ASVAB Validation Technical Report

Hospital Corpsman (HM) Rating

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14. ABSTRACT

The Armed Services Vocational Aptitude Battery (ASVAB) is used by the Navy to classify Sailors into occupations, or ratings. This report presents a study undertaken to determine if the selection criteria for the Hospital Corpsman (HM) rating was still appropriate or if it should be changed to reflect any changes in rating tasks or training since last updated. The analysis processes used and the data included when making decisions are described, that ultimately led to a change in the composites used for selection into the HM rating.

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Introduction

The Armed Services Vocational Aptitude Battery (ASVAB) has been used for Navy entrance since 1974 (*History of Military Testing*, n.d.). This battery assesses crystallized intelligence predominantly, but also includes a few tests to assess fluid intelligence (see Appendix A for brief descriptions of each test, or visit https://www.officialasvab.com). The ASVAB is usually administered at Military Entrance Processing Stations (MEPS) or Military Entrance Testing (MET) sites to those attempting to become enlisted personnel.

Those accepted to become enlisted Sailors are classified into specific occupations, known as Navy ratings, based upon each rating's ASVAB composite(s) and cutscore(s), as well as needs of the Navy, other rating specific requirements such as vision minimums or security clearance, and Sailor interests (see Appendix B for a list of ratings and their current ASVAB selection composites). Once Sailors complete their initial recruit training, they may attend initial rating-specific training, or "A" School. Once "A" School and any rating-specific follow-on "C" School training is complete, Sailors are sent to their first assignment to work in their rating.

Selection composites have historically been based on final school grade; ASVAB tests that had the highest correlations with final school grade became the composite (see Held, Hezlett, Johnson, McCloy, Drasgow, and Salas (2014) for more information). In the 2010s, a shift was made away from final school grade to First-Pass Pipeline Success (FPPS), or the ability to pass the school(s) successfully in the first attempt with no academic setbacks. Those with FPPS are sent to the Fleet fastest and therefore cost the least to train, as compared to those who had an academic setback during training or who were not able to successfully complete the course and needed to be retrained in another rating.

The ASVAB Validation Review Committee (AVRC) continually reassesses these rating entry ASVAB standards to ensure they reflect the requirements of the rating and the training undertaken. The standards for the majority of the Hospital Corpsman (HM) rating were changed in December 2020, and this report describes the revalidation effort conducted.

Hospital Corpsman Work

Navy training is based upon the rating description and tasks listed in the Navy Enlisted Manpower and Personnel Classifications and Occupational Standards (NEOCS), specifically Volume I (available at https://www.mynavyhr.navy.mil/References/NEOCS-Manual/), and this was consulted early in the ASVAB re-validation process for an understanding of HM work. However, the primary source of information about the rating that was used for this composite revalidation analysis was the Navy Credentialing Opportunities On-Line (COOL) rating cards, available from https://www.cool.osd.mil/usn/ . The June 2022 COOL rating card for HM indicates:

> "Hospital Corpsman perform duties as assistants in the prevention and treatment of disease and injury and assist health care professionals in providing medical care to Naval personnel and their families. They may function as clinical or

specialty technicians, medical administrative personnel and health care providers at medical treatment facilities. They also serve as battlefield corpsmen with the Marine Corps, rendering emergency medical treatment to include initial treatment in a combat environment. Qualified Hospital Corpsmen may be assigned the responsibility of independent duty aboard ships and submarines; Fleet Marine Force, Special Forces and Seabee units, and at isolated duty stations where no medical officer is available. Additionally, they perform duties as a general dental assistant to include dental infection control, dental treatment room management, preventive dentistry, comprehensive dental assisting, and intraoral radiography.

WHAT THEY DO:

- Assisting in prevention and treatment of disease and injuries;
- Caring for sick and injured;
- Administering immunization programs;
- Rendering emergency medical treatment;
- Instructing sailors and marines in first aid, self aid and personal hygiene procedures;
- Transporting the sick and injured;
- Conducting preliminary physical examinations;
- Performing medical administrative, supply and accounting procedures;
- Maintaining treatment records and reports;
- Supervising shipboard and field environmental sanitation and preventive medicine programs;
- Supervising air, water, food and habitability standards."

Table 1 has been adapted from the COOL rating card description, with the first column showing what HMs do and the remaining columns showing to which of the ASVAB tests each task might intuitively link. Seemingly, the General Science and the 3 language related tests/scores are the most linked to HM work. While this table is not definitive, it can be used as a guide for analyses when creating relevant composites.

Table 1
ASVAB Linkages to the HM Rating

HM Rating Skills/Qualifications	GS	AR	WK	PC	MK	EI	AS	MC	AO	CS	VE
Prevention and treatment of disease and injury	X										
Caring for sick and injured			X								X
Administering immunization programs	X	X	X	X							X
Rendering emergency medical treatment	X										
Instructing in first aid, self aid and personal hygiene procedures	X		X	X							X
Transporting the sick and injured	X										
Conducting preliminary physical examinations	X										
Performing medical administrative, supply and accounting procedures		X	X	X	X						X
Maintaining treatment records and reports			X	X							X
Supervising shipboard and field environmental sanitation and preventive medicine programs	X		X	X							X
Supervising air, water, food and habitability standards	X		X	X							X

The paragraph description from Navy COOL touches upon some unique tasks of some of the HM, specifically tasks conducted by Search and Rescue Medical Technicians, Fleet Marine Force Reconnaissance Independent Duty Corpsmen, or Medical Deep Sea Diving Technicians. This report focuses only on those who were not accessed or reclassified to these advanced technical fields (HM/ATF). While the initial academic course is the same, there is a separate CDP code that was used to separate the data, and these trainees may have a different school experience due to unique requirements of the HM/ATF program. HM/ATF analyses were conducted separately and are not included here, and the final decision of the AVRC was that HM/ATF should not be changed at this time.

Methods

Student Data Used

HM "A" School data was analyzed, as corpsman could be assigned to ships or hospitals following just "A" School completion. Corporate Enterprise Training Activity Resource Systems (CeTARS) data for the Course Data Processing (CDP) code 05JP (Hospital Corpsman Basic) were downloaded for those with Active Duty Service Dates (ADSD) 1 October 2016 and beyond. As the HM rating composites were last changed in December of 2020, data with an

enrollment code from before 1 April 2021 were deleted under the assumption that those going through training in the first 4 months after the change might have been selected based on the previous ASVAB standards.

Those who had graduated or academically failed were retained in the data for analyses, as well as those who had not yet completed the course but had already had an academic setback; an academic setback even without course completion would automatically indicate they had not completed the course successfully in the first pass, which is the dependent variable being used for these analyses. Non-academic failures were removed from data prior to analyses, and non-academic setbacks were not considered in any computations. Table 2 contains the Person Event codes (PEVT) applicable to the sample selected, in addition to the enrollment code (2) and the graduation code (288); see the CeTARS database for full descriptions.

Table 2
Person Event Codes Used

Category	Academic Code	Non-Academic Code
Setback	53	296
	855	298
	964	308
		965
Failure	81	148
		311
		970
		971

The remaining data consisted of 2,820 student records. These were categorized into 4 groups, based upon how they qualified: a) through GS+AR+MK+VE≥209 only, b) through GS+MK+2VE≥209 only, c) through both a) and b), and d) not qualified based on a) nor b). Table 3 provides the number of students in each of the groups, as well as the rate of academic setbacks, the number who were still in training but had already had an academic setback, graduation/failure rates, and observed FPPS rates.

Table 3
Qualification and FPPS Rates for Each Qualification Method

	Student #	% of Sample	Academic Setback Rate	Academic Setback, Still in Training	Grad Rate	Academic Failure Rate	Observed FPPS%
Total Sample	2,820	100.0%	23.5%	99	87.6%	8.9%	74.9%
Qualified Only Through GS+AR+MK+VE≥209	206	7.3%	24.3%	5	90.8%	6.8%	74.8%
Qualified Only Through GS+MK+2VE≥209	336	11.9%	35.7%	18	77.1%	17.6%	60.4%
Qualified On Both	1,599	56.7%	16.1%	40	93.4%	4.1%	83.1%
Qualified On Either	2,141	75.9%	20.0%	63	90.6%	6.5%	78.7%
Waivered	679	24.1%	34.5%	36	78.1%	16.6%	62.9%

As indicated in Table 3, the graduation rate was 87.6% for all those included in the data. The FPPS rate is somewhat lower at 75.9%. The group with the lowest graduation rate is those who qualified only based on the second composite; those who received a waiver are slightly more likely to graduate than those qualified based only on the second composite (77.1% vs 78.1% respectively). Those who qualify on both composites have the highest graduation rate at 93.4%, as well as the highest FPPS rate at 83.1%.

If the minimum scores of the composite are not met, a waiver may be granted per MILPERSMAN 1306-618, up to 3 points per test on a multi-test composite. As indicated in Table 3, 679 received waiver within this range. Figure 1 shows the FPPS, graduation, and academic setback rates for all those receiving waivers of various points per test. At 2 points per test (8 points lower than required score), graduation rate is about 85% (n=65), although it is 71% for 1.5 points per test (n=62).

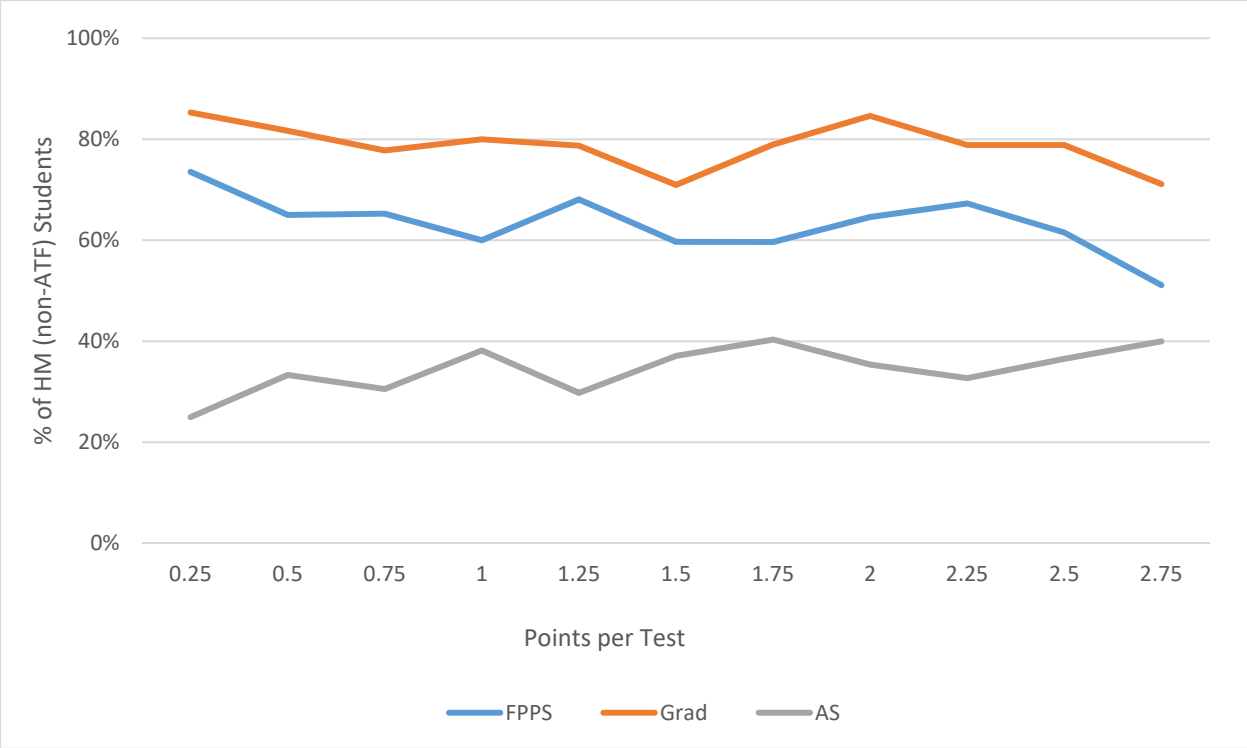

Figure 1. FPPS, graduation (Grad), and academic setback (AS) rates based on number of points per test waivered.

Table 4 provides descriptive details for each ASVAB subtest for the sample, and figures 2 and 3 are histograms of the scores on the two relevant composites. As with all individual ASVAB tests, 50 is the mean and 10 is the standard deviation. The mean score for GS+AR+MK+VE was 216.5 and the mean score for GS+MK+2VE was 217.1.

Table 4
ASVAB Test Descriptives for HM Sample

Test	Count	Min	Max	Mean
GS	2,820	25	76	53.93
AR	2,820	31	76	53.07
WK	2,820	26	74	53.45
PC	2,819	32	69	53.79
MK	2,820	33	73	55.66
EI	2,819	23	77	49.65
AS	2,820	24	78	45.06
MC	2,820	24	78	51.25
VE	2,820	31	72	53.76
AO	2,621	28	69	56.62
CS	446	25	72	54.24

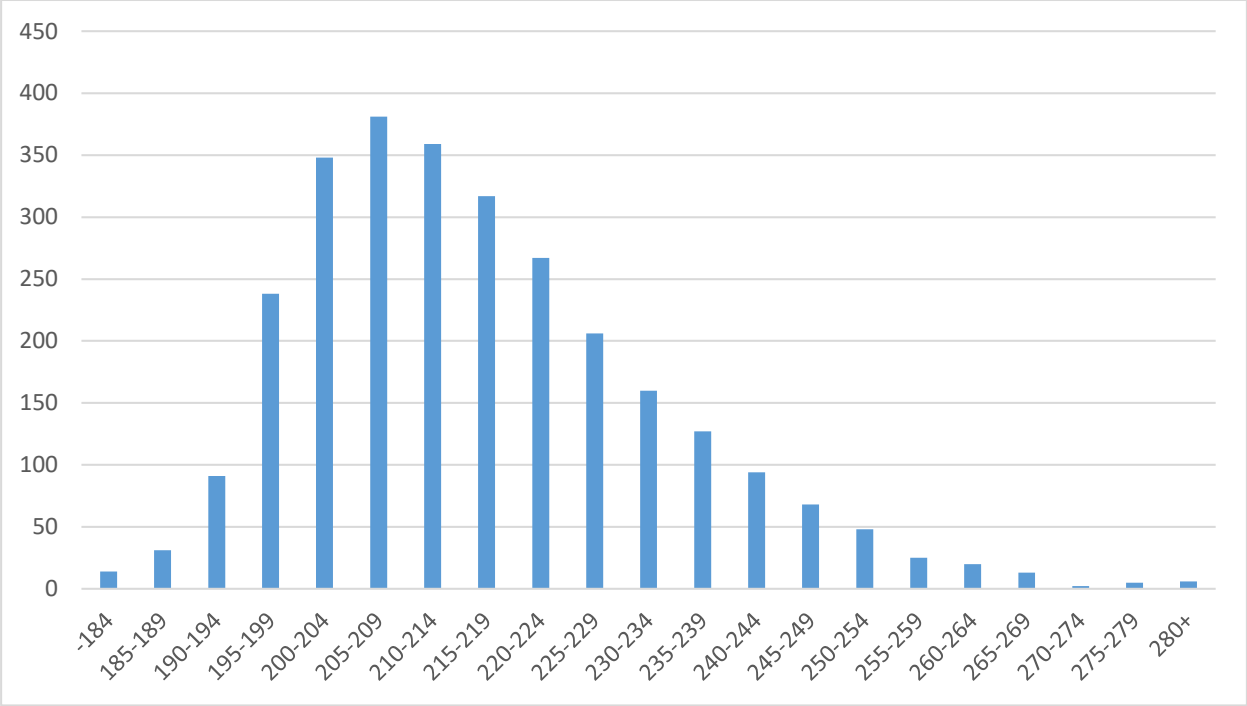

Figure 2. GS+AR+MK+VE Scores of HM Students.

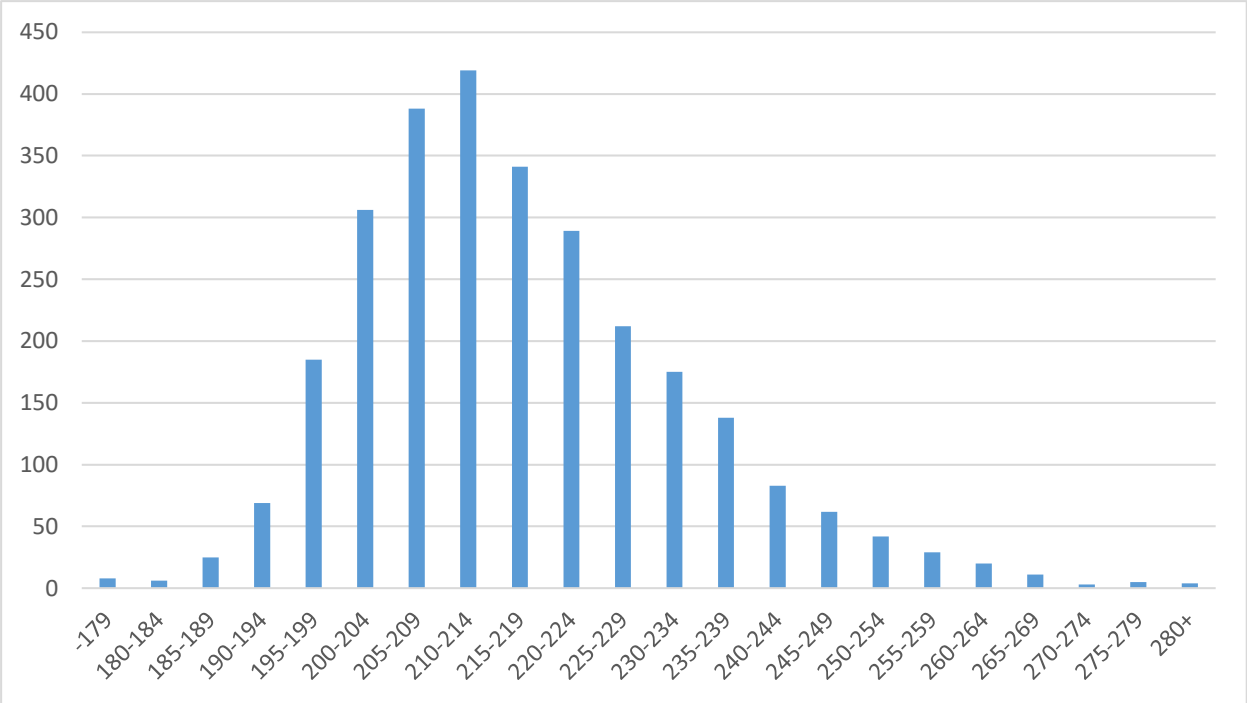

Figure 3. GS+MK+2VE Scores of HM Students.

Because of the low amount of CS data, composites with CS were not considered in any analyses. However, data was only retained for those who had a score on the remainder of the ASVAB tests (2,620 Sailors).

Validity Coefficients

Receiver operating characteristic (ROC) curves were produced for both operational composites, with the GS+AR+MK+VE ROC curve shown in Figure 4 and the GS+MK+2VE ROC curve shown in Figure 5. As indicated in the figure, the diagonal line indicates random classification (i.e., chance) while the solid curve is the relevant ROC. The two composites function similarly in that they function better in the lower left region with lower False Positives. The area under the curve (AUC) for the first is .6845 and for the second is .6433, showing the first is slightly better than the second.

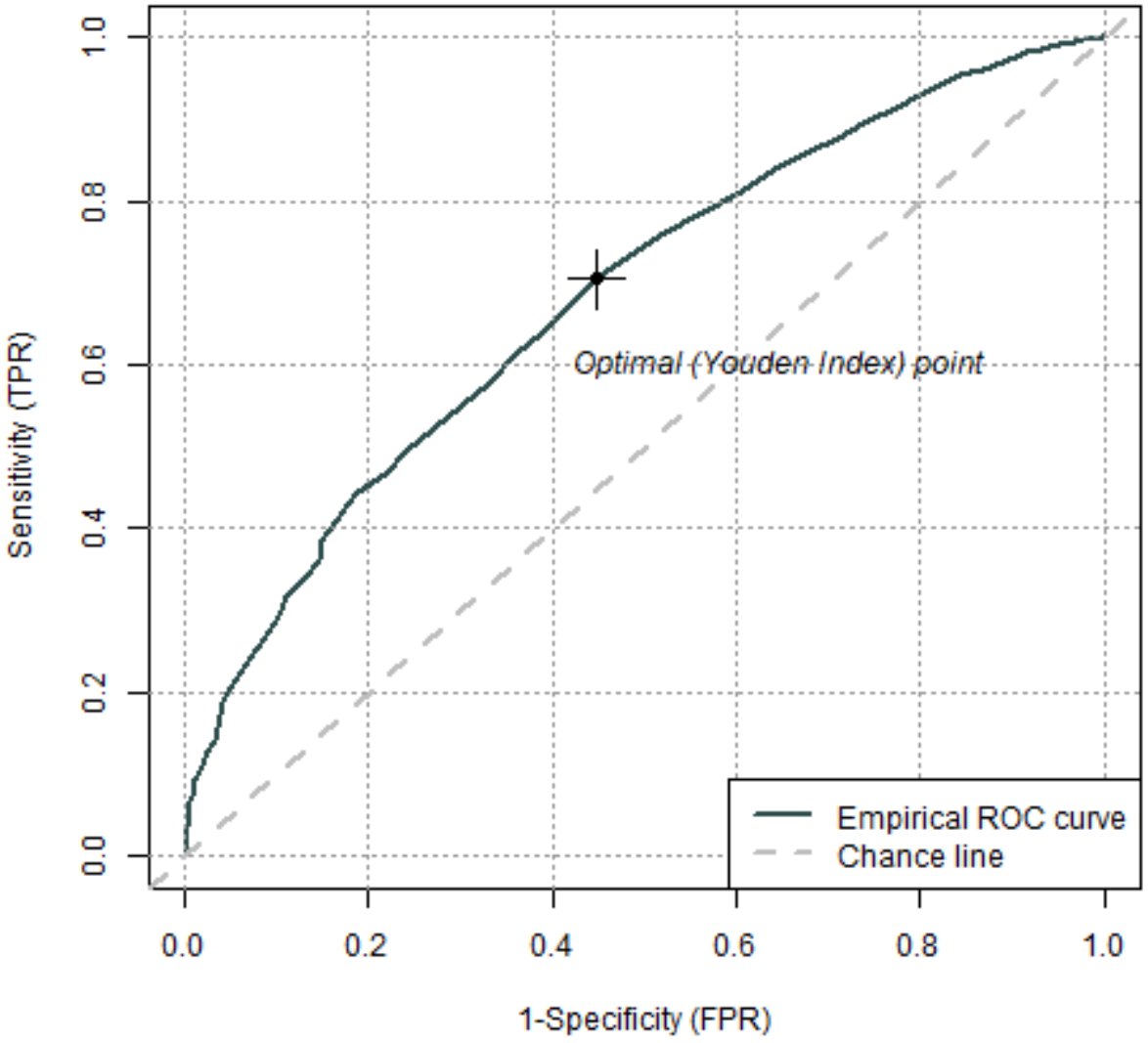

Figure 4. GS+AR+MK+VE ROC.

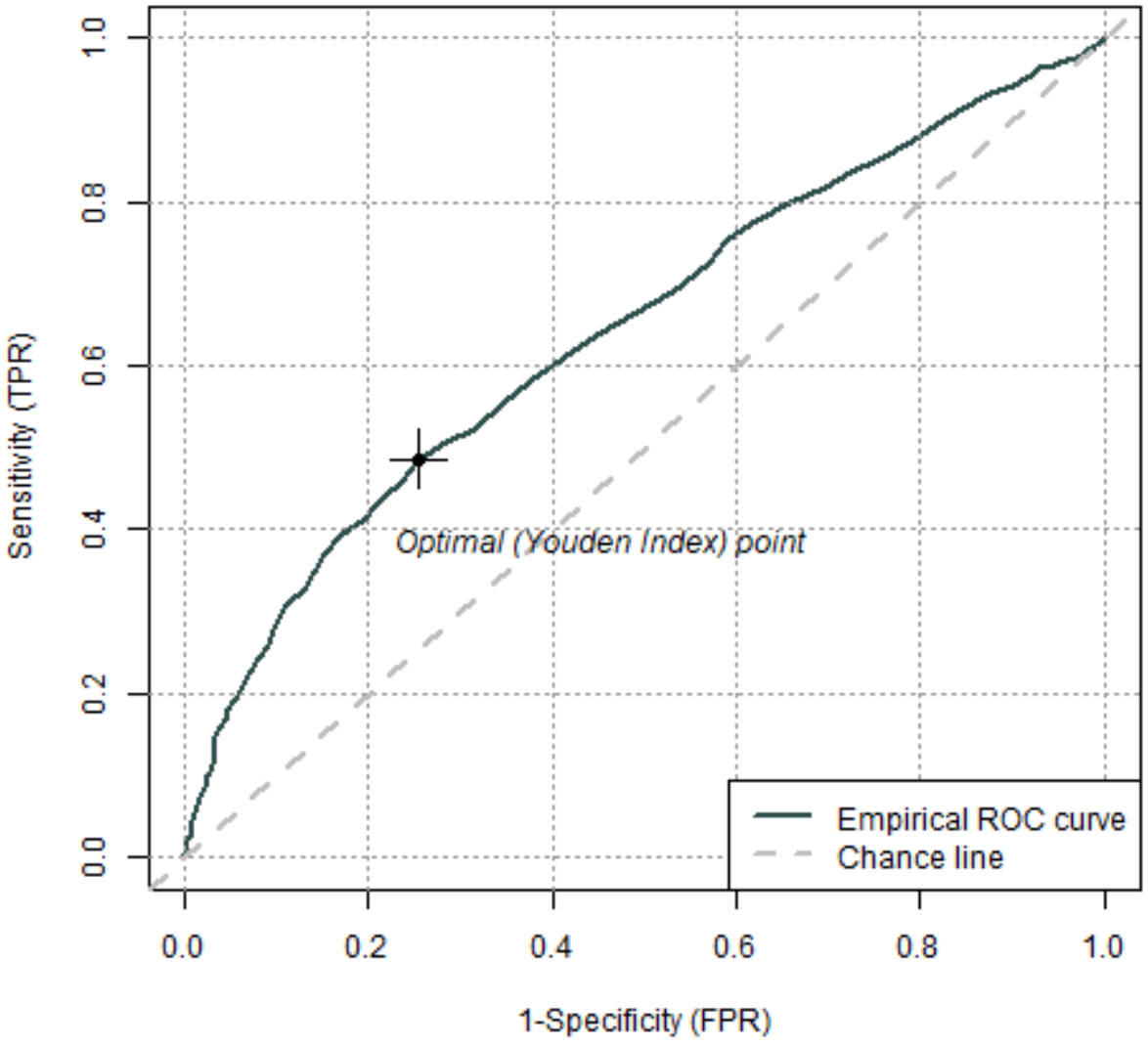

Figure 5. GS+MK+2VE ROC.

Correlations between each individual test/composite and FPPS were computed for the HM data. These correlations were corrected to adjust for the range restriction that results from the selection process (see Segall, 2004 for correcting to PAY97 norms) as well as for the dichotomous nature of the FPPS variable (see appendix C for a brief description, or Held, Carretta, Hezlett, Johnson, Mendoza, Abrahams, Drasgow, McCloy, and & Wolfe (2015) for a detailed description). Table 5 shows the test/composite, grouped by family of test/composite, as well as the uncorrected, partially corrected (for range restriction only), and fully corrected (for range restriction as well as dichotomy) validities. Those highlighted are the 10 highest fully corrected validities, and those underlined are the composites currently in place for selection into the HM rating.

Table 5
Composite Validities

Composite Family	Composite	Uncorrected Validity	Validity Corrected for Range Restriction to PAY97	Validity Corrected for Range Restriction & Dichotomy (Fully Corrected)
ASVAB test	AO	0.113	0.388	0.528
ASVAB test	AR	0.239	0.513	0.697
ASVAB test	AS	0.064	0.211	0.287
ASVAB test	EI	0.120	0.360	0.490
ASVAB test	GS	0.119	0.462	0.628
ASVAB test	MC	0.112	0.354	0.482
ASVAB test	MK	0.255	0.537	0.731
ASVAB test	PC	0.174	0.497	0.677
ASVAB test	VE	0.120	0.488	0.664
ASVAB test	WK	0.058	0.435	0.592
Administrative	MK+VE	0.266	0.560	0.762
Administrative	PC+MK	0.288	0.565	0.769
Administrative	AR+PC+MK	0.297	0.569	0.774
Mechanical	AR+AS+MC	0.174	0.423	0.576
Mechanical	MK+AS+AO	0.203	0.487	0.663
Mechanical	AR+MK+AS	0.251	0.518	0.705
Mechanical	MK+AS+VE	0.211	0.518	0.705
Operations	AR+MK+AS+VE	0.252	0.537	0.731
Operations	GS+AR+2MK	0.285	0.560	0.762
Operations	AR+MK+AO+VE	0.267	0.555	0.755
Operations	AR+MK+EI+VE	0.267	0.552	0.751
Operations	GS+MK+MC+VE	0.214	0.530	0.721
Operations	MK+EI+VE	0.234	0.540	0.735
Specialized	AR+VE	0.241	0.537	0.731
Specialized	GS+MK+VE	0.237	0.548	0.746
Specialized	AR+WK	0.208	0.518	0.705
Specialized	GS+AR+MK+VE	0.272	0.557	0.759
Specialized	GS+AR+MK	0.275	0.555	0.755
Specialized	GS+MK+2VE	0.215	0.541	0.736
Technical	AR+MK+MC+VE	0.255	0.545	0.741
Technical	GS+AR+MK+EI	0.258	0.541	0.736
Technical	GS+EI+MC	0.141	0.439	0.597
Technical	GS+AR+EI+MC	0.194	0.485	0.660

Results

Twelve months of accessions data was extracted in order to assess the possible impact of any changes to the HM selection composites. Those with Active Duty Service Date (ADSD) between 11 October 2021 and 10 October 2022 were selected, which included a total of 34,595 records. Males were 75.6% of this population; racial/ethnic groupings showed 23.4% were Hispanic, 21.4% were African American, and 44.3% were White, with the remainder being another, unknown, or mixed race. ASVAB test descriptives for this population are provided in Table 6.

Table 6
ASVAB Test Descriptives for 12 Month Accessions

Test	Count	Min	Max	Mean
GS	34,564	22	79	52.60
AR	34,566	24	79	53.02
WK	34,563	21	76	52.41
PC	34,562	25	74	52.99
MK	34,565	29	73	54.79
EI	34,512	20	80	50.44
AS	34,560	20	80	46.36
MC	34,556	22	80	52.04
VE	34,565	21	74	52.77
AO	31,651	26	70	56.61
CS	7,155	22	72	60.78
CT	19,352	24	79	52.08
AFQT	34,579	5	99	60.75

Standardized group test score mean differences (Cohen's d) for gender as well as two racial/ethnic differences were computed for the current composites as well as for those composites with the highest validity coefficients after correction. Table 7 shows Cohen's d for the two current composites (GS+AR+MK+VE and GS+MK+2VE) as well as the composite with the highest validity coefficient (AR+PC+MK); see the full results brief in Appendix D for the Cohen's d of the remainder of the most valid composites. All three composites show small (between .20 and .49) differences based on gender (males higher than females) and large differences (.80 and higher) for African American when compared to Whites. Hispanic means as compared to White are small for AR+PC+MK and moderate (between .50 and .79) for the two current composites (Whites higher than Hispanic).

Table 7
Standardized Group Mean Score Differences Based on 12 Months of Accessions

	GS+AR+MK+VE	GS+MK+2VE	AR+PC+MK
Female-Male	-.493	-.470	-.337
African American-White	-.945	-.913	-.764
Hispanic-White	-.573	-.628	-.430

A prediction of FPPS and graduation was made for each of the 34,579 accessed Sailors, based on the FPPS, graduation rates, and ASVAB characteristics of the 2,620 HM Sailors with useable training data. Table 8 shows overall predictions at key cutscores, including the current cutscore (209) and the maximum allowable waiver (197; see *Class "A" School and Rating Entry Requirements* (2016) for waiver policy). The three composites selected are generally similar, with about a 79% FPPS rate, 90% graduation rate, and 73% qualification rate when predicted using a cutscore equivalent to the maximum waiver.

Table 8
Predicted FPPS and Qualification Rates based on 12 Months of Accessions

	GS+AR+MK+VE			GS+MK+2VE			AR+PC+MK		
Standardized Score	FPPS Rate (%)	Grad Rate (%)	Qual Rate (%)	FPPS Rate (%)	Grad Rate (%)	Qual Rate (%)	FPPS Rate (%)	Grad Rate (%)	Qual Rate (%)
212	86.1	94.9	48.7	83.3	92.7	49.3	85.7	94.7	50.8
209	84.8	94.2	53.5	82.3	92.1	54.2	84.6	94.1	55.0
206	83.5	93.4	58.1	81.2	91.4	59.1	82.9	93.1	61.8
203	82.1	92.4	62.9	80.1	90.7	63.9	81.7	92.3	66.4
200	80.7	91.4	67.7	78.9	90.0	68.7	80.5	91.4	70.9
197	79.2	90.3	72.5	77.8	89.2	73.4	79.2	90.6	75.7

Various combinations of these composites are compared in Table 9. Cutscores used with the combinations were adjusted to maintain or improve upon graduation and FPPS rates while also maximizing the number who would qualify.

Table 9
Summary of Qualification Standards Options Considered

	GS+AR+MK+VE≥209 or GS+MK+2VE≥209	GS+AR+MK+VE ≥207 or AR+PC+MK≥155	GS+MK+2VE≥208 or AR+PC+MK≥156	GS+AR+MK+VE ≥208 or GS+MK+2VE≥208 or AR+PC+MK≥156
	Current Operational Standard	Option 1	Option 2	Option 3
QR	58.7%	64.0%	65.9%	66.5%
Difference from Current Qual #	---	+1,860	+2,519	+2,727
% Qual F::M	.684	.766	.778	.774
% Qual AA::W	.491	.564	.577	.576
% Qual H::W	.690	.769	.766	.768
Predicted Grad	93.1%	93.4%	93.4%	93.3%
Predicted FPPS	83.3%	83.3%	83.5%	83.2%

The third option considered (keeping the current composites and adding an additional composite) showed that an additional 2,727 Sailors would qualify as compare to the composites in place now, while the predicted graduation rate would be about the same. Additionally, the ratios of qualified Sailors by demographic groups would be better for the three composite option than for the combination in place now.

Discussion and AVRC Decision

Generally, the two composites currently in place are effective at maintaining a high level of success for those attending HM "A"-School, with overall graduation rate at about 88% and first pass pipeline success at about 75%. While increased graduation rates and FPPS rates would be possible with higher cutscores, the current recruiting environment (see, for example, Anderson, 2022) necessitates allowing recruiters and classifiers more options to select a potential Sailor into training while at least maintaining the number of trained Sailors who complete training and enter the Fleet in a rating. To that end, it was recommended to the ASVAB Validation Review Committee (AVRC) that an additional alternative be added to the current combination of composites, to maintain predicted graduation rates while allowing more potential Sailors to attempt the training (see Appendix D for the complete set of slides presented to the HM Enlisted Community Manager, a subset of which were presented to the AVRC).

While outside the scope of this revalidation, another method for improving graduation rates, and thereby eventually increasing the number who might be allowed to train as an HM, might be to modify the HM training. At present, there are make-or-break evolutions during the first week of HM "A"-School. While another chance may be given to pass those evolutions, it may be that some initial time spent in preparing students for the reality of studying in order to join the rating would be appropriate. Anecdotally, it may be that those fresh from high school join the Navy because they do not want to study like they would if they had gone to college, so additional coaching in study skills might increase success in training to be an HM as well as other knowledge-based ratings.

Subsequent to the AVRC meeting held on 8 March 2023, a final vote was held to change to the three-composite option, which then became effective as of 11April 2023. Appendix E provides the final decision memorandum.

Table 10
Composites for Selection

Selection Composites prior to 11 April 2023	Selection Composites as of 11 April 2023
GS+AR+MK+VE≥ 209 or GS+MK+2VE≥209	GS+AR+MK+VE≥ 208 or GS+MK+2VE≥208 Or AR+PC+MK≥156

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Appendix A
Description of the ASVAB and Additional Selection Tests

Test Type	Test Name and Abbreviation	Test Description
Standard ASVAB	General Science (GS)	Knowledge of physical and biological sciences
	Arithmetic Reasoning (AR)	Ability to solve arithmetic word problems
	Word Knowledge (WK)[a]	Ability to select the correct meaning of words presented in context and correct synonyms
	Paragraph Comprehension (PC)[a]	Ability to obtain information from written passages
	Mathematics Knowledge (MK)	Knowledge of high school mathematics principles
	Electronics Information (EI)	Knowledge of electricity and electronics
	Auto and Shop Information (AS)	Knowledge of automobile and shop technologies, tools, and practices
	Mechanical Comprehension (MC)	Knowledge of mechanical and physical principles
	Assembling Objects (AO)	Ability to determine correct spatial forms from their separate parts and connection points (not administered in all versions)
Special Tests (May be Given in Conjunction with ASVAB)	Coding Speed (CS)	Ability to quickly identify correct word/number pairings from a key with many options
	MCt	Ability to maintain value of 3 counters that increment and decrement simultaneously
	Cyber Test (CT)	Information and communications technology literacy
	Navy Advanced Placement Test (NAPT)	Knowledge of advanced physics, mathematics, and chemistry
	Defense Language Aptitude Battery (DLAB)	Aptitude to learn a foreign language

[a] WK and PC are combined to form the Verbal (VE) composite that is a component of the AFQT and several Navy ASVAB classification composites.

Appendix B
Current Composites in Use Across All Ratings

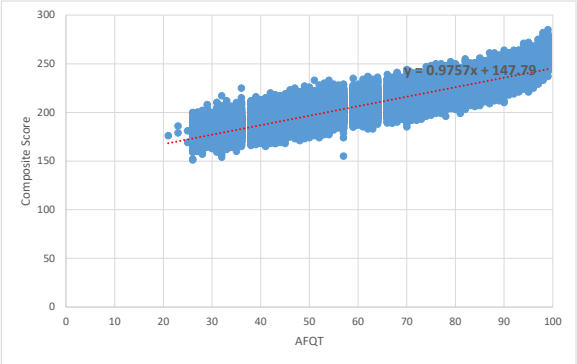
Composite Name	Composite Calculation	Rating/Program Entry Standards
Administration 1	VE+MK	CTI, LN, PS, QM, RP, YN
Administration 2	MK+CS+VE	OS, PS, RP, YN
Administration 3	PC+MK	CTR
Administration 4	AR+PC+MK	AC, CTR
Cyber 1	MK+VE+CT	CTN, IT/ATF, IT/SG, ITS
Cyber 2	AR+MK+CT	CTT/AEF, CTT/SG
Mechanical 1	AR+AS+MC	BU, CM, EO, SW
Mechanical 2	MK+AS+AO	AO, AS, BM, MR, PR
Mechanical 3	AR+MK+AS	UT
Mechanical 4	MK+AS+VE	AD
Operations 1	AR+MK+AS+VE	ABE, ABF, ABH, AIRC, AIRR, AM, AME, AN (APACT), AO, BM, DC, EN, FN (E/PACT), GSM, HT, MM, MR, PR
Operations 2	GS+AR+2MK	AECF, CTN, CTT/SG, EA, ET, FC, FCA, GM, ITS, OS, SB
Operations 3	AR+MK+AO+VE	AE, AME, AT, AV, BU, EN, GSM, IC, IC/ATF, MM, MN, MT, STG, STG/AEF
Operations 4	MK+MC+CS+VE	SO
Operations 5	AR+MK+EI+VE	AS, CTM, IT/SG, MMA, MMS, TM
Operations 6	GS+MK+MC+VE	QM
Operations 7	MK+EI+VE	AD
Specialized 1	AR+VE	AZ, CS, EOD, LN, LS, MC, ND, RS, SB, SN (S/PACT), SO
Specialized 2	GS+MK+VE	AG, CTI, HM/ATF, IT/ATF, IT/SG, NC
Specialized 3	AR+WK	HM/ATF
Specialized 4	GS+AR+MK+VE	HM, HM/ATF, IS, IT/ATF, ITS
Specialized 5	GS+AR+MK	AG
Specialized 6	GS+MK+2VE	HM
Specialized 7	AR+MK+MC+VE+NAPT	EM(NUC), ET(NUC), MM(NUC), NUC
Specialized 8	GS+AR+MK+EI+NAPT	EM(NUC), ET(NUC), MM(NUC), NUC
Technical 1	AR+MK+MC+VE	AC, AE, AIRC, AIRR, AM, AS, AT, AV, CSS, CTN, DC, EM, EM(NUC), ET(NUC), ETV, FT, FN (E/PACT), GSE, HT, LSS, MA, MM(NUC), MN, MR, MT, NUC, SECF, STS, YNS
Technical 2	GS+AR+MK+EI	AECF, CE, CSS, CTT/AEF, EM, EM(NUC), ET, ET(NUC), ETV, FC, FCA, FT, GM, GSE, IC, IC/ATF, LSS, MM(NUC), NUC, SECF, STS, STG, STG/AEF, UT, YNS
Technical 3	GS+EI+MC	EOD, SO
Technical 4	GS+AR+EI+MC	MMA, MMS, TM

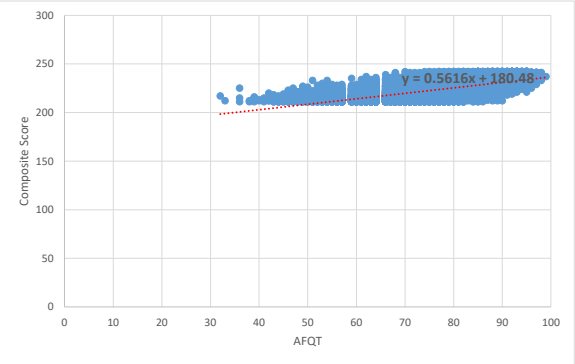
As of 1/17/2023.

Appendix C
Corrections of Validity Coefficients

Two corrections are executed before determining the fully corrected validity coefficients used to determine the best-fitting composites. The first correction is for range restriction, and the second is for dichotomy. A simplistic explanation of both is included below, with more detailed information provided in Held, Carretta, Hezlett, Johnson, Mendoza, Abrahams, Drasgow, McCloy, & Wolfe (2015).

Because a selection for the rating has already occurred prior to analyzing the training data, the validity coefficients initially computed do not cover the entire spectrum of possible ASVAB scores, as can be seen in the two graphs below with the left graph showing the complete spectrum of AFQT scores vs a composite AFQT score, and the right graph showing all AFQT but only the composite scores above a selected cutscore of 210. The correlation line equation is different between the two graphs because of the restriction in range of the graph on the right.





Matrix algebra is used to correct for this range restriction by adjusting the variance/covariance matrix of the test scores and FPPS to the PAY97 variance/covariance matrix created by Segall (2004) in the PAY97 norming process. Once each individual ASVAB score is corrected, each composite of ASVAB scores can also be corrected as laid out in Held, et al (2015).

Correcting for dichotomization accounts for the dependent variable (FPPS in this report) being a 0 or 1, which is actually a measure of an underlying continuous variable Final School Grade. The Table of Normal Deviates and Ordinates is consulted to determine the y ordinate that corresponds to the FPPS rate ("B Area in the larger portion" within the table). Each range restricted correlation is then multiplied by the calculated dichotomy correction factor $\frac{\sqrt{FPPS*(1-FPPS)}}{y-ordinate}$.

Hospital Corpsman (HM) ASVAB Revalidation

Zannette A. Uriell
Navy S&C

Background

- **Navy S&C develops and monitors ASVAB standards for all Navy ratings**
  - Goal is to balance rating qualification rate and training performance
  - About 18 months after any change in selection standards, a retrospective is conducted to determine if change is functioning as expected

- **HM rating standards prior to December 2020**
  - VE+MK+GS ≥ 156
- **HM rating standards as of December 2020**
  - VE+AR+MK+GS ≥ 209 OR MK+GS+2VE ≥ 209
- **HM retrospective analyses in August 2022 showed First Pass Pipeline Success (FPPS) decline, from 85.8% expected to 73.79% observed**

- **HM/ATF rating standards as of July 2018**
  - VE+MK+GS ≥ 156 AND AR+WK ≥ 105 AND VE+AR+MK+GS ≥ 210
- **HM/ATF retrospective analyses in August 2022 showed a graduation rate of 48%**

Study Goals

- **In ideal Navy, improve FPPS to save money in training time and lessen aggravation due to training/reclassification of Sailors**

- **In recruiting-challenged Navy, maintain or improve graduation rate while increasing number who would qualify for training**
  - Use FPPS predictions to determine most valid composites (FPPS and graduation are generally related)
  - Test most valid composites and linescores to determine graduation and qualification rates
  - Consider adjustment of linescore further to account for unique recruiting environment, similar to temporary adjustments to other ratings based on rating complexity (medium) and findings of waiver analyses

About HM

- Hospital Corpsman perform duties as assistants in the prevention and treatment of disease and injury and assist health care professionals in providing medical care to Naval personnel and their families
- They may function as clinical or specialty technicians, medical administrative personnel and health care providers at medical treatment facilities
- They also serve as battlefield corpsmen with the Marine Corps, rendering emergency medical treatment to include initial treatment in a combat environment
- Qualified Hospital Corpsmen may be assigned the responsibility of independent duty aboard ships and submarines; Fleet Marine Force, Special Forces and Seabee units, and at isolated duty stations where no medical officer is available
- Additionally, they perform duties as a general dental assistant to include dental infection control, dental treatment room management, preventive dentistry, comprehensive dental assisting, and intraoral radiography

– Navy COOL, June 2022

HM Linkage to ASVAB

	GS	AR	WK	PC	MK	EI	AS	MC	AO	CS	VE
Prevention and treatment of disease and injury	X										
Caring for sick and injured			X								X
Administering immunization programs	X	X	X	X							X
Rendering emergency medical treatment	X										
Instructing in first aid, self aid and personal hygiene procedures	X		X	X							X
Transporting the sick and injured	X										
Conducting preliminary physical examinations	X										
Performing medical administrative, supply and accounting procedures		X	X	X	X						X
Maintaining treatment records and reports			X	X							X
Supervising shipboard and field environmental sanitation and preventive medicine programs	X		X	X							X
Supervising air, water, food and habitability standards	X		X	X							X

From HM COOL rating card, "What They Do"

HM Accessions

- **Accessions have changed since 2018, especially noticeable between 2019 and 2020 (when the HM (non-ATF) composites were adopted), and between 2021 and 2022**
- **Per July 2022 Enlisted Recruiting Manual, all utilize the same composites/scores except for HM/ATF**

Pride Rating/ Program	2018	2019	2020	2021	2022	2023
HM/5YO	3237	3067	2072	1126	3627	3039
HM/ATF	---	186	186	164	140	210
HM/TAR	16	32	38	88	78	22
HM/SG	2	1	3	3	2	3
HMBHT/ATF	---	---	---	12	18	23
HMDA/5YO	289	359	394	253	149	270
HM/NAT	114	206	284	374	491	221
HMDA/NAT	98	43	36	3	0	0
HMDH/SG	---	---	---	---	12	12
HMFM/NAT	129	89	128	36	0	0

HM (non-ATF) Findings

CDP 05JP Data Included

- **All those who started CDP 05JP and had a final disposition (academic failure or graduation) or who had an academic setback in 05JP but no final disposition (and therefore were not going to have FPPS) included, regardless of Pride Rating/Program**

Pride Rating/ Program	Student Number	AS Rate	AS Still in Training	Grad Rate	AF Rate	FPPS
HM/5YO	1894	.2492	76	.8606	.0993	.7307
HM/ATF	9	0	0	1.0000	0	1.0000
HM/TAR	94	.1702	4	.8617	.0957	.8298
HM/SG	1	0	0	1.000	0	1.0000
HM/NAT	389	.1620	8	.9203	.0591	.8278
HMBHT/ATF	24	.1250	1	.9583	0	.8750
HMDA/5YO	245	.2776	2	.8980	.0939	.7102
HMDA/NAT	3	.3333	0	1	0	.6667
HMFM/NAT	19	.1579	0	1	0	.8421
Reclass	142	.2535	8	.8803	.0634	.7394

Note: Those who had a Pride Rating other than HM or related are grouped as “Reclass”.
Data with CDP 05JP start date of 4/1/2021 through 10/10/2022.

HM vs HMDA

- **HMDA data was separated from the HM (non-ATF) data; because there is no significant difference between groups, analyses are based upon all HM that are not HM/ATF**

Pride Rating/ Program	Student Number	AS Rate	AS Still in Training	Grad Rate	AF Rate	FPPS
HM (5YO, FTS, NAT, SG)	2378	.2317	88	.8705	.0925	.7506
HMDA (5YO, NAT)	248	.2782	2	.8992	.0927	.7097

Data with CDP 05JP start date of 4/1/2021 through 10/10/2022.

Findings – CDP 05JP

- **Observed course FPPS (74.9%) much lower than was predicted (85.8%)**
- **Majority are qualifying based upon both composites**

CDP 05JP	Student #	% of Sample	Academic Setback Rate	Academic Setback Still in Training	Grad Rate	Academic Failure Rate	Observed FPPS%
Total Sample	2820	100.0%	0.2348	99	0.8755	0.0894	0.7489
Qualified Only Through VE+AR+MK+GS>=209	206	7.3%	0.2427	5	0.9078	0.0680	0.7476
Qualified Only Through MK+GS+2VE>=209	336	11.9%	0.3571	18	0.7708	0.1756	0.6042
Qualified On Both	1599	56.7%	0.1614	40	0.9337	0.0413	0.8305
Qualified On Either	2141	75.9%	0.1999	63	0.9057	0.0649	0.7870
Waivered	679	24.1%	0.3446	36	0.7806	0.1664	0.6289

Data with CDP 05JP start date of 4/1/2021 through 10/10/2022.
Includes all Pride Rating Codes (SG, 5YO, ATF, FTS, NAT) through this CDP.

HM (non-ATF) - Fully Corrected Validity Coefficients and Diversity

- **Composites with highest validity coefficients (after corrections) listed below for comparison**

Composites	Composite (Family)	Fully Corrected Validity Coefficients n=2620 with AO	Standardized Group Mean Score Differences: 12month Accession Population (n=34,595)		
			F-M	AA-W	H-W
GS+AR+MK+VE	SPEC4	0.7585	-0.493	-0.945	-0.573
GS+MK+2VE	SPEC6	0.7356	-0.470	-0.913	-0.628
AR+PC+MK	ADMIN4	0.7743	-0.337	-0.764	-0.430
PC+MK	ADMIN3	0.7691	-0.231	-0.652	-0.424
GS+AR+2MK	OPS2	0.7620	-0.379	-0.799	-0.446
GS+AR+MK	SPEC5	0.7554	-0.465	-0.902	-0.507
AR+MK+AO+VE	OPS3	0.7550	-0.344	-0.861	-0.412
AR+MK+EI+VE	OPS5	0.7510	-0.596	-0.976	-0.592
MK+VE	ADMIN1	0.7616	-0.307	-0.716	-0.486
AR+MK+MC+VE	TECH1	0.7411	-0.558	-1.019	-0.582
GS+MK+VE	SPEC2	0.7458	-0.468	-0.917	-0.609

* Effect Size, or “Cohen’s d”, are terms used for measurement of group test score differences with .20 considered small, .50 moderate, and .80 large, with zero indicating no difference.

HM (non-ATF) Options Under Consideration

Same or better graduation rate, with more qualifying

1. **No change at present**

2. **Keep GS+AR+MK+VE and change 2nd for AR+PC+MK**
   - Small change, higher validity coefficient than current 2nd equation

3. **Keep GS+MK+2VE and change 1st for AR+PC+MK**
   - Small change, higher validity coefficient than current 1st equation

4. **Keep both composites and add AR+PC+MK as alternate**
   - Small change from current, provide additional way of qualifying that is not science related

Predicted HM (non-ATF) FPPS with Individual Composites

- Possible scores and impact on FPPS, Grad Rate, and Qualification Rate (QR) listed below, with the bold scores being the current cutscore and the maximum waiver currently possible

Cutscore Analysis for Predicted FPPS at or above Key Scores Applied to 12month Navy Accessions N=34,595

	GS+AR+MK+VE (Current - Composite 1)				GS+MK+2VE (Current - Composite 2)				AR+PC+MK (Possible Composite)			
Transformed Score	Score	Pred. FPPS	Pred. Grad	QR	Score	Pred. FPPS	Pred. Grad	QR	Score	Pred. FPPS	Pred. Grad	QR
212	212	86.1	94.9	48.7	212	83.3	92.7	49.3	159	85.7	94.7	50.8
209	**209**	**84.8**	**94.2**	**53.5**	**209**	**82.3**	**92.1**	**54.2**	157	84.6	94.1	55.0
206	206	83.5	93.4	58.1	206	81.2	91.4	59.1	154	82.9	93.1	61.8
203	203	82.1	92.4	62.9	203	80.1	90.7	63.9	152	81.7	92.3	66.4
200	200	80.7	91.4	67.7	200	78.9	90.0	68.7	150	80.5	91.4	70.9
197	**197**	**79.2**	**90.3**	**72.5**	**197**	**77.8**	**89.2**	**73.4**	148	79.2	90.6	75.7

Notes.
1. Tests transformed to be equivalent to a 4-test score.
2. 12-month Navy accessions 10/11/2021 – 10/10/2022.

Summary of Full Options – HM (non-ATF)

- **Combining option 1 and option 2 increases the QR from those options while only slightly decreasing expected FPPS**

	Qualification Standard			
	VE+AR+MK+GS ≥ 209 or GS+MK+2VE ≥ 209	VE+AR+MK+GS ≥ 207 or AR+PC+MK ≥ 155	GS+MK+2VE>=208 Or AR+PC+MK>=156	GS+AR+MK+VE>=208 Or GS+MK+2VE>=208 Or AR+PC+MK>=156
	[Current]	[Option 2]	[Option 3]	[Option4]
QR	58.7%	64.0%	65.9%	66.5%
Diff from Current #	---	+1860	+2519	+2727
%Qualified F::M	.684	.766	.778	.774
%Qualified AA::W	.491	.564	.577	.576
%Qualified H::W	.690	.769	.766	.768
Predicted Grad	93.1%	93.4%	93.4%	93.3%
Predicted FPPS	83.3%	83.3%	83.5%	83.2%

*12-month Navy accessions 10/11/2021 – 10/10/2022.

HM (non-ATF) Recommendation 1

- **Issue memo for PERMANENT change of standards to adopt combination of composites:**
  - Highest validity for FPPS
  - At least maintains graduation rate
  - At least maintains (or nearly maintains) FPPS
  - Increases qualification rate the most
  - Has least changes from current
  - Ideally improves demographic subgroup comparisons

GS+AR+MK+VE>=208

Or

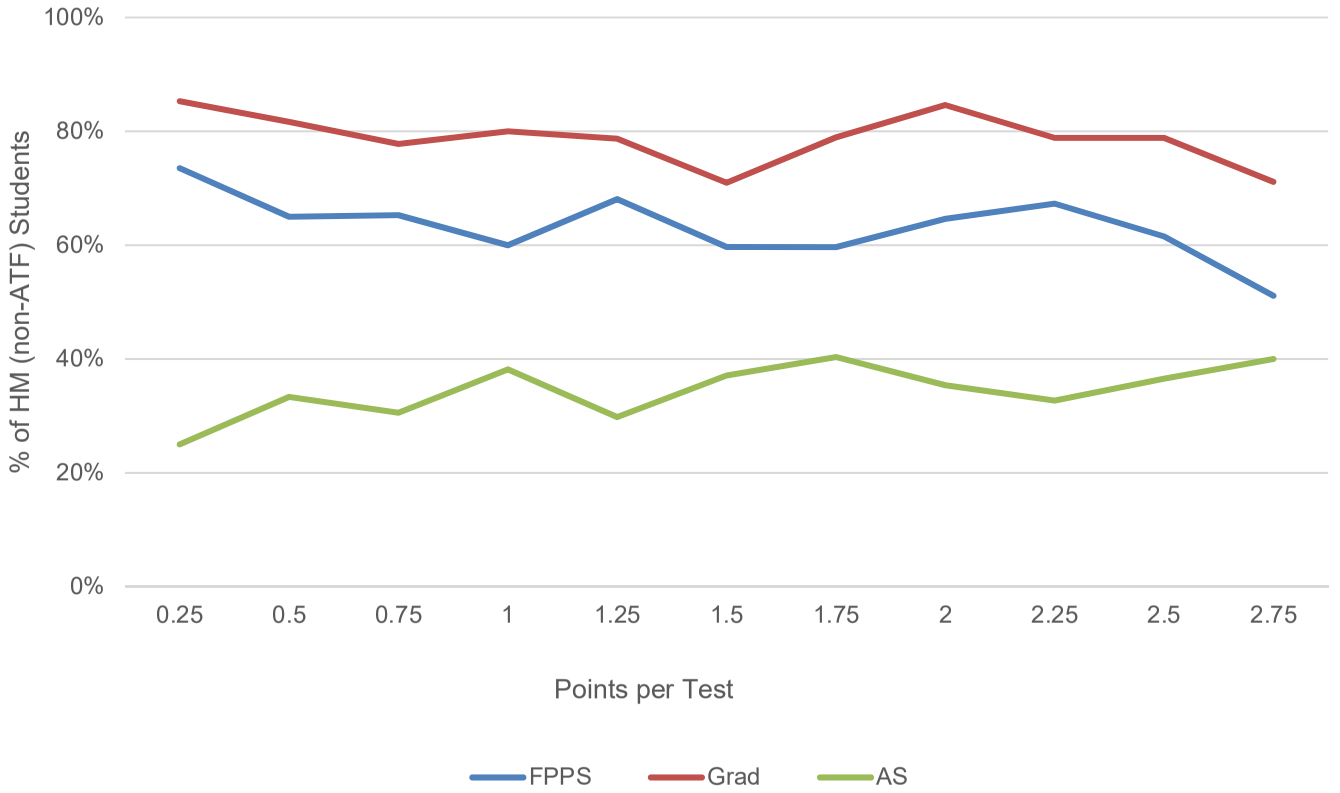
GS+MK+2VE>=208

Or

AR+PC+MK>=156

Waivers

- **The higher the amount of the waiver, the less likely the graduation**
  - However individual difference still has an impact; over 80% of those with 2 points per test successfully graduated



Note: 6 Sailors of 679 had waivers of more than 3 points or more per test.

HM (non-ATF) Recommendation 2 - Potential Reduction of Linescore

- **Implement permanent changes for 6 months before considering linescore reduction**

- **Likely reduce linescore TEMPORARILY by 1 point per test, similar to other medium-complexity ratings**

GS+AR+MK+VE>=204

Or

GS+MK+2VE>=204

Or

AR+PC+MK>=153

				2019-2021 Applicant Population (N=187,368)							
		Qualification Rate		Qualification Rates by AFQT Band (at Lowered Standard)							
Rating/Program	FY23 AC accession goal	Current Standard	Lowered Standard	I	II	IIIA	IIIB	IVA	IVB	IVC	V
				93-99	65-92	50-64	31-49	21-30	16-20	10-15	1-9
HM (AC, non-ATF)	3369	55%	60%	100%	100%	77%	30%	2%	0%	0%	0%

HM (ATF) Findings

HM/ATF

- **HM/ATF encompasses 3 pipelines with differing courses and lengths:**

❖SMT – Search and Rescue Medical Technician (SMT)

- Search and Rescue, MEDEVAC, CASEVAC
- NATOPS qualified
- 4 courses post A-school, approximately 329 days

❖SARC – Fleet Marine Force Reconnaissance Independent Duty Corpsman Role (SARC)

- FMF and SPECOPS IDC
- SPECOPS Advanced Tactical Practitioner
- 9 courses post A-school, approximately 874 days

❖DMT – Medical Deep Sea Diving Technician

- Prevents/treats deep sea diving and high-pressure condition illnesses
- Qualified to dive
- 3 courses post A-school, approximately 344 days

Findings – Additional SMT Courses

- **Little data available since composite implementation to determine SMT pipeline graduation rate, however most graduate from the courses following 19TK**

SMT	Title	Total Student #	Total Graduate #	Waivers	Waiver Grad #
806E	NAVAL AIRCREWMAN CANDIDATE SCHOOL	54	51	2	2
21A8	SMT FLIGHT MEDIC COURSE	35	30	2	1
06T8	SURVIVAL, EVASION, RESISTANCE, AND ESCAPE	31	31	0	0
07VH	SURVIVAL, EVASION, RESISTANCE, AND ESCAPE	8	8	1	1
04Y8	MH-60S SAR MEDICAL TECHNICIAN FLEET REPLACEMENT AIRCREWMAN CATEGORY I	8	8	1	1
04Y5	MH-60S SAR MEDICAL TECHNICIAN FLEET REPLACEMENT AIRCREWMAN CATEGORY I	17	17	0	0

Data with CDP 19TK start date of 11/9/2018 or later, through 10/10/2022.

Findings – Additional SARC Courses

- **Little complete data available since composite change to determine SARC pipeline completion**
- **As with SMT, most graduate the post-19TK courses**

SARC	Title	Total Student #	Graduate #	Waivers	Waiver Grad #
3388	FIELD MEDICAL SERVICE TECHNICIAN	84	82	1	1
11ZP	RECONNAISSANCE TRAINING AND ASSESSMENT PROGRAM	66	51	1	1
04HD	BASIC RECONNAISSANCE TRAINING COMPANY	41	33	1	1
231Z	FLEET MARINE FORCE RECONNAISANCE TECHNICIAN (SOCM)	7	5	0	0
385G	USMC COMBATANT DIVER	22	20	1	1
429R	AMPHIBIOUS RECONNAISSANCE CORPSMAN	26	26	1	1
2007	BASIC AIRBORNE	29	27	1	1
10M0	FLEET MARINE FORCE RECONNAISANCE INDEPENDENT DUTY CORPSMAN	3	3	0	0
21CC	ARMY SERE HIGH RISK (LEVEL C)	4	4	0	0

Data with CDP 19TK start date of 11/9/2018 or later, through 10/10/2022.

Findings – Additional DMT Courses

- **Few have completed DMT pipeline since composite change**
- **Only 2/3 of those who have started 23YH are able to complete it**

DMT	Title	Total Student #	Graduate #	Waivers	Waiver Grad #
23YH	EXPLOSIVE ORDNANCE DISPOSAL AND NAVY DIVER ASSESSMENT AND SELECTION COURSE	12	8	0	0
3365	DIVING MEDICAL TECHNICIAN	20	19	0	0

Data with CDP 19TK start date of 11/9/2018 or later, through 10/10/2022.

Findings – CDP 19TK

- **Initially established as**

  VE+MK+GS>=156 AND AR+WK>=105 AND VE+AR+MK+GS>=210

- **About half graduate, although only 1/3 of the few who receive ASVAB waivers are able to graduate successfully**

CDP 19TK	Student #	% of Sample	Academic Setback Rate	Academic Setback Still in Training	Grad Rate	Academic Failure Rate	Observed FPPS%
Total Sample	404	100.0	.0074	0	.5248	.4752	.5223
Qualified	389	96.3	.0077	0	.5321	.4679	.5296
Waivered	15	3.7	.0000	0	.3333	.6667	.3333

Data with CDP 19TK start date of 11/9/2018 or later, through 10/10/2022.

Findings – CDP 19TK without DOR/PT Failures

- **Initially established as**

  VE+MK+GS>=156 AND AR+WK>=105 AND VE+AR+MK+GS>=210

- **Focus on those with seemingly academic issues, not those who dropped on request or had a PT failure (PT test implemented in FY22)**
- **About 2/3 graduate, implying PT-related issues are not only reason for failure**
  - HM (non-ATF) observed graduation rate 88%

CDP 19TK (without DOR/PT Failures)	Student #	% of Sample	Academic Setback Rate	Academic Setback Still in Training	Grad Rate	Academic Failure Rate	Observed FPPS%
Total Sample	317	100.0	0.0063	0	0.6688	0.3312	0.6656
Qualified	304	95.9	0.0066	0	0.6809	0.3191	0.6776
Waivered	13	4.1	0.0000	0	0.3846	0.6154	0.3846

Data with CDP 19TK start date of 11/9/2018 or later, through 10/10/2022.

HM/ATF - Fully Corrected Validity Coefficients and Diversity

- **Composites with highest validity coefficients (after corrections) listed below for comparison**

Composites	Composite (Family)	Fully Corrected Validity Coefficients n=369 with AO	Standardized Group Mean Score Differences: 12month Accession Population (n=34,595)		
			F-M	AA-W	H-W
GS+MK+VE	SPEC2	0.6321	-.467	-.917	-.609
GS+AR+MK+VE	SPEC4	0.6274	-.493	-.945	-.573
AR+WK	SPEC3	0.5930	-.517	-.899	-.547
MK+VE	ADMIN1	0.6532	-.307	-.716	-.486
AR+MK+MC+VE	TECH1	0.6453	-.558	-1.019	-.582
PC+MK	ADMIN3	0.6407	-.231	-.652	-.424
GS+MK+MC+VE	OPS6	0.6402	-.609	-1.094	-.679
MK+EI+VE	OPS7	0.6377	-.605	-.956	-.633
MK+AS+VE	MECH4	0.6376	-.681	-1.144	-.717
GS+MK+2VE	SPEC6	0.6318	-.470	-.913	-.628
AR+MK+AS+VE	OPS1	0.6316	-.653	-1.116	-.652
AR+MK+EI+VE	OPS5	0.6310	-.596	-.976	-.592
AR+MK+AO+VE	OPS3	0.6284	-.519	-.814	-.312
AR+PC+MK	ADMIN4	0.6282	-.712	-.609	-.365

* Effect Size, or "Cohen's d", are terms used for measurement of group test score differences with .20 considered small, .50 moderate, and .80 large with zero indicating no difference.

HM/ATF Options Under Consideration

Same or better graduation rate, with more accessions

1. **No change at present**
2. **Simplify to just the first composite and add a GS floor of 50**
3. **Combine first composite with AR+MK+MC+VE as alternate**
4. **Make same new alternative composites as HM since course is the same**

Predicted HM/ATF FPPS with Individual Composites

- Possible scores and impact on FPPS and Qualification Rate (QR) listed below

Cutscore Analysis for Predicted FPPS "at or above" Key Scores Applied to 12month Navy Accessions N=34,595

Transformed Score	GS+MK+VE (Current Eq. 1)				AR+MK+MC+VE (Eq. 2 Option 3)				GS+AR+MK+VE (Eq. 1 Option 4)				PC+AR+MK (Eq. 3 Option 4)			
	Score	Pred. FPPS	Pred. Grad	QR	Score	Pred. FPPS	Pred. Grad	QR	Score	Pred. FPPS	Pred. Grad	QR	Score	Pred. FPPS	Pred. Grad	QR
221	166	56.7	56.9	36.1	221	58.0	58.3	34.4	221	57.0	57.2	35.6	166	57.6	57.9	37.0
218	164	55.4	55.6	39.9	218	56.3	56.6	38.5	218	55.5	55.8	39.7	164	56.3	56.6	40.8
215	161	53.4	53.7	46.0	215	54.6	54.9	43.0	215	54.0	54.3	44.0	161	54.4	54.7	46.7
212	159	52.2	52.4	50.3	212	53.0	53.2	47.5	212	52.6	52.9	48.7	159	53.1	53.4	50.8
209	157	50.9	51.2	54.6	209	51.4	51.6	52.2	209	51.1	51.4	53.5	157	51.9	52.2	55.0
206	154	49.2	49.5	61.1	206	49.8	50.1	57.0	206	49.4	49.7	59.8	154	50.0	50.3	61.8
203	152	48.0	48.3	65.6	203	48.3	48.6	61.9	203	48.5	48.8	62.9	152	48.8	49.0	66.4
200	150	47.0	47.3	69.8	200	46.9	47.1	66.9	200	47.2	47.5	67.7	150	47.6	47.9	70.9
197	148	45.9	46.3	74.1	197	45.5	45.7	71.7	197	46.0	46.3	72.4	148	46.4	46.7	75.7

Notes.
1. Tests transformed to be equivalent to a 4-test score.
2. 12-month Navy accessions 10/11/2021 – 10/10/2022.

Summary of Full Options - HM/ATF

- **Simplifying by using alternatives (OR) and utilizing the new HM composites/scores maintains predicted graduation rate while opening the program to almost 2,000 additional accessions**

	Qualification Standard			
	VE+MK+GS>=156 AND AR+WK>=105 AND VE+AR+MK+GS>=210	VE+MK+GS>=215 AND GS>=50	VE+MK+GS>=163 OR AR+MK+MC+VE>=217	GS+AR+MK+VE>=218 OR GS+MK+2VE>=218 OR AR+PC+MK>=164
	[Current]	[Option 2]	[Option 3]	[Option 4]
QR	44.0%	44.6%	47.3%	49.2%
Diff from Current #	---	+187	+1130	+1785
%Qualified F::M	.583	.583	.594	.676
%Qualified AA::W	.383	.391	.392	.444
%Qualified H::W	.600	.585	.614	.656
Predicted Grad	54.0%	54.0%	54.5%	54.5%
Predicted FPPS	53.7%	53.8%	54.2%	54.2%

*12-month Navy accessions 10/11/2021 – 10/10/2022.

HM/ATF Recommendation

- **Issue memo for PERMANENT change of standards to adopt:**

GS+AR+MK+VE>=218
OR
GS+MK+2VE>=218
OR
AR+PC+MK>=164

Backup

DRAFT // PRE-DECISIONAL

ASVAB Tests and Special Classification Tests

Test	Content
General Science (GS)	Biological and physical sciences
Arithmetic Reasoning (AR)	Arithmetic word problems
Word Knowledge (WK)	Synonyms/meaning of words in context
Paragraph Comprehension (PC)	Written passages
Mathematics Knowledge (MK)	Algebra, geometry, fractions, decimals, exponents
Electronic Information (EI)	Electrical principles and electronics
Auto and Shop Information (AS)	Automotive, tool, shop, practices
Mechanical Comprehension (MC)	Mechanical and physical principles
Assembling Objects (AO)	Patterns and connection point recognition
Verbal (VE)	Combination of 1/3 PC and 2/3 WK
Coding Speed (CS)	Perceptual speed and accuracy test; not administered to all candidates
Defense Language Aptitude Battery (DLAB)	Administered to CTI candidates
Navy Advanced Placement Test (NAPT)	Administered to about 1/2 of NF candidates
Cyber Test (CT)	Used for some computer intensive ratings
Mental Counters (MCt)	Working memory test

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1230
OPNAV S&C/076
27 Mar 2023

MEMORANDUM FOR THE RECORD

SUBJ: RATING ENTRY STANDARDS FOR THE HOSPITAL CORPSMAN (HM) RATING

Ref: (a) MILPERSMAN 1306-618
(b) COMNAVCRUITCOMINST 1130.8 (CRUITMAN-ENL)
(c) Catalog of Navy Training Courses (CANTRAC)

1. The Navy Selection and Classification Office (OPNAV N132G) ASVAB Validation Review Committee analyzed observed training outcomes for Initial Skills Training for the HM rating and simulated the effects of possible alternative entry standards.

2. Based on the analysis and coordination with all stakeholders, the new minimum composite test score criteria for the HM rating (including all accession programs except HM/ATF) is:

GS+AR+MK+VE>=208
or
GS+MK+2VE>=208
or
AR+PC+MK>=156

3. Organizations responsible for references (a) through (c) and other publications, manuals, articles, and instructions referencing minimum rating entry requirements should update their materials and classification systems to reflect this standard. Navy Selection and Classification Office will ensure the appropriate RIDE WEB Service Qualification Policy Tables reflect this standard.

4. The new standard will become effective 11 April 2023.

3/27/2023

X Jason Jacobs-Lentz

Jason Jacobs-Lentz
Acting Director
Signed by: JACOBS-LENTZ.JASON.1563030379

Copy to:
OPNAV N132
BUPERS 3 (Codes BUPERS-32, BUPERS-33)

PERS 4
CNRC (Codes N3, N35, N6)
NETC N3