.809	.877	.974	.935	1.012	90.684
2A3X8	125	.758	.774	.698	.790	.622	.765	.902	.787	.968	86.979
2A5X1	1,306	.758	.774	.698	.790	.622	.765	.902	.787	.968	87.037
2A5X2B	420	.628	.652	.536	.680	.436	.610	.823	.641	.898	90.593
2A5X2D	198	.715	.734	.642	.755	.553	.713	.875	.733	.944	87.224
2A5X4	772	.758	.774	.698	.790	.622	.765	.902	.787	.968	86.740
2A6X1	4,369	.628	.652	.536	.680	.436	.610	.823	.641	.898	87.833
2A6X2	3,197	.758	.774	.698	.790	.622	.765	.902	.787	.968	88.618
2A6X3	485	.628	.652	.536	.680	.436	.610	.823	.641	.898	87.494
2A6X4	1,799	.758	.774	.698	.790	.622	.765	.902	.787	.968	89.255
2A6X5	1,738	.628	.652	.536	.680	.436	.610	.823	.641	.898	88.672
2A6X6	3,001	.847	.853	.823	.858	.785	.864	.965	.915	1.007	89.575
2A7X1	576	.758	.774	.698	.790	.622	.765	.902	.787	.968	88.570
2A7X2	676	.833	.840	.802	.848	.755	.848	.954	.890	1.001	89.003
2A7X3	2,138	.758	.774	.698	.790	.622	.765	.902	.787	.968	89.365
2A7X5	385	.758	.774	.698	.790	.622	.765	.902	.787	.968	87.819
2F0X1	2,876	.758	.774	.698	.790	.622	.765	.902	.787	.968	90.250
2M0X2	419	.758	.774	.698	.790	.622	.765	.902	.787	.968	93.306
2T1X1	1,544	.858	.863	.840	.866	.809	.877	.974	.935	1.012	87.371
2T2X1	3,921	.758	.774	.698	.790	.622	.765	.902	.787	.968	88.957
2T3X1	1,482	.758	.774	.698	.790	.622	.765	.902	.787	.968	88.257
2T3X1A	219	.858	.863	.840	.866	.809	.877	.974	.935	1.012	87.265
2T3X1C	250	.858	.863	.840	.866	.809	.877	.974	.935	1.012	92.643
2W0X1	5,577	.572	.597	.472	.628	.368	.545	.790	.586	.867	90.221
2W1X1	5,459	.572	.597	.472	.628	.368	.545	.790	.586	.867	90.649
2W2X1	587	.572	.597	.472	.628	.368	.545	.790	.586	.867	92.839
3D1X7	475	.646	.669	.558	.696	.459	.632	.833	.660	.908	90.988
3E0X1	1,044	.913	.915	.905	.914	.899	.925	.990	.984	1.012	88.522
3E0X2	1,124	.628	.652	.536	.680	.436	.610	.823	.641	.898	86.204
3E1X1	1,151	.758	.774	.698	.790	.622	.765	.902	.787	.968	90.015
3E2X1	1,276	.858	.863	.840	.866	.809	.877	.974	.935	1.012	90.210
3E3X1	786	.758	.774	.698	.790	.622	.765	.902	.787	.968	86.642
3E4X1	1,250	.758	.774	.698	.790	.622	.765	.902	.787	.968	89.331
3E8X1	231	.572	.597	.472	.628	.368	.545	.790	.586	.867	92.557
4A2X1	216	.572	.597	.472	.628	.368	.545	.790	.586	.867	89.867

Note. Qualification Rates represent the percentage of USAF accessions that would qualify for Mechanical AFS. QR Adverse Impact Ratios are the minority group QR/majority group QR. QR=Qualification Rate, NHW=Non-Hispanic White, NHB=Non-Hispanic Black, HW=Hispanic-White, FSG=Mean predicted Final School Grade of the qualified group.

Table F.5. Projected Impact Results by AFS for Mechanical Composite: AR+PC+WK+AO+MK

AFSC	Sample Size	Qualification Rate						QR Adverse Impact Ratio			FSG
		Overall	Male	Female	NHW	NHB	HW	M/F	NHW/NHB	NHW/HW	
1C2X1	412	.654	.672	.584	.693	.487	.648	.869	.703	.935	86.017
1C7X1	662	.858	.863	.842	.865	.809	.878	.976	.935	1.014	85.350
1P0X1	1,618	.858	.863	.842	.865	.809	.878	.976	.935	1.014	90.732
2A3X8	125	.764	.777	.718	.788	.647	.776	.925	.821	.985	86.966
2A5X1	1,306	.764	.777	.718	.788	.647	.776	.925	.821	.985	87.008
2A5X2B	420	.638	.657	.565	.679	.468	.630	.860	.688	.927	90.557
2A5X2D	198	.713	.729	.654	.745	.568	.717	.897	.763	.963	87.191
2A5X4	772	.764	.777	.718	.788	.647	.776	.925	.821	.985	86.733
2A6X1	4,369	.638	.657	.565	.679	.468	.630	.860	.688	.927	87.803
2A6X2	3,197	.764	.777	.718	.788	.647	.776	.925	.821	.985	88.611
2A6X3	485	.638	.657	.565	.679	.468	.630	.860	.688	.927	87.519
2A6X4	1,799	.764	.777	.718	.788	.647	.776	.925	.821	.985	89.259
2A6X5	1,738	.638	.657	.565	.679	.468	.630	.860	.688	.927	88.651
2A6X6	3,001	.846	.851	.826	.855	.787	.865	.970	.920	1.012	89.627
2A7X1	576	.764	.777	.718	.788	.647	.776	.925	.821	.985	88.607
2A7X2	676	.839	.845	.817	.849	.775	.858	.967	.912	1.010	89.030
2A7X3	2,138	.764	.777	.718	.788	.647	.776	.925	.821	.985	89.350
2A7X5	385	.764	.777	.718	.788	.647	.776	.925	.821	.985	87.805
2F0X1	2,876	.764	.777	.718	.788	.647	.776	.925	.821	.985	90.261
2M0X2	419	.764	.777	.718	.788	.647	.776	.925	.821	.985	93.307
2T1X1	1,544	.858	.863	.842	.865	.809	.878	.976	.935	1.014	87.408
2T2X1	3,921	.764	.777	.718	.788	.647	.776	.925	.821	.985	88.968
2T3X1	1,482	.764	.777	.718	.788	.647	.776	.925	.821	.985	88.241
2T3X1A	219	.858	.863	.842	.865	.809	.878	.976	.935	1.014	87.300
2T3X1C	250	.858	.863	.842	.865	.809	.878	.976	.935	1.014	92.668
2W0X1	5,577	.575	.597	.492	.622	.390	.557	.825	.628	.896	90.260
2W1X1	5,459	.575	.597	.492	.622	.390	.557	.825	.628	.896	90.670
2W2X1	587	.575	.597	.492	.622	.390	.557	.825	.628	.896	92.834
3D1X7	475	.654	.672	.584	.693	.487	.648	.869	.703	.935	90.975
3E0X1	1,044	.912	.914	.904	.914	.894	.925	.989	.978	1.012	88.542
3E0X2	1,124	.638	.657	.565	.679	.468	.630	.860	.688	.927	86.179
3E1X1	1,151	.764	.777	.718	.788	.647	.776	.925	.821	.985	90.020
3E2X1	1,276	.858	.863	.842	.865	.809	.878	.976	.935	1.014	90.241
3E3X1	786	.764	.777	.718	.788	.647	.776	.925	.821	.985	86.633
3E4X1	1,250	.764	.777	.718	.788	.647	.776	.925	.821	.985	89.309
3E8X1	231	.575	.597	.492	.622	.390	.557	.825	.628	.896	92.524
4A2X1	216	.575	.597	.492	.622	.390	.557	.825	.628	.896	89.925

Note. Qualification Rates represent the percentage of USAF accessions that would qualify for Mechanical AFS. QR Adverse Impact Ratios are the minority group QR/majority group QR. QR=Qualification Rate, NHW=Non-Hispanic White, NHB=Non-Hispanic Black, HW=Hispanic-White, FSG=Mean predicted Final School Grade of the qualified group.

Table F.6. Projected Impact Results by AFS for Electronics Composite: Current Composite

AFSC	Sample Size	Qualification Rate						QR Adverse Impact Ratio			FSG
		Overall	Male	Female	NHW	NHB	HW	M/F	NHW/NHB	NHW/HW	
1A3X1	1,177	.531	.588	.310	.607	.279	.467	.528	.460	.769	92.932
1C6X1	733	.531	.588	.310	.607	.279	.467	.528	.460	.769	92.435
1C8X3	942	.531	.588	.310	.607	.279	.467	.528	.460	.769	89.191
1W0X1	1,960	.843	.884	.689	.895	.659	.814	.780	.736	.910	87.673
2A0X1	904	.531	.588	.310	.607	.279	.467	.528	.460	.769	89.100
2A2X1	225	.531	.588	.310	.607	.279	.467	.528	.460	.769	90.956
2A2X2	168	.531	.588	.310	.607	.279	.467	.528	.460	.769	91.381
2A2X3	138	.531	.588	.310	.607	.279	.467	.528	.460	.769	87.878
2A3X4	1,312	.531	.588	.310	.607	.279	.467	.528	.460	.769	90.016
2A3X5	1,022	.531	.588	.310	.607	.279	.467	.528	.460	.769	90.933
2A6X2	3,197	.985	.991	.958	.993	.951	.982	.966	.958	.988	88.039
2A6X6	3,001	.681	.736	.468	.754	.434	.626	.635	.576	.830	90.859
2A8X1	260	.531	.588	.310	.607	.279	.467	.528	.460	.769	90.641
2A8X2	275	.531	.588	.310	.607	.279	.467	.528	.460	.769	91.447
2A9X1	142	.531	.588	.310	.607	.279	.467	.528	.460	.769	90.740
2A9X2	133	.531	.588	.310	.607	.279	.467	.528	.460	.769	91.010
2A9X3	234	.531	.588	.310	.607	.279	.467	.528	.460	.769	88.135
2M0X1	602	.531	.588	.310	.607	.279	.467	.528	.460	.769	92.258
2M0X3	328	.531	.588	.310	.607	.279	.467	.528	.460	.769	91.734
2P0X1	649	.531	.588	.310	.607	.279	.467	.528	.460	.769	87.375
2W1X1	5,459	.892	.924	.770	.932	.745	.869	.834	.799	.932	89.853
3D1X1	569	.698	.753	.488	.770	.455	.646	.648	.591	.839	87.661
3D1X2	334	.531	.588	.310	.607	.279	.467	.528	.460	.769	87.969
3D1X3	2,539	.531	.588	.310	.607	.279	.467	.528	.460	.769	89.171
3D1X7	475	.767	.817	.578	.832	.544	.724	.708	.654	.871	90.970
3E0X1	1,044	.963	.977	.907	.980	.895	.956	.928	.913	.975	88.667
3E0X2	1,124	.930	.953	.841	.959	.820	.914	.882	.855	.953	85.363
3E1X1	1,151	.985	.991	.958	.993	.951	.982	.966	.958	.988	89.582
3E4X1	1,250	.985	.991	.958	.993	.951	.982	.966	.958	.988	88.833
4A2X1	216	.531	.588	.310	.607	.279	.467	.528	.460	.769	90.017

Note. Qualification Rates represent the percentage of USAF accessions that would qualify for Electronics AFS. QR Adverse Impact Ratios are the minority group QR/majority group QR. QR=Qualification Rate, NHW=Non-Hispanic White, NHB=Non-Hispanic Black, HW=Hispanic-White, FSG=Mean predicted Final School Grade of the qualified group.

Table F.7. Projected Impact Results by AFS for Electronics Composite: AR+MK

AFSC	Sample Size	Qualification Rate						QR Adverse Impact Ratio			FSG
		Overall	Male	Female	NHW	NHB	HW	M/F	NHW/NHB	NHW/HW	
1A3X1	1,177	.560	.583	.469	.588	.412	.553	.804	.701	.939	92.850
1C6X1	733	.560	.583	.469	.588	.412	.553	.804	.701	.939	92.214
1C8X3	942	.560	.583	.469	.588	.412	.553	.804	.701	.939	89.071
1W0X1	1,960	.850	.862	.805	.863	.773	.857	.934	.896	.993	87.541
2A0X1	904	.560	.583	.469	.588	.412	.553	.804	.701	.939	88.756
2A2X1	225	.560	.583	.469	.588	.412	.553	.804	.701	.939	90.415
2A2X2	168	.560	.583	.469	.588	.412	.553	.804	.701	.939	90.982
2A2X3	138	.560	.583	.469	.588	.412	.553	.804	.701	.939	87.923
2A3X4	1,312	.560	.583	.469	.588	.412	.553	.804	.701	.939	89.681
2A3X5	1,022	.560	.583	.469	.588	.412	.553	.804	.701	.939	90.514
2A6X2	3,197	.986	.987	.981	.987	.978	.988	.994	.991	1.001	88.009
2A6X6	3,001	.703	.722	.630	.725	.581	.706	.872	.800	.973	90.403
2A8X1	260	.560	.583	.469	.588	.412	.553	.804	.701	.939	90.393
2A8X2	275	.560	.583	.469	.588	.412	.553	.804	.701	.939	90.980
2A9X1	142	.560	.583	.469	.588	.412	.553	.804	.701	.939	90.126
2A9X2	133	.560	.583	.469	.588	.412	.553	.804	.701	.939	90.776
2A9X3	234	.560	.583	.469	.588	.412	.553	.804	.701	.939	87.660
2M0X1	602	.560	.583	.469	.588	.412	.553	.804	.701	.939	91.884
2M0X3	328	.560	.583	.469	.588	.412	.553	.804	.701	.939	91.476
2P0X1	649	.560	.583	.469	.588	.412	.553	.804	.701	.939	86.878
2W1X1	5,459	.894	.903	.860	.902	.837	.902	.953	.927	1.000	89.739
3D1X1	569	.703	.722	.630	.725	.581	.706	.872	.800	.973	87.581
3D1X2	334	.560	.583	.469	.588	.412	.553	.804	.701	.939	87.338
3D1X3	2,539	.560	.583	.469	.588	.412	.553	.804	.701	.939	88.788
3D1X7	475	.797	.811	.741	.813	.700	.802	.913	.861	.986	90.664
3E0X1	1,044	.970	.972	.959	.972	.952	.974	.986	.980	1.002	88.603
3E0X2	1,124	.941	.946	.921	.946	.907	.948	.974	.959	1.003	85.233
3E1X1	1,151	.986	.987	.981	.987	.978	.988	.994	.991	1.001	89.560
3E4X1	1,250	.986	.987	.981	.987	.978	.988	.994	.991	1.001	88.795
4A2X1	216	.560	.583	.469	.588	.412	.553	.804	.701	.939	89.848

Note. Qualification Rates represent the percentage of USAF accessions that would qualify for Electronics AFS. QR Adverse Impact Ratios are the minority group QR/majority group QR. QR=Qualification Rate, NHW=Non-Hispanic White, NHB=Non-Hispanic Black, HW=Hispanic-White, FSG=Mean predicted Final School Grade of the qualified group.

Table F.8. Projected Impact Results by AFS for Electronics Composite: AR+MK+WK

AFSC	Sample Size	Qualification Rate						QR Adverse Impact Ratio			FSG
		Overall	Male	Female	NHW	NHB	HW	M/F	NHW/NHB	NHW/HW	
1A3X1	1,177	.558	.584	.459	.610	.371	.515	.787	.607	.844	92.969
1C6X1	733	.558	.584	.459	.610	.371	.515	.787	.607	.844	92.315
1C8X3	942	.558	.584	.459	.610	.371	.515	.787	.607	.844	89.191
1W0X1	1,960	.855	.868	.802	.880	.748	.843	.924	.850	.958	87.587
2A0X1	904	.558	.584	.459	.610	.371	.515	.787	.607	.844	88.975
2A2X1	225	.558	.584	.459	.610	.371	.515	.787	.607	.844	90.571
2A2X2	168	.558	.584	.459	.610	.371	.515	.787	.607	.844	91.075
2A2X3	138	.558	.584	.459	.610	.371	.515	.787	.607	.844	87.931
2A3X4	1,312	.558	.584	.459	.610	.371	.515	.787	.607	.844	89.799
2A3X5	1,022	.558	.584	.459	.610	.371	.515	.787	.607	.844	90.655
2A6X2	3,197	.988	.990	.982	.991	.978	.989	.992	.987	.998	88.004
2A6X6	3,001	.701	.724	.614	.745	.535	.669	.849	.718	.898	90.565
2A8X1	260	.558	.584	.459	.610	.371	.515	.787	.607	.844	90.545
2A8X2	275	.558	.584	.459	.610	.371	.515	.787	.607	.844	91.178
2A9X1	142	.558	.584	.459	.610	.371	.515	.787	.607	.844	90.317
2A9X2	133	.558	.584	.459	.610	.371	.515	.787	.607	.844	90.993
2A9X3	234	.558	.584	.459	.610	.371	.515	.787	.607	.844	87.918
2M0X1	602	.558	.584	.459	.610	.371	.515	.787	.607	.844	92.141
2M0X3	328	.558	.584	.459	.610	.371	.515	.787	.607	.844	91.650
2P0X1	649	.558	.584	.459	.610	.371	.515	.787	.607	.844	87.072
2W1X1	5,459	.894	.904	.852	.913	.809	.885	.942	.886	.969	89.786
3D1X1	569	.701	.724	.614	.745	.535	.669	.849	.718	.898	87.706
3D1X2	334	.558	.584	.459	.610	.371	.515	.787	.607	.844	87.706
3D1X3	2,539	.558	.584	.459	.610	.371	.515	.787	.607	.844	88.991
3D1X7	475	.783	.801	.713	.818	.643	.762	.890	.786	.931	90.804
3E0X1	1,044	.969	.973	.955	.975	.942	.968	.981	.966	.992	88.608
3E0X2	1,124	.938	.945	.910	.949	.884	.933	.964	.931	.983	85.256
3E1X1	1,151	.988	.990	.982	.991	.978	.989	.992	.987	.998	89.555
3E4X1	1,250	.988	.990	.982	.991	.978	.989	.992	.987	.998	88.792
4A2X1	216	.558	.584	.459	.610	.371	.515	.787	.607	.844	89.979

Note. Qualification Rates represent the percentage of USAF accessions that would qualify for Electronics AFS. QR Adverse Impact Ratios are the minority group QR/majority group QR. QR=Qualification Rate, NHW=Non-Hispanic White, NHB=Non-Hispanic Black, HW=Hispanic-White, FSG=Mean predicted Final School Grade of the qualified group.

Table F.9. Projected Impact Results by AFS for Electronics Composite: AR+MK+PC

AFSC	Sample Size	Qualification Rate						QR Adverse Impact Ratio			FSG
		Overall	Male	Female	NHW	NHB	HW	M/F	NHW/NHB	NHW/HW	
1A3X1	1,177	.539	.562	.448	.580	.372	.517	.797	.642	.892	93.082
1C6X1	733	.539	.562	.448	.580	.372	.517	.797	.642	.892	92.352
1C8X3	942	.539	.562	.448	.580	.372	.517	.797	.642	.892	89.265
1W0X1	1,960	.857	.868	.816	.873	.776	.856	.940	.888	.980	87.575
2A0X1	904	.539	.562	.448	.580	.372	.517	.797	.642	.892	88.986
2A2X1	225	.539	.562	.448	.580	.372	.517	.797	.642	.892	90.669
2A2X2	168	.539	.562	.448	.580	.372	.517	.797	.642	.892	91.240
2A2X3	138	.539	.562	.448	.580	.372	.517	.797	.642	.892	88.118
2A3X4	1,312	.539	.562	.448	.580	.372	.517	.797	.642	.892	89.910
2A3X5	1,022	.539	.562	.448	.580	.372	.517	.797	.642	.892	90.705
2A6X2	3,197	.987	.988	.984	.988	.979	.990	.995	.991	1.002	88.008
2A6X6	3,001	.684	.703	.608	.717	.538	.672	.865	.750	.937	90.597
2A8X1	260	.539	.562	.448	.580	.372	.517	.797	.642	.892	90.577
2A8X2	275	.539	.562	.448	.580	.372	.517	.797	.642	.892	91.321
2A9X1	142	.539	.562	.448	.580	.372	.517	.797	.642	.892	90.380
2A9X2	133	.539	.562	.448	.580	.372	.517	.797	.642	.892	91.089
2A9X3	234	.539	.562	.448	.580	.372	.517	.797	.642	.892	87.892
2M0X1	602	.539	.562	.448	.580	.372	.517	.797	.642	.892	92.201
2M0X3	328	.539	.562	.448	.580	.372	.517	.797	.642	.892	91.610
2P0X1	649	.539	.562	.448	.580	.372	.517	.797	.642	.892	87.159
2W1X1	5,459	.894	.902	.864	.907	.832	.896	.957	.917	.988	89.777
3D1X1	569	.711	.730	.639	.742	.573	.701	.876	.772	.945	87.701
3D1X2	334	.539	.562	.448	.580	.372	.517	.797	.642	.892	87.690
3D1X3	2,539	.539	.562	.448	.580	.372	.517	.797	.642	.892	89.034
3D1X7	475	.790	.805	.734	.813	.680	.785	.912	.836	.965	90.727
3E0X1	1,044	.966	.968	.955	.969	.944	.970	.987	.974	1.001	88.631
3E0X2	1,124	.937	.942	.917	.944	.898	.941	.974	.952	.997	85.271
3E1X1	1,151	.987	.988	.984	.988	.979	.990	.995	.991	1.002	89.558
3E4X1	1,250	.987	.988	.984	.988	.979	.990	.995	.991	1.002	88.798
4A2X1	216	.539	.562	.448	.580	.372	.517	.797	.642	.892	89.973

Note. Qualification Rates represent the percentage of USAF accessions that would qualify for Electronics AFS. QR Adverse Impact Ratios are the minority group QR/majority group QR. QR=Qualification Rate, NHW=Non-Hispanic White, NHB=Non-Hispanic Black, HW=Hispanic-White, FSG=Mean predicted Final School Grade of the qualified group.

Table F.10. Projected Impact Results by AFS for Electronics Composite: AR+MK+AO

AFSC	Sample Size	Qualification Rate						QR Adverse Impact Ratio			FSG
		Overall	Male	Female	NHW	NHB	HW	M/F	NHW/NHB	NHW/HW	
1A3X1	1,177	.552	.573	.472	.581	.391	.565	.822	.674	.974	92.746
1C6X1	733	.552	.573	.472	.581	.391	.565	.822	.674	.974	92.118
1C8X3	942	.552	.573	.472	.581	.391	.565	.822	.674	.974	88.980
1W0X1	1,960	.845	.849	.829	.849	.800	.872	.976	.942	1.027	87.289
2A0X1	904	.552	.573	.472	.581	.391	.565	.822	.674	.974	88.681
2A2X1	225	.552	.573	.472	.581	.391	.565	.822	.674	.974	90.250
2A2X2	168	.552	.573	.472	.581	.391	.565	.822	.674	.974	90.945
2A2X3	138	.552	.573	.472	.581	.391	.565	.822	.674	.974	87.739
2A3X4	1,312	.552	.573	.472	.581	.391	.565	.822	.674	.974	89.460
2A3X5	1,022	.552	.573	.472	.581	.391	.565	.822	.674	.974	90.293
2A6X2	3,197	.985	.986	.979	.986	.977	.988	.993	.991	1.001	88.001
2A6X6	3,001	.696	.710	.639	.716	.566	.720	.899	.791	1.006	90.212
2A8X1	260	.552	.573	.472	.581	.391	.565	.822	.674	.974	90.268
2A8X2	275	.552	.573	.472	.581	.391	.565	.822	.674	.974	90.862
2A9X1	142	.552	.573	.472	.581	.391	.565	.822	.674	.974	90.044
2A9X2	133	.552	.573	.472	.581	.391	.565	.822	.674	.974	90.400
2A9X3	234	.552	.573	.472	.581	.391	.565	.822	.674	.974	87.532
2M0X1	602	.552	.573	.472	.581	.391	.565	.822	.674	.974	91.823
2M0X3	328	.552	.573	.472	.581	.391	.565	.822	.674	.974	91.407
2P0X1	649	.552	.573	.472	.581	.391	.565	.822	.674	.974	86.490
2W1X1	5,459	.892	.893	.889	.890	.887	.910	.995	.997	1.023	89.492
3D1X1	569	.713	.727	.660	.732	.589	.738	.908	.805	1.009	87.436
3D1X2	334	.552	.573	.472	.581	.391	.565	.822	.674	.974	87.048
3D1X3	2,539	.552	.573	.472	.581	.391	.565	.822	.674	.974	88.635
3D1X7	475	.773	.783	.733	.785	.679	.799	.937	.864	1.018	90.515
3E0X1	1,044	.964	.967	.954	.966	.951	.971	.987	.984	1.005	88.548
3E0X2	1,124	.930	.933	.919	.931	.916	.942	.985	.983	1.012	85.176
3E1X1	1,151	.985	.986	.979	.986	.977	.988	.993	.991	1.001	89.548
3E4X1	1,250	.985	.986	.979	.986	.977	.988	.993	.991	1.001	88.783
4A2X1	216	.552	.573	.472	.581	.391	.565	.822	.674	.974	90.113

Note. Qualification Rates represent the percentage of USAF accessions that would qualify for Electronics AFS. QR Adverse Impact Ratios are the minority group QR/majority group QR. QR=Qualification Rate, NHW=Non-Hispanic White, NHB=Non-Hispanic Black, HW=Hispanic-White, FSG=Mean predicted Final School Grade of the qualified group.

Table F.11. Projected Impact Results by AFS for Electronics Composite: AR+MK+PC+WK

AFSC	Sample Size	Qualification Rate						QR Adverse Impact Ratio			FSG
		Overall	Male	Female	NHW	NHB	HW	M/F	NHW/NHB	NHW/HW	
1A3X1	1,177	.543	.568	.446	.600	.353	.495	.786	.589	.825	93.101
1C6X1	733	.543	.568	.446	.600	.353	.495	.786	.589	.825	92.379
1C8X3	942	.543	.568	.446	.600	.353	.495	.786	.589	.825	89.284
1W0X1	1,960	.853	.865	.804	.880	.747	.836	.929	.849	.949	87.616
2A0X1	904	.543	.568	.446	.600	.353	.495	.786	.589	.825	89.075
2A2X1	225	.543	.568	.446	.600	.353	.495	.786	.589	.825	90.690
2A2X2	168	.543	.568	.446	.600	.353	.495	.786	.589	.825	91.223
2A2X3	138	.543	.568	.446	.600	.353	.495	.786	.589	.825	88.044
2A3X4	1,312	.543	.568	.446	.600	.353	.495	.786	.589	.825	89.914
2A3X5	1,022	.543	.568	.446	.600	.353	.495	.786	.589	.825	90.741
2A6X2	3,197	.986	.987	.981	.988	.974	.985	.994	.985	.997	88.019
2A6X6	3,001	.699	.720	.619	.747	.530	.664	.859	.710	.889	90.597
2A8X1	260	.543	.568	.446	.600	.353	.495	.786	.589	.825	90.644
2A8X2	275	.543	.568	.446	.600	.353	.495	.786	.589	.825	91.376
2A9X1	142	.543	.568	.446	.600	.353	.495	.786	.589	.825	90.451
2A9X2	133	.543	.568	.446	.600	.353	.495	.786	.589	.825	91.164
2A9X3	234	.543	.568	.446	.600	.353	.495	.786	.589	.825	88.016
2M0X1	602	.543	.568	.446	.600	.353	.495	.786	.589	.825	92.299
2M0X3	328	.543	.568	.446	.600	.353	.495	.786	.589	.825	91.693
2P0X1	649	.543	.568	.446	.600	.353	.495	.786	.589	.825	87.189
2W1X1	5,459	.900	.910	.865	.920	.823	.889	.951	.895	.966	89.780
3D1X1	569	.699	.720	.619	.747	.530	.664	.859	.710	.889	87.787
3D1X2	334	.543	.568	.446	.600	.353	.495	.786	.589	.825	87.894
3D1X3	2,539	.543	.568	.446	.600	.353	.495	.786	.589	.825	89.106
3D1X7	475	.789	.806	.725	.827	.652	.765	.900	.788	.925	90.789
3E0X1	1,044	.970	.973	.961	.977	.946	.968	.987	.968	.991	88.606
3E0X2	1,124	.933	.939	.909	.947	.878	.925	.968	.927	.976	85.285
3E1X1	1,151	.986	.987	.981	.988	.974	.985	.994	.985	.997	89.565
3E4X1	1,250	.986	.987	.981	.988	.974	.985	.994	.985	.997	88.809
4A2X1	216	.543	.568	.446	.600	.353	.495	.786	.589	.825	90.033

Note. Qualification Rates represent the percentage of USAF accessions that would qualify for Electronics AFS. QR Adverse Impact Ratios are the minority group QR/majority group QR. QR=Qualification Rate, NHW=Non-Hispanic White, NHB=Non-Hispanic Black, HW=Hispanic-White, FSG=Mean predicted Final School Grade of the qualified group.

Table F.12. Projected Impact Results by AFS for Electronics Composite: AR+MK+AO+WK

AFSC	Sample Size	Qualification Rate						QR Adverse Impact Ratio			FSG
		Overall	Male	Female	NHW	NHB	HW	M/F	NHW/NHB	NHW/HW	
1A3X1	1,177	.546	.569	.457	.591	.357	.530	.804	.604	.898	92.855
1C6X1	733	.546	.569	.457	.591	.357	.530	.804	.604	.898	92.213
1C8X3	942	.546	.569	.457	.591	.357	.530	.804	.604	.898	89.097
1W0X1	1,960	.848	.853	.830	.855	.796	.870	.974	.931	1.018	87.296
2A0X1	904	.546	.569	.457	.591	.357	.530	.804	.604	.898	88.870
2A2X1	225	.546	.569	.457	.591	.357	.530	.804	.604	.898	90.405
2A2X2	168	.546	.569	.457	.591	.357	.530	.804	.604	.898	91.039
2A2X3	138	.546	.569	.457	.591	.357	.530	.804	.604	.898	87.781
2A3X4	1,312	.546	.569	.457	.591	.357	.530	.804	.604	.898	89.586
2A3X5	1,022	.546	.569	.457	.591	.357	.530	.804	.604	.898	90.433
2A6X2	3,197	.985	.987	.978	.988	.974	.987	.991	.986	.999	88.007
2A6X6	3,001	.692	.709	.626	.724	.538	.699	.883	.744	.966	90.322
2A8X1	260	.546	.569	.457	.591	.357	.530	.804	.604	.898	90.390
2A8X2	275	.546	.569	.457	.591	.357	.530	.804	.604	.898	91.025
2A9X1	142	.546	.569	.457	.591	.357	.530	.804	.604	.898	90.199
2A9X2	133	.546	.569	.457	.591	.357	.530	.804	.604	.898	90.602
2A9X3	234	.546	.569	.457	.591	.357	.530	.804	.604	.898	87.752
2M0X1	602	.546	.569	.457	.591	.357	.530	.804	.604	.898	92.032
2M0X3	328	.546	.569	.457	.591	.357	.530	.804	.604	.898	91.548
2P0X1	649	.546	.569	.457	.591	.357	.530	.804	.604	.898	86.696
2W1X1	5,459	.892	.893	.887	.892	.879	.909	.993	.986	1.020	89.512
3D1X1	569	.708	.724	.647	.738	.562	.718	.893	.762	.973	87.508
3D1X2	334	.546	.569	.457	.591	.357	.530	.804	.604	.898	87.333
3D1X3	2,539	.546	.569	.457	.591	.357	.530	.804	.604	.898	88.813
3D1X7	475	.778	.789	.735	.797	.667	.795	.932	.837	.997	90.548
3E0X1	1,044	.963	.966	.951	.967	.944	.967	.984	.977	1.000	88.554
3E0X2	1,124	.931	.934	.920	.934	.912	.940	.985	.977	1.007	85.181
3E1X1	1,151	.985	.987	.978	.988	.974	.987	.991	.986	.999	89.552
3E4X1	1,250	.985	.987	.978	.988	.974	.987	.991	.986	.999	88.789
4A2X1	216	.546	.569	.457	.591	.357	.530	.804	.604	.898	90.196

Note. Qualification Rates represent the percentage of USAF accessions that would qualify for Electronics AFS. QR Adverse Impact Ratios are the minority group QR/majority group QR. QR=Qualification Rate, NHW=Non-Hispanic White, NHB=Non-Hispanic Black, HW=Hispanic-White, FSG=Mean predicted Final School Grade of the qualified group.

Table F.13. Projected Impact Results by AFS for Electronics Composite: AR+MK+AO+PC

AFSC	Sample Size	Qualification Rate						QR Adverse Impact Ratio			FSG
		Overall	Male	Female	NHW	NHB	HW	M/F	NHW/NHB	NHW/HW	
1A3X1	1,177	.531	.553	.448	.569	.358	.530	.810	.630	.932	92.935
1C6X1	733	.531	.553	.448	.569	.358	.530	.810	.630	.932	92.240
1C8X3	942	.531	.553	.448	.569	.358	.530	.810	.630	.932	89.152
1W0X1	1,960	.845	.849	.828	.849	.798	.870	.975	.940	1.024	87.311
2A0X1	904	.531	.553	.448	.569	.358	.530	.810	.630	.932	88.882
2A2X1	225	.531	.553	.448	.569	.358	.530	.810	.630	.932	90.477
2A2X2	168	.531	.553	.448	.569	.358	.530	.810	.630	.932	91.159
2A2X3	138	.531	.553	.448	.569	.358	.530	.810	.630	.932	87.912
2A3X4	1,312	.531	.553	.448	.569	.358	.530	.810	.630	.932	89.665
2A3X5	1,022	.531	.553	.448	.569	.358	.530	.810	.630	.932	90.470
2A6X2	3,197	.987	.988	.983	.987	.980	.990	.995	.993	1.002	88.000
2A6X6	3,001	.694	.710	.636	.719	.559	.711	.896	.777	.989	90.285
2A8X1	260	.531	.553	.448	.569	.358	.530	.810	.630	.932	90.413
2A8X2	275	.531	.553	.448	.569	.358	.530	.810	.630	.932	91.128
2A9X1	142	.531	.553	.448	.569	.358	.530	.810	.630	.932	90.247
2A9X2	133	.531	.553	.448	.569	.358	.530	.810	.630	.932	90.664
2A9X3	234	.531	.553	.448	.569	.358	.530	.810	.630	.932	87.737
2M0X1	602	.531	.553	.448	.569	.358	.530	.810	.630	.932	92.080
2M0X3	328	.531	.553	.448	.569	.358	.530	.810	.630	.932	91.525
2P0X1	649	.531	.553	.448	.569	.358	.530	.810	.630	.932	86.760
2W1X1	5,459	.893	.894	.888	.892	.881	.911	.993	.987	1.021	89.518
3D1X1	569	.710	.724	.655	.733	.582	.729	.905	.794	.995	87.510
3D1X2	334	.531	.553	.448	.569	.358	.530	.810	.630	.932	87.318
3D1X3	2,539	.531	.553	.448	.569	.358	.530	.810	.630	.932	88.846
3D1X7	475	.777	.787	.739	.792	.683	.801	.940	.863	1.012	90.524
3E0X1	1,044	.966	.968	.959	.968	.953	.973	.990	.985	1.006	88.550
3E0X2	1,124	.931	.933	.920	.932	.913	.943	.986	.980	1.011	85.186
3E1X1	1,151	.987	.988	.983	.987	.980	.990	.995	.993	1.002	89.546
3E4X1	1,250	.987	.988	.983	.987	.980	.990	.995	.993	1.002	88.785
4A2X1	216	.531	.553	.448	.569	.358	.530	.810	.630	.932	90.202

Note. Qualification Rates represent the percentage of USAF accessions that would qualify for Electronics AFS. QR Adverse Impact Ratios are the minority group QR/majority group QR. QR=Qualification Rate, NHW=Non-Hispanic White, NHB=Non-Hispanic Black, HW=Hispanic-White, FSG=Mean predicted Final School Grade of the qualified group.

Table F.14. Projected Impact Results by AFS for Electronics Composite: AR+MK+AO+PC+WK

AFSC	Sample Size	Qualification Rate						QR Adverse Impact Ratio			FSG
		Overall	Male	Female	NHW	NHB	HW	M/F	NHW/NHB	NHW/HW	
1A3X1	1,177	.542	.565	.455	.591	.353	.521	.806	.598	.881	92.949
1C6X1	733	.542	.565	.455	.591	.353	.521	.806	.598	.881	92.258
1C8X3	942	.542	.565	.455	.591	.353	.521	.806	.598	.881	89.161
1W0X1	1,960	.846	.851	.826	.855	.787	.865	.970	.920	1.012	87.347
2A0X1	904	.542	.565	.455	.591	.353	.521	.806	.598	.881	88.941
2A2X1	225	.542	.565	.455	.591	.353	.521	.806	.598	.881	90.483
2A2X2	168	.542	.565	.455	.591	.353	.521	.806	.598	.881	91.140
2A2X3	138	.542	.565	.455	.591	.353	.521	.806	.598	.881	87.859
2A3X4	1,312	.542	.565	.455	.591	.353	.521	.806	.598	.881	89.668
2A3X5	1,022	.542	.565	.455	.591	.353	.521	.806	.598	.881	90.494
2A6X2	3,197	.987	.988	.982	.988	.978	.989	.994	.989	1.000	88.003
2A6X6	3,001	.684	.701	.619	.720	.528	.683	.882	.733	.949	90.393
2A8X1	260	.542	.565	.455	.591	.353	.521	.806	.598	.881	90.461
2A8X2	275	.542	.565	.455	.591	.353	.521	.806	.598	.881	91.162
2A9X1	142	.542	.565	.455	.591	.353	.521	.806	.598	.881	90.288
2A9X2	133	.542	.565	.455	.591	.353	.521	.806	.598	.881	90.737
2A9X3	234	.542	.565	.455	.591	.353	.521	.806	.598	.881	87.826
2M0X1	602	.542	.565	.455	.591	.353	.521	.806	.598	.881	92.139
2M0X3	328	.542	.565	.455	.591	.353	.521	.806	.598	.881	91.574
2P0X1	649	.542	.565	.455	.591	.353	.521	.806	.598	.881	86.778
2W1X1	5,459	.894	.896	.886	.896	.871	.911	.989	.973	1.016	89.543
3D1X1	569	.699	.715	.637	.733	.549	.700	.890	.749	.956	87.579
3D1X2	334	.542	.565	.455	.591	.353	.521	.806	.598	.881	87.474
3D1X3	2,539	.542	.565	.455	.591	.353	.521	.806	.598	.881	88.895
3D1X7	475	.776	.787	.733	.798	.665	.790	.931	.834	.990	90.571
3E0X1	1,044	.964	.966	.955	.967	.946	.969	.988	.979	1.002	88.555
3E0X2	1,124	.932	.934	.922	.935	.912	.942	.987	.976	1.008	85.186
3E1X1	1,151	.987	.988	.982	.988	.978	.989	.994	.989	1.000	89.548
3E4X1	1,250	.987	.988	.982	.988	.978	.989	.994	.989	1.000	88.788
4A2X1	216	.542	.565	.455	.591	.353	.521	.806	.598	.881	90.220

Note. Qualification Rates represent the percentage of USAF accessions that would qualify for Electronics AFS. QR Adverse Impact Ratios are the minority group QR/majority group QR. QR=Qualification Rate, NHW=Non-Hispanic White, NHB=Non-Hispanic Black, HW=Hispanic-White, FSG=Mean predicted Final School Grade of the qualified group.

Table F.15. Projected Impact Results by AFS for Administrative Composite: Current Composite

AFSC	Sample Size	Qualification Rate						QR Adverse Impact Ratio			FSG
		Overall	Male	Female	NHW	NHB	HW	M/F	NHW/NHB	NHW/HW	
1C0X2	1,469	.875	.877	.865	.890	.817	.857	.987	.917	.962	88.455
1C3X1	818	.807	.812	.789	.831	.723	.781	.972	.870	.939	87.233
1N0X1	2,460	.636	.648	.594	.677	.500	.594	.917	.740	.878	88.312
1N2X1A	522	.417	.432	.358	.464	.266	.366	.829	.573	.790	90.878
1N2X1C	434	.417	.432	.358	.464	.266	.366	.829	.573	.790	91.701
2G0X1	405	.768	.775	.743	.796	.670	.737	.959	.842	.925	88.839
2S0X1	5,350	.973	.972	.975	.975	.964	.969	1.003	.989	.994	89.452
2T0X1	1,475	.994	.993	.995	.994	.993	.993	1.002	.999	.999	89.305
2T2X1	3,921	1.000	.999	1.000	.999	1.000	1.000	1.000	1.000	1.000	88.320
2T3X7	452	.973	.972	.975	.975	.964	.969	1.003	.989	.994	90.183
3D0X1	3,618	.636	.648	.594	.677	.500	.594	.917	.740	.878	89.079
3F0X1	3,197	.973	.972	.975	.975	.964	.969	1.003	.989	.994	90.227
3F5X1	353	.924	.925	.922	.933	.890	.914	.996	.954	.979	89.479
4A1X1	610	.924	.925	.922	.933	.890	.914	.996	.954	.979	84.461
4C0X1	396	.768	.775	.743	.796	.670	.737	.959	.842	.925	87.442
4J0X2	143	.875	.877	.865	.890	.817	.857	.987	.917	.962	86.453

Note. Qualification Rates represent the percentage of USAF accessions that would qualify for Administrative AFS. QR Adverse Impact Ratios are the minority group QR/majority group QR. QR=Qualification Rate, NHW=Non-Hispanic White, NHB=Non-Hispanic Black, HW=Hispanic-White, FSG=Mean predicted Final School Grade of the qualified group.

Table F.16. Projected Impact Results by AFS for Administrative Composite: MK+PC+WK+GS

AFSC	Sample Size	Qualification Rate						QR Adverse Impact Ratio			FSG
		Overall	Male	Female	NHW	NHB	HW	M/F	NHW/NHB	NHW/HW	
1C0X2	1,469	.878	.891	.825	.915	.770	.838	.926	.842	.917	88.394
1C3X1	818	.816	.835	.744	.864	.676	.763	.891	.782	.884	87.187
1N0X1	2,460	.639	.666	.535	.705	.445	.571	.803	.631	.810	88.265
1N2X1A	522	.430	.458	.320	.496	.235	.358	.699	.473	.722	90.835
1N2X1C	434	.430	.458	.320	.496	.235	.358	.699	.473	.722	91.479
2G0X1	405	.781	.802	.700	.834	.624	.724	.873	.748	.868	88.711
2S0X1	5,350	.976	.979	.964	.986	.947	.964	.985	.961	.978	89.421
2T0X1	1,475	.995	.995	.992	.998	.989	.992	.997	.991	.994	89.295
2T2X1	3,921	1.000	1.000	.999	1.000	.999	1.000	1.000	.999	1.000	88.320
2T3X7	452	.976	.979	.964	.986	.947	.964	.985	.961	.978	90.146
3D0X1	3,618	.639	.666	.535	.705	.445	.571	.803	.631	.810	88.976
3F0X1	3,197	.976	.979	.964	.986	.947	.964	.985	.961	.978	90.203
3F5X1	353	.926	.934	.892	.951	.853	.899	.955	.897	.945	89.403
4A1X1	610	.926	.934	.892	.951	.853	.899	.955	.897	.945	84.413
4C0X1	396	.781	.802	.700	.834	.624	.724	.873	.748	.868	87.374
4J0X2	143	.878	.891	.825	.915	.770	.838	.926	.842	.917	86.418

Note. Qualification Rates represent the percentage of USAF accessions that would qualify for Administrative AFS. QR Adverse Impact Ratios are the minority group QR/majority group QR. QR=Qualification Rate, NHW=Non-Hispanic White, NHB=Non-Hispanic Black, HW=Hispanic-White, FSG=Mean predicted Final School Grade of the qualified group.

Table F.17. Projected Impact Results by AFS for Administrative Composite: MK+PC+WK+AR

AFSC	Sample Size	Qualification Rate						QR Adverse Impact Ratio			FSG
		Overall	Male	Female	NHW	NHB	HW	M/F	NHW/NHB	NHW/HW	
1C0X2	1,469	.887	.897	.847	.909	.802	.874	.944	.882	.961	88.439
1C3X1	818	.811	.826	.752	.845	.683	.789	.910	.808	.934	87.269
1N0X1	2,460	.653	.676	.567	.705	.475	.614	.838	.674	.871	88.292
1N2X1A	522	.436	.461	.339	.493	.250	.383	.736	.507	.777	90.907
1N2X1C	434	.436	.461	.339	.493	.250	.383	.736	.507	.777	91.691
2G0X1	405	.789	.806	.725	.827	.652	.765	.900	.788	.925	88.875
2S0X1	5,350	.979	.980	.972	.983	.961	.977	.991	.978	.994	89.425
2T0X1	1,475	.995	.996	.995	.996	.992	.996	.999	.996	.999	89.300
2T2X1	3,921	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	88.320
2T3X7	452	.979	.980	.972	.983	.961	.977	.991	.978	.994	90.163
3D0X1	3,618	.653	.676	.567	.705	.475	.614	.838	.674	.871	89.051
3F0X1	3,197	.979	.980	.972	.983	.961	.977	.991	.978	.994	90.218
3F5X1	353	.933	.939	.909	.947	.878	.925	.968	.927	.976	89.470
4A1X1	610	.933	.939	.909	.947	.878	.925	.968	.927	.976	84.435
4C0X1	396	.789	.806	.725	.827	.652	.765	.900	.788	.925	87.364
4J0X2	143	.887	.897	.847	.909	.802	.874	.944	.882	.961	86.391

Note. Qualification Rates represent the percentage of USAF accessions that would qualify for Administrative AFS. QR Adverse Impact Ratios are the minority group QR/majority group QR. QR=Qualification Rate, NHW=Non-Hispanic White, NHB=Non-Hispanic Black, HW=Hispanic-White, FSG=Mean predicted Final School Grade of the qualified group.

Table F.18. Projected Impact Results by AFS for Administrative Composite: MK+PC+WK+AO

AFSC	Sample Size	Qualification Rate						QR Adverse Impact Ratio			FSG
		Overall	Male	Female	NHW	NHB	HW	M/F	NHW/NHB	NHW/HW	
1C0X2	1,469	.876	.876	.874	.876	.857	.894	.997	.978	1.020	88.077
1C3X1	818	.813	.817	.796	.827	.739	.827	.975	.894	1.000	86.921
1N0X1	2,460	.650	.663	.600	.687	.500	.638	.905	.728	.929	87.948
1N2X1A	522	.425	.443	.355	.476	.251	.388	.800	.528	.814	90.625
1N2X1C	434	.425	.443	.355	.476	.251	.388	.800	.528	.814	91.549
2G0X1	405	.779	.786	.754	.799	.684	.787	.959	.856	.986	88.452
2S0X1	5,350	.974	.975	.971	.976	.962	.978	.996	.986	1.001	89.409
2T0X1	1,475	.995	.995	.995	.995	.993	.995	1.000	.997	1.000	89.292
2T2X1	3,921	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	88.319
2T3X7	452	.974	.975	.971	.976	.962	.978	.996	.986	1.001	90.115
3D0X1	3,618	.650	.663	.600	.687	.500	.638	.905	.728	.929	88.690
3F0X1	3,197	.974	.975	.971	.976	.962	.978	.996	.986	1.001	90.217
3F5X1	353	.928	.929	.922	.930	.911	.937	.992	.980	1.008	89.467
4A1X1	610	.928	.929	.922	.930	.911	.937	.992	.980	1.008	84.249
4C0X1	396	.779	.786	.754	.799	.684	.787	.959	.856	.986	86.980
4J0X2	143	.876	.876	.874	.876	.857	.894	.997	.978	1.020	86.062

Note. Qualification Rates represent the percentage of USAF accessions that would qualify for Administrative AFS. QR Adverse Impact Ratios are the minority group QR/majority group QR. QR=Qualification Rate, NHW=Non-Hispanic White, NHB=Non-Hispanic Black, HW=Hispanic-White, FSG=Mean predicted Final School Grade of the qualified group.

Table F.19. Projected Impact Results by AFS for Administrative Composite: MK+PC+WK+AR+GS

AFSC	Sample Size	Qualification Rate						QR Adverse Impact Ratio			FSG
		Overall	Male	Female	NHW	NHB	HW	M/F	NHW/NHB	NHW/HW	
1C0X2	1,469	.879	.897	.810	.915	.757	.850	.903	.827	.929	88.434
1C3X1	818	.810	.835	.717	.860	.646	.771	.858	.751	.897	87.246
1N0X1	2,460	.642	.674	.520	.709	.428	.582	.771	.603	.821	88.308
1N2X1A	522	.424	.457	.300	.491	.218	.362	.657	.445	.738	90.975
1N2X1C	434	.424	.457	.300	.491	.218	.362	.657	.445	.738	91.615
2G0X1	405	.779	.806	.678	.833	.601	.735	.841	.722	.882	88.822
2S0X1	5,350	.976	.981	.956	.986	.939	.967	.974	.952	.981	89.430
2T0X1	1,475	.994	.995	.988	.997	.983	.991	.993	.985	.994	89.303
2T2X1	3,921	1.000	1.000	.999	1.000	.998	.999	.999	.998	1.000	88.321
2T3X7	452	.976	.981	.956	.986	.939	.967	.974	.952	.981	90.160
3D0X1	3,618	.642	.674	.520	.709	.428	.582	.771	.603	.821	89.044
3F0X1	3,197	.976	.981	.956	.986	.939	.967	.974	.952	.981	90.214
3F5X1	353	.930	.941	.886	.954	.848	.911	.941	.888	.955	89.431
4A1X1	610	.930	.941	.886	.954	.848	.911	.941	.888	.955	84.423
4C0X1	396	.779	.806	.678	.833	.601	.735	.841	.722	.882	87.370
4J0X2	143	.879	.897	.810	.915	.757	.850	.903	.827	.929	86.426

Note. Qualification Rates represent the percentage of USAF accessions that would qualify for Administrative AFS. QR Adverse Impact Ratios are the minority group QR/majority group QR. QR=Qualification Rate, NHW=Non-Hispanic White, NHB=Non-Hispanic Black, HW=Hispanic-White, FSG=Mean predicted Final School Grade of the qualified group.

Table F.20. Projected Impact Results by AFS for Administrative Composite: MK+PC+WK+AO+GS

AFSC	Sample Size	Qualification Rate						QR Adverse Impact Ratio			FSG
		Overall	Male	Female	NHW	NHB	HW	M/F	NHW/NHB	NHW/HW	
1C0X2	1,469	.876	.880	.860	.885	.829	.886	.978	.937	1.002	88.152
1C3X1	818	.814	.824	.775	.837	.715	.815	.941	.853	.973	86.946
1N0X1	2,460	.649	.671	.564	.700	.468	.620	.841	.669	.886	87.956
1N2X1A	522	.418	.444	.315	.478	.225	.366	.708	.470	.765	90.721
1N2X1C	434	.418	.444	.315	.478	.225	.366	.708	.470	.765	91.495
2G0X1	405	.775	.789	.724	.807	.651	.769	.917	.806	.953	88.449
2S0X1	5,350	.974	.976	.963	.978	.957	.975	.987	.979	.997	89.408
2T0X1	1,475	.994	.995	.991	.996	.988	.994	.996	.993	.999	89.293
2T2X1	3,921	1.000	1.000	.999	1.000	.999	.999	1.000	.999	1.000	88.320
2T3X7	452	.974	.976	.963	.978	.957	.975	.987	.979	.997	90.109
3D0X1	3,618	.649	.671	.564	.700	.468	.620	.841	.669	.886	88.681
3F0X1	3,197	.974	.976	.963	.978	.957	.975	.987	.979	.997	90.212
3F5X1	353	.925	.928	.913	.930	.902	.934	.983	.970	1.004	89.463
4A1X1	610	.925	.928	.913	.930	.902	.934	.983	.970	1.004	84.251
4C0X1	396	.775	.789	.724	.807	.651	.769	.917	.806	.953	87.012
4J0X2	143	.876	.880	.860	.885	.829	.886	.978	.937	1.002	86.170

Note. Qualification Rates represent the percentage of USAF accessions that would qualify for Administrative AFS. QR Adverse Impact Ratios are the minority group QR/majority group QR. QR=Qualification Rate, NHW=Non-Hispanic White, NHB=Non-Hispanic Black, HW=Hispanic-White, FSG=Mean predicted Final School Grade of the qualified group.

Table F.21. Projected Impact Results by AFS for Administrative Composite: MK+PC+WK+AO+AR

AFSC	Sample Size	Qualification Rate						QR Adverse Impact Ratio			FSG
		Overall	Male	Female	NHW	NHB	HW	M/F	NHW/NHB	NHW/HW	
1C0X2	1,469	.877	.880	.866	.881	.844	.896	.984	.958	1.017	88.141
1C3X1	818	.815	.823	.785	.830	.732	.833	.953	.882	1.004	86.948
1N0X1	2,460	.638	.657	.565	.679	.468	.630	.860	.688	.927	88.028
1N2X1A	522	.430	.454	.337	.482	.243	.395	.742	.504	.819	90.702
1N2X1C	434	.430	.454	.337	.482	.243	.395	.742	.504	.819	91.620
2G0X1	405	.776	.787	.733	.798	.665	.790	.931	.834	.990	88.536
2S0X1	5,350	.973	.975	.966	.976	.958	.977	.990	.982	1.001	89.417
2T0X1	1,475	.995	.995	.992	.995	.991	.996	.997	.995	1.000	89.296
2T2X1	3,921	1.000	1.000	.999	1.000	.999	1.000	1.000	1.000	1.000	88.320
2T3X7	452	.973	.975	.966	.976	.958	.977	.990	.982	1.001	90.124
3D0X1	3,618	.638	.657	.565	.679	.468	.630	.860	.688	.927	88.784
3F0X1	3,197	.973	.975	.966	.976	.958	.977	.990	.982	1.001	90.226
3F5X1	353	.926	.929	.917	.929	.907	.937	.987	.976	1.009	89.478
4A1X1	610	.926	.929	.917	.929	.907	.937	.987	.976	1.009	84.256
4C0X1	396	.776	.787	.733	.798	.665	.790	.931	.834	.990	86.995
4J0X2	143	.877	.880	.866	.881	.844	.896	.984	.958	1.017	86.130

Note. Qualification Rates represent the percentage of USAF accessions that would qualify for Administrative AFS. QR Adverse Impact Ratios are the minority group QR/majority group QR. QR=Qualification Rate, NHW=Non-Hispanic White, NHB=Non-Hispanic Black, HW=Hispanic-White, FSG=Mean predicted Final School Grade of the qualified group.

Table F.22. Projected Impact Results by AFS for Administrative Composite: MK+PC+WK+AO+AR+GS

AFSC	Sample Size	Qualification Rate						QR Adverse Impact Ratio			FSG
		Overall	Male	Female	NHW	NHB	HW	M/F	NHW/NHB	NHW/HW	
1C0X2	1,469	.876	.884	.845	.890	.809	.886	.957	.909	.996	88.221
1C3X1	818	.807	.822	.751	.835	.688	.810	.913	.823	.970	87.029
1N0X1	2,460	.642	.669	.542	.695	.446	.619	.810	.642	.891	88.032
1N2X1A	522	.422	.452	.306	.483	.220	.374	.679	.455	.775	90.786
1N2X1C	434	.422	.452	.306	.483	.220	.374	.679	.455	.775	91.573
2G0X1	405	.771	.789	.701	.805	.628	.768	.888	.780	.954	88.563
2S0X1	5,350	.974	.977	.961	.978	.955	.975	.984	.976	.997	89.414
2T0X1	1,475	.994	.996	.990	.996	.988	.995	.994	.992	.998	89.295
2T2X1	3,921	1.000	1.000	.999	1.000	.999	1.000	.999	.999	1.000	88.320
2T3X7	452	.974	.977	.961	.978	.955	.975	.984	.976	.997	90.117
3D0X1	3,618	.642	.669	.542	.695	.446	.619	.810	.642	.891	88.771
3F0X1	3,197	.974	.977	.961	.978	.955	.975	.984	.976	.997	90.219
3F5X1	353	.926	.930	.908	.932	.893	.935	.976	.958	1.004	89.475
4A1X1	610	.926	.930	.908	.932	.893	.935	.976	.958	1.004	84.273
4C0X1	396	.771	.789	.701	.805	.628	.768	.888	.780	.954	87.073
4J0X2	143	.876	.884	.845	.890	.809	.886	.957	.909	.996	86.238

Note. Qualification Rates represent the percentage of USAF accessions that would qualify for Administrative AFS. QR Adverse Impact Ratios are the minority group QR/majority group QR. QR=Qualification Rate, NHW=Non-Hispanic White, NHB=Non-Hispanic Black, HW=Hispanic-White, FSG=Mean predicted Final School Grade of the qualified group.

Table F.23. Projected Impact Results by AFS for General Composite: Current Composite

AFSC	Sample Size	Qualification Rate						QR Adverse Impact Ratio			FSG
		Overall	Male	Female	NHW	NHB	HW	M/F	NHW/NHB	NHW/HW	
1A0X1	364	.718	.747	.605	.775	.521	.682	.809	.673	.880	94.679
1A2X1	887	.678	.709	.560	.739	.474	.637	.789	.641	.862	94.352
1A8X1	1,316	.410	.442	.289	.475	.211	.353	.653	.445	.744	89.595
1A8X2	260	.410	.442	.289	.475	.211	.353	.653	.445	.744	91.715
1C1X1	2,644	.718	.747	.605	.775	.521	.682	.809	.673	.880	85.743
1C2X1	412	.718	.747	.605	.775	.521	.682	.809	.673	.880	86.107
1C3X1	818	.678	.709	.560	.739	.474	.637	.789	.641	.862	87.643
1C4X1	873	.829	.852	.739	.872	.676	.807	.867	.776	.925	84.284
1C5X1	902	.718	.747	.605	.775	.521	.682	.809	.673	.880	88.668
1C7X1	662	.829	.852	.739	.872	.676	.806	.867	.776	.925	85.660
1N1X1A	2,205	.520	.553	.392	.587	.306	.464	.708	.521	.790	88.788
1N3X1	2,476	.410	.442	.289	.475	.211	.353	.653	.445	.744	87.705
1N4X1A	917	.598	.630	.473	.664	.384	.548	.751	.578	.826	93.239
1N4X1B	448	.598	.630	.473	.664	.384	.548	.751	.578	.826	91.414
1T2X1	356	.889	.906	.822	.920	.777	.876	.907	.844	.953	82.453
1W0X1	1,960	.520	.553	.392	.587	.306	.464	.708	.521	.790	89.055
2F0X1	2,876	.951	.961	.913	.968	.890	.944	.950	.919	.975	89.858
2R0X1	507	.718	.747	.605	.775	.521	.682	.809	.673	.880	89.049
2R1X1	702	.889	.906	.822	.920	.777	.876	.907	.844	.953	88.307
2S0X1	5,350	.889	.906	.822	.920	.777	.876	.907	.844	.953	89.688
2W0X1	5,577	.678	.709	.560	.739	.474	.637	.789	.641	.862	90.052
3D0X2	227	.558	.591	.431	.625	.344	.504	.729	.550	.806	86.519
3D0X4	248	.558	.591	.431	.625	.344	.504	.729	.550	.806	87.835
3E4X3	175	.951	.961	.913	.968	.890	.944	.950	.919	.975	92.265
3E5X1	629	.829	.852	.739	.872	.676	.807	.867	.776	.925	85.888
3E6X1	383	.889	.906	.822	.920	.777	.876	.907	.844	.953	87.871
3E7X1	3,384	.951	.961	.913	.968	.890	.944	.950	.919	.975	89.671
3E8X1	231	.558	.591	.431	.625	.344	.504	.729	.550	.806	93.003
3E9X1	162	.598	.630	.473	.664	.384	.548	.751	.578	.826	88.730
3F1X1	3,751	.998	.999	.997	.999	.996	.998	.998	.996	.999	85.706
3P0X1	29,141	.991	.994	.980	.995	.976	.990	.986	.981	.994	84.654
4A0X1	1,383	.889	.906	.822	.920	.777	.876	.907	.844	.953	86.917
4D0X1	164	.889	.906	.822	.920	.777	.876	.907	.844	.953	83.238
4Y0X1	1,029	.889	.906	.822	.920	.777	.876	.907	.844	.953	85.891
4Y0X2	128	.520	.553	.392	.587	.306	.464	.708	.521	.790	88.107
6C0X1	1,118	.410	.442	.289	.475	.211	.353	.653	.445	.744	85.219
6F0X1	1,804	.678	.709	.560	.739	.474	.637	.789	.641	.862	89.340

Note. Qualification Rates represent the percentage of USAF accessions that would qualify for General AFS. QR Adverse Impact Ratios are the minority group QR/majority group QR. QR=Qualification Rate, NHW=Non-Hispanic White, NHB=Non-Hispanic Black, HW=Hispanic-White, FSG=Mean predicted Final School Grade of the qualified group.

Table F.24. Projected Impact Results by AFS for General Composite: AR+PC+WK+MK

AFSC	Sample Size	Qualification Rate						QR Adverse Impact Ratio			FSG
		Overall	Male	Female	NHW	NHB	HW	M/F	NHW/NHB	NHW/HW	
1A0X1	364	.722	.742	.645	.768	.560	.688	.870	.729	.896	94.636
1A2X1	887	.699	.720	.619	.747	.530	.664	.859	.710	.889	94.370
1A8X1	1,316	.416	.441	.321	.473	.233	.363	.728	.492	.768	89.492
1A8X2	260	.416	.441	.321	.473	.233	.363	.728	.492	.768	91.641
1C1X1	2,644	.722	.742	.645	.768	.560	.688	.870	.729	.896	85.776
1C2X1	412	.722	.742	.645	.768	.560	.688	.870	.729	.896	86.260
1C3X1	818	.699	.720	.619	.747	.530	.664	.859	.710	.889	87.647
1C4X1	873	.832	.847	.778	.863	.716	.813	.919	.829	.942	84.265
1C5X1	902	.722	.742	.645	.768	.560	.688	.870	.729	.896	88.710
1C7X1	662	.832	.847	.778	.863	.716	.813	.919	.829	.942	85.682
1N1X1A	2,205	.521	.546	.423	.578	.330	.471	.775	.571	.815	88.822
1N3X1	2,476	.416	.441	.321	.473	.233	.363	.728	.492	.768	87.690
1N4X1A	917	.609	.632	.518	.664	.423	.564	.819	.637	.849	93.271
1N4X1B	448	.609	.632	.518	.664	.423	.564	.819	.637	.849	91.413
1T2X1	356	.900	.910	.865	.920	.823	.889	.951	.895	.966	82.517
1W0X1	1,960	.521	.546	.423	.578	.330	.471	.775	.571	.815	89.086
2F0X1	2,876	.953	.957	.936	.963	.913	.948	.978	.948	.985	89.869
2R0X1	507	.722	.742	.645	.768	.560	.688	.870	.729	.896	89.106
2R1X1	702	.900	.910	.865	.920	.823	.889	.951	.895	.966	88.283
2S0X1	5,350	.900	.910	.865	.920	.823	.889	.951	.895	.966	89.721
2W0X1	5,577	.699	.720	.619	.747	.530	.664	.859	.710	.889	90.026
3D0X2	227	.565	.590	.470	.621	.375	.518	.797	.604	.833	86.474
3D0X4	248	.565	.590	.470	.621	.375	.518	.797	.604	.833	87.986
3E4X3	175	.953	.957	.936	.963	.913	.948	.978	.948	.985	92.280
3E5X1	629	.832	.847	.778	.863	.716	.813	.919	.829	.942	85.905
3E6X1	383	.900	.910	.865	.920	.823	.889	.951	.895	.966	87.876
3E7X1	3,384	.953	.957	.936	.963	.913	.948	.978	.948	.985	89.655
3E8X1	231	.565	.590	.470	.621	.375	.518	.797	.604	.833	93.004
3E9X1	162	.609	.632	.518	.664	.423	.564	.819	.637	.849	88.738
3F1X1	3,751	.999	.999	.999	.999	.999	.999	1.000	1.000	1.000	85.706
3P0X1	29,141	.991	.992	.989	.993	.984	.991	.997	.992	.999	84.659
4A0X1	1,383	.900	.910	.865	.920	.823	.889	.951	.895	.966	86.915
4D0X1	164	.900	.910	.865	.920	.823	.889	.951	.895	.966	83.244
4Y0X1	1,029	.900	.910	.865	.920	.823	.889	.951	.895	.966	85.883
4Y0X2	128	.521	.546	.423	.578	.330	.471	.775	.571	.815	88.088
6C0X1	1,118	.416	.441	.321	.473	.233	.363	.728	.492	.768	85.296
6F0X1	1,804	.699	.720	.619	.747	.530	.664	.859	.710	.889	89.344

Note. Qualification Rates represent the percentage of USAF accessions that would qualify for General AFS. QR Adverse Impact Ratios are the minority group QR/majority group QR. QR=Qualification Rate, NHW=Non-Hispanic White, NHB=Non-Hispanic Black, HW=Hispanic-White, FSG=Mean predicted Final School Grade of the qualified group.

Table F.25. Projected Impact Results by AFS for General Composite: AR+PC+WK+AO

AFSC	Sample Size	Qualification Rate						QR Adverse Impact Ratio			FSG
		Overall	Male	Female	NHW	NHB	HW	M/F	NHW/NHB	NHW/HW	
1A0X1	364	.730	.748	.661	.767	.575	.731	.884	.750	.953	94.437
1A2X1	887	.682	.703	.601	.726	.507	.674	.856	.698	.928	94.269
1A8X1	1,316	.419	.446	.314	.480	.219	.377	.703	.456	.786	89.636
1A8X2	260	.419	.446	.314	.480	.219	.377	.703	.456	.786	91.446
1C1X1	2,644	.730	.748	.661	.767	.575	.731	.884	.750	.953	85.422
1C2X1	412	.730	.748	.661	.767	.575	.731	.884	.750	.953	85.691
1C3X1	818	.682	.703	.601	.726	.507	.674	.856	.698	.928	87.379
1C4X1	873	.833	.840	.802	.848	.755	.848	.954	.890	1.001	83.879
1C5X1	902	.730	.748	.661	.767	.575	.731	.884	.750	.953	88.225
1C7X1	662	.833	.840	.802	.848	.755	.848	.954	.890	1.001	85.381
1N1X1A	2,205	.533	.560	.431	.592	.327	.501	.770	.552	.846	88.626
1N3X1	2,476	.419	.446	.314	.480	.219	.377	.703	.456	.786	87.626
1N4X1A	917	.609	.634	.515	.663	.412	.589	.812	.622	.888	93.052
1N4X1B	448	.609	.634	.515	.663	.412	.589	.812	.622	.888	91.183
1T2X1	356	.890	.891	.885	.890	.877	.907	.993	.985	1.019	82.356
1W0X1	1,960	.533	.560	.431	.592	.327	.501	.770	.552	.846	88.743
2F0X1	2,876	.953	.956	.943	.957	.934	.959	.986	.976	1.002	89.780
2R0X1	507	.730	.748	.661	.767	.575	.731	.884	.750	.953	88.761
2R1X1	702	.890	.891	.885	.890	.877	.907	.993	.985	1.019	88.079
2S0X1	5,350	.890	.891	.885	.890	.877	.907	.993	.985	1.019	89.445
2W0X1	5,577	.682	.703	.601	.726	.507	.674	.856	.698	.928	89.754
3D0X2	227	.572	.597	.472	.628	.368	.545	.790	.586	.867	86.056
3D0X4	248	.572	.597	.472	.628	.368	.545	.790	.586	.867	87.989
3E4X3	175	.953	.956	.943	.957	.934	.959	.986	.976	1.002	92.195
3E5X1	629	.833	.840	.802	.848	.755	.848	.954	.890	1.001	85.567
3E6X1	383	.890	.891	.885	.890	.877	.907	.993	.985	1.019	87.578
3E7X1	3,384	.953	.956	.943	.957	.934	.959	.986	.976	1.002	89.610
3E8X1	231	.572	.597	.472	.628	.368	.545	.790	.586	.867	92.900
3E9X1	162	.609	.634	.515	.663	.412	.589	.812	.622	.888	88.303
3F1X1	3,751	.999	.999	.998	.999	.997	.999	.999	.998	1.000	85.706
3P0X1	29,141	.992	.992	.988	.993	.985	.993	.996	.992	1.000	84.643
4A0X1	1,383	.890	.891	.885	.890	.877	.907	.993	.985	1.019	86.608
4D0X1	164	.890	.891	.885	.890	.877	.907	.993	.985	1.019	83.021
4Y0X1	1,029	.890	.891	.885	.890	.877	.907	.993	.985	1.019	85.549
4Y0X2	128	.533	.560	.431	.592	.327	.501	.770	.552	.846	87.658
6C0X1	1,118	.419	.446	.314	.480	.219	.377	.703	.456	.786	84.875
6F0X1	1,804	.682	.703	.601	.726	.507	.674	.856	.698	.928	89.241

Note. Qualification Rates represent the percentage of USAF accessions that would qualify for General AFS. QR Adverse Impact Ratios are the minority group QR/majority group QR. QR=Qualification Rate, NHW=Non-Hispanic White, NHB=Non-Hispanic Black, HW=Hispanic-White, FSG=Mean predicted Final School Grade of the qualified group.

Table F.26. Projected Impact Results by AFS for General Composite: AR+PC+WK+GS

AFSC	Sample Size	Qualification Rate						QR Adverse Impact Ratio			FSG
		Overall	Male	Female	NHW	NHB	HW	M/F	NHW/NHB	NHW/HW	
1A0X1	364	.719	.753	.589	.791	.505	.654	.782	.638	.827	94.645
1A2X1	887	.680	.716	.544	.755	.458	.611	.760	.606	.809	94.349
1A8X1	1,316	.425	.461	.287	.499	.209	.353	.622	.420	.708	89.629
1A8X2	260	.425	.461	.287	.499	.209	.353	.622	.420	.708	91.473
1C1X1	2,644	.719	.753	.589	.791	.505	.654	.782	.638	.827	85.712
1C2X1	412	.719	.753	.589	.791	.505	.654	.782	.638	.827	86.252
1C3X1	818	.680	.716	.544	.755	.458	.611	.760	.606	.809	87.617
1C4X1	873	.842	.868	.745	.895	.681	.799	.858	.760	.893	84.378
1C5X1	902	.719	.753	.589	.791	.505	.654	.782	.638	.827	88.738
1C7X1	662	.842	.868	.745	.895	.681	.799	.858	.760	.893	85.583
1N1X1A	2,205	.521	.559	.375	.599	.289	.448	.671	.482	.748	88.803
1N3X1	2,476	.425	.461	.287	.499	.209	.353	.622	.420	.708	87.680
1N4X1A	917	.600	.637	.457	.678	.368	.527	.717	.543	.776	93.219
1N4X1B	448	.600	.637	.457	.678	.368	.527	.717	.543	.776	91.331
1T2X1	356	.897	.916	.823	.937	.776	.865	.899	.828	.923	82.611
1W0X1	1,960	.521	.559	.375	.599	.289	.448	.671	.482	.748	89.034
2F0X1	2,876	.954	.964	.915	.976	.886	.936	.949	.908	.958	89.859
2R0X1	507	.719	.753	.589	.791	.505	.654	.782	.638	.827	88.965
2R1X1	702	.897	.916	.823	.937	.776	.865	.899	.828	.923	88.216
2S0X1	5,350	.897	.916	.823	.937	.776	.865	.899	.828	.923	89.650
2W0X1	5,577	.680	.716	.544	.755	.458	.611	.760	.606	.809	90.076
3D0X2	227	.560	.598	.414	.639	.327	.488	.692	.511	.764	86.543
3D0X4	248	.560	.598	.414	.639	.327	.488	.692	.511	.764	87.929
3E4X3	175	.954	.964	.915	.976	.886	.936	.949	.908	.958	92.308
3E5X1	629	.842	.868	.745	.895	.681	.799	.858	.760	.893	85.872
3E6X1	383	.897	.916	.823	.937	.776	.865	.899	.828	.923	87.839
3E7X1	3,384	.954	.964	.915	.976	.886	.936	.949	.908	.958	89.676
3E8X1	231	.560	.598	.414	.639	.327	.488	.692	.511	.764	93.047
3E9X1	162	.600	.637	.457	.678	.368	.527	.717	.543	.776	88.805
3F1X1	3,751	.999	.999	.997	1.000	.996	.998	.998	.996	.998	85.708
3P0X1	29,141	.991	.994	.982	.997	.975	.987	.988	.978	.990	84.661
4A0X1	1,383	.897	.916	.823	.937	.776	.865	.899	.828	.923	86.895
4D0X1	164	.897	.916	.823	.937	.776	.865	.899	.828	.923	83.154
4Y0X1	1,029	.897	.916	.823	.937	.776	.865	.899	.828	.923	85.857
4Y0X2	128	.521	.559	.375	.599	.289	.448	.671	.482	.748	87.939
6C0X1	1,118	.425	.461	.287	.499	.209	.353	.622	.420	.708	85.019
6F0X1	1,804	.680	.716	.544	.755	.458	.611	.760	.606	.809	89.198

Note. Qualification Rates represent the percentage of USAF accessions that would qualify for General AFS. QR Adverse Impact Ratios are the minority group QR/majority group QR. QR=Qualification Rate, NHW=Non-Hispanic White, NHB=Non-Hispanic Black, HW=Hispanic-White, FSG=Mean predicted Final School Grade of the qualified group.

Table F.27. Projected Impact Results by AFS for General Composite: AR+PC+WK+AO+MK

AFSC	Sample Size	Qualification Rate						QR Adverse Impact Ratio			FSG
		Overall	Male	Female	NHW	NHB	HW	M/F	NHW/NHB	NHW/HW	
1A0X1	364	.727	.742	.670	.756	.590	.733	.904	.780	.969	94.425
1A2X1	887	.684	.701	.619	.720	.528	.683	.882	.733	.949	94.311
1A8X1	1,316	.414	.438	.321	.466	.228	.378	.733	.488	.810	89.566
1A8X2	260	.414	.438	.321	.466	.228	.378	.733	.488	.810	91.508
1C1X1	2,644	.727	.742	.670	.756	.590	.733	.904	.780	.969	85.477
1C2X1	412	.727	.742	.670	.756	.590	.733	.904	.780	.969	85.808
1C3X1	818	.684	.701	.619	.720	.528	.683	.882	.733	.949	87.418
1C4X1	873	.832	.838	.807	.843	.762	.851	.963	.903	1.009	83.891
1C5X1	902	.727	.742	.670	.756	.590	.733	.904	.780	.969	88.282
1C7X1	662	.832	.838	.807	.843	.762	.851	.963	.903	1.009	85.437
1N1X1A	2,205	.526	.549	.438	.575	.337	.502	.799	.585	.872	88.695
1N3X1	2,476	.414	.438	.321	.466	.228	.378	.733	.488	.810	87.644
1N4X1A	917	.607	.628	.529	.651	.427	.594	.843	.655	.912	93.118
1N4X1B	448	.607	.628	.529	.651	.427	.594	.843	.655	.912	91.238
1T2X1	356	.891	.893	.883	.893	.867	.908	.988	.970	1.017	82.358
1W0X1	1,960	.526	.549	.438	.575	.337	.502	.799	.585	.872	88.849
2F0X1	2,876	.951	.954	.941	.955	.932	.958	.987	.975	1.003	89.791
2R0X1	507	.727	.742	.670	.756	.590	.733	.904	.780	.969	88.839
2R1X1	702	.891	.893	.883	.893	.867	.908	.988	.970	1.017	88.114
2S0X1	5,350	.891	.893	.883	.893	.867	.908	.988	.970	1.017	89.492
2W0X1	5,577	.684	.701	.619	.720	.528	.683	.882	.733	.949	89.785
3D0X2	227	.559	.581	.473	.606	.372	.539	.815	.613	.889	86.114
3D0X4	248	.559	.581	.473	.606	.372	.539	.815	.613	.889	88.138
3E4X3	175	.951	.954	.941	.955	.932	.958	.987	.975	1.003	92.211
3E5X1	629	.832	.838	.807	.843	.762	.851	.963	.903	1.009	85.615
3E6X1	383	.891	.893	.883	.893	.867	.908	.988	.970	1.017	87.623
3E7X1	3,384	.951	.954	.941	.955	.932	.958	.987	.975	1.003	89.613
3E8X1	231	.559	.581	.473	.606	.372	.539	.815	.613	.889	92.928
3E9X1	162	.607	.628	.529	.651	.427	.594	.843	.655	.912	88.384
3F1X1	3,751	.999	.999	.998	.999	.998	.999	1.000	.999	1.000	85.707
3P0X1	29,141	.991	.992	.988	.993	.985	.993	.995	.992	1.000	84.647
4A0X1	1,383	.891	.893	.883	.893	.867	.908	.988	.970	1.017	86.655
4D0X1	164	.891	.893	.883	.893	.867	.908	.988	.970	1.017	83.076
4Y0X1	1,029	.891	.893	.883	.893	.867	.908	.988	.970	1.017	85.602
4Y0X2	128	.526	.549	.438	.575	.337	.502	.799	.585	.872	87.750
6C0X1	1,118	.414	.438	.321	.466	.228	.378	.733	.488	.810	85.032
6F0X1	1,804	.684	.701	.619	.720	.528	.683	.882	.733	.949	89.310

Note. Qualification Rates represent the percentage of USAF accessions that would qualify for General AFS. QR Adverse Impact Ratios are the minority group QR/majority group QR. QR=Qualification Rate, NHW=Non-Hispanic White, NHB=Non-Hispanic Black, HW=Hispanic-White, FSG=Mean predicted Final School Grade of the qualified group.

Table F.28. Projected Impact Results by AFS for General Composite: AR+PC+WK+GS+MK

AFSC	Sample Size	Qualification Rate						QR Adverse Impact Ratio			FSG
		Overall	Male	Female	NHW	NHB	HW	M/F	NHW/NHB	NHW/HW	
1A0X1	364	.729	.757	.619	.789	.533	.677	.817	.676	.859	94.608
1A2X1	887	.694	.724	.579	.757	.490	.640	.799	.647	.845	94.385
1A8X1	1,316	.424	.457	.300	.491	.218	.362	.657	.445	.738	89.557
1A8X2	260	.424	.457	.300	.491	.218	.362	.657	.445	.738	91.531
1C1X1	2,644	.729	.757	.619	.789	.533	.677	.817	.676	.859	85.734
1C2X1	412	.729	.757	.619	.789	.533	.677	.817	.676	.859	86.337
1C3X1	818	.694	.724	.579	.757	.490	.640	.799	.647	.845	87.635
1C4X1	873	.840	.862	.755	.884	.692	.804	.876	.783	.910	84.356
1C5X1	902	.729	.757	.619	.789	.533	.677	.817	.676	.859	88.752
1C7X1	662	.840	.862	.755	.884	.692	.804	.876	.783	.910	85.654
1N1X1A	2,205	.522	.555	.393	.591	.303	.458	.707	.512	.776	88.854
1N3X1	2,476	.424	.457	.300	.491	.218	.362	.657	.445	.738	87.692
1N4X1A	917	.607	.640	.481	.675	.390	.547	.751	.578	.810	93.268
1N4X1B	448	.607	.640	.481	.675	.390	.547	.751	.578	.810	91.376
1T2X1	356	.890	.907	.826	.924	.777	.863	.911	.841	.934	82.579
1W0X1	1,960	.522	.555	.393	.591	.303	.458	.707	.512	.776	89.116
2F0X1	2,876	.953	.961	.919	.971	.891	.939	.956	.918	.967	89.880
2R0X1	507	.729	.757	.619	.789	.533	.677	.817	.676	.859	89.029
2R1X1	702	.890	.907	.826	.924	.777	.863	.911	.841	.934	88.271
2S0X1	5,350	.890	.907	.826	.924	.777	.863	.911	.841	.934	89.740
2W0X1	5,577	.694	.724	.579	.757	.490	.640	.799	.647	.845	90.076
3D0X2	227	.573	.607	.444	.642	.353	.511	.732	.549	.795	86.479
3D0X4	248	.573	.607	.444	.642	.353	.511	.732	.549	.795	88.044
3E4X3	175	.953	.961	.919	.971	.891	.939	.956	.918	.967	92.333
3E5X1	629	.840	.862	.755	.884	.692	.804	.876	.783	.910	85.926
3E6X1	383	.890	.907	.826	.924	.777	.863	.911	.841	.934	87.907
3E7X1	3,384	.953	.961	.919	.971	.891	.939	.956	.918	.967	89.676
3E8X1	231	.573	.607	.444	.642	.353	.511	.732	.549	.795	93.023
3E9X1	162	.607	.640	.481	.675	.390	.547	.751	.578	.810	88.845
3F1X1	3,751	.999	.999	.998	1.000	.997	.999	.998	.997	.999	85.707
3P0X1	29,141	.992	.994	.984	.996	.978	.989	.990	.981	.992	84.659
4A0X1	1,383	.890	.907	.826	.924	.777	.863	.911	.841	.934	86.956
4D0X1	164	.890	.907	.826	.924	.777	.863	.911	.841	.934	83.255
4Y0X1	1,029	.890	.907	.826	.924	.777	.863	.911	.841	.934	85.930
4Y0X2	128	.522	.555	.393	.591	.303	.458	.707	.512	.776	88.026
6C0X1	1,118	.424	.457	.300	.491	.218	.362	.657	.445	.738	85.160
6F0X1	1,804	.694	.724	.579	.757	.490	.640	.799	.647	.845	89.263

Note. Qualification Rates represent the percentage of USAF accessions that would qualify for General AFS. QR Adverse Impact Ratios are the minority group QR/majority group QR. QR=Qualification Rate, NHW=Non-Hispanic White, NHB=Non-Hispanic Black, HW=Hispanic-White, FSG=Mean predicted Final School Grade of the qualified group.

Table F.29. Projected Impact Results by AFS for General Composite: AR+PC+WK+AO+GS

AFSC	Sample Size	Qualification Rate						QR Adverse Impact Ratio			FSG
		Overall	Male	Female	NHW	NHB	HW	M/F	NHW/NHB	NHW/HW	
1A0X1	364	.725	.750	.632	.774	.548	.710	.843	.708	.918	94.445
1A2X1	887	.687	.715	.582	.742	.491	.666	.815	.662	.897	94.281
1A8X1	1,316	.414	.447	.288	.481	.203	.359	.646	.422	.747	89.693
1A8X2	260	.414	.447	.288	.481	.203	.359	.646	.422	.747	91.448
1C1X1	2,644	.725	.750	.632	.774	.548	.710	.843	.708	.918	85.462
1C2X1	412	.725	.750	.632	.774	.548	.710	.843	.708	.918	85.828
1C3X1	818	.687	.715	.582	.742	.491	.666	.815	.662	.897	87.367
1C4X1	873	.831	.844	.782	.856	.730	.836	.926	.853	.977	83.992
1C5X1	902	.725	.750	.632	.774	.548	.710	.843	.708	.918	88.324
1C7X1	662	.831	.844	.782	.856	.730	.836	.926	.853	.977	85.437
1N1X1A	2,205	.531	.564	.404	.599	.307	.485	.716	.513	.809	88.686
1N3X1	2,476	.414	.447	.288	.481	.203	.359	.646	.422	.747	87.671
1N4X1A	917	.604	.635	.485	.668	.387	.567	.763	.579	.849	93.093
1N4X1B	448	.604	.635	.485	.668	.387	.567	.763	.579	.849	91.191
1T2X1	356	.889	.895	.868	.899	.844	.901	.970	.939	1.002	82.395
1W0X1	1,960	.531	.564	.404	.599	.307	.485	.716	.513	.809	88.811
2F0X1	2,876	.954	.958	.938	.959	.929	.958	.979	.969	.999	89.785
2R0X1	507	.725	.750	.632	.774	.548	.710	.843	.708	.918	88.770
2R1X1	702	.889	.895	.868	.899	.844	.901	.970	.939	1.002	88.128
2S0X1	5,350	.889	.895	.868	.899	.844	.901	.970	.939	1.002	89.512
2W0X1	5,577	.687	.715	.582	.742	.491	.666	.815	.662	.897	89.781
3D0X2	227	.561	.593	.435	.628	.337	.517	.733	.536	.823	86.171
3D0X4	248	.561	.593	.435	.628	.337	.517	.733	.536	.823	88.095
3E4X3	175	.954	.958	.938	.959	.929	.958	.979	.969	.999	92.219
3E5X1	629	.831	.844	.782	.856	.730	.836	.926	.853	.977	85.640
3E6X1	383	.889	.895	.868	.899	.844	.901	.970	.939	1.002	87.651
3E7X1	3,384	.954	.958	.938	.959	.929	.958	.979	.969	.999	89.616
3E8X1	231	.561	.593	.435	.628	.337	.517	.733	.536	.823	92.958
3E9X1	162	.604	.635	.485	.668	.387	.567	.763	.579	.849	88.448
3F1X1	3,751	.999	.999	.997	.999	.996	.999	.998	.997	.999	85.707
3P0X1	29,141	.992	.993	.985	.994	.982	.992	.992	.988	.997	84.645
4A0X1	1,383	.889	.895	.868	.899	.844	.901	.970	.939	1.002	86.693
4D0X1	164	.889	.895	.868	.899	.844	.901	.970	.939	1.002	83.101
4Y0X1	1,029	.889	.895	.868	.899	.844	.901	.970	.939	1.002	85.642
4Y0X2	128	.531	.564	.404	.599	.307	.485	.716	.513	.809	87.645
6C0X1	1,118	.414	.447	.288	.481	.203	.359	.646	.422	.747	84.907
6F0X1	1,804	.687	.715	.582	.742	.491	.666	.815	.662	.897	89.178

Note. Qualification Rates represent the percentage of USAF accessions that would qualify for General AFS. QR Adverse Impact Ratios are the minority group QR/majority group QR. QR=Qualification Rate, NHW=Non-Hispanic White, NHB=Non-Hispanic Black, HW=Hispanic-White, FSG=Mean predicted Final School Grade of the qualified group.

Table F.30. Projected Impact Results by AFS for General Composite: AR+PC+WK+AO+GS+MK

AFSC	Sample Size	Qualification Rate						QR Adverse Impact Ratio			FSG
		Overall	Male	Female	NHW	NHB	HW	M/F	NHW/NHB	NHW/HW	
1A0X1	364	.728	.749	.645	.770	.561	.717	.860	.728	.932	94.444
1A2X1	887	.681	.705	.587	.729	.495	.664	.832	.680	.911	94.337
1A8X1	1,316	.422	.452	.306	.483	.220	.374	.679	.455	.775	89.624
1A8X2	260	.422	.452	.306	.483	.220	.374	.679	.455	.775	91.448
1C1X1	2,644	.728	.749	.645	.770	.561	.717	.860	.728	.932	85.517
1C2X1	412	.728	.749	.645	.770	.561	.717	.860	.728	.932	85.928
1C3X1	818	.681	.705	.587	.729	.495	.664	.832	.680	.911	87.453
1C4X1	873	.832	.844	.784	.855	.730	.837	.929	.854	.979	84.025
1C5X1	902	.728	.749	.645	.770	.561	.717	.860	.728	.932	88.381
1C7X1	662	.832	.844	.784	.855	.730	.837	.929	.854	.979	85.505
1N1X1A	2,205	.525	.554	.412	.585	.315	.485	.743	.539	.830	88.752
1N3X1	2,476	.422	.452	.306	.483	.220	.374	.679	.455	.775	87.658
1N4X1A	917	.604	.631	.498	.659	.399	.574	.789	.605	.870	93.153
1N4X1B	448	.604	.631	.498	.659	.399	.574	.789	.605	.870	91.248
1T2X1	356	.890	.896	.865	.901	.834	.901	.964	.926	1.000	82.396
1W0X1	1,960	.525	.554	.412	.585	.315	.485	.743	.539	.830	88.912
2F0X1	2,876	.952	.956	.936	.958	.927	.957	.980	.968	1.000	89.795
2R0X1	507	.728	.749	.645	.770	.561	.717	.860	.728	.932	88.846
2R1X1	702	.890	.896	.865	.901	.834	.901	.964	.926	1.000	88.161
2S0X1	5,350	.890	.896	.865	.901	.834	.901	.964	.926	1.000	89.564
2W0X1	5,577	.681	.705	.587	.729	.495	.664	.832	.680	.911	89.864
3D0X2	227	.564	.593	.454	.622	.356	.528	.767	.571	.849	86.157
3D0X4	248	.564	.593	.454	.622	.356	.528	.767	.571	.849	88.190
3E4X3	175	.952	.956	.936	.958	.927	.957	.980	.968	1.000	92.230
3E5X1	629	.832	.844	.784	.855	.730	.837	.929	.854	.979	85.701
3E6X1	383	.890	.896	.865	.901	.834	.901	.964	.926	1.000	87.699
3E7X1	3,384	.952	.956	.936	.958	.927	.957	.980	.968	1.000	89.620
3E8X1	231	.564	.593	.454	.622	.356	.528	.767	.571	.849	92.952
3E9X1	162	.604	.631	.498	.659	.399	.574	.789	.605	.870	88.518
3F1X1	3,751	.999	.999	.997	.999	.997	.999	.998	.997	1.000	85.707
3P0X1	29,141	.992	.993	.986	.994	.984	.992	.992	.989	.997	84.646
4A0X1	1,383	.890	.896	.865	.901	.834	.901	.964	.926	1.000	86.741
4D0X1	164	.890	.896	.865	.901	.834	.901	.964	.926	1.000	83.156
4Y0X1	1,029	.890	.896	.865	.901	.834	.901	.964	.926	1.000	85.697
4Y0X2	128	.525	.554	.412	.585	.315	.485	.743	.539	.830	87.739
6C0X1	1,118	.422	.452	.306	.483	.220	.374	.679	.455	.775	84.961
6F0X1	1,804	.681	.705	.587	.729	.495	.664	.832	.680	.911	89.288

Note. Qualification Rates represent the percentage of USAF accessions that would qualify for General AFS. QR Adverse Impact Ratios are the minority group QR/majority group QR. QR=Qualification Rate, NHW=Non-Hispanic White, NHB=Non-Hispanic Black, HW=Hispanic-White, FSG=Mean predicted Final School Grade of the qualified group.

APPENDIX G – CONTENT-ORIENTED APPROACH RESULTS

Table G.1. Nominal Weights for Content-Oriented Approach: Mechanical Composite

	Composite 1			Composite 2				Composite 3				Composite 4				
AFSC	AR	PC	WK	AR	PC	WK	MK	AR	PC	WK	AO	AR	PC	WK	AO	MK
1C2X1	.000	.535	.465	.000	.465	.535	.000	.000	.465	.535	.000	.000	.465	.535	.000	.000
1C7X1	.000	.513	.487	.000	.487	.513	.000	.000	.487	.513	.000	.000	.487	.513	.000	.000
1P0X1	.000	.483	.517	.000	.455	.427	.118	.000	.517	.483	.000	.000	.455	.427	.000	.118
2A3X8	.065	.454	.481	.031	.330	.315	.324	.060	.459	.432	.048	.030	.320	.304	.033	.313
2A5X1	.000	.490	.510	.000	.339	.330	.331	.000	.494	.472	.034	.000	.332	.323	.022	.323
2A5X4	.038	.469	.493	.017	.335	.323	.324	.035	.472	.447	.046	.017	.326	.313	.031	.314
2A6X1	.022	.491	.487	.011	.339	.347	.304	.019	.444	.444	.094	.009	.318	.322	.069	.282
2A6X2	.000	.465	.535	.000	.376	.330	.294	.000	.502	.433	.064	.000	.360	.314	.046	.280
2A6X3	.000	.431	.569	.000	.402	.306	.292	.000	.533	.400	.066	.000	.385	.290	.048	.277
2A6X4	.000	.442	.558	.000	.393	.313	.294	.000	.550	.435	.015	.000	.389	.310	.010	.291
2A6X5	.000	.466	.534	.000	.368	.325	.307	.000	.480	.415	.105	.000	.342	.299	.077	.282
2A6X6	.000	.487	.513	.000	.360	.346	.294	.000	.469	.441	.091	.000	.339	.322	.067	.273
2A7X1	.000	.380	.620	.000	.353	.217	.431	.000	.518	.309	.172	.000	.316	.189	.111	.383
2A7X2	.000	.432	.568	.000	.390	.299	.310	.000	.568	.432	.000	.000	.390	.299	.000	.310
2A7X3	.000	.462	.538	.000	.336	.292	.372	.000	.491	.417	.092	.000	.317	.273	.061	.349
2A7X5	.000	.554	.446	.000	.281	.358	.362	.000	.403	.498	.099	.000	.263	.333	.067	.337
2F0X1	.000	.450	.550	.000	.447	.368	.185	.000	.550	.450	.000	.000	.447	.368	.000	.185
2M0X2	.048	.438	.514	.022	.349	.301	.328	.039	.463	.390	.108	.019	.325	.276	.078	.302
2T1X1	.000	.506	.494	.000	.458	.471	.071	.000	.494	.506	.000	.000	.458	.471	.000	.071
2T2X1	.000	.503	.497	.000	.497	.503	.000	.000	.497	.503	.000	.000	.497	.503	.000	.000
2T3X1	.000	.529	.471	.000	.350	.399	.251	.000	.422	.471	.107	.000	.324	.366	.084	.227
2W0X1	.000	.419	.581	.000	.416	.302	.282	.000	.581	.419	.000	.000	.416	.302	.000	.282
2W1X1	.000	.460	.540	.000	.540	.460	.000	.000	.484	.407	.109	.000	.484	.407	.109	.000
2W2X1	.000	.510	.490	.000	.408	.427	.165	.000	.474	.491	.035	.000	.397	.415	.029	.159
3D1X7	.000	.590	.410	.000	.363	.525	.112	.000	.371	.531	.098	.000	.333	.480	.089	.098
3E0X1	.000	.537	.463	.000	.363	.426	.212	.000	.411	.473	.115	.000	.331	.386	.095	.188
3E0X2	.000	.470	.530	.000	.332	.298	.370	.000	.494	.434	.071	.000	.318	.283	.046	.353
3E1X1	.217	.383	.399	.123	.284	.275	.319	.187	.362	.343	.107	.110	.263	.252	.080	.294
3E2X1	.000	.560	.440	.000	.269	.353	.378	.000	.388	.491	.121	.000	.249	.324	.081	.347
3E3X1	.000	.534	.466	.000	.294	.345	.361	.000	.407	.462	.131	.000	.269	.313	.090	.328
3E4X1	.078	.415	.508	.034	.329	.271	.366	.066	.463	.374	.097	.030	.309	.252	.067	.342
3E8X1	.000	.483	.517	.000	.501	.467	.032	.000	.517	.483	.000	.000	.501	.467	.000	.032
4A2X1	.000	.464	.536	.000	.400	.348	.252	.000	.502	.431	.066	.000	.381	.330	.050	.238

Note. Nominal weights incorporate the VCV structure and effective weights for each alternative composite. Composite label refers to the ASVAB subtests comprising the alternative composite.

Table G.2. Nominal Weights for Content-Oriented Approach: Electronics Composite

	Composite 1		Composite 2			Composite 3			Composite 4			Composite 5			
AFSC	AR	MK	AR	WK	MK	AR	PC	MK	AR	MK	AO	AR	WK	PC	MK
1A3X1	NA	NA	.000	1.000	.000	.000	1.000	.000	NA	NA	NA	.000	.505	.495	.000
1C6X1	NA	NA	.000	1.000	.000	.000	1.000	.000	.000	.000	1.000	.000	.547	.453	.000
1C8X3	.000	1.000	.000	.493	.507	.000	.566	.434	.000	.853	.147	.000	.283	.390	.327
1W0X1	.000	1.000	.000	.531	.469	.000	.567	.433	.000	.871	.129	.000	.322	.368	.311
2A0X1	.000	1.000	.000	.608	.392	.000	.621	.379	.000	.827	.173	.000	.370	.376	.253
2A2X1	.053	.947	.021	.520	.459	.019	.557	.424	.045	.845	.110	.012	.317	.364	.307
2A2X2	.182	.818	.086	.468	.446	.078	.512	.410	.160	.745	.095	.055	.291	.347	.308
2A2X3	.101	.899	.042	.512	.446	.037	.552	.411	.087	.811	.101	.025	.313	.363	.299
2A3X4	.000	1.000	.000	.547	.453	.000	.581	.419	.000	.915	.085	.000	.329	.373	.297
2A3X5	.000	1.000	.000	.524	.476	.000	.565	.435	.000	.828	.172	.000	.316	.369	.315
2A6X2	.000	1.000	.000	.549	.451	.000	.585	.415	.000	.865	.135	.000	.330	.376	.294
2A6X6	.000	1.000	.000	.559	.441	.000	.577	.423	.000	.819	.181	.000	.346	.360	.294
2A8X1	.000	1.000	.000	.561	.439	.000	.593	.407	.000	.896	.104	.000	.337	.378	.285
2A8X2	.000	1.000	.000	.552	.448	.000	.589	.411	.000	.901	.099	.000	.329	.379	.291
2A9X1	.011	.989	.004	.560	.436	.003	.591	.405	.009	.879	.112	.002	.337	.376	.285
2A9X2	.195	.805	.092	.475	.433	.082	.519	.398	.170	.728	.102	.058	.295	.350	.297
2A9X3	.000	1.000	.000	.560	.440	.000	.595	.405	.000	.901	.099	.000	.334	.381	.285
2M0X1	.000	1.000	.000	.552	.448	.000	.563	.437	.000	.821	.179	.000	.346	.350	.303
2M0X3	.000	1.000	.000	.519	.481	.000	.533	.467	.000	.803	.197	.000	.330	.338	.332
2P0X1	.380	.620	.188	.477	.335	.156	.559	.285	.345	.574	.081	.114	.277	.394	.216
2W1X1	NA	NA	.000	1.000	.000	.000	1.000	.000	.000	.000	1.000	.000	.460	.540	.000
3D1X1	.000	1.000	.000	.639	.361	.000	.655	.345	.000	.994	.006	.000	.381	.393	.226
3D1X2	.000	1.000	.000	.588	.412	.000	.590	.410	.000	.839	.161	.000	.370	.355	.275
3D1X3	.000	1.000	.000	.541	.459	.000	.604	.396	.000	.873	.127	.000	.308	.404	.288
3D1X7	.000	1.000	.000	.819	.181	.000	.773	.227	.000	.618	.382	.000	.525	.363	.112
3E0X1	.000	1.000	.000	.674	.326	.000	.654	.346	.000	.709	.291	.000	.426	.363	.212
3E0X2	.000	1.000	.000	.471	.529	.000	.501	.499	.000	.886	.114	.000	.298	.332	.370
3E1X1	.306	.694	.172	.404	.424	.168	.417	.415	.251	.595	.154	.123	.275	.284	.319
3E4X1	.104	.896	.052	.430	.518	.047	.477	.476	.084	.772	.143	.034	.271	.329	.366
4A2X1	.000	1.000	.000	.597	.403	.000	.633	.367	.000	.839	.161	.000	.348	.400	.252

Table G.2. (Continued)

	Composite 6				Composite 7				Composite 8				
AFSC	AR	WK	MK	AO	AR	PC	MK	AO	AR	WK	PC	MK	AO
1A3X1	.000	1.000	.000	.000	.000	1.000	.000	.000	.000	.505	.495	.000	.000
1C6X1	.000	.897	.000	.103	.000	.884	.000	.116	.000	.510	.425	.000	.065
1C8X3	.000	.452	.466	.082	.000	.526	.400	.074	.000	.266	.370	.307	.057
1W0X1	.000	.496	.438	.065	.000	.533	.404	.063	.000	.307	.352	.295	.046
2A0X1	.000	.561	.360	.079	.000	.574	.346	.079	.000	.350	.357	.237	.056
2A2X1	.019	.491	.434	.056	.017	.528	.400	.054	.012	.304	.351	.294	.039
2A2X2	.080	.443	.424	.053	.072	.488	.389	.051	.052	.280	.335	.296	.038
2A2X3	.039	.486	.424	.052	.035	.525	.390	.050	.024	.301	.351	.288	.036
2A3X4	.000	.526	.436	.038	.000	.560	.402	.038	.000	.321	.364	.289	.026
2A3X5	.000	.475	.432	.093	.000	.517	.395	.088	.000	.294	.347	.292	.066
2A6X2	.000	.513	.421	.066	.000	.549	.387	.064	.000	.314	.360	.280	.046
2A6X6	.000	.508	.399	.092	.000	.527	.382	.092	.000	.322	.339	.273	.067
2A8X1	.000	.535	.418	.047	.000	.567	.386	.047	.000	.326	.367	.275	.032
2A8X2	.000	.527	.428	.045	.000	.564	.392	.044	.000	.319	.369	.282	.031
2A9X1	.004	.531	.413	.052	.003	.562	.383	.051	.002	.325	.364	.273	.036
2A9X2	.085	.449	.410	.057	.076	.493	.376	.055	.054	.282	.338	.285	.041
2A9X3	.000	.535	.420	.045	.000	.570	.386	.044	.000	.324	.370	.275	.030
2M0X1	.000	.501	.406	.092	.000	.513	.394	.093	.000	.322	.329	.281	.067
2M0X3	.000	.462	.428	.110	.000	.477	.414	.109	.000	.302	.312	.304	.082
2P0X1	.178	.457	.321	.044	.148	.540	.273	.039	.109	.268	.384	.210	.030
2W1X1	.000	.815	.000	.185	.000	.835	.000	.165	.000	.407	.484	.000	.109
3D1X1	.000	.639	.360	.001	.000	.654	.345	.001	.000	.381	.393	.226	.001
3D1X2	.000	.545	.380	.075	.000	.547	.376	.078	.000	.349	.338	.259	.054
3D1X3	.000	.507	.430	.063	.000	.571	.372	.057	.000	.295	.388	.275	.042
3D1X7	.000	.725	.153	.121	.000	.668	.186	.146	.000	.480	.333	.098	.089
3E0X1	.000	.591	.280	.129	.000	.569	.293	.138	.000	.386	.331	.188	.095
3E0X2	.000	.440	.497	.063	.000	.470	.467	.062	.000	.283	.318	.353	.046
3E1X1	.151	.362	.385	.102	.146	.377	.375	.101	.110	.252	.263	.294	.080
3E4X1	.046	.391	.474	.089	.041	.438	.436	.085	.030	.252	.309	.342	.067
4A2X1	.000	.553	.373	.074	.000	.590	.339	.071	.000	.330	.381	.238	.050

Note. Nominal weights incorporate the VCV structure and effective weights for each alternative composite. Composite label refers to the ASVAB subtests comprising the alternative composite. Values of NA mean the effective weights for subtests were zero and therefore a nominal weight could not be calculated.

Table G.3. Nominal Weights for Content-Oriented Approach: Administrative Composite

	Composite 1				Composite 2				Composite 3				Composite 4				
AFSC	PC	WK	MK	GS	AR	PC	WK	MK	PC	WK	AO	MK	AR	PC	WK	MK	GS
1C0X2	.428	.340	.233	.000	.000	.428	.340	.233	.428	.340	.000	.233	.000	.428	.340	.233	.000
1C3X1	.449	.440	.111	.000	.000	.449	.440	.111	.449	.440	.000	.111	.000	.449	.440	.111	.000
1N0X1	.546	.454	.000	.000	.000	.546	.454	.000	.535	.443	.022	.000	.000	.546	.454	.000	.000
2G0X1	.428	.373	.199	.000	.045	.411	.359	.184	.407	.352	.055	.186	.045	.411	.359	.184	.000
2S0X1	.431	.371	.198	.000	.000	.431	.371	.198	.431	.371	.000	.198	.000	.431	.371	.198	.000
2T0X1	.499	.484	.017	.000	.000	.499	.484	.017	.499	.484	.000	.017	.000	.499	.484	.017	.000
2T2X1	.497	.503	.000	.000	.000	.497	.503	.000	.497	.503	.000	.000	.000	.497	.503	.000	.000
2T3X7	.388	.352	.259	.000	.000	.388	.352	.259	.388	.352	.000	.259	.000	.388	.352	.259	.000
3D0X1	.522	.478	.000	.000	.020	.511	.469	.000	.522	.478	.000	.000	.020	.511	.469	.000	.000
3F0X1	.538	.462	.000	.000	.000	.538	.462	.000	.538	.462	.000	.000	.000	.538	.462	.000	.000
3F5X1	.490	.510	.000	.000	.000	.490	.510	.000	.490	.510	.000	.000	.000	.490	.510	.000	.000
4A1X1	.419	.424	.156	.000	.000	.419	.424	.156	.419	.424	.000	.156	.000	.419	.424	.156	.000
4C0X1	.511	.489	.000	.000	.000	.511	.489	.000	.511	.489	.000	.000	.000	.511	.489	.000	.000
4J0X2	.477	.454	.069	.000	.000	.477	.454	.069	.462	.439	.033	.066	.000	.477	.454	.069	.000

	Composite 5					Composite 6					Composite 7					
AFSC	PC	WK	AO	MK	GS	AR	PC	WK	AO	MK	AR	PC	WK	AO	MK	GS
1C0X2	.428	.340	.000	.233	.000	.000	.428	.340	.000	.233	.000	.428	.340	.000	.233	.000
1C3X1	.449	.440	.000	.111	.000	.000	.449	.440	.000	.111	.000	.449	.440	.000	.111	.000
1N0X1	.535	.443	.022	.000	.000	.000	.535	.443	.022	.000	.000	.535	.443	.022	.000	.000
2G0X1	.407	.352	.055	.186	.000	.042	.392	.340	.053	.173	.042	.392	.340	.053	.173	.000
2S0X1	.431	.371	.000	.198	.000	.000	.431	.371	.000	.198	.000	.431	.371	.000	.198	.000
2T0X1	.499	.484	.000	.017	.000	.000	.499	.484	.000	.017	.000	.499	.484	.000	.017	.000
2T2X1	.497	.503	.000	.000	.000	.000	.497	.503	.000	.000	.000	.497	.503	.000	.000	.000
2T3X7	.388	.352	.000	.259	.000	.000	.388	.352	.000	.259	.000	.388	.352	.000	.259	.000
3D0X1	.522	.478	.000	.000	.000	.020	.511	.469	.000	.000	.020	.511	.469	.000	.000	.000
3F0X1	.538	.462	.000	.000	.000	.000	.538	.462	.000	.000	.000	.538	.462	.000	.000	.000
3F5X1	.490	.510	.000	.000	.000	.000	.490	.510	.000	.000	.000	.490	.510	.000	.000	.000
4A1X1	.419	.424	.000	.156	.000	.000	.419	.424	.000	.156	.000	.419	.424	.000	.156	.000
4C0X1	.511	.489	.000	.000	.000	.000	.511	.489	.000	.000	.000	.511	.489	.000	.000	.000
4J0X2	.462	.439	.033	.066	.000	.000	.462	.439	.033	.066	.000	.462	.439	.033	.066	.000

Note. Nominal weights incorporate the VCV structure and effective weights for each alternative composite. Composite label refers to the ASVAB subtests comprising the alternative composite.

Table G.4. Nominal Weights for Content-Oriented Approach: General Composite

	Composite 1				Composite 2				Composite 3				Composite 4				
AFSC	AR	PC	WK	MK	AR	PC	WK	AO	AR	PC	WK	GS	AR	PC	WK	AO	MK
1A0X1	.000	.344	.344	.312	.000	.504	.496	.000	.000	.504	.496	.000	.000	.344	.344	.000	.312
1A2X1	.000	.413	.408	.179	.000	.505	.495	.000	.000	.505	.495	.000	.000	.413	.408	.000	.179
1A8X1	.000	.500	.500	.000	.000	.500	.500	.000	.000	.500	.500	.000	.000	.500	.500	.000	.000
1A8X2	.000	.445	.457	.098	.000	.495	.505	.000	.000	.495	.505	.000	.000	.445	.457	.000	.098
1C1X1	.000	.619	.381	.000	.000	.619	.381	.000	.000	.619	.381	.000	.000	.619	.381	.000	.000
1C2X1	.000	.465	.535	.000	.000	.465	.535	.000	.000	.465	.535	.000	.000	.465	.535	.000	.000
1C3X1	.000	.449	.440	.111	.000	.506	.494	.000	.000	.506	.494	.000	.000	.449	.440	.000	.111
1C4X1	.000	.454	.546	.000	.000	.423	.506	.070	.000	.454	.546	.000	.000	.423	.506	.070	.000
1C5X1	.000	.477	.364	.159	.000	.546	.414	.041	.000	.568	.432	.000	.000	.462	.352	.034	.152
1C7X1	.000	.487	.513	.000	.000	.487	.513	.000	.000	.487	.513	.000	.000	.487	.513	.000	.000
1N3X1	.000	.442	.558	.000	.000	.442	.558	.000	.000	.442	.558	.000	.000	.442	.558	.000	.000
1T2X1	.000	.455	.545	.000	.000	.455	.545	.000	.000	.455	.545	.000	.000	.455	.545	.000	.000
1W0X1	.000	.368	.322	.311	.000	.502	.432	.065	.000	.536	.464	.000	.000	.352	.307	.046	.295
2F0X1	.000	.447	.368	.185	.000	.550	.450	.000	.000	.550	.450	.000	.000	.447	.368	.000	.185
2R0X1	.095	.371	.280	.254	.153	.484	.364	.000	.153	.484	.364	.000	.095	.371	.280	.000	.254
2R1X1	.000	.416	.346	.238	.000	.529	.435	.036	.000	.548	.452	.000	.000	.406	.336	.027	.231
2S0X1	.000	.431	.371	.198	.000	.539	.461	.000	.000	.539	.461	.000	.000	.431	.371	.000	.198
2W0X1	.000	.416	.302	.282	.000	.581	.419	.000	.000	.581	.419	.000	.000	.416	.302	.000	.282
3D0X2	.000	.515	.485	.000	.000	.515	.485	.000	.000	.515	.485	.000	.000	.515	.485	.000	.000
3D0X4	.000	.606	.394	.000	.000	.606	.394	.000	.000	.606	.394	.000	.000	.606	.394	.000	.000
3E4X3	.000	.440	.359	.201	.000	.538	.435	.027	.000	.552	.448	.000	.000	.432	.351	.021	.196
3E5X1	.083	.328	.308	.281	.129	.415	.382	.074	.144	.444	.413	.000	.077	.311	.290	.057	.265
3E6X1	.031	.415	.313	.241	.054	.540	.407	.000	.054	.540	.407	.000	.031	.415	.313	.000	.241
3E7X1	.000	.461	.520	.019	.000	.443	.497	.060	.000	.470	.530	.000	.000	.435	.489	.059	.017
3E8X1	.000	.501	.467	.032	.000	.517	.483	.000	.000	.517	.483	.000	.000	.501	.467	.000	.032
3E9X1	.000	.496	.504	.000	.000	.496	.504	.000	.000	.496	.504	.000	.000	.496	.504	.000	.000
3F1X1	.008	.395	.313	.284	.017	.550	.433	.000	.017	.550	.433	.000	.008	.395	.313	.000	.284
3P0X1	.000	.473	.527	.000	.000	.473	.527	.000	.000	.473	.527	.000	.000	.473	.527	.000	.000
4A0X1	.026	.417	.383	.174	.038	.503	.459	.000	.038	.503	.459	.000	.026	.417	.383	.000	.174
4D0X1	.000	.555	.445	.000	.000	.555	.445	.000	.000	.555	.445	.000	.000	.555	.445	.000	.000
4Y0X1	.000	.469	.531	.000	.000	.469	.531	.000	.000	.469	.531	.000	.000	.469	.531	.000	.000
4Y0X2	.000	.424	.366	.211	.000	.538	.462	.000	.000	.538	.462	.000	.000	.424	.365	.000	.211
6F0X1	.176	.282	.220	.322	.298	.395	.307	.000	.298	.395	.307	.000	.176	.282	.220	.000	.322

Table G.4. (Continued)

	Composite 5					Composite 6					Composite 7					
AFSC	AR	PC	WK	MK	GS	AR	PC	WK	AO	GS	AR	PC	WK	AO	MK	GS
1A0X1	.000	.344	.344	.312	.000	.000	.504	.496	.000	.000	.000	.344	.344	.000	.312	.000
1A2X1	.000	.413	.408	.179	.000	.000	.505	.495	.000	.000	.000	.413	.408	.000	.179	.000
1A8X1	.000	.500	.500	.000	.000	.000	.500	.500	.000	.000	.000	.500	.500	.000	.000	.000
1A8X2	.000	.445	.457	.098	.000	.000	.495	.505	.000	.000	.000	.445	.457	.000	.098	.000
1C1X1	.000	.619	.381	.000	.000	.000	.619	.381	.000	.000	.000	.619	.381	.000	.000	.000
1C2X1	.000	.465	.535	.000	.000	.000	.465	.535	.000	.000	.000	.465	.535	.000	.000	.000
1C3X1	.000	.449	.440	.111	.000	.000	.506	.494	.000	.000	.000	.449	.440	.000	.111	.000
1C4X1	.000	.454	.546	.000	.000	.000	.423	.506	.070	.000	.000	.423	.506	.070	.000	.000
1C5X1	.000	.477	.364	.159	.000	.000	.546	.414	.041	.000	.000	.462	.352	.034	.152	.000
1C7X1	.000	.487	.513	.000	.000	.000	.487	.513	.000	.000	.000	.487	.513	.000	.000	.000
1N3X1	.000	.442	.558	.000	.000	.000	.442	.558	.000	.000	.000	.442	.558	.000	.000	.000
1T2X1	.000	.455	.545	.000	.000	.000	.455	.545	.000	.000	.000	.455	.545	.000	.000	.000
1W0X1	.000	.368	.322	.311	.000	.000	.502	.432	.065	.000	.000	.352	.307	.046	.295	.000
2F0X1	.000	.447	.368	.185	.000	.000	.550	.450	.000	.000	.000	.447	.368	.000	.185	.000
2R0X1	.095	.371	.280	.254	.000	.153	.484	.364	.000	.000	.095	.371	.280	.000	.254	.000
2R1X1	.000	.416	.346	.238	.000	.000	.529	.435	.036	.000	.000	.406	.336	.027	.231	.000
2S0X1	.000	.431	.371	.198	.000	.000	.539	.461	.000	.000	.000	.431	.371	.000	.198	.000
2W0X1	.000	.416	.302	.282	.000	.000	.581	.419	.000	.000	.000	.416	.302	.000	.282	.000
3D0X2	.000	.515	.485	.000	.000	.000	.515	.485	.000	.000	.000	.515	.485	.000	.000	.000
3D0X4	.000	.606	.394	.000	.000	.000	.606	.394	.000	.000	.000	.606	.394	.000	.000	.000
3E4X3	.000	.440	.359	.201	.000	.000	.538	.435	.027	.000	.000	.432	.351	.021	.196	.000
3E5X1	.083	.328	.308	.281	.000	.129	.415	.382	.074	.000	.077	.311	.290	.057	.265	.000
3E6X1	.031	.415	.313	.241	.000	.054	.540	.407	.000	.000	.031	.415	.313	.000	.241	.000
3E7X1	.000	.461	.520	.019	.000	.000	.443	.497	.060	.000	.000	.435	.489	.059	.017	.000
3E8X1	.000	.501	.467	.032	.000	.000	.517	.483	.000	.000	.000	.501	.467	.000	.032	.000
3E9X1	.000	.496	.504	.000	.000	.000	.496	.504	.000	.000	.000	.496	.504	.000	.000	.000
3F1X1	.008	.395	.313	.284	.000	.017	.550	.433	.000	.000	.008	.395	.313	.000	.284	.000
3P0X1	.000	.473	.527	.000	.000	.000	.473	.527	.000	.000	.000	.473	.527	.000	.000	.000
4A0X1	.026	.417	.383	.174	.000	.038	.503	.459	.000	.000	.026	.417	.383	.000	.174	.000
4D0X1	.000	.555	.445	.000	.000	.000	.555	.445	.000	.000	.000	.555	.445	.000	.000	.000
4Y0X1	.000	.469	.531	.000	.000	.000	.469	.531	.000	.000	.000	.469	.531	.000	.000	.000
4Y0X2	.000	.424	.366	.211	.000	.000	.538	.462	.000	.000	.000	.424	.366	.000	.211	.000
6F0X1	.176	.282	.220	.322	.000	.298	.395	.307	.000	.000	.176	.282	.220	.000	.322	.000

Note. Nominal weights incorporate the VCV structure and effective weights for each alternative composite. Composite label refers to the ASVAB subtests comprising the alternative composite.

Table G.5. Predictive Validity for Content-Oriented Approach: Mechanical Composite

AFSC	AR+PC+WK	AR+PC+WK+MK	AR+PC+WK+AO	AR+PC+WK+AO+MK
1C2X1	.206	.195	.207	.196
1C7X1	.229	.217	.230	.218
1P0X1	.278	.327	.279	.328
2A3X8	.530	.565	.520	.566
2A5X1	.214	.301	.218	.302
2A5X4	.287	.400	.284	.397
2A6X1	.292	.368	.283	.358
2A6X2	.287	.405	.295	.408
2A6X3	.096	.158	.116	.174
2A6X4	.213	.341	.219	.345
2A6X5	.222	.322	.206	.304
2A6X6	.282	.284	.286	.379
2A7X1	.191	.271	.134	.224
2A7X2	.364	.500	.365	.501
2A7X3	.277	.386	.267	.373
2A7X5	.245	.342	.211	.313
2F0X1	.246	.315	.247	.316
2M0X2	.293	.371	.277	.360
2T1X1	.272	.285	.274	.286
2T2X1	.303	.287	.304	.288
2T3X1	.135	.191	.124	.176
2W0X1	.332	.441	.333	.442
2W1X1	.343	.327	.321	.305
2W2X1	.245	.289	.255	.295
3D1X7	.268	.299	.258	.285
3E0X1	.347	.451	.323	.413
3E0X2	.218	.318	.232	.324
3E1X1	.412	.489	.384	.458
3E2X1	.233	.323	.191	.277
3E3X1	.225	.327	.206	.299
3E4X1	.321	.397	.298	.276
3E8X1	.047	.045	.048	.045
4A2X1	.264	.333	.277	.341

Note. Validities reported are corrected correlations between the composite and the training grade criterion.

Table G.6. Predictive Validity for Content-Oriented Approach: Electronics Composite

AFSC	AR+MK	AR+MK+WK	AR+MK+PC	AR+MK+AO	AR+MK+PC+WK	AR+MK+AO+WK	AR+MK+AO+PC	AR+MK+AO+PC+WK
1A3X1	NA	.218	.296	NA	.301	.219	.298	.302
1C6X1	NA	.151	.181	.023	.183	.148	.168	.178
1C8X3	.319	.418	.407	.457	.392	.409	.394	.385
1W0X1	.321	.432	.441	.478	.450	.437	.443	.451
2A0X1	.201	.302	.305	.290	.390	.296	.296	.296
2A2X1	.302	.334	.382	.396	.337	.320	.357	.324
2A2X2	.325	.425	.480	.479	.437	.432	.474	.439
2A2X3	.297	.371	.431	.410	.396	.371	.433	.400
2A3X4	.254	.385	.393	.389	.385	.384	.390	.382
2A3X5	.247	.401	.382	.306	.397	.358	.350	.371
2A6X2	.276	.409	.376	.390	.405	.407	.378	.408
2A6X6	.239	.401	.354	.339	.384	.389	.345	.379
2A8X1	.240	.314	.145	.417	.243	.306	.298	.256
2A8X2	.099	.273	.345	.166	.338	.268	.349	.337
2A9X1	.206	.416	.307	.321	.368	.415	.301	.364
2A9X2	.331	.511	.521	.426	.516	.479	.476	.488
2A9X3	.175	.266	.207	.280	.227	.268	.224	.236
2M0X1	.264	.445	.427	.393	.441	.422	.414	.429
2M0X3	.289	.438	.383	.337	.402	.365	.318	.351
2P0X1	.479	.553	.512	.629	.508	.539	.508	.502
2W1X1	NA	.281	.271	.029	.327	.239	.237	.305
3D1X1	.214	.239	.261	.320	.242	.240	.263	.242
3D1X2	.131	.256	.251	.199	.258	.246	.236	.249
3D1X3	.257	.406	.382	.375	.393	.400	.378	.389
3D1X7	.265	.295	.281	.179	.299	.278	.234	.285
3E0X1	.396	.437	.474	.276	.451	.374	.381	.412
3E0X2	.210	.287	.324	.332	.318	.297	.329	.325
3E1X1	.381	.527	.458	.463	.489	.475	.415	.458
3E4X1	.246	.385	.352	.336	.397	.361	.329	.376
4A2X1	.269	.331	.333	.405	.333	.344	.339	.341

Note. Validities reported are corrected correlations between the composite and the training grade criterion. Values of NA reflect composites where it was not possible to calculate a nominal weight and therefore, a validity estimate.

Table G.7. Predictive Validity for Content-Oriented Approach: Administrative Composite

AFSC	MK+PC+WK+GS	MK+PC+WK+AR	MK+PC+WK+AO	MK+PC+WK+AR+GS	MK+PC+WK+AO+GS	MK+PC+WK+ AO+AR	MK+PC+WK+AO+ AR+GS
1C0X2	.390	.390	.390	.390	.390	.390	.390
1C3X1	.340	.340	.340	.340	.340	.340	.340
1N0X1	.360	.360	.360	.360	.360	.360	.360
2G0X1	.310	.310	.270	.310	.270	.280	.280
2S0X1	.310	.310	.310	.310	.310	.310	.310
2T0X1	.230	.230	.230	.230	.230	.230	.230
2T2X1	.280	.280	.290	.280	.290	.290	.290
2T3X7	.280	.280	.280	.280	.280	.280	.280
3D0X1	.190	.190	.180	.190	.180	.190	.190
3F0X1	.100	.100	.100	.100	.100	.100	.100
3F5X1	.160	.160	.160	.160	.160	.160	.160
4A1X1	.240	.240	.240	.240	.240	.240	.240
4C0X1	.380	.380	.380	.380	.380	.380	.380
4J0X2	.420	.420	.440	.420	.440	.440	.440

Note. Validities reported are corrected correlations between the composite and the training grade criterion.

Table G.8. Predictive Validity for Content-Oriented Approach: General Composite

AFSC	AR+PC+WK+MK	AR+PC+WK+AO	AR+PC+WK+GS	AR+PC+WK+AO+ MK	AR+PC+WK+GS+ MK	AR+PC+WK+AO+ GS	AR+PC+WK+AO+ GS+MK
1A0X1	.410	.340	.340	.410	.410	.340	.410
1A2X1	.220	.160	.160	.220	.220	.160	.220
1A8X1	.080	.080	.080	.080	.080	.080	.080
1A8X2	.320	.290	.290	.320	.320	.290	.320
1C1X1	.240	.250	.250	.240	.240	.250	.240
1C2X1	.190	.210	.210	.190	.190	.210	.190
1C3X1	.340	.310	.310	.340	.340	.310	.340
1C4X1	.190	.190	.200	.180	.190	.190	.180
1C5X1	.260	.210	.210	.250	.260	.210	.250
1C7X1	.220	.230	.220	.220	.220	.230	.220
1N3X1	.120	.130	.130	.120	.120	.130	.120
1T2X1	.080	.090	.090	.080	.080	.090	.080
1W0X1	.450	.320	.310	.450	.450	.320	.450
2F0X1	.320	.250	.250	.320	.320	.240	.320
2R0X1	.450	.360	.360	.440	.440	.360	.440
2R1X1	.220	.160	.140	.240	.230	.160	.240
2S0X1	.310	.210	.210	.310	.310	.210	.310
2W0X1	.440	.330	.330	.440	.440	.330	.440
3D0X2	.300	.320	.320	.300	.300	.320	.300
3D0X4	.250	.260	.260	.250	.250	.260	.250
3E4X3	.390	.290	.280	.390	.390	.290	.390
3E5X1	.290	.260	.250	.250	.290	.260	.290
3E6X1	.290	.220	.220	.290	.290	.220	.290
3E7X1	.370	.400	.380	.390	.370	.400	.390
3E8X1	.050	.050	.050	.050	.050	.050	.050
3E9X1	.210	.220	.220	.210	.210	.220	.210
3F1X1	.400	.270	.270	.400	.400	.270	.400
3P0X1	.350	.370	.370	.350	.350	.370	.350
4A0X1	.430	.360	.360	.430	.430	.360	.430
4D0X1	.310	.330	.330	.310	.310	.330	.310
4Y0X1	.290	.310	.310	.290	.290	.310	.290
4Y0X2	.150	.080	.080	.150	.150	.080	.150
6F0X1	.400	.340	.340	.400	.400	.340	.400

Note. Validities reported are corrected correlations between the composite and the training grade criterion.

APPENDIX H – OPTIMAL WEIGHTING PREDICTIVE VALIDITY RESULTS BY AFS

Table H.1. Optimally Weighted Predictive Validity Results for Training Grade Criterion by AFS for Mechanical Composite

AFSC	Sample Size	Criterion Mean	Criterion SD	Predictive Validity				
				Current Composite	AR+PC+WK	AR+PC+WK+MK	AR+PC+WK+AO	AR+PC+WK+AO+MK
1C2X1	412	86.330	10.274	.218	.202	.243	.206	.246
1C7X1	662	84.760	5.798	.440	.413	.434	.415	.437
1P0X1	1,618	89.518	5.156	.489	.441	.458	.444	.461
2A3X8	125	87.560	5.576	.550	.494	.507	.494	.507
2A5X1	1,306	87.394	6.706	.480	.386	.387	.386	.387
2A5X2B	420	90.719	5.325	.392	.368	.369	.369	.370
2A5X2D	198	88.167	5.056	.364	.260	.265	.276	.281
2A5X4	772	86.522	5.801	.602	.495	.504	.495	.504
2A6X1	4,369	87.674	5.456	.479	.398	.404	.399	.405
2A6X2	3,197	87.927	4.555	.575	.513	.521	.514	.522
2A6X3	485	87.186	5.022	.371	.304	.320	.315	.331
2A6X4	1,799	88.511	5.297	.504	.433	.445	.434	.447
2A6X5	1,738	88.639	5.193	.464	.404	.411	.404	.412
2A6X6	3,001	90.530	4.832	.595	.527	.542	.529	.543
2A7X1	576	88.186	9.720	.280	.277	.283	.281	.287
2A7X2	676	88.175	5.023	.521	.493	.519	.494	.519
2A7X3	2,138	89.122	5.023	.532	.474	.478	.475	.479
2A7X5	385	87.844	5.289	.545	.437	.444	.440	.446
2F0X1	2,876	89.605	5.253	.445	.399	.415	.399	.415
2M0X2	419	93.200	3.030	.456	.422	.434	.426	.437
2T1X1	1,544	86.622	4.857	.462	.430	.439	.431	.439
2T2X1	3,921	88.046	5.371	.478	.458	.476	.458	.476
2T3X1	1,482	88.653	5.607	.448	.326	.328	.327	.329
2T3X1A	219	87.082	5.536	.421	.344	.348	.345	.349
2T3X1C	250	92.288	4.860	.389	.343	.346	.357	.359
2W0X1	5,577	89.584	4.847	.487	.460	.478	.460	.478
2W1X1	5,459	89.296	4.600	.503	.454	.465	.454	.465
2W2X1	587	93.204	2.899	.513	.434	.439	.435	.440
3D1X7	475	90.686	3.945	.529	.464	.470	.464	.470
3E0X1	1,044	87.810	4.996	.577	.529	.552	.529	.553
3E0X2	1,124	86.716	4.519	.564	.457	.461	.461	.465
3E1X1	1,151	88.662	4.441	.512	.454	.465	.454	.465
3E2X1	1,276	89.837	4.428	.459	.420	.422	.420	.422
3E3X1	786	86.615	4.947	.475	.429	.431	.429	.431
3E4X1	1,250	88.850	4.665	.539	.480	.482	.480	.482
3E8X1	231	93.857	4.873	.410	.327	.328	.329	.330
4A2X1	216	90.463	3.266	.473	.372	.436	.441	.495

Note. Validities reported are multiple Rs for the composite predicting the criterion. SD = standard deviation.

Table H.2. Optimally Weighted Predictive Validity Results for MMRS Criterion by AFS for Mechanical Composite

AFSC	Sample Size	Criterion Mean	Criterion SD	Predictive Validity				
				Current Composite	AR+PC+WK	AR+PC+WK+MK	AR+PC+WK+AO	AR+PC+WK+AO+MK
1C2X1	171	39.001	13.617	.143	.125	.126	.138	.138
1C7X1	423	36.392	15.833	.148	.122	.125	.131	.134
1P0X1	927	34.257	17.031	.060	.049	.106	.081	.124
2A3X3	2,910	37.026	16.002	.114	.073	.074	.091	.092
2A3X3L	234	32.007	16.407	.219	.161	.161	.162	.162
2A3X3M	199	33.017	14.874	.148	.068	.104	.069	.105
2A3X7	137	32.767	15.820	.205	.205	.257	.220	.269
2A5X1	4,204	37.746	15.227	.139	.100	.101	.107	.108
2A5X2B	239	37.542	15.420	.235	.076	.078	.107	.108
2A5X2D	101	36.480	15.023	.335	.305	.327	.305	.327
2A5X4	572	33.235	15.445	.097	.060	.077	.063	.079
2A6X1	2,421	37.066	15.553	.099	.047	.048	.079	.079
2A6X2	1,918	36.398	15.789	.150	.056	.057	.089	.090
2A6X3	272	38.242	14.798	.097	.082	.083	.099	.100
2A6X4	1,050	35.059	16.350	.157	.097	.098	.099	.099
2A6X5	963	37.446	14.881	.130	.097	.099	.103	.105
2A6X6	1,705	38.530	14.518	.137	.086	.086	.094	.094
2A7X1	310	36.147	15.558	.127	.056	.057	.081	.082
2A7X2	393	35.815	16.215	.143	.141	.148	.142	.149
2A7X3	1,227	36.630	15.903	.155	.087	.090	.105	.108
2A7X5	184	35.638	15.395	.272	.188	.189	.197	.198
2F0X1	1,688	37.350	15.273	.096	.039	.042	.057	.059
2M0X2	219	34.673	15.905	.226	.201	.201	.225	.225
2T1X1	1,249	36.044	16.035	.084	.045	.046	.046	.047
2T2X1	2,350	38.053	14.751	.054	.019	.019	.035	.035
2T3X1	739	37.104	15.500	.077	.018	.043	.024	.046
2T3X1A	104	37.471	15.572	.227	.142	.157	.148	.163
2T3X1C	136	36.185	15.275	.138	.113	.121	.133	.141
2W0X1	3,122	35.886	15.918	.117	.087	.088	.099	.099
2W1X1	3,166	37.169	15.346	.091	.043	.058	.051	.064
2W2X1	356	37.339	15.202	.071	.058	.106	.059	.106
3D1X7	222	37.599	15.038	.113	.073	.119	.101	.139
3E0X1	571	38.550	14.440	.104	.102	.102	.115	.115
3E0X2	639	38.363	14.539	.104	.059	.060	.110	.110
3E1X1	641	38.008	14.576	.067	.056	.057	.059	.060
3E2X1	832	37.806	15.087	.135	.106	.119	.116	.129
3E3X1	687	38.351	14.267	.113	.104	.108	.105	.109
3E4X1	644	37.186	14.982	.129	.082	.084	.087	.088
3E8X1	216	41.742	11.795	.247	.224	.228	.249	.252
4A2X1	218	39.972	13.385	.176	.140	.146	.161	.167

Note. Validities reported are multiple Rs for the composite predicting the criterion. SD = standard deviation.

Table H.3. Optimally Weighted Predictive Validity Results for Training Grade Criterion by AFS for Electronics Composite

AFSC	Sample Size	Criterion Mean	Criterion SD	Predictive Validity								
				Current Composite	AR+MK	AR+MK +WK	AR+MK +PC	AR+MK +AO	AR+MK+ PC+WK	AR+MK+ AO+WK	AR+MK+ AO+PC	AR+MK+AO +PC+WK
1A3X1	1,177	92.981	3.930	.346	.316	.354	.386	.317	.392	.355	.386	.392
1C6X1	733	92.035	4.309	.318	.269	.298	.296	.270	.307	.298	.297	.307
1C8X3	942	89.162	4.875	.367	.344	.375	.378	.350	.388	.378	.382	.391
1W0X1	1,960	89.006	4.886	.537	.470	.516	.512	.475	.530	.519	.515	.532
2A0X1	904	88.894	5.194	.410	.348	.403	.386	.356	.412	.407	.392	.416
2A2X1	225	90.493	3.800	.659	.533	.577	.581	.537	.596	.579	.584	.598
2A2X2	168	91.149	3.965	.499	.407	.432	.467	.418	.469	.440	.475	.477
2A2X3	138	87.630	4.128	.393	.385	.395	.429	.386	.429	.395	.429	.429
2A3X4	1,312	89.843	4.365	.489	.422	.453	.464	.422	.472	.453	.464	.472
2A3X5	1,022	90.824	4.476	.468	.381	.417	.412	.381	.427	.417	.412	.427
2A6X2	3,197	87.927	4.555	.550	.449	.510	.495	.452	.522	.511	.496	.523
2A6X6	3,001	90.530	4.832	.597	.483	.536	.521	.487	.546	.538	.523	.547
2A8X1	260	90.408	3.756	.295	.234	.288	.290	.235	.308	.291	.292	.311
2A8X2	275	90.822	4.151	.496	.395	.445	.482	.395	.490	.445	.482	.490
2A9X1	142	90.261	3.494	.556	.382	.440	.446	.384	.464	.440	.447	.464
2A9X2	133	90.782	4.427	.418	.371	.434	.450	.380	.467	.446	.461	.479
2A9X3	234	88.103	4.285	.509	.401	.479	.445	.405	.486	.480	.448	.488
2M0X1	602	91.945	4.215	.525	.451	.526	.521	.460	.549	.530	.527	.552
2M0X3	328	91.546	3.871	.412	.345	.408	.373	.349	.411	.410	.376	.413
2P0X1	649	87.664	5.252	.624	.541	.583	.577	.541	.595	.584	.577	.595
2W1X1	5,459	89.296	4.600	.492	.401	.451	.445	.402	.465	.451	.445	.465
3D1X1	569	87.775	4.612	.219	.184	.250	.261	.185	.278	.252	.262	.280
3D1X2	334	87.955	6.772	.312	.179	.272	.255	.192	.290	.286	.266	.303
3D1X3	2,539	88.917	4.718	.460	.385	.438	.431	.387	.452	.439	.431	.453
3D1X7	475	90.686	3.945	.522	.407	.470	.438	.408	.474	.470	.438	.474
3E0X1	1,044	87.810	4.996	.587	.512	.543	.547	.512	.557	.543	.547	.557
3E0X2	1,124	86.716	4.519	.530	.420	.448	.459	.426	.467	.452	.463	.470
3E1X1	1,151	88.662	4.441	.495	.408	.453	.440	.409	.461	.453	.440	.461
3E4X1	1,250	88.850	4.665	.521	.401	.463	.457	.402	.481	.463	.457	.481
4A2X1	216	90.463	3.266	.340	.286	.345	.326	.388	.354	.424	.413	.431

Note. Validities reported are multiple Rs for the composite predicting the criterion. SD = standard deviation.

Table H.4. Optimally Weighted Predictive Validity Results for MMRS Criterion by AFS for Electronics Composite

AFSC	Sample Size	Criterion Mean	Criterion SD	Predictive Validity								
				Current Composite	AR+MK	AR+MK +WK	AR+MK +PC	AR+MK +AO	AR+MK+ PC+WK	AR+MK+ AO+WK	AR+MK+ AO+PC	AR+MK+AO +PC+WK
1A3X1	705	39.513	14.083	.082	.048	.048	.058	.070	.059	.070	.076	.077
1C6X1	431	37.765	14.718	.133	.008	.018	.094	.100	.098	.103	.140	.141
1C8X3	548	37.467	14.525	.109	.043	.045	.050	.051	.057	.054	.057	.064
1U0X1	320	39.813	13.345	.227	.094	.105	.154	.095	.155	.105	.154	.155
1W0X1	1,134	39.606	13.689	.137	.120	.134	.127	.121	.135	.135	.128	.136
2A0X1	525	38.507	13.990	.128	.093	.117	.094	.096	.128	.121	.097	.132
2A3X4	767	36.269	15.873	.256	.236	.243	.236	.238	.244	.244	.238	.245
2A3X5	609	39.827	13.936	.159	.135	.147	.150	.136	.154	.147	.151	.154
2A6X2	1,918	36.398	15.789	.110	.062	.062	.062	.093	.062	.093	.093	.093
2A6X6	1,705	38.530	14.518	.075	.052	.055	.080	.065	.081	.066	.088	.089
2A8X2	113	35.932	13.748	.282	.268	.273	.277	.312	.278	.319	.322	.324
2A9X3	104	37.033	13.811	.711	.424	.484	.481	.426	.503	.484	.481	.503
2M0X1	358	38.091	14.505	.158	.056	.065	.062	.077	.066	.082	.080	.083
2M0X3	187	35.497	15.693	.122	.099	.099	.101	.103	.102	.103	.105	.106
2P0X1	390	38.949	14.793	.223	.043	.097	.051	.073	.098	.110	.077	.111
2W1X1	3,166	37.169	15.346	.052	.039	.049	.041	.047	.057	.056	.048	.063
3D1X1	999	39.498	13.614	.158	.143	.146	.144	.147	.148	.150	.147	.152
3D1X2	1,118	39.481	13.135	.132	.043	.046	.064	.059	.064	.061	.076	.076
3D1X3	1,471	39.003	14.411	.101	.050	.056	.052	.082	.056	.084	.082	.084
3D1X7	222	37.599	15.038	.110	.108	.109	.124	.127	.125	.128	.142	.142
3E0X1	571	38.550	14.440	.084	.011	.100	.016	.063	.106	.113	.063	.119
3E0X2	639	38.363	14.539	.115	.063	.066	.063	.113	.068	.114	.114	.115
3E1X1	641	38.008	14.576	.047	.047	.049	.048	.052	.049	.054	.053	.054
3E4X1	644	37.186	14.982	.098	.044	.082	.058	.055	.082	.086	.065	.087
4A2X1	218	39.972	13.385	.199	.135	.164	.139	.153	.164	.183	.158	.183

Note. Validities reported are multiple Rs for the composite predicting the criterion. SD = standard deviation.

Table H.5. Optimally Weighted Predictive Validity Results for Training Grade Criterion by AFS for Administrative Composite

AFSC	Sample Size	Criterion Mean	Criterion SD	Predictive Validity							
				Current Composite	MK+PC+WK+GS	MK+PC+WK+AR	MK+PC+WK+AO	MK+PC+WK+AR+GS	MK+PC+WK+AO+GS	MK+PC+WK+AO+AR	MK+PC+WK+AO+AR+GS
1C0X2	1,469	85.978	6.449	.384	.385	.397	.385	.397	.385	.397	.397
1C3X1	818	86.995	5.672	.387	.389	.400	.388	.400	.389	.400	.401
1N0X1	2,460	88.338	4.907	.470	.472	.480	.470	.481	.472	.480	.481
1N2X1A	522	91.128	4.503	.502	.511	.529	.503	.534	.512	.529	.534
1N2X1C	434	91.461	3.776	.353	.358	.373	.357	.382	.362	.375	.384
2G0X1	405	87.252	6.088	.327	.327	.362	.327	.365	.328	.364	.367
2S0X1	5,350	88.084	5.726	.422	.425	.428	.423	.430	.427	.429	.431
2T0X1	1,475	87.099	5.544	.463	.466	.477	.464	.478	.466	.478	.478
2T2X1	3,921	88.046	5.371	.459	.474	.474	.459	.484	.474	.474	.484
2T3X7	452	87.522	6.360	.455	.455	.470	.455	.470	.456	.471	.471
3D0X1	3,618	85.981	6.009	.355	.356	.363	.355	.363	.356	.363	.364
3F0X1	3,197	88.626	6.274	.313	.313	.327	.319	.327	.320	.331	.331
3F5X1	353	88.805	5.793	.281	.288	.298	.298	.308	.304	.311	.320
4A1X1	610	82.910	5.719	.430	.431	.436	.430	.436	.431	.436	.436
4C0X1	396	87.634	5.047	.560	.560	.561	.560	.561	.560	.561	.561
4J0X2	143	85.441	5.212	.586	.593	.589	.594	.595	.601	.596	.603

Note. Validities reported are multiple Rs for the composite predicting the criterion. SD = standard deviation.

Table H.6. Optimally Weighted Predictive Validity Results for MMRS Criterion by AFS for Administrative Composite

AFSC	Sample Size	Criterion Mean	Criterion SD	Predictive Validity							
				Current Composite	MK+PC+WK+GS	MK+PC+WK+AR	MK+PC+WK+AO	MK+PC+WK+AR+GS	MK+PC+WK+AO+GS	MK+PC+WK+AO+AR	MK+PC+WK+AO+AR+GS
1C0X2	828	34.953	16.379	.099	.105	.101	.103	.107	.108	.104	.109
1C3X1	470	35.578	15.819	.069	.108	.091	.069	.131	.108	.091	.131
1N0X1	1,420	39.302	13.810	.057	.074	.086	.098	.095	.111	.114	.122
1N2X1A	577	40.412	13.682	.082	.151	.156	.089	.189	.153	.162	.193
1N2X1C	235	38.154	14.321	.097	.119	.149	.098	.158	.120	.152	.160
2G0X1	231	37.502	15.653	.046	.046	.100	.049	.100	.049	.103	.104
2S0X1	3,101	37.186	15.534	.051	.068	.052	.051	.070	.069	.052	.071
2T0X1	807	36.655	15.805	.137	.139	.137	.167	.139	.170	.167	.170
2T2X1	2,350	38.053	14.751	.026	.037	.026	.039	.037	.046	.039	.046
2T3X7	228	31.447	17.415	.160	.162	.160	.203	.162	.205	.204	.205
3D0X1	2,112	35.907	16.473	.073	.074	.076	.116	.077	.116	.119	.120
3F0X1	1,530	34.633	16.421	.077	.083	.077	.084	.085	.090	.084	.090
4A1X1	484	38.630	14.748	.091	.103	.102	.094	.116	.105	.105	.120
4C0X1	491	33.993	16.313	.188	.188	.196	.191	.197	.191	.199	.199
4E0X1	575	36.719	15.336	.080	.132	.081	.125	.133	.161	.126	.161
4J0X2	140	37.780	15.216	.286	.293	.296	.295	.305	.300	.302	.310
4M0X1	136	35.817	16.168	.237	.238	.251	.252	.255	.253	.263	.266
4N1X1	331	36.608	15.298	.075	.076	.112	.092	.115	.093	.128	.131
4P0X1	408	35.754	15.787	.099	.099	.100	.164	.101	.165	.167	.169

Note. Validities reported are multiple Rs for the composite predicting the criterion. SD = standard deviation.

Table H.7. Optimally Weighted Predictive Validity Results for Training Grade Criterion by AFS for General Composite

AFSC	Sample Size	Criterion Mean	Criterion SD	Predictive Validity							
				Current Composite	AR+PC+ WK+MK	AR+PC+ WK+AO	AR+PC+WK +GS	AR+PC+WK +AO+MK	AR+PC+WK +GS+MK	AR+PC+WK +AO+GS	AR+PC+WK+ AO+GS+MK
1A0X1	364	94.676	2.987	.446	.447	.447	.446	.448	.447	.447	.448
1A2X1	887	94.379	3.009	.307	.348	.310	.324	.351	.360	.328	.363
1A8X1	1,316	89.477	6.544	.084	.099	.090	.093	.105	.108	.099	.114
1A8X2	260	91.800	3.416	.669	.671	.673	.670	.675	.671	.674	.675
1C1X1	2,644	86.419	6.633	.373	.385	.375	.377	.386	.387	.378	.389
1C2X1	412	86.330	10.274	.174	.225	.177	.207	.227	.246	.209	.247
1C3X1	818	86.995	5.672	.370	.390	.371	.372	.390	.390	.372	.390
1C4X1	873	84.427	9.102	.258	.260	.260	.281	.261	.282	.282	.282
1C5X1	902	87.541	5.920	.407	.424	.408	.438	.425	.450	.438	.451
1C7X1	662	84.760	5.798	.403	.426	.405	.409	.428	.430	.412	.432
1N1X1A	2,205	88.671	4.237	.472	.483	.478	.488	.489	.497	.495	.504
1N3X1	2,476	88.181	6.220	.191	.192	.193	.196	.194	.197	.198	.199
1N4X1A	917	93.529	3.442	.488	.513	.491	.498	.516	.519	.501	.523
1N4X1B	448	91.366	3.544	.541	.554	.543	.542	.556	.555	.544	.557
1T2X1	356	82.253	10.926	.160	.162	.164	.165	.166	.167	.168	.170
1W0X1	1,960	89.006	4.886	.537	.549	.539	.553	.551	.562	.556	.565
2F0X1	2,876	89.605	5.253	.395	.411	.395	.413	.412	.426	.414	.426
2R0X1	507	88.363	5.214	.393	.423	.394	.393	.423	.423	.394	.423
2R1X1	702	87.152	5.306	.379	.387	.381	.380	.388	.388	.382	.390
2S0X1	5,350	88.084	5.726	.378	.425	.379	.383	.426	.427	.384	.428
2W0X1	5,577	89.584	4.847	.459	.477	.459	.475	.477	.489	.475	.490
3D0X2	227	86.264	6.118	.480	.481	.481	.492	.482	.492	.492	.493
3D0X4	248	89.375	4.997	.136	.266	.189	.206	.295	.297	.249	.327
3E4X3	175	90.389	4.706	.392	.428	.392	.505	.428	.524	.506	.526
3E5X1	629	86.409	7.128	.269	.287	.269	.291	.287	.305	.291	.305
3E6X1	383	86.794	5.677	.384	.407	.384	.392	.407	.412	.392	.412
3E7X1	3,384	89.158	3.926	.500	.500	.503	.522	.504	.522	.526	.526
3E8X1	231	93.857	4.873	.273	.274	.274	.290	.275	.291	.292	.292
3E9X1	162	87.747	5.429	.485	.500	.485	.528	.500	.537	.528	.537
3F1X1	3,751	84.073	5.988	.400	.436	.400	.403	.436	.437	.404	.437
3P0X1	29,141	82.911	5.913	.503	.520	.503	.514	.521	.529	.514	.529
4A0X1	1,383	85.205	5.307	.473	.493	.474	.479	.494	.497	.480	.497
4D0X1	164	81.463	5.454	.584	.612	.599	.585	.626	.612	.600	.626
4Y0X1	1,029	84.114	5.716	.467	.489	.468	.476	.490	.495	.477	.496
4Y0X2	128	87.430	4.576	.435	.441	.436	.435	.442	.441	.436	.442
6C0X1	1,118	85.125	5.859	.560	.578	.562	.561	.580	.578	.563	.580
6F0X1	1,804	89.256	5.253	.394	.420	.406	.395	.431	.422	.407	.433

Note. Validities reported are multiple Rs for the composite predicting the criterion. SD = standard deviation.

Table H.8. Optimally Weighted Predictive Validity Results for MMRS Criterion by AFS for General Composite

AFSC	Sample Size	Criterion Mean	Criterion SD	Predictive Validity							
				Current Composite	AR+PC+ WK+MK	AR+PC+ WK+AO	AR+PC+WK +GS	AR+PC+WK +AO+MK	AR+PC+WK +GS+MK	AR+PC+WK +AO+GS	AR+PC+WK+ AO+GS+MK
1A0X1	268	39.461	13.138	.290	.305	.290	.305	.305	.322	.305	.322
1A2X1	792	39.107	13.625	.057	.067	.140	.060	.144	.068	.142	.146
1A8X1	724	38.872	12.952	.118	.120	.119	.131	.121	.132	.133	.134
1A8X2	158	40.750	12.041	.202	.225	.296	.205	.311	.229	.296	.313
1C1X1	2,355	38.750	14.935	.058	.065	.069	.058	.074	.065	.069	.075
1C2X1	171	39.001	13.617	.062	.062	.081	.104	.081	.104	.114	.114
1C3X1	470	35.578	15.819	.087	.089	.087	.129	.089	.132	.129	.133
1C4X1	478	42.031	12.064	.054	.054	.054	.096	.054	.096	.096	.096
1C5X1	538	38.742	14.606	.094	.098	.102	.102	.105	.105	.110	.112
1C7X1	423	36.392	15.833	.136	.138	.145	.137	.147	.139	.145	.148
1N1X1A	1,288	39.158	13.733	.088	.088	.093	.088	.093	.088	.093	.093
1N3X1	1,504	40.865	12.509	.199	.199	.201	.200	.201	.200	.202	.203
1N4X1A	514	41.391	12.601	.129	.143	.132	.144	.147	.160	.149	.164
1N4X1B	162	36.505	14.494	.364	.365	.366	.364	.367	.365	.366	.367
1T0X1	108	40.727	14.349	.186	.222	.202	.200	.236	.231	.214	.243
1T2X1	125	34.618	14.673	.332	.394	.335	.338	.396	.396	.340	.398
1U0X1	320	39.813	13.345	.107	.145	.107	.140	.145	.177	.140	.177
1W0X1	1,134	39.606	13.689	.145	.145	.145	.146	.146	.146	.147	.147
2F0X1	1,688	37.350	15.273	.038	.042	.056	.042	.058	.046	.058	.061
2R0X1	299	36.729	15.528	.159	.159	.159	.162	.159	.162	.162	.162
2R1X1	414	34.656	16.754	.113	.163	.114	.117	.164	.168	.118	.169
2S0X1	3,101	37.186	15.534	.047	.049	.048	.068	.049	.068	.069	.069
2W0X1	3,122	35.886	15.918	.086	.087	.098	.086	.099	.087	.098	.099
3D0X2	1,304	38.979	13.722	.064	.070	.095	.067	.099	.074	.096	.101
3D0X3	397	37.396	14.136	.160	.160	.161	.160	.162	.160	.161	.162
3D0X4	146	40.290	11.844	.452	.453	.457	.455	.457	.455	.459	.459
3E5X1	433	38.624	14.002	.095	.114	.097	.102	.115	.118	.103	.119
3E6X1	201	33.625	17.440	.264	.273	.278	.264	.286	.274	.278	.287
3E7X1	2,274	38.407	14.578	.061	.070	.068	.062	.076	.071	.069	.077
3E8X1	216	41.742	11.795	.217	.221	.245	.222	.248	.226	.248	.251
3E9X1	277	39.193	14.816	.255	.265	.256	.262	.266	.271	.263	.272
3F1X1	2,421	33.109	16.884	.070	.071	.104	.079	.104	.080	.109	.109
3N0X2	205	38.589	13.916	.184	.248	.185	.191	.249	.257	.193	.258
3P0X1	20,959	35.713	16.025	.085	.085	.091	.089	.091	.089	.095	.095
4A0X1	1,383	34.289	16.828	.147	.149	.166	.147	.168	.149	.166	.168
4B0X1	419	36.513	15.554	.093	.093	.105	.093	.105	.093	.105	.105
4D0X1	169	35.904	16.613	.121	.201	.125	.121	.204	.203	.125	.206
4H0X1	176	41.492	11.712	.144	.153	.179	.147	.186	.155	.183	.189
4N0X1	3,095	38.345	14.450	.045	.056	.066	.048	.074	.058	.069	.076
4R0X1	335	38.448	14.139	.082	.092	.091	.083	.100	.092	.092	.101

AFSC	Sample Size	Criterion Mean	Criterion SD	Predictive Validity							
				Current Composite	AR+PC+ WK+MK	AR+PC+ WK+AO	AR+PC+WK +GS	AR+PC+WK +AO+MK	AR+PC+WK +GS+MK	AR+PC+WK +AO+GS	AR+PC+WK+ AO+GS+MK
4T0X1	462	36.395	15.196	.067	.070	.077	.072	.079	.075	.080	.083
4Y0X1	1,057	34.655	16.486	.086	.089	.086	.090	.090	.092	.090	.093
4Y0X2	135	37.710	14.499	.458	.459	.458	.459	.459	.459	.459	.460
5J0X1	204	35.268	15.625	.024	.074	.030	.028	.076	.075	.033	.077
6C0X1	735	38.120	14.080	.095	.108	.143	.095	.152	.108	.143	.152
6F0X1	1,118	35.402	15.912	.079	.080	.107	.089	.108	.089	.114	.114

Note. Validities reported are multiple Rs for the composite predicting the criterion. SD = standard deviation.

APPENDIX I – OPTIMAL WEIGHTS BY AFS

Table I.1. OLS Weights for Training Grade Criterion by AFS for Mechanical Composite

	Composite 1					Composite 2			Composite 3				Composite 4				Composite 5				
	AR	MC	AS	PC	WK	AR	PC	WK	AR	PC	WK	MK	AR	PC	WK	AO	AR	PC	WK	AO	MK
1C2X1	.143	-.113	.060	.037	.132	.111	.029	.118	.011	.023	.114	.170	.116	.030	.121	-.038	.016	.024	.117	-.039	.170
1C7X1	.228	.114	.084	.042	.140	.282	.057	.184	.180	.051	.180	.171	.275	.056	.181	.047	.174	.051	.177	.046	.171
1P0X1	.211	.141	.131	.100	.106	.282	.119	.167	.188	.114	.164	.159	.275	.118	.163	.052	.181	.113	.159	.051	.159
2A3X8	.180	-.031	.269	.229	.144	.209	.238	.193	.123	.233	.190	.145	.209	.238	.194	-.001	.123	.233	.190	-.002	.145
2A5X1	.188	.127	.225	.072	.053	.268	.094	.131	.248	.093	.130	.032	.269	.094	.131	-.010	.250	.093	.131	-.010	.032
2A5X2B	.209	.011	.137	.100	.102	.233	.107	.134	.214	.106	.133	.033	.229	.107	.131	.034	.210	.106	.131	.033	.033
2A5X2D	.129	-.043	.287	.118	-.003	.157	.127	.048	.198	.129	.049	-.070	.170	.128	.055	-.095	.211	.130	.057	-.095	-.069
2A5X4	.228	.176	.253	.113	.070	.329	.141	.166	.259	.137	.163	.118	.329	.141	.166	.002	.259	.137	.163	.002	.118
2A6X1	.170	.109	.217	.094	.090	.241	.114	.161	.191	.111	.159	.085	.237	.114	.159	.030	.187	.111	.157	.030	.085
2A6X2	.245	.144	.185	.114	.128	.324	.136	.201	.255	.132	.199	.118	.319	.136	.199	.034	.250	.132	.196	.034	.117
2A6X3	.209	-.046	.244	.107	-.009	.229	.113	.032	.153	.109	.029	.127	.217	.112	.025	.086	.142	.108	.022	.085	.127
2A6X4	.214	.081	.229	.111	.085	.277	.128	.153	.197	.124	.150	.135	.271	.128	.150	.042	.192	.123	.147	.041	.134
2A6X5	.175	.127	.161	.112	.083	.245	.131	.147	.185	.128	.145	.101	.242	.131	.146	.019	.183	.128	.143	.018	.100
2A6X6	.257	.204	.153	.100	.114	.354	.126	.195	.260	.121	.191	.158	.348	.126	.192	.042	.255	.121	.188	.041	.158
2A7X1	.204	.050	-.007	.101	-.008	.221	.106	.002	.178	.103	.001	.073	.227	.106	.006	-.047	.184	.104	.004	-.047	.074
2A7X2	.263	.174	.038	.109	.123	.332	.127	.173	.211	.120	.168	.205	.328	.127	.171	.027	.207	.120	.166	.026	.205
2A7X3	.225	.180	.130	.106	.102	.309	.129	.173	.263	.126	.171	.078	.306	.129	.171	.020	.260	.126	.169	.020	.078
2A7X5	.185	.163	.244	.120	.047	.280	.146	.138	.224	.143	.136	.094	.274	.145	.134	.043	.219	.142	.132	.043	.093
2F0X1	.189	.086	.157	.129	.074	.244	.144	.128	.157	.139	.125	.146	.241	.144	.127	.017	.155	.139	.124	.016	.146
2M0X2	.212	.030	.164	.149	.101	.247	.159	.143	.172	.154	.140	.127	.240	.158	.139	.053	.165	.154	.136	.053	.126
2T1X1	.179	.065	.139	.131	.149	.223	.143	.194	.159	.140	.192	.108	.220	.143	.193	.020	.157	.140	.190	.020	.108
2T2X1	.211	.067	.102	.173	.124	.251	.184	.162	.154	.178	.158	.163	.249	.184	.161	.009	.153	.178	.157	.008	.163
2T3X1	.146	.116	.258	.091	-.008	.226	.113	.075	.199	.112	.073	.046	.221	.113	.072	.033	.194	.111	.071	.033	.046
2T3X1A	.205	.004	.254	.088	.039	.244	.100	.094	.206	.097	.092	.064	.240	.099	.091	.028	.202	.097	.090	.028	.063
2T3X1C	.207	.012	.186	.137	.002	.239	.146	.044	.208	.145	.043	.053	.225	.145	.036	.098	.195	.143	.035	.098	.052
2W0X1	.227	.065	.132	.144	.128	.270	.156	.172	.173	.151	.168	.163	.268	.156	.171	.009	.172	.151	.167	.008	.163
2W1X1	.220	.119	.156	.120	.100	.287	.138	.161	.211	.133	.159	.127	.285	.138	.161	.010	.210	.133	.158	.009	.127
2W2X1	.173	.104	.227	.148	.080	.244	.168	.153	.195	.165	.151	.084	.243	.168	.152	.011	.193	.165	.150	.010	.084
3D1X7	.220	.159	.164	.058	.139	.302	.080	.211	.244	.077	.209	.098	.302	.080	.211	.000	.244	.077	.209	-.001	.098
3E0X1	.312	.151	.144	.131	.060	.388	.151	.127	.269	.145	.122	.200	.389	.151	.128	-.010	.271	.145	.123	-.011	.200
3E0X2	.227	.171	.243	.129	.005	.325	.156	.097	.280	.153	.095	.076	.316	.155	.092	.060	.272	.153	.091	.059	.075
3E1X1	.239	.119	.178	.089	.098	.309	.108	.164	.234	.104	.161	.127	.308	.108	.164	.002	.233	.104	.161	.002	.127
3E2X1	.211	.034	.178	.140	.098	.250	.151	.143	.213	.149	.142	.062	.250	.151	.143	.000	.213	.149	.142	-.001	.062
3E3X1	.247	.088	.165	.161	-.001	.304	.176	.055	.275	.175	.054	.049	.303	.176	.054	.007	.274	.175	.053	.007	.049
3E4X1	.226	.095	.203	.137	.111	.291	.155	.176	.258	.153	.175	.056	.292	.155	.177	-.009	.259	.153	.176	-.010	.056
3E8X1	.079	.239	.078	.160	-.021	.176	.186	.053	.165	.186	.052	.019	.171	.186	.050	.036	.160	.185	.049	.036	.019
4A2X1	.109	.258	.117	.053	.092	.219	.083	.179	.051	.073	.172	.286	.186	.080	.159	.241	.019	.071	.153	.240	.283

Note. Values reported are standardized OLS weights for each composite for predicting the criterion.

Table I.2. OLS Weights for MMRS Criterion by AFS for Mechanical Composite

	Composite 1					Composite 2			Composite 3				Composite 4				Composite 5				
	AR	MC	AS	PC	WK	AR	PC	WK	AR	PC	WK	MK	AR	PC	WK	AO	AR	PC	WK	AO	MK
1C2X1	-.050	-.080	.078	.060	-.109	-.067	.055	-.111	-.078	.055	-.111	.019	-.059	.056	-.106	-.058	-.071	.055	-.107	-.058	.019
1C7X1	.087	.004	.087	.050	-.044	.101	.054	-.025	.081	.053	-.026	.035	.095	.054	-.029	.050	.074	.052	-.030	.050	.035
1P0X1	.033	.018	.026	-.009	-.048	.043	-.007	-.039	-.027	-.011	-.041	.118	.034	-.007	-.044	.066	-.035	-.011	-.046	.065	.117
2A3X3	.038	.013	.085	.041	-.060	.055	.045	-.039	.044	.045	-.039	.019	.048	.045	-.043	.055	.036	.044	-.044	.055	.019
2A3X3L	-.059	.171	.010	.090	.033	.004	.107	.076	.005	.107	.076	.000	.006	.107	.077	-.012	.006	.107	.077	-.012	.000
2A3X3M	.010	.121	.049	-.038	-.008	.061	-.024	.031	.119	-.021	.033	-.100	.058	-.024	.030	.016	.117	-.021	.032	.017	-.100
2A3X7	.065	-.018	.007	.141	.058	.059	.140	.056	-.057	.133	.051	.196	.048	.139	.049	.082	-.067	.133	.045	.081	.195
2A5X1	.028	.048	.074	.067	-.045	.056	.075	-.018	.045	.074	-.018	.018	.051	.074	-.021	.038	.040	.074	-.021	.038	.018
2A5X2B	-.036	.047	.209	-.096	.013	.012	-.083	.069	-.002	-.084	.068	.024	.001	-.084	.063	.076	-.012	-.084	.062	.076	.023
2A5X2D	-.098	.156	.016	.285	-.012	-.039	.301	.029	-.128	.296	.026	.150	-.038	.301	.029	-.005	-.127	.296	.026	-.006	.150
2A5X4	.014	.033	.062	.006	.009	.035	.012	.030	-.001	.010	.028	.061	.032	.012	.028	.019	-.003	.010	.027	.019	.061
2A6X1	.011	.027	.076	.026	-.038	.032	.032	-.015	.028	.032	-.015	.007	.023	.032	-.020	.064	.020	.031	-.021	.064	.006
2A6X2	.019	.054	.116	-.009	-.037	.055	.001	.000	.048	.000	.000	.013	.045	.000	-.005	.071	.038	.000	-.006	.071	.012
2A6X3	.095	-.072	.040	-.049	.045	.075	-.054	.036	.065	-.055	.036	.016	.067	-.055	.031	.058	.057	-.055	.031	.058	.016
2A6X4	.017	.095	.064	.010	.006	.061	.022	.042	.053	.022	.042	.013	.059	.022	.041	.018	.051	.021	.040	.018	.013
2A6X5	.050	-.019	.100	.068	-.037	.058	.070	-.020	.074	.071	-.020	-.027	.053	.070	-.023	.036	.069	.071	-.023	.036	-.028
2A6X6	.023	-.010	.116	.068	-.034	.037	.072	-.012	.034	.072	-.012	.006	.032	.072	-.015	.038	.028	.071	-.015	.038	.006
2A7X1	.051	-.037	.134	-.036	-.013	.057	-.034	.007	.066	-.033	.007	-.014	.049	-.034	.002	.059	.058	-.034	.002	.059	-.015
2A7X2	-.005	-.028	.019	.168	-.074	-.013	.166	-.077	-.046	.164	-.078	.057	-.010	.167	-.076	-.016	-.044	.165	-.077	-.016	.057
2A7X3	-.023	.024	.122	.044	.015	.004	.052	.046	.023	.053	.047	-.032	-.005	.051	.042	.061	.015	.052	.042	.061	-.033
2A7X5	.120	.061	.174	.033	-.055	.168	.047	-.004	.183	.047	-.003	-.026	.176	.047	.001	-.060	.191	.048	.002	-.060	-.025
2F0X1	-.018	-.012	.097	.026	-.060	-.007	.029	-.042	-.020	.028	-.043	.021	-.013	.028	-.046	.042	-.025	.027	-.046	.042	.021
2M0X2	.092	.135	-.024	.132	-.119	.137	.144	-.092	.141	.144	-.091	-.007	.122	.142	-.100	.103	.127	.143	-.100	.103	-.008
2T1X1	.024	.031	.057	.002	-.027	.044	.007	-.007	.052	.008	-.007	-.013	.042	.007	-.008	.011	.050	.008	-.008	.011	-.013
2T2X1	.000	-.005	.055	.004	.001	.007	.006	.012	.006	.006	.012	.002	.003	.006	.009	.029	.002	.006	.009	.029	.001
2T3X1	-.010	.064	.032	-.005	-.025	.017	.002	-.002	.047	.004	-.001	-.049	.015	.002	-.004	.017	.044	.004	-.003	.017	-.050
2T3X1A	-.052	-.008	.190	.154	-.073	-.026	.162	-.034	-.077	.159	-.036	.087	-.020	.162	-.031	-.044	-.072	.159	-.033	-.044	.087
2T3X1C	-.017	-.066	.100	-.049	.126	-.026	-.051	.132	.008	-.049	.133	-.056	-.036	-.052	.126	.072	-.002	-.050	.127	.073	-.057
2W0X1	.040	-.033	.095	.005	.049	.042	.005	.061	.051	.006	.061	-.016	.036	.005	.057	.047	.045	.005	.057	.047	-.016
2W1X1	-.031	.032	.066	.029	-.068	-.009	.035	-.046	-.038	.034	-.047	.048	-.013	.035	-.048	.029	-.042	.033	-.049	.028	.048
2W2X1	-.079	.046	.003	.023	.001	-.061	.028	.013	-.127	.024	.011	.112	-.060	.028	.014	-.010	-.126	.024	.011	-.011	.112
3D1X7	-.003	.104	-.097	.066	-.026	.020	.072	-.021	-.050	.068	-.024	.120	.030	.073	-.016	-.072	-.041	.069	-.018	-.073	.120
3E0X1	.021	-.014	.023	.049	-.122	.019	.049	-.120	.023	.049	-.120	-.007	.027	.049	-.116	-.053	.030	.049	-.116	-.053	-.006
3E0X2	.043	.004	.088	-.033	.001	.057	-.029	.021	.055	-.029	.021	.005	.045	-.030	.013	.094	.042	-.030	.013	.094	.004
3E1X1	.031	.014	.031	.001	.014	.041	.004	.024	.050	.005	.025	-.016	.038	.004	.023	.020	.048	.004	.023	.020	-.016
3E2X1	.038	-.083	.101	.032	.077	.023	.028	.078	.064	.031	.080	-.069	.016	.028	.074	.049	.057	.030	.076	.050	-.070
3E3X1	.035	.005	.045	.094	-.048	.044	.096	-.037	.064	.097	-.036	-.035	.041	.096	-.038	.017	.062	.097	-.038	.017	-.035
3E4X1	-.085	.023	.093	.003	.047	-.063	.009	.072	-.051	.010	.072	-.020	-.067	.009	.070	.029	-.055	.010	.070	.029	-.020
3E8X1	.131	-.004	.112	-.126	-.170	.146	-.121	-.148	.117	-.123	-.149	.049	.130	-.123	-.157	.111	.102	-.124	-.158	.111	.048
4A2X1	-.015	-.068	-.068	.003	-.082	-.050	-.006	-.113	-.017	-.004	-.111	-.055	-.061	-.007	-.119	.081	-.028	-.005	-.118	.081	-.056

Note. Values reported are standardized OLS weights for each composite for predicting the criterion.

Table I.3. OLS Weights for Training Grade Criterion by AFS for Electronics Composite

	Composite 1				Composite 2		Composite 3			Composite 4			Composite 5			Composite 6			
	GS	AR	MK	EI	AR	MK	AR	MK	WK	AR	MK	PC	AR	MK	AO	AR	MK	PC	WK
1A3X1	.165	.178	.103	-.018	.225	.123	.179	.114	.169	.151	.109	.237	.220	.123	.032	.140	.107	.200	.081
1C6X1	.114	.103	.110	.097	.174	.125	.137	.118	.135	.132	.117	.132	.169	.125	.029	.120	.114	.089	.095
1C8X3	.068	.192	.125	.090	.246	.134	.203	.126	.157	.194	.124	.167	.236	.133	.062	.180	.121	.120	.104
1W0X1	.201	.236	.147	.121	.344	.174	.282	.161	.225	.276	.160	.217	.333	.173	.068	.254	.156	.144	.162
2A0X1	.136	.140	.137	.133	.231	.156	.172	.144	.213	.175	.145	.178	.219	.155	.076	.152	.140	.102	.169
2A2X1	.226	.131	.269	.257	.294	.300	.231	.287	.233	.217	.285	.247	.284	.299	.067	.197	.281	.177	.155
2A2X2	.154	.176	.130	.205	.297	.151	.256	.143	.151	.221	.136	.244	.282	.150	.098	.213	.135	.219	.055
2A2X3	.079	.178	.213	.008	.207	.223	.182	.218	.091	.144	.210	.201	.204	.223	.018	.143	.210	.199	.004
2A3X4	.126	.181	.165	.181	.285	.183	.238	.173	.173	.220	.170	.206	.283	.182	.013	.207	.167	.160	.103
2A3X5	.139	.161	.125	.198	.275	.145	.227	.135	.177	.222	.134	.168	.275	.145	.000	.205	.131	.110	.129
2A6X2	.176	.216	.115	.220	.350	.139	.280	.125	.255	.281	.126	.222	.342	.138	.054	.255	.120	.133	.197
2A6X6	.192	.206	.151	.244	.354	.178	.286	.164	.245	.288	.165	.208	.344	.177	.061	.263	.160	.121	.192
2A8X1	.100	.131	.027	.125	.207	.041	.158	.031	.178	.149	.029	.184	.211	.041	-.025	.133	.026	.130	.121
2A8X2	.095	.254	.013	.265	.377	.028	.318	.016	.216	.285	.010	.295	.373	.028	.024	.270	.007	.246	.109
2A9X1	.237	.143	.067	.266	.313	.100	.250	.087	.229	.236	.085	.246	.307	.099	.037	.216	.081	.177	.151
2A9X2	.178	.236	.062	.055	.312	.085	.248	.072	.237	.227	.069	.274	.326	.087	-.087	.207	.065	.207	.146
2A9X3	.239	.181	.095	.150	.311	.127	.236	.112	.274	.247	.114	.206	.303	.126	.056	.217	.108	.102	.230
2M0X1	.176	.235	.120	.160	.349	.144	.271	.129	.284	.261	.127	.279	.335	.143	.089	.235	.122	.188	.202
2M0X3	.113	.045	.226	.166	.140	.242	.077	.229	.229	.092	.232	.152	.131	.241	.055	.065	.227	.060	.203
2P0X1	.228	.208	.234	.161	.338	.264	.275	.251	.230	.270	.251	.216	.338	.264	-.001	.248	.246	.139	.169
2W1X1	.173	.177	.120	.183	.297	.144	.238	.132	.217	.233	.131	.205	.293	.144	.027	.212	.127	.133	.159
3D1X1	.118	.084	.059	.021	.130	.074	.081	.064	.178	.068	.062	.197	.132	.074	-.014	.053	.058	.145	.114
3D1X2	.260	.075	-.022	.037	.172	.011	.113	-.001	.216	.111	-.001	.194	.183	.012	-.070	.090	-.006	.120	.163
3D1X3	.121	.169	.134	.190	.274	.151	.214	.139	.220	.210	.138	.205	.268	.150	.038	.188	.134	.132	.162
3D1X7	.222	.188	.088	.186	.325	.117	.258	.104	.246	.271	.107	.172	.322	.117	.020	.243	.101	.075	.213
3E0X1	.115	.231	.198	.237	.351	.215	.299	.205	.191	.286	.202	.207	.350	.215	.009	.270	.199	.150	.126
3E0X2	.083	.227	.077	.299	.358	.090	.313	.081	.166	.296	.078	.199	.347	.089	.073	.283	.075	.154	.099
3E1X1	.125	.190	.122	.219	.307	.140	.251	.129	.206	.252	.130	.176	.304	.140	.020	.231	.125	.103	.161
3E4X1	.191	.216	.042	.223	.356	.068	.290	.055	.243	.284	.054	.233	.355	.068	.010	.260	.049	.153	.177
4A2X1	.094	-.005	.223	.134	.072	.236	.017	.225	.203	.020	.226	.166	.030	.233	.265	-.001	.222	.093	.162

Table I.3. (Continued)

	Composite 7				Composite 8				Composite 9				
	AR	MK	AO	WK	AR	MK	AO	PC	AR	MK	AO	PC	WK
1A3X1	.176	.114	.019	.167	.148	.109	.022	.236	.138	.106	.017	.200	.080
1C6X1	.134	.118	.018	.133	.129	.117	.023	.131	.117	.114	.017	.089	.094
1C8X3	.196	.125	.050	.152	.186	.123	.055	.164	.173	.121	.049	.119	.100
1W0X1	.275	.161	.051	.220	.267	.160	.059	.214	.248	.155	.050	.143	.158
2A0X1	.164	.144	.059	.208	.165	.144	.068	.175	.145	.140	.058	.101	.164
2A2X1	.224	.287	.049	.229	.209	.284	.056	.244	.190	.280	.047	.176	.152
2A2X2	.244	.142	.086	.144	.208	.135	.087	.240	.202	.134	.084	.218	.049
2A2X3	.180	.218	.011	.090	.142	.210	.010	.200	.142	.210	.009	.199	.003
2A3X4	.238	.173	-.001	.173	.220	.170	.004	.206	.207	.167	-.002	.160	.103
2A3X5	.229	.135	-.015	.178	.224	.134	-.008	.169	.208	.131	-.015	.110	.130
2A6X2	.276	.125	.034	.252	.274	.125	.045	.220	.250	.120	.033	.133	.194
2A6X6	.281	.164	.042	.242	.281	.164	.052	.206	.258	.159	.041	.121	.189
2A8X1	.164	.031	-.040	.181	.154	.030	-.033	.186	.139	.026	-.041	.130	.124
2A8X2	.317	.016	.007	.216	.283	.010	.012	.294	.270	.007	.005	.246	.108
2A9X1	.248	.087	.019	.227	.232	.084	.027	.244	.214	.080	.018	.177	.150
2A9X2	.262	.073	-.106	.246	.241	.070	-.099	.278	.222	.066	-.108	.209	.155
2A9X3	.232	.112	.034	.271	.240	.114	.047	.204	.212	.108	.033	.102	.227
2M0X1	.262	.128	.067	.278	.250	.126	.077	.275	.226	.121	.065	.187	.196
2M0X3	.072	.229	.037	.226	.085	.232	.049	.149	.061	.227	.037	.059	.200
2P0X1	.278	.252	-.019	.231	.272	.251	-.010	.216	.251	.246	-.020	.140	.170
2W1X1	.236	.132	.010	.216	.230	.131	.019	.204	.211	.127	.009	.133	.158
3D1X1	.085	.064	-.028	.180	.071	.062	-.023	.198	.057	.059	-.030	.146	.117
3D1X2	.125	.000	-.088	.223	.123	.000	-.079	.198	.102	-.005	-.089	.121	.170
3D1X3	.211	.139	.021	.218	.206	.138	.029	.204	.186	.134	.020	.132	.161
3D1X7	.257	.104	.000	.246	.269	.107	.013	.171	.243	.101	.000	.075	.213
3E0X1	.300	.205	-.006	.192	.286	.202	.000	.207	.271	.199	-.007	.151	.126
3E0X2	.305	.080	.060	.161	.287	.077	.064	.196	.275	.075	.059	.154	.094
3E1X1	.250	.129	.004	.206	.250	.129	.013	.175	.231	.125	.003	.103	.161
3E4X1	.291	.055	-.009	.244	.283	.054	.000	.233	.262	.049	-.010	.153	.177
4A2X1	-.017	.223	.250	.181	-.017	.223	.258	.154	-.034	.220	.250	.090	.142

Note. Values reported are standardized OLS weights for each composite for predicting the criterion.

Table I.4. OLS Weights for MMRS Criterion by AFS for Electronics Composite

	Composite 1				Composite 2		Composite 3			Composite 4			Composite 5			Composite 6			
	GS	AR	MK	EI	AR	MK	AR	MK	WK	AR	MK	PC	AR	MK	AO	AR	MK	PC	WK
1A3X1	-.021	-.016	.047	.079	.005	.045	.003	.044	.006	-.006	.043	.035	-.003	.044	.051	-.005	.043	.040	-.011
1C6X1	-.164	.007	.016	.114	-.006	-.003	-.001	-.002	-.017	.025	.003	-.100	-.022	-.004	.101	.021	.002	-.115	.033
1C8X3	-.053	.005	.022	.124	.031	.016	.035	.017	-.014	.023	.015	.027	.027	.016	.028	.027	.016	.041	-.032
1U0X1	.073	.030	-.105	.176	.115	-.094	.101	-.097	.050	.074	-.102	.131	.114	-.095	.007	.075	-.102	.135	-.009
1W0X1	.065	.069	.027	.014	.095	.035	.077	.032	.064	.080	.033	.047	.092	.035	.018	.073	.031	.022	.054
2A0X1	-.078	.000	-.057	-.030	-.036	-.067	-.015	-.063	-.075	-.041	-.068	.016	-.040	-.067	.026	-.027	-.065	.063	-.102
2A3X4	-.024	.113	.118	.116	.146	.117	.130	.113	.060	.143	.116	.010	.142	.116	.028	.134	.114	-.022	.069
2A3X5	-.103	.112	.075	.027	.088	.062	.104	.066	-.060	.110	.067	-.070	.090	.063	-.013	.115	.068	-.053	-.037
2A6X2	-.054	.027	.025	.113	.049	.020	.049	.020	.000	.049	.020	-.001	.038	.019	.069	.049	.020	-.001	.000
2A6X6	.024	.025	.003	.043	.048	.007	.043	.006	.017	.028	.003	.065	.042	.006	.039	.029	.003	.072	-.014
2A8X2	.082	.319	-.306	-.102	.309	-.297	.324	-.294	-.055	.333	-.293	-.076	.284	-.300	.162	.337	-.292	-.064	-.027
2A9X3	.414	.106	.061	.297	.344	.116	.277	.103	.245	.268	.101	.241	.338	.116	.035	.245	.097	.162	.174
2M0X1	-.171	.068	-.041	.151	.065	-.061	.055	-.063	.035	.056	-.063	.028	.056	-.062	.054	.052	-.064	.015	.029
2M0X3	-.035	.071	.017	.088	.090	.013	.088	.013	.007	.096	.015	-.020	.085	.013	.030	.094	.014	-.029	.020
2P0X1	-.278	-.016	.048	.160	-.050	.015	-.025	.020	-.092	-.041	.017	-.031	-.041	.016	-.060	-.028	.019	.014	-.098
2W1X1	-.004	-.051	.048	.039	-.039	.047	-.031	.049	-.031	-.043	.047	.013	-.043	.047	.026	-.037	.048	.034	-.046
3D1X1	.059	.066	.059	.020	.093	.067	.085	.065	.029	.096	.067	-.010	.098	.067	-.033	.090	.066	-.029	.042
3D1X2	-.074	.019	-.004	.155	.049	-.011	.045	-.012	.015	.034	-.015	.050	.056	-.011	-.040	.035	-.014	.054	-.009
3D1X3	.000	.029	-.027	.094	.061	-.026	.054	-.028	.026	.056	-.027	.016	.051	-.027	.065	.053	-.028	.005	.024
3D1X7	-.024	-.022	.127	-.002	-.031	.124	-.035	.123	.014	-.051	.120	.065	-.020	.125	-.067	-.049	.121	.073	-.018
3E0X1	-.102	.002	.006	.075	-.005	-.006	.023	-.001	-.104	-.001	-.006	-.013	.005	-.006	-.063	.015	-.002	.042	-.123
3E0X2	-.058	.041	.004	.119	.064	-.002	.057	-.003	.023	.066	-.001	-.006	.048	-.003	.096	.061	-.002	-.021	.031
3E1X1	-.009	.055	-.011	.003	.053	-.012	.049	-.013	.016	.050	-.012	.010	.050	-.012	.023	.048	-.013	.004	.015
3E4X1	-.002	-.068	-.013	.095	-.035	-.012	-.055	-.016	.073	-.048	-.015	.040	-.040	-.013	.033	-.057	-.017	.009	.069
4A2X1	-.072	.017	-.093	-.109	-.044	-.103	-.017	-.098	-.098	-.032	-.101	-.037	-.056	-.104	.073	-.019	-.098	.009	-.102

Distribution A: Approved for public release. 88ABW-2020-3628, cleared 18 November 2020.

Table I.4. (Continued)

	Composite 7				Composite 8				Composite 9				
	AR	MK	AO	WK	AR	MK	AO	PC	AR	MK	AO	PC	WK
1A3X1	-.004	.044	.051	.002	-.013	.042	.050	.032	-.011	.042	.051	.039	-.015
1C6X1	-.015	-.003	.103	-.026	.010	.002	.106	-.105	.007	.001	.104	-.116	.025
1C8X3	.031	.017	.029	-.016	.019	.014	.027	.025	.023	.015	.029	.041	-.034
1U0X1	.101	-.097	.004	.049	.074	-.102	.002	.131	.075	-.102	.002	.135	-.010
1W0X1	.076	.032	.013	.063	.078	.032	.016	.046	.071	.031	.013	.022	.053
2A0X1	-.020	-.063	.032	-.078	-.044	-.068	.026	.015	-.032	-.065	.032	.062	-.105
2A3X4	.126	.113	.024	.058	.139	.116	.028	.008	.131	.114	.024	-.022	.068
2A3X5	.105	.066	-.008	-.060	.111	.067	-.010	-.070	.116	.068	-.008	-.053	-.037
2A6X2	.039	.019	.070	-.006	.039	.019	.069	-.004	.040	.019	.070	-.002	-.005
2A6X6	.038	.005	.038	.014	.022	.002	.037	.063	.024	.003	.038	.071	-.017
2A8X2	.302	-.296	.168	-.069	.309	-.295	.166	-.084	.314	-.294	.168	-.066	-.040
2A9X3	.274	.103	.016	.244	.265	.101	.025	.240	.243	.097	.015	.162	.173
2M0X1	.048	-.064	.051	.031	.049	-.064	.053	.025	.046	-.064	.051	.014	.025
2M0X3	.084	.013	.030	.004	.092	.014	.031	-.021	.090	.014	.030	-.029	.017
2P0X1	-.018	.021	-.053	-.088	-.032	.018	-.059	-.028	-.021	.020	-.053	.014	-.094
2W1X1	-.035	.049	.029	-.033	-.047	.046	.026	.012	-.041	.048	.028	.034	-.048
3D1X1	.089	.065	-.035	.032	.100	.068	-.032	-.009	.095	.067	-.035	-.029	.045
3D1X2	.051	-.012	-.042	.019	.040	-.014	-.043	.052	.040	-.014	-.042	.054	-.005
3D1X3	.046	-.028	.064	.021	.047	-.028	.065	.013	.045	-.029	.064	.004	.019
3D1X7	-.025	.124	-.069	.020	-.041	.121	-.070	.068	-.039	.121	-.070	.073	-.012
3E0X1	.031	.000	-.055	-.100	.008	-.005	-.062	-.011	.022	-.002	-.055	.043	-.118
3E0X2	.045	-.004	.094	.014	.052	-.002	.096	-.011	.049	-.003	.095	-.022	.024
3E1X1	.046	-.013	.022	.014	.047	-.013	.022	.009	.045	-.013	.022	.003	.013
3E4X1	-.059	-.017	.028	.071	-.052	-.015	.032	.039	-.060	-.017	.028	.008	.067
4A2X1	-.028	-.099	.082	-.105	-.043	-.102	.075	-.041	-.030	-.099	.082	.008	-.109

Note. Values reported are standardized OLS weights for each composite for predicting the criterion.

Table I.5. OLS Weights for Training Grade Criterion by AFS for Administrative Composite

	Composite 1			Composite 2				Composite 3				Composite 4				Composite 5				
	MK	PC	WK	MK	PC	WK	GS	MK	PC	WK	AR	MK	PC	WK	AO	MK	PC	WK	AR	GS
1C0X2	.240	.155	.122	.236	.152	.110	.024	.168	.134	.108	.132	.239	.155	.120	.017	.168	.134	.106	.132	.004
1C3X1	.212	.173	.139	.204	.166	.118	.044	.140	.152	.125	.131	.211	.172	.138	.019	.138	.148	.114	.128	.025
1N0X1	.257	.188	.192	.248	.180	.167	.051	.188	.168	.179	.127	.256	.188	.191	.007	.185	.164	.163	.122	.033
1N2X1A	.264	.148	.265	.242	.128	.205	.125	.143	.113	.242	.221	.261	.147	.262	.026	.134	.100	.198	.207	.093
1N2X1C	.262	.057	.143	.276	.070	.182	-.082	.175	.031	.126	.160	.258	.055	.138	.052	.185	.046	.177	.177	-.109
2G0X1	.213	.147	.075	.217	.150	.085	-.021	.100	.114	.053	.207	.215	.148	.077	-.018	.105	.121	.078	.215	-.054
2S0X1	.299	.135	.126	.287	.123	.092	.070	.245	.119	.116	.098	.296	.133	.123	.036	.240	.111	.090	.090	.056
2T0X1	.315	.193	.107	.304	.183	.077	.062	.234	.170	.091	.148	.317	.194	.109	-.018	.231	.164	.073	.141	.040
2T2X1	.245	.203	.173	.218	.178	.098	.154	.160	.178	.157	.155	.244	.202	.171	.020	.148	.160	.094	.134	.134
2T3X7	.287	.204	.119	.282	.200	.106	.026	.202	.179	.103	.155	.288	.204	.120	-.010	.202	.179	.102	.154	.002
3D0X1	.243	.129	.101	.237	.123	.084	.035	.187	.113	.091	.102	.243	.129	.102	-.007	.185	.110	.081	.099	.020
3F0X1	.203	.157	.053	.200	.154	.046	.016	.135	.137	.040	.123	.197	.155	.047	.064	.135	.138	.042	.124	-.003
3F5X1	.212	.073	.084	.226	.086	.124	-.083	.141	.052	.070	.130	.204	.070	.074	.101	.151	.067	.119	.146	-.106
4A1X1	.287	.197	.085	.281	.192	.068	.035	.234	.182	.075	.097	.287	.197	.085	.000	.232	.179	.065	.093	.021
4C0X1	.223	.294	.231	.224	.295	.235	-.008	.197	.286	.226	.048	.223	.294	.231	.001	.198	.288	.233	.050	-.016
4J0X2	.339	.273	.178	.318	.254	.120	.120	.295	.260	.169	.080	.331	.270	.168	.098	.285	.245	.118	.063	.110

	Composite 6					Composite 7					Composite 8					
	MK	PC	WK	AO	GS	MK	PC	WK	AO	AR	MK	PC	WK	AO	AR	GS
1C0X2	.234	.151	.108	.018	.025	.168	.134	.107	.007	.131	.168	.134	.105	.007	.130	.004
1C3X1	.203	.165	.115	.020	.045	.140	.152	.125	.008	.130	.138	.148	.113	.010	.126	.025
1N0X1	.247	.180	.166	.009	.052	.188	.168	.179	-.003	.127	.185	.164	.164	-.002	.122	.033
1N2X1A	.239	.127	.201	.031	.126	.142	.113	.241	.009	.220	.134	.100	.197	.013	.205	.094
1N2X1C	.272	.068	.176	.049	-.079	.174	.031	.123	.040	.155	.184	.045	.173	.035	.172	-.106
2G0X1	.219	.151	.087	-.019	-.022	.101	.114	.056	-.035	.211	.106	.122	.083	-.037	.220	-.057
2S0X1	.283	.122	.088	.038	.072	.245	.119	.114	.028	.095	.240	.111	.086	.031	.085	.059
2T0X1	.306	.184	.079	-.016	.061	.235	.170	.094	-.030	.152	.231	.165	.076	-.028	.146	.038
2T2X1	.216	.177	.095	.025	.156	.160	.178	.156	.008	.154	.148	.160	.093	.014	.132	.135
2T3X7	.283	.200	.108	-.009	.025	.203	.179	.104	-.022	.158	.203	.179	.104	-.022	.158	.000
3D0X1	.237	.124	.085	-.006	.035	.187	.113	.092	-.015	.104	.185	.110	.083	-.014	.101	.019
3F0X1	.194	.152	.038	.065	.020	.135	.137	.036	.055	.116	.135	.136	.035	.055	.116	.002
3F5X1	.217	.082	.112	.099	-.078	.140	.051	.063	.092	.117	.149	.065	.109	.087	.133	-.099
4A1X1	.281	.192	.068	.001	.035	.234	.182	.075	-.007	.098	.232	.179	.066	-.006	.094	.020
4C0X1	.224	.295	.235	.000	-.008	.197	.286	.226	-.003	.048	.198	.288	.234	-.004	.051	-.016
4J0X2	.309	.249	.107	.102	.125	.294	.259	.162	.093	.068	.284	.243	.106	.098	.049	.118

Note. Values reported are standardized OLS weights for each composite for predicting the criterion.

Table I.6. OLS Weights for MMRS Criterion by AFS for Administrative Composite

	Composite 1			Composite 2				Composite 3				Composite 4				Composite 5				
	MK	WK	PC	MK	PC	WK	GS	MK	PC	WK	AR	MK	PC	WK	AO	MK	PC	WK	AR	GS
1C0X2	.042	-.108	.064	.050	.071	-.087	-.043	.031	.061	-.110	.020	.040	.064	-.110	.027	.035	.068	-.088	.028	-.048
1C3X1	.072	-.009	-.007	.091	.011	.044	-.110	.029	-.019	-.017	.078	.071	-.007	-.009	.003	.041	-.002	.041	.097	-.125
1N0X1	.049	.014	.007	.038	-.003	-.016	.063	.002	-.007	.005	.086	.042	.004	.007	.081	-.003	-.014	-.019	.078	.051
1N2X1A	.074	-.037	-.034	.045	-.060	-.117	.166	-.021	-.061	-.055	.174	.077	-.033	-.033	-.033	-.034	-.081	-.121	.152	.143
1N2X1C	.030	-.013	-.093	.046	-.079	.031	-.090	.112	-.070	.003	-.150	.029	-.094	-.014	.017	.118	-.060	.035	-.139	-.069
2G0X1	-.021	.031	.023	-.019	.024	.035	-.010	.043	.041	.043	-.117	-.023	.022	.029	.018	.042	.040	.039	-.118	.009
2S0X1	.005	-.057	.014	-.006	.005	-.086	.060	.012	.016	-.056	-.012	.004	.014	-.058	.008	.006	.008	-.086	-.022	.064
2T0X1	-.117	-.058	.013	-.123	.007	-.075	.034	-.117	.013	-.058	.000	-.125	.010	-.067	.097	-.120	.008	-.074	-.005	.035
2T2X1	.011	.016	.008	.017	.013	.032	-.034	.009	.007	.016	.003	.009	.007	.013	.029	.012	.012	.032	.009	-.035
2T3X7	.112	.023	.074	.118	.080	.040	-.035	.113	.075	.023	-.002	.101	.070	.011	.127	.116	.080	.040	.004	-.035
3D0X1	.060	-.049	.039	.062	.041	-.042	-.015	.075	.043	-.046	-.028	.052	.036	-.057	.090	.076	.044	-.041	-.026	-.011
3F0X1	.030	-.072	-.010	.038	-.003	-.051	-.043	.023	-.012	-.074	.014	.027	-.011	-.076	.035	.027	-.006	-.052	.021	-.046
4A1X1	.057	-.091	.023	.068	.033	-.061	-.063	.024	.014	-.097	.060	.059	.024	-.089	-.023	.030	.024	-.063	.072	-.074
4C0X1	.102	.010	.129	.103	.130	.015	-.009	.061	.117	.002	.074	.099	.128	.007	.035	.063	.120	.012	.077	-.021
4E0X1	-.037	-.060	.085	-.013	.107	.007	-.138	-.033	.086	-.059	-.008	-.045	.082	-.069	.097	-.020	.105	.007	.014	-.140
4J0X2	.195	-.143	.213	.209	.226	-.104	-.081	.141	.198	-.154	.098	.189	.211	-.150	.071	.150	.211	-.108	.113	-.099
4M0X1	.186	-.004	.110	.193	.116	.014	-.039	.125	.092	-.016	.112	.179	.107	-.013	.087	.130	.100	.011	.120	-.057
4N1X1	.036	.073	-.047	.039	-.045	.082	-.018	-.024	-.065	.061	.109	.040	-.046	.078	-.053	-.020	-.060	.078	.115	-.036
4P0X1	-.028	.061	-.105	-.030	-.107	.055	.011	-.015	-.101	.063	-.024	-.039	-.109	.048	.133	-.016	-.103	.056	-.027	.016

	Composite 6					Composite 7					Composite 8					
	MK	PC	WK	AO	GS	MK	PC	WK	AO	AR	MK	PC	WK	AO	AR	GS
1C0X2	.047	.070	-.090	.026	-.042	.031	.061	-.112	.026	.017	.035	.067	-.090	.024	.024	-.046
1C3X1	.091	.011	.045	-.001	-.110	.029	-.019	-.016	-.003	.078	.041	-.002	.043	-.009	.098	-.125
1N0X1	.030	-.007	-.026	.084	.068	.001	-.008	-.001	.075	.076	-.004	-.015	-.028	.078	.067	.058
1N2X1A	.048	-.059	-.113	-.027	.164	-.020	-.061	-.051	-.047	.180	-.033	-.080	-.117	-.041	.158	.139
1N2X1C	.045	-.079	.029	.014	-.090	.112	-.070	.001	.029	-.153	.118	-.061	.032	.026	-.143	-.067
2G0X1	-.021	.024	.033	.018	-.009	.042	.041	.041	.027	-.120	.041	.040	.036	.028	-.122	.011
2S0X1	-.006	.004	-.087	.010	.061	.012	.016	-.057	.009	-.014	.006	.007	-.087	.012	-.024	.065
2T0X1	-.132	.003	-.087	.099	.040	-.118	.012	-.066	.098	-.013	-.122	.006	-.086	.100	-.019	.043
2T2X1	.014	.012	.029	.028	-.032	.009	.007	.013	.029	.000	.012	.011	.029	.028	.005	-.033
2T3X7	.106	.075	.025	.126	-.028	.111	.073	.013	.129	-.019	.114	.077	.025	.128	-.015	-.025
3D0X1	.054	.037	-.053	.090	-.010	.074	.042	-.054	.093	-.040	.074	.042	-.052	.093	-.040	-.003
3F0X1	.035	-.005	-.055	.033	-.041	.022	-.013	-.076	.034	.009	.026	-.007	-.056	.032	.016	-.044
4A1X1	.070	.034	-.058	-.025	-.064	.024	.014	-.095	-.028	.064	.031	.024	-.059	-.031	.076	-.076
4C0X1	.100	.129	.010	.035	-.007	.061	.117	.000	.029	.070	.062	.119	.009	.028	.073	-.019
4E0X1	-.022	.103	-.004	.092	-.133	-.034	.085	-.067	.098	-.021	-.022	.103	-.004	.092	.000	-.133
4J0X2	.203	.224	-.113	.068	-.077	.141	.197	-.159	.064	.090	.149	.210	-.115	.059	.105	-.094
4M0X1	.185	.112	.004	.086	-.034	.124	.091	-.022	.079	.101	.129	.098	.002	.077	.109	-.051
4N1X1	.044	-.042	.088	-.054	-.021	-.023	-.064	.066	-.062	.118	-.019	-.059	.085	-.064	.124	-.041
4P0X1	-.042	-.112	.039	.134	.019	-.016	-.102	.052	.136	-.042	-.018	-.106	.040	.138	-.047	.026

Note. Values reported are standardized OLS weights for each composite for predicting the criterion.

Table I.7. OLS Weights for Training Grade Criterion by AFS for General Composite

	Composite 1			Composite 2				Composite 3				Composite 4				Composite 5				
	AR	PC	WK	AR	PC	WK	MK	AR	PC	WK	AO	AR	PC	WK	GS	AR	PC	WK	AO	MK
1A0X1	.231	.130	.218	.253	.131	.219	-.036	.235	.131	.221	-.029	.236	.133	.228	-.021	.257	.132	.222	-.029	-.036
1A2X1	.227	.075	.083	.104	.068	.078	.209	.222	.075	.079	.043	.198	.056	.017	.140	.099	.068	.075	.042	.208
1A8X1	.035	-.033	.081	.074	-.031	.083	-.067	.030	-.033	.078	.033	.025	-.040	.058	.050	.070	-.031	.080	.033	-.067
1A8X2	.459	.186	.210	.427	.184	.208	.055	.449	.185	.203	.076	.453	.182	.196	.028	.417	.184	.202	.076	.054
1A9X1	.117	.116	.250	.121	.116	.250	-.006	.101	.115	.241	.115	.089	.097	.187	.135	.105	.115	.241	.115	-.008
1C1X1	.229	.130	.125	.158	.126	.122	.118	.224	.130	.123	.030	.214	.121	.093	.068	.155	.126	.120	.029	.118
1C2X1	.086	.024	.111	-.020	.018	.107	.180	.091	.024	.114	-.035	.055	.003	.042	.149	-.015	.018	.110	-.036	.180
1C3X1	.198	.157	.127	.108	.152	.123	.152	.196	.157	.126	.009	.189	.152	.108	.041	.107	.152	.123	.008	.152
1C4X1	.069	.040	.204	.048	.039	.203	.035	.073	.041	.206	-.028	.038	.020	.134	.148	.052	.040	.205	-.028	.035
1C5X1	.250	.141	.136	.161	.136	.133	.150	.254	.141	.138	-.027	.206	.112	.036	.213	.165	.136	.135	-.028	.150
1C7X1	.277	.052	.181	.174	.046	.177	.174	.270	.051	.178	.046	.257	.038	.137	.095	.168	.045	.174	.045	.174
1N1X1A	.291	.166	.154	.213	.162	.150	.131	.280	.165	.147	.076	.256	.143	.075	.168	.203	.161	.144	.075	.130
1N3X1	.112	.062	.076	.097	.061	.075	.025	.108	.061	.073	.027	.100	.054	.049	.056	.093	.060	.073	.027	.025
1N4X1A	.306	.193	.130	.188	.186	.125	.199	.298	.192	.125	.056	.279	.176	.071	.126	.180	.186	.121	.055	.199
1N4X1B	.364	.198	.127	.274	.193	.123	.153	.358	.197	.123	.049	.354	.191	.103	.052	.268	.192	.119	.048	.152
1T2X1	-.124	.093	.089	-.143	.092	.089	.031	-.119	.094	.092	-.035	-.136	.086	.064	.055	-.138	.093	.091	-.035	.031
1W0X1	.359	.155	.175	.273	.150	.171	.145	.352	.154	.171	.050	.323	.130	.093	.175	.267	.149	.167	.049	.145
2F0X1	.242	.143	.127	.156	.138	.123	.145	.239	.143	.125	.017	.209	.121	.052	.158	.154	.138	.122	.016	.145
2R0X1	.268	.088	.147	.151	.081	.142	.197	.264	.088	.145	.024	.264	.086	.139	.016	.148	.081	.140	.023	.197
2R1X1	.269	.122	.089	.213	.119	.087	.094	.264	.122	.086	.037	.277	.127	.106	-.037	.208	.119	.084	.036	.094
2S0X1	.241	.127	.120	.096	.118	.114	.246	.237	.126	.117	.030	.224	.115	.082	.081	.092	.118	.112	.028	.245
2W0X1	.269	.156	.171	.173	.151	.168	.163	.268	.156	.171	.009	.236	.134	.096	.160	.172	.150	.167	.008	.163
3D0X2	.269	.194	.162	.246	.193	.161	.039	.273	.194	.164	-.029	.240	.175	.097	.138	.250	.193	.163	-.029	.039
3D0X4	.095	-.017	.083	-.075	-.026	.076	.288	.077	-.018	.072	.133	.053	-.045	-.013	.204	-.093	-.028	.066	.131	.287
3E4X3	.257	.047	.193	.128	.040	.188	.217	.254	.047	.191	.022	.169	-.012	-.004	.421	.126	.039	.187	.020	.217
3E5X1	.191	.019	.126	.117	.015	.123	.126	.192	.019	.127	-.008	.160	-.001	.057	.147	.118	.015	.124	-.009	.126
3E6X1	.246	.149	.097	.145	.143	.093	.171	.245	.149	.097	.007	.225	.135	.049	.102	.144	.143	.093	.006	.171
3E7X1	.273	.161	.216	.260	.160	.216	.023	.265	.160	.211	.061	.232	.133	.123	.198	.252	.160	.211	.061	.022
3E8X1	.158	.174	.000	.141	.174	-.001	.028	.155	.174	-.002	.022	.130	.156	-.062	.131	.138	.173	-.003	.022	.028
3E9X1	.321	.175	.124	.230	.170	.121	.154	.322	.175	.125	-.008	.264	.137	-.005	.276	.231	.170	.121	-.009	.154
3F1X1	.198	.145	.178	.069	.138	.173	.218	.201	.145	.180	-.019	.183	.135	.145	.071	.072	.138	.175	-.020	.218
3P0X1	.243	.179	.233	.143	.174	.229	.169	.245	.180	.235	-.017	.213	.160	.166	.142	.145	.174	.231	-.018	.170
4A0X1	.245	.164	.208	.142	.158	.204	.176	.242	.163	.206	.026	.225	.150	.163	.096	.138	.157	.202	.025	.175
4D0X1	.353	.261	.137	.216	.253	.131	.232	.334	.259	.126	.136	.344	.255	.118	.040	.198	.251	.121	.134	.230
4Y0X1	.284	.127	.194	.176	.121	.190	.181	.280	.127	.192	.026	.259	.111	.138	.120	.173	.121	.188	.025	.181
4Y0X2	.336	.062	.141	.283	.059	.139	.089	.340	.062	.144	-.032	.332	.060	.133	.018	.287	.059	.142	-.033	.090
6C0X1	.319	.216	.194	.213	.210	.189	.180	.312	.215	.190	.046	.308	.209	.170	.049	.207	.209	.186	.045	.179
6F0X1	.277	.126	.096	.168	.120	.091	.185	.263	.125	.088	.101	.285	.132	.114	-.039	.155	.119	.083	.100	.184

Table I.7. (Continued)

	Composite 6					Composite 7					Composite 8					
	AR	PC	WK	GS	MK	AR	PC	WK	AO	GS	AR	PC	WK	AO	GS	MK
1A0X1	.255	.134	.227	-.017	-.035	.240	.134	.232	-.030	-.023	.260	.134	.231	-.030	-.020	-.034
1A2X1	.086	.052	.022	.120	.198	.191	.055	.012	.049	.144	.079	.051	.017	.047	.124	.197
1A8X1	.066	-.039	.056	.057	-.072	.019	-.041	.053	.035	.053	.060	-.039	.052	.036	.060	-.072
1A8X2	.423	.181	.197	.023	.053	.441	.181	.187	.077	.035	.412	.180	.188	.077	.029	.052
1A9X1	.099	.097	.186	.137	-.019	.070	.094	.173	.122	.145	.082	.095	.172	.122	.147	-.021
1C1X1	.150	.118	.096	.057	.113	.209	.120	.089	.033	.071	.145	.118	.092	.032	.059	.113
1C2X1	-.041	.000	.046	.132	.168	.059	.004	.045	-.028	.146	-.036	.000	.049	-.030	.129	.168
1C3X1	.104	.149	.111	.026	.150	.187	.151	.106	.011	.042	.102	.149	.110	.009	.027	.150
1C4X1	.026	.020	.135	.145	.021	.041	.020	.137	-.021	.146	.029	.020	.137	-.021	.144	.022
1C5X1	.131	.109	.039	.200	.131	.208	.112	.038	-.017	.212	.133	.109	.041	-.018	.199	.132
1C7X1	.162	.035	.141	.078	.167	.249	.037	.131	.050	.099	.155	.034	.135	.048	.082	.166
1N1X1A	.189	.140	.078	.156	.117	.243	.141	.065	.084	.174	.177	.139	.068	.083	.163	.115
1N3X1	.089	.053	.050	.054	.020	.095	.053	.046	.030	.058	.084	.053	.046	.029	.056	.019
1N4X1A	.171	.172	.075	.107	.189	.270	.174	.064	.062	.131	.163	.171	.068	.060	.112	.188
1N4X1B	.268	.188	.106	.037	.149	.346	.189	.097	.051	.056	.261	.187	.100	.050	.041	.149
1T2X1	-.151	.085	.064	.052	.026	-.131	.086	.067	-.033	.052	-.146	.086	.068	-.033	.049	.027
1W0X1	.248	.128	.096	.162	.131	.314	.129	.086	.058	.179	.240	.126	.089	.056	.166	.130
2F0X1	.134	.118	.056	.145	.132	.205	.120	.050	.024	.160	.130	.118	.053	.023	.147	.131
2R0X1	.151	.082	.144	-.004	.198	.260	.085	.136	.025	.018	.148	.081	.141	.023	-.002	.197
2R1X1	.220	.126	.109	-.047	.099	.271	.127	.102	.035	-.034	.215	.125	.105	.034	-.044	.098
2S0X1	.087	.111	.087	.057	.241	.219	.115	.078	.033	.084	.082	.110	.084	.031	.059	.240
2W0X1	.150	.131	.100	.145	.150	.233	.133	.094	.016	.162	.148	.130	.098	.014	.146	.149
3D0X2	.225	.174	.097	.136	.026	.244	.175	.099	-.023	.136	.228	.175	.100	-.023	.134	.027
3D0X4	-.103	-.050	-.006	.177	.272	.030	-.048	-.029	.143	.215	-.123	-.053	-.023	.140	.188	.270
3E4X3	.066	-.015	.000	.403	.180	.163	-.013	-.009	.041	.424	.061	-.016	-.004	.039	.406	.180
3E5X1	.096	-.004	.060	.136	.113	.161	-.001	.057	-.001	.147	.096	-.004	.060	-.002	.136	.113
3E6X1	.132	.132	.053	.086	.163	.223	.135	.048	.012	.103	.131	.131	.052	.010	.086	.163
3E7X1	.230	.133	.124	.197	.005	.221	.132	.115	.071	.203	.219	.132	.115	.071	.203	.003
3E8X1	.121	.156	-.061	.129	.016	.126	.156	-.065	.028	.133	.117	.155	-.065	.028	.132	.016
3E9X1	.189	.134	-.002	.262	.130	.263	.137	-.006	.004	.276	.189	.134	-.002	.003	.263	.130
3F1X1	.062	.131	.150	.050	.214	.186	.135	.147	-.016	.070	.064	.131	.152	-.018	.048	.214
3P0X1	.123	.156	.170	.127	.158	.215	.160	.168	-.011	.142	.125	.157	.172	-.013	.126	.158
4A0X1	.129	.147	.167	.079	.168	.221	.150	.159	.031	.098	.125	.146	.164	.029	.081	.168
4D0X1	.213	.251	.124	.017	.230	.323	.252	.102	.138	.050	.194	.248	.108	.135	.027	.228
4Y0X1	.160	.107	.142	.103	.172	.254	.110	.135	.032	.122	.156	.107	.139	.030	.105	.171
4Y0X2	.282	.058	.135	.009	.089	.337	.060	.136	-.032	.016	.286	.059	.139	-.033	.007	.089
6C0X1	.208	.205	.175	.032	.177	.301	.208	.165	.048	.053	.201	.204	.169	.046	.035	.176
6F0X1	.177	.128	.118	-.058	.190	.270	.129	.102	.100	-.031	.163	.126	.107	.098	-.050	.188

Note. Values reported are standardized OLS weights for each composite for predicting the criterion.

Table I.8. OLS Weights for MMRS Criterion by AFS for General Composite

	Composite 1			Composite 2				Composite 3				Composite 4				Composite 5				
	AR	PC	WK	AR	PC	WK	MK	AR	PC	WK	AO	AR	PC	WK	GS	AR	PC	WK	AO	MK
1A0X1	-.040	.302	-.001	.029	.306	.002	-.117	-.039	.302	.000	-.006	-.065	.285	-.059	.124	.030	.306	.002	-.005	-.116
1A2X1	-.020	.058	.005	-.046	.057	.004	.044	-.038	.057	-.005	.130	-.024	.055	-.005	.022	-.063	.055	-.006	.130	.043
1A8X1	.072	-.113	-.019	.057	-.114	-.020	.025	.070	-.113	-.021	.017	.056	-.123	-.055	.076	.055	-.114	-.021	.017	.025
1A8X2	.054	-.047	-.187	-.020	-.051	-.190	.125	.024	-.050	-.204	.219	.063	-.041	-.166	-.043	-.049	-.054	-.207	.218	.123
1C1X1	-.002	.003	-.058	-.024	.002	-.059	.037	-.007	.002	-.061	.038	-.001	.003	-.057	-.003	-.029	.001	-.062	.038	.037
1C2X1	-.019	.064	-.058	-.022	.064	-.058	.004	-.012	.065	-.053	-.052	-.042	.049	-.109	.110	-.015	.065	-.053	-.053	.005
1C3X1	.093	-.019	-.017	.077	-.020	-.018	.027	.094	-.019	-.017	-.006	.120	-.001	.042	-.126	.078	-.020	-.017	-.006	.027
1C4X1	.018	-.056	.049	.018	-.056	.049	.000	.019	-.056	.049	-.005	-.004	-.071	.000	.105	.019	-.056	.049	-.005	.000
1C5X1	.025	.075	.014	.005	.073	.013	.035	.020	.074	.010	.039	.015	.068	-.010	.051	-.001	.073	.010	.039	.034
1C7X1	.110	.064	-.024	.092	.063	-.024	.030	.103	.063	-.028	.051	.114	.067	-.013	-.022	.085	.062	-.028	.050	.030
1N1X1A	.039	.047	.027	.039	.047	.027	.001	.035	.046	.024	.031	.037	.045	.022	.011	.035	.046	.024	.031	.001
1N3X1	.129	.077	.049	.139	.077	.050	-.017	.133	.077	.052	-.029	.135	.081	.064	-.032	.143	.078	.052	-.029	-.017
1N4X1A	.082	.094	-.044	.035	.091	-.046	.079	.087	.094	-.041	-.032	.100	.106	-.004	-.086	.040	.092	-.043	-.033	.080
1N4X1B	.275	-.002	.170	.255	-.003	.169	.035	.280	-.002	.173	-.038	.273	-.004	.165	.010	.260	-.003	.173	-.038	.035
1T0X1	-.117	-.099	-.017	-.026	-.094	-.013	-.153	-.128	-.100	-.023	.080	-.096	-.085	.030	-.099	-.037	-.095	-.019	.081	-.154
1T2X1	.074	-.340	-.023	-.084	-.349	-.029	.267	.079	-.339	-.020	-.040	.057	-.351	-.061	.082	-.078	-.348	-.026	-.042	.267
1U0X1	-.024	.123	-.026	.049	.127	-.023	-.125	-.024	.123	-.026	.000	-.049	.106	-.082	.120	.049	.127	-.023	.000	-.125
1W0X1	.095	.029	.062	.086	.028	.062	.015	.093	.028	.061	.012	.089	.025	.050	.027	.084	.028	.061	.012	.015
2F0X1	-.006	.030	-.042	-.019	.029	-.042	.022	-.012	.029	-.045	.042	-.001	.033	-.030	-.024	-.025	.028	-.045	.042	.022
2R0X1	.114	.096	-.036	.122	.097	-.036	-.014	.114	.096	-.036	.000	.123	.102	-.016	-.044	.122	.097	-.036	.000	-.014
2R1X1	-.012	.053	.081	-.100	.048	.078	.149	-.011	.053	.082	-.009	-.004	.058	.099	-.039	-.098	.048	.079	-.010	.149
2S0X1	-.003	.018	-.052	-.013	.017	-.053	.016	-.005	.018	-.053	.009	-.017	.009	-.083	.064	-.014	.017	-.053	.009	.016
2W0X1	.041	.005	.060	.051	.006	.061	-.015	.035	.005	.057	.047	.041	.005	.059	.004	.044	.005	.057	.047	-.016
3D0X2	.056	.028	-.028	.035	.027	-.029	.036	.047	.028	-.034	.071	.062	.032	-.016	-.026	.026	.026	-.035	.071	.035
3D0X3	.138	-.026	.067	.135	-.027	.066	.005	.141	-.026	.068	-.023	.138	-.026	.067	.000	.138	-.026	.068	-.023	.005
3D0X4	-.011	-.203	-.309	.007	-.202	-.309	-.030	-.020	-.204	-.315	.066	.002	-.195	-.280	-.062	-.002	-.203	-.314	.066	-.031
3E5X1	-.006	-.039	-.066	-.052	-.042	-.068	.079	-.003	-.039	-.065	-.019	-.016	-.046	-.089	.049	-.050	-.042	-.066	-.020	.079
3E6X1	.057	.262	-.051	.006	.259	-.053	.087	.045	.261	-.058	.089	.060	.264	-.045	-.014	-.006	.258	-.060	.088	.086
3E7X1	.044	.033	-.005	.069	.034	-.004	-.041	.040	.032	-.007	.030	.042	.031	-.010	.011	.065	.034	-.006	.031	-.042
3E8X1	.127	-.123	-.143	.099	-.124	-.144	.047	.111	-.124	-.152	.116	.138	-.115	-.116	-.057	.083	-.126	-.153	.115	.046
3E9X1	.084	.104	.139	.029	.101	.137	.093	.081	.104	.138	.017	.067	.093	.100	.082	.027	.101	.136	.017	.093
3F1X1	.030	.053	.002	.024	.053	.002	.010	.019	.052	-.004	.078	.040	.060	.025	-.049	.013	.052	-.005	.078	.009
3N0X2	.093	.084	.061	.218	.091	.066	-.210	.091	.084	.060	.021	.079	.074	.029	.070	.215	.091	.065	.022	-.210
3P0X1	.059	.021	.028	.065	.021	.028	-.010	.055	.020	.025	.033	.052	.016	.012	.035	.061	.020	.026	.033	-.010
4A0X1	.062	.087	.038	.044	.086	.038	.031	.051	.086	.032	.079	.062	.087	.038	.000	.033	.085	.031	.079	.030
4B0X1	.083	-.004	.026	.082	-.004	.026	.003	.090	-.003	.030	-.050	.083	-.004	.026	-.001	.088	-.003	.030	-.050	.003
4D0X1	-.047	.134	-.013	-.168	.127	-.018	.204	-.043	.134	-.010	-.032	-.043	.136	-.005	-.017	-.163	.128	-.015	-.033	.204
4H0X1	.011	-.169	.097	-.026	-.171	.095	.064	-.004	-.170	.088	.109	.003	-.174	.078	.041	-.041	-.172	.087	.109	.063

	Composite 1			Composite 2				Composite 3				Composite 4				Composite 5				
	AR	PC	WK	AR	PC	WK	MK	AR	PC	WK	AO	AR	PC	WK	GS	AR	PC	WK	AO	MK
4N0X1	.020	-.013	-.040	-.005	-.014	-.041	.043	.013	-.013	-.044	.049	.016	-.016	-.050	.021	-.012	-.015	-.045	.049	.042
4R0X1	.018	-.077	-.017	-.013	-.079	-.018	.052	.012	-.078	-.020	.040	.014	-.080	-.025	.017	-.018	-.080	-.021	.040	.052
4T0X1	-.009	.069	.002	-.024	.068	.002	.025	-.014	.068	-.001	.038	-.003	.073	.017	-.032	-.029	.068	-.001	.038	.025
4Y0X1	.059	.060	-.054	.041	.059	-.055	.031	.061	.060	-.053	-.012	.052	.055	-.071	.035	.042	.059	-.054	-.012	.032
4Y0X2	.394	-.024	.160	.375	-.025	.160	.032	.391	-.024	.159	.021	.386	-.028	.144	.035	.372	-.025	.158	.021	.031
5J0X1	-.009	-.016	.027	.044	-.013	.029	-.089	-.006	-.016	.029	-.018	-.005	-.014	.035	-.017	.046	-.013	.031	-.018	-.089
6C0X1	.082	-.001	.030	.044	-.003	.029	.065	.067	-.003	.022	.109	.081	-.002	.028	.006	.029	-.005	.020	.108	.064
6F0X1	.075	-.017	-.053	.081	-.016	-.053	-.012	.064	-.017	-.059	.074	.086	-.009	-.027	-.055	.072	-.017	-.058	.074	-.012

Table I.8. (Continued)

	Composite 6					Composite 7					Composite 8					
	AR	PC	WK	GS	MK	AR	PC	WK	AO	GS	AR	PC	WK	AO	GS	MK
1A0X1	.008	.288	-.062	.137	-.129	-.065	.285	-.059	.000	.124	.008	.288	-.062	.001	.137	-.129
1A2X1	-.048	.054	-.004	.018	.042	-.045	.052	-.020	.132	.032	-.067	.052	-.019	.131	.028	.040
1A8X1	.046	-.124	-.055	.074	.018	.053	-.124	-.057	.021	.078	.043	-.124	-.057	.021	.076	.018
1A8X2	-.011	-.044	-.163	-.057	.130	.029	-.046	-.192	.218	-.027	-.043	-.049	-.189	.217	-.039	.127
1C1X1	-.023	.002	-.056	-.007	.038	-.007	.002	-.061	.038	.000	-.028	.002	-.060	.037	-.004	.037
1C2X1	-.039	.049	-.109	.111	-.006	-.035	.050	-.104	-.048	.107	-.032	.050	-.104	-.048	.107	-.005
1C3X1	.097	-.002	.043	-.130	.039	.121	-.001	.043	-.012	-.127	.099	-.002	.044	-.012	-.131	.039
1C4X1	.002	-.070	.000	.106	-.010	-.004	-.071	.000	.000	.105	.002	-.070	.000	.000	.106	-.010
1C5X1	-.003	.067	-.009	.048	.030	.008	.067	-.015	.041	.054	-.009	.066	-.014	.041	.051	.030
1C7X1	.096	.066	-.013	-.025	.033	.107	.066	-.019	.050	-.018	.088	.065	-.018	.049	-.021	.032
1N1X1A	.037	.045	.022	.011	.000	.032	.044	.018	.031	.013	.032	.044	.018	.031	.013	.000
1N3X1	.143	.081	.064	-.030	-.014	.140	.082	.068	-.031	-.034	.148	.082	.067	-.031	-.033	-.014
1N4X1A	.050	.104	-.001	-.095	.088	.106	.107	.001	-.036	-.089	.055	.105	.003	-.037	-.098	.089
1N4X1B	.254	-.004	.166	.007	.034	.279	-.003	.170	-.038	.007	.259	-.004	.171	-.038	.004	.035
1T0X1	-.013	-.082	.026	-.084	-.145	-.108	-.087	.021	.075	-.093	-.025	-.084	.017	.077	-.078	-.146
1T2X1	-.093	-.356	-.055	.056	.262	.062	-.350	-.057	-.037	.080	-.087	-.355	-.051	-.040	.053	.262
1U0X1	.029	.109	-.085	.134	-.137	-.050	.106	-.083	.005	.120	.028	.109	-.086	.007	.134	-.137
1W0X1	.082	.025	.050	.025	.013	.087	.025	.048	.014	.028	.080	.024	.048	.013	.026	.013
2F0X1	-.015	.033	-.030	-.027	.025	-.007	.032	-.035	.041	-.021	-.021	.032	-.034	.041	-.024	.024
2R0X1	.129	.103	-.016	-.043	-.010	.123	.102	-.015	-.002	-.044	.129	.103	-.016	-.002	-.043	-.010
2R1X1	-.091	.055	.103	-.054	.154	-.002	.058	.101	-.011	-.039	-.090	.055	.105	-.013	-.055	.154
2S0X1	-.023	.009	-.082	.063	.011	-.019	.009	-.084	.012	.065	-.025	.008	-.084	.012	.064	.010
2W0X1	.050	.005	.058	.005	-.016	.033	.004	.053	.048	.007	.043	.004	.053	.048	.009	-.017
3D0X2	.040	.031	-.015	-.030	.039	.051	.030	-.024	.070	-.021	.030	.030	-.023	.070	-.025	.038
3D0X3	.135	-.026	.067	-.001	.005	.142	-.026	.069	-.023	-.002	.139	-.026	.070	-.023	-.003	.005
3D0X4	.016	-.194	-.281	-.059	-.025	-.008	-.196	-.288	.063	-.057	.006	-.196	-.288	.064	-.054	-.026
3E5X1	-.059	-.048	-.087	.041	.075	-.013	-.046	-.087	-.017	.047	-.056	-.047	-.085	-.018	.040	.076
3E6X1	.010	.262	-.043	-.023	.089	.046	.262	-.055	.088	-.007	-.003	.261	-.053	.087	-.016	.087
3E7X1	.066	.032	-.011	.015	-.043	.037	.031	-.014	.031	.013	.062	.031	-.015	.032	.018	-.043
3E8X1	.108	-.116	-.115	-.062	.053	.121	-.117	-.129	.113	-.048	.092	-.118	-.128	.113	-.053	.051
3E9X1	.017	.091	.103	.074	.086	.063	.092	.098	.021	.084	.015	.090	.100	.020	.075	.086
3F1X1	.032	.059	.025	-.050	.015	.028	.058	.016	.076	-.043	.021	.058	.016	.076	-.044	.014
3N0X2	.203	.078	.023	.092	-.218	.075	.074	.026	.024	.072	.199	.078	.020	.027	.094	-.219
3P0X1	.059	.016	.011	.036	-.013	.047	.015	.008	.035	.037	.054	.015	.007	.035	.039	-.014
4A0X1	.044	.087	.039	-.003	.031	.050	.086	.029	.079	.006	.033	.085	.030	.079	.003	.030
4B0X1	.082	-.004	.026	-.001	.003	.091	-.003	.032	-.050	-.005	.089	-.003	.032	-.051	-.005	.004
4D0X1	-.162	.132	.000	-.038	.207	-.038	.137	-.001	-.033	-.020	-.157	.133	.004	-.035	-.041	.208
4H0X1	-.032	-.175	.079	.035	.061	-.015	-.177	.065	.111	.050	-.048	-.178	.066	.111	.044	.059
4N0X1	-.008	-.017	-.049	.017	.041	.008	-.017	-.056	.050	.025	-.015	-.018	-.055	.050	.021	.040
4R0X1	-.015	-.081	-.023	.012	.051	.008	-.081	-.029	.041	.020	-.021	-.082	-.028	.040	.015	.051
4T0X1	-.019	.073	.018	-.035	.028	-.008	.073	.013	.037	-.029	-.024	.072	.014	.036	-.032	.028
4Y0X1	.036	.055	-.070	.033	.028	.054	.056	-.069	-.010	.035	.037	.055	-.069	-.010	.032	.029

	Composite 6					Composite 7					Composite 8					
	AR	PC	WK	GS	MK	AR	PC	WK	AO	GS	AR	PC	WK	AO	GS	MK
4Y0X2	.370	-.029	.145	.032	.029	.383	-.029	.141	.023	.037	.367	-.029	.142	.022	.034	.028
5J0X1	.045	-.012	.033	-.009	-.088	-.002	-.013	.038	-.019	-.019	.048	-.012	.035	-.018	-.010	-.088
6C0X1	.044	-.003	.029	-.001	.065	.064	-.005	.015	.109	.014	.028	-.006	.017	.109	.008	.063
6F0X1	.090	-.009	-.027	-.054	-.007	.075	-.011	-.035	.072	-.050	.079	-.010	-.036	.072	-.049	-.008

Note. Values reported are standardized OLS weights for each composite for predicting the criterion.