2022 Core Skill Requirements Operations Analysis Subspecialty 3211 Curriculum 360

- 1. <u>Description of CSR Competencies</u>. In accordance with ref (c), the listed CSRs are a set of quantifiable skills, traits, and experiences that a subspecialist must possess to perform acceptably in an Operations Research Analysis (3211) coded billet.
- a. <u>CSR-1 Foundations</u>: Exhibits an understanding of the following foundational competencies: probability and statistics, data analysis, mathematical modeling, optimization, quantification of uncertainty and advanced topics (such as random phenomena, decision theory, game theory and/or risk analysis).
- b. <u>CSR-2 Problem Definition</u>: Utilizes communication and collaboration skills to understand complex organizational problems from multiple stakeholders. Identifies the objectives of the decision-maker along with relevant measures of effectiveness (MOEs) to guide decision-making. Identifies reasonable alternative courses of action and the key variables that impact the courses of action. Refines or reframes problem statements to enhance relevance and specificity or reduce ambiguity.
- c. <u>CSR-3 Data Collection</u>, <u>Manipulation</u>, <u>and Analysis</u>: Develops or uses appropriate tools and methods for collecting data. Gathers datasets or builds appropriate datasets while verifying accuracy, completeness, and consistency conducts data cleaning of noisy, incomplete data or data with established data quality issues using relevant tools and methods. Manipulates data for analysis utilizing appropriate tools and methods for structured or unstructured data. Explores, summarizes, and draws statistically valid conclusions from available data.
- d. <u>CSR-4 Modeling</u>, <u>Computation</u>, and <u>Simulation</u>: Identifies, applies, develops and/or integrates appropriate mathematical models or simulations to solve problems. Demonstrates computational programming utilizing a higher-level language and/or modeling tool. Utilizes modeling software and/or spreadsheets to implement models. Understands limits of computation, and can manage tradeoffs between fidelity, accuracy, and time for the relevant problem.
- e. <u>CSR-5 Assessments</u>: Using experience and knowledge of a variety of potential solutions, identifies appropriate analytic technique to solve specific problems. Using critical and strategic thinking, performs analysis of alternative courses of action by exercising models and technical analysis. Conducts sensitivity analysis of key assumptions, relevant parameters, and available data to assess robustness of potential solutions.
- f. <u>CSR-6 Presentation and Visualization</u>: Interprets and evaluates information or hypotheses through data visualization. Evaluates and selects appropriate data visualization tools and techniques based on the audience, type of data, or message. Creates visual or graphic

interfaces to enable automated and reproducible updates. Presents analytical results to decision-makers via written reports and/or briefings, making appropriate use of data visualization.

g. <u>CSR-7 Real-world OA Application</u>: Identifies and applies OA theory and techniques to real-world, operationally relevant problems. Enhances ability of senior leaders to make data-driven and evidence-based decisions.

2. Applicable Officer Designators

- a. 111X, 112X, 113X, 114X
- b. 12XX
- c. 13XX
- d. 152X
- e. 181X, 182X, 183X
- f. 23XX
- g. 31XX
- h. 51XX

3. Applicable Billet Designators

- a. 1000
- b. 1050
- c. 111X, 112X, 113X, 114X
- d. 12XX
- e. 13XX
- f. 152X
- g. 181X, 182X, 183X
- h. 23XX
- i. 31XX

j. 51XX

4. Educational and Significant Experience Criteria

- a. Coded billets are authorized when the functions of the billet include the CSR competencies listed in paragraph l.
- b. <u>Subspecialty Code Suffixes Authorized</u>. Authorized suffixes annotated with "X"; unauthorized suffixes are blank.

Note: "Proven" requires at least an 18-month experience tour in an Operations Research Analysis (3211) coded billet or billet using the CSR of a related subspecialty, such as Operations Research-Logistics Analysis (3212).

| | | Sub | specialty Code Suffixes Authorized | |
|--------|---------|--------|---|--------|
| Billet | Officer | Suffix | Definition | Notes |
| | | В | Master's degree or higher without subspecialty compensation | 1 |
| Х | X | С | Proven Doctor of Philosophy | 2, 3 |
| Х | X | D | Doctor of Philosophy | 4, 5 |
| | Х | E | Bachelors or Baccalaureate Degree | 6 |
| | х | F | Proven Master's Degree that does not meet all ESRs | 7 |
| | Х | G | Master's Degree that does not meet all ESRs | 8 |
| X | _ [] | Н | Master's Degree desired, not required | 9 |
| | X | I | Bowman Scholar Program | 10 |
| - | X | L | Certificate degree at the Master's level | 11 |
| | | M | Proven Post Master's Degree graduate education | 1 |
| | 1 3 | N | Post Master's Degree graduate education | 1 |
| Х | X | P= | Master's Degree in approved Navy subspecialty | 12, 13 |
| X | X | Q | Proven Master's Degree | 14, 15 |
| | | R | Proven Significant Experience | 1 |
| 11.3 | Х | S | Significant Experience obtained through OJT | 16 |

Note 1: Not authorized.

Note 2: C-coded billet authorized when all the following are met:

a. The billet requires doctoral-level facility with mathematical modeling, quantification of uncertainty and random phenomena, data analysis, probability and statistics, optimization techniques, and game theory.

- b. Billet range and scope requires the incumbent to already hold either a D- or C-code and have successfully completed a previous tour in an Operations Research Analysis (3211) D- or C-coded billet.
- c. Billet requires supervision of other Operations Research Analysis (3211) coded billets and/or analysts.
- Note 3: C-coded officer authorized when an officer with a D-code completes at least 18 consecutive months in an Operations Research Analysis (3211) C- or D-coded billet. An experience package requesting this code shall be submitted to the SME listed in ref (c) for adjudication.
- <u>Note 4</u>: D-coded billet authorized when it requires doctoral-level facility with mathematical modeling, quantification of uncertainty and random phenomena, data analysis, probability and statistics, optimization techniques, and game theory.
- Note 5: D-coded officer authorized when the officer completes a doctoral program in Operations Analysis that meets Naval Postgraduate School (NPS) Operations Analysis Curriculum 360 ESRs.
- Note 6: E-coded officer authorized when officer has received a baccalaureate degree in Operations Research or Operations Analysis which meet the Core Skill Requirements at an undergraduate level.
- Note 7: F-coded officer authorized when officer has a G-code and has completed a tour of at least 18 months in a B-, H-, P-, or Q-coded Operations Research Analysis (3211) billet. An experience package requesting this code shall be submitted to the SME listed in ref (c) for adjudication.
- Note 8: G-coded officer authorized when an officer attends an institution where the course of study does not meet all NPS Master of Systems Analysis Curriculum 363 ESRs. G-code also authorized for officers who earn a Master of Science in Applied Science (Operations Research) through the NPS Operations Research Department.
- <u>Note 9</u>: H-coded billet authorized when a Master's level of knowledge in Operations Analysis is desired but not essential for optimum performance. E- and L-coded officers are acceptable alternatives for these billets when a P-coded officer is unavailable.
- Note 10: I-code authorized for graduates of the Bowman Scholar program. I-coded officers retain the I-code throughout their careers for tracking purposes; therefore, these officers also will be authorized a 3211P-code (if granted a Master of Science in Operations Research) or 3211G-code (if granted a Master of Science in Applied Science (Operations Research).
- Note 11: L-coded officer authorized when officer completes a four course Systems Analysis Certificate (Curriculum 281) through NPS or an equivalent certificate from a civilian institution.

If an L-coded officer completes the entire Master of Systems Analysis curriculum 363, the L-code is replaced by a P-code.

Note 12: P-coded billet authorized when the billet requires all Operations Research Analysis (3211) Core Skill Requirements.

Note 13: P-coded officer authorized when the officer completes a master's degree in Operation Research, Masters in Systems Analysis, or an equivalent degree that meets all NPS Operations Analysis Curriculum 363 ESRs. NPS programs that lead to a Master of Science in Applied Science (Operations Research) will not be considered for a P-code but will be authorized a G-code.

Note 14: Q-coded billet authorized when all of the following are met:

- a. Billet requires all Operations Research Analysis (3211) Core Skill Requirements.
- b. Billet range and scope requires the incumbent to already hold either a P- or Q-code and have successfully completed a previous tour in an Operations Analysis P- or Q-coded billet.

Note 15: Q-coded officer authorized when officer with a P-code completes at least 18 consecutive months in a B-, C-, D-, H-, P-, or Q-coded Operations Research Analysis (3211) coded billet. G-coded officers cannot obtain Q-codes, but will be authorized F-codes. An experience package requesting this code shall be submitted to the SME listed in ref (c) for adjudication.

Note 16: S-coded officer authorized when an officer who holds a 3211E subspecialty code completes at least 18 consecutive months in an H- or P-coded Operations Research Analysis (3211) coded billet. No other officers are eligible for the S-code. An experience package requesting this code shall be submitted to the SME listed in ref (c) for adjudication.

| APPROVED: | Director, N81 | | | [Date] | |
|-----------|----------------|----|----|--------|--|
| APPROVED: | President, NPS | | | [Date] | |
| APPROVED: | Director, N71 | Q) | LV | [Date] | |

2022 Core Skill Requirements Systems Analysis Subspecialty 3211 Curriculum 363

- 1. <u>Description of Core Skill Requirement (CSR) Competencies</u>. The listed CSRs are a set of quantifiable skills, traits, and experiences that a subspecialist must possess to perform acceptably in a coded billet for Operations Research Analysis/3211.
- a. CSR-1 Foundations: Exhibits an understanding of the following foundational competencies: probability and statistics, data analysis, mathematical modeling, optimization, quantification of uncertainty and advanced topics (such as random phenomena, decision theory, game theory and/or risk analysis).
- b. CSR-2 Problem Definition: Utilizes communication and collaboration skills to understand complex organizational problems from multiple stakeholders. Identifies the objectives of the decision-maker along with relevant measures of effectiveness (MOEs) to guide decision-making. Identifies reasonable alternative courses of action and the key variables that impact the courses of action. Refines or reframes problem statements to enhance relevance and specificity or reduce ambiguity.
- c. CSR-3 Data Collection, Manipulation, and Analysis: Develops or uses appropriate tools and methods for collecting data. Gathers datasets or builds appropriate datasets while verifying accuracy, completeness, and consistency. Conducts data cleaning of noisy, incomplete data or data with established data quality issues using relevant tools and methods. Manipulates data for analysis utilizing appropriate tools and methods for structured or unstructured data. Explores, summarizes, and draws statistically valid conclusions from available data.
- d. CSR-4 Modeling, Computation, and Simulation: Identifies, applies, develops and/or integrates appropriate mathematical models or simulations to solve problems. Demonstrates computational programming utilizing a higher-level language and/or modeling tool. Utilizes modeling software and/or spreadsheets to implement models. Understands limits of computation, and can manage tradeoffs between fidelity, accuracy, and time for the relevant problem.
- e. CSR-5 Assessment: Using experience and knowledge of a variety of potential solutions, identifies appropriate analytic technique to solve specific problems. Using critical and strategic thinking, performs analysis of alternative courses of action by exercising models and technical analysis. Conducts sensitivity analysis of key assumptions, relevant parameters, and available data to assess robustness of potential solutions.
- f. CSR-6 Presentation and Visualization: Interprets and evaluates information or hypotheses through data visualization. Evaluates and selects appropriate data visualization tools and techniques based on the audience, type of data, or message. Creates visual or graphic interfaces to enable automated and reproducible updates. Presents analytical results to decision-makers via written reports and/or briefings, making appropriate use of data visualization.
- g. CSR-7 Real-world OA Application: Identifies and applies OA theory and techniques to real-world, operationally relevant problems. Enhances ability of senior leaders to make data-driven and evidence-based decisions.
- 2. Applicable Officer Designators
 - a. 111X, 112X, 113X, 114X

- b. 12XX
- c. 13XX
- d. 152X
- e. 181X, 182X, 183X
- f. 23XX
- g. 31XX
- h. 51XX

3. Applicable Billet Designators

- a. 1000
- ь. 1050
- c. 111X, 112X, 113X, 114X
- d. 12XX
- e. 13XX
- f. 152X
- g. 181X, 182X, 183X
- h. 23XX
- i. 31XX
- j. 51XX

4. Educational and Significant Experience Criteria

- a. Coded billets are authorized when the functions of the billet include the CSR competencies listed in paragraph 1.
- b. Subspecialty Code Suffixes Authorized. Authorized suffixes annotated with "X"; unauthorized suffixes are blank.

Note: "Proven" requires at least an 18-month experience tour in an Operations Research Analysis/3211-coded billet or billet using the CSR of a related subspecialty, such as Operations Research Logistics Analysis/3212.

| | Subspecialty Code Suffixes Authorized | | | | | |
|--------|---------------------------------------|---|---|--------|--|--|
| Billet | Billet Officer Suffix Definition | | | | | |
| | | В | Master's degree or higher without subspecialty compensation | 1 | | |
| X | X | C | Proven Doctor of Philosophy | 2, 3 | | |
| X | X | D | Doctor of Philosophy | 4,5 | | |
| | X | E | Bachelors or Baccalaureate Degree | 6 | | |
| | х | F | Proven Master's Degree that does not meet all ESRs | 7 | | |
| | X | G | Master's Degree that does not meet all ESRs | 8 | | |
| X | | Н | Master's Degree desired, not required | 9 | | |
| | X | I | Bowman Scholar Program | 10 | | |
| | X | L | L Certificate degree at the Master's level | | | |
| | | M Proven Post Master's Degree graduate education | | 1 | | |
| | | N Post Master's Degree graduate education 1 | | 1 | | |
| X | X | P | Master's Degree in approved Navy subspecialty | 12, 13 | | |
| X | X | Q | Proven Master's Degree | | | |
| | | Q Proven Master's Degree 14, 13 R Proven Significant Experience 1 | | 1 | | |
| | X | S | Significant Experience obtained through OJT | 16 | | |

Note 1: Not authorized.

Note 2: C-coded billet authorized when all the following are met:

- a. The billet requires doctoral-level facility with mathematical modeling, quantification of uncertainty and random phenomena, data analysis, probability and statistics, optimization techniques, and game theory.
- b. Billet range and scope requires the incumbent to already hold either a D- or C-code and have successfully completed a previous tour in an Operations Research Analysis (3211) D- or C-coded billet.
- c. Billet requires supervision of other Operations Research Analysis (3211) coded billets and/or analysts.

Note 3: C-coded officer authorized when an officer with a D-code completes at least 18 consecutive months in an Operations Research Analysis (3211) C- or D-coded billet. An experience package requesting this code shall be submitted to the SME listed in ref (c) for adjudication.

Note 4: D-coded billet authorized when it requires doctoral-level facility with mathematical modeling, quantification of uncertainty and random phenomena, data analysis, probability and statistics, optimization techniques, and game theory.

Note 5: D-coded officer authorized when the officer completes a doctoral program in Operations Analysis that meets Naval Postgraduate School (NPS) Operations Analysis Curriculum 360 ESRs.

<u>Note 6</u>: E-coded officer authorized when officer has received a baccalaureate degree in Operations Research or Operations Analysis which meet the Core Skill Requirements at an undergraduate level.

Note 7: F-coded officer authorized when officer has a G-code and has completed a tour of at least 18 months in a B-, H-, P-, or Q-coded Operations Research Analysis (3211) billet. An experience package requesting this code shall be submitted to the SME listed in ref (c) for adjudication.

Note 8: G-coded officer authorized when an officer attends an institution where the course of study does not meet all NPS Master of Systems Analysis Curriculum 363 ESRs. G-code also authorized for officers who earn a Master of Science in Applied Science (Operations Research) through the NPS Operations Research Department.

Note 9: H-coded billet authorized when a Master's level of knowledge in Operations Analysis is desired but not essential for optimum performance. E- and L-coded officers are acceptable alternatives for these billets when a P-coded officer is unavailable.

Note 10: I-code authorized for graduates of the Bowman Scholar program. I-coded officers retain the I-code throughout their careers for tracking purposes; therefore, these officers also will be authorized a 3211P-code (if granted a Master of Science in Operations Research) or 3211G-code (if granted a Master of Science in Applied Science (Operations Research).

Note 11: L-coded officer authorized when officer completes a four course Systems Analysis Certificate (Curriculum 281) through NPS or an equivalent certificate from a civilian institution. If an L-coded officer completes the entire Master of Systems Analysis curriculum 363, the L-code is replaced by a P-code.

Note 12: P-coded billet authorized when the billet requires all Operations Research Analysis (3211) Core Skill Requirements.

Note 13: P-coded officer authorized when the officer completes a master's degree in Operation Research, Master's in Systems Analysis, or an equivalent degree that meets all NPS Operations Analysis Curriculum 363 ESRs. NPS programs that lead to a Master of Science in Applied Science (Operations Research) will not be considered for a P-code but will be authorized a G-code.

Note 14: Q-coded billet authorized when all the following are met:

- a. Billet requires all Operations Research Analysis (3211) Core Skill Requirements.
- b. Billet range and scope requires the incumbent to already hold either a P- or Q-code and have successfully completed a previous tour in an Operations Analysis P- or Q-coded billet.

Note 15: Q-coded officer authorized when officer with a P-code completes at least 18 consecutive months in a B-, C-, D-, H-, P-, or Q-coded Operations Research Analysis (3211) coded billet. G-coded officers cannot obtain Q-codes, but will be authorized F-codes. An experience package requesting this code shall be submitted to the SME listed in ref (c) for adjudication.

Note 16: S-coded officer authorized when an officer who holds a 3211E subspecialty code completes at least 18 consecutive months in an H- or P-coded Operations Research Analysis (3211) coded billet. No other officers are eligible for the S-code. An experience package requesting this code shall be submitted to the SME listed in ref (c) for adjudication.

| APPROVED: | Director, #81 | | [Date] | |
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| APPROVED: | President, NPS | | [Date] | |
| APPROVED: | Director, N71 | ° () | [Date] | |

2022 Core Skill Requirements Operational Warfare Analysis (OWA) Subspecialty 3211 Curriculum 355

- 1. <u>Description of CSR Competencies</u>. In accordance with ref (c), the listed CSRs are a set of quantifiable skills, traits, and experiences that a subspecialist must possess to perform acceptably in an Operations Research Analysis (3211) coded billet.
- a. <u>CSR-1 Foundations</u>: Exhibits an understanding of the following foundational competencies: probability and statistics, data analysis, mathematical modeling, optimization, quantification of uncertainty and advanced topics (such as random phenomena, decision theory, game theory and/or risk analysis).
- b. <u>CSR-2 Problem Definition</u>: Utilizes communication and collaboration skills to understand complex organizational problems from multiple stakeholders. Identifies the objectives of the decision-maker along with relevant measures of effectiveness (MOEs) to guide decision-making. Identifies reasonable alternative courses of action and the key variables that impact the courses of action. Refines or reframes problem statements to enhance relevance and specificity or reduce ambiguity.
- c. <u>CSR-3 Data Collection, Manipulation, and Analysis</u>: Develops or uses appropriate tools and methods for collecting data. Gathers datasets or builds appropriate datasets while verifying accuracy, completeness, and consistency. Conducts data cleaning of noisy, incomplete data or data with established data quality issues using relevant tools and methods. Manipulates data for analysis utilizing appropriate tools and methods for structured or unstructured data. Explores, summarizes, and draws statistically valid conclusions from available data.
- d. <u>CSR-4 Modeling, Computation, and Simulation</u>: Identifies, applies, develops and/or integrates appropriate mathematical models or simulations to solve problems. Demonstrates computational programming utilizing a higher-level language and/or modeling tool. Utilizes modeling software and/or spreadsheets to implement models. Understands limits of computation, and can manage tradeoffs between fidelity, accuracy, and time for the relevant problem.
- e. <u>CSR-5 Assessment</u>: Using experience and knowledge of a variety of potential solutions, identifies appropriate analytic technique to solve specific problems. Using critical and strategic thinking, performs analysis of alternative courses of action by exercising models and technical analysis. Conducts sensitivity analysis of key assumptions, relevant parameters, and available data to assess robustness of potential solutions.
- f. <u>CSR-6 Presentation and Visualization</u>: Interprets and evaluates information or hypotheses through data visualization. Evaluates and selects appropriate data visualization tools and techniques based on the audience, type of data, or message. Creates visual or graphic interfaces to enable automated and reproducible updates. Presents analytical results to decision-makers via written reports and/or briefings, making appropriate use of data visualization.
- g. <u>CSR-7 Real-world OA Application</u>: Identifies and applies OA theory and techniques to real-world, operationally relevant problems. Enhances ability of senior leaders to make data-driven and evidence-based decisions.

| 2. | Apr | olicable | Officer I | Designator: | | | | |
|----|-----|----------|-----------|-------------|--|--|--|--|
| | | ШХ | | | | | | |
| | b. | 112X | | | | | | |
| | c. | 113X | | | | | | |

- d. 114X
- e. 130X
- f. 131X
- g. 132X

3. Applicable Billet Designators

- a. 1000
- b. 1050
- c. 111X
- d. 112X
- e. 113X
- f. 114X
- g. 130X
- h. 131X
- i. 132X

4. Educational and Significant Experience Criteria

- a. Coded billets are authorized when the functions of the billet include the CSR competencies listed in paragraph 1.
- b. Subspecialty Code Suffixes Authorized. Authorized suffixes annotated with "X"; unauthorized suffixes are blank.

Note: "Proven" requires at least an 18-month experience tour in an Operations Analysis/3211-coded billet or billet using the CSR of a related subspecialty, such as Operations Research Logistics Analysis/3212.

| | | Sul | ospecialty Code Suffixes Authorized | | | | |
|--------|---------|--------|---|--------|--|--|--|
| Billet | Officer | Suffix | Tix Definition | | | | |
| | | В | Master's degree or higher without subspecialty compensation | 1 | | | |
| X | X | С | Proven Doctor of Philosophy | 2, 3 | | | |
| X | X | D | Doctor of Philosophy | 4, 5 | | | |
| | X | E | Bachelors or Baccalaureate Degree | 6 | | | |
| | х | F | Proven Master's Degree that does not meet all ESRs | 7 | | | |
| | X | G | Master's Degree that does not meet all ESRs | 8 | | | |
| X | | Н | Master's Degree desired, not required | 9 | | | |
| | X | I | Bowman Scholar Program | 10 | | | |
| | X | L | Certificate degree at the Master's level | | | | |
| | | M | M Proven Post Master's Degree graduate education | | | | |
| | | N | Post Master's Degree graduate education | 1 | | | |
| X | X | P | Master's Degree in approved Navy subspecialty | 12, 13 | | | |
| X | X | Q | Proven Master's Degree | 14, 15 | | | |
| | | R | Proven Significant Experience | 1 | | | |
| | X | S | Significant Experience obtained through OJT | 16 | | | |

Note 1: Not authorized.

Note 2: C-coded billet authorized when all the following are met:

- a. The billet requires doctoral-level facility with mathematical modeling, quantification of uncertainty and random phenomena, data analysis, probability and statistics, optimization techniques, and game theory.
- b. Billet range and scope requires the incumbent to already hold either a D- or C-code and have successfully completed a previous tour in an Operations Research Analysis (3211) D- or C-coded billet.
- c. Billet requires supervision of other Operations Research Analysis (3211) coded billets and/or analysts.

Note 3: C-coded officer authorized when an officer with a D-code completes at least 18 consecutive months in an Operations Research Analysis (3211) C- or D-coded billet. An experience package requesting this code shall be submitted to the SME listed in ref (c) for adjudication.

Note 4: D-coded billet authorized when it requires doctoral-level facility with mathematical modeling, quantification of uncertainty and random phenomena, data analysis, probability and statistics, optimization techniques, and game theory.

Note 5: D-coded officer authorized when the officer completes a doctoral program in Operations Analysis that meets Naval Postgraduate School (NPS) Operations Analysis Curriculum 360 ESRs.

Note 6: E-coded officer authorized when officer has received a baccalaureate degree in Operations Research or Operations Analysis which meet the Core Skill Requirements at an undergraduate level.

Note 7: F-coded officer authorized when officer has a G-code and has completed a tour of at least 18 months in a B-, H-, P-, or Q-coded Operations Research Analysis (3211) billet. An experience package requesting this code shall be submitted to the SME listed in ref (c) for adjudication.

Note 8: G-coded officer authorized when an officer attends an institution where the course of study does not meet all NPS Master of Systems Analysis Curriculum 363 ESRs. G-code also authorized for officers who earn a Master of Science in Applied Science (Operations Research) through the NPS Operations Research Department.

Note 9: H-coded billet authorized when a Master's level of knowledge in Operations Analysis is desired but not essential for optimum performance. E- and L-coded officers are acceptable alternatives for these billets when a P-coded officer is unavailable.

Note 10: I-code authorized for graduates of the Bowman Scholar program. I-coded officers retain the I-code throughout their careers for tracking purposes; therefore, these officers also will be authorized a 3211P-code (if granted a Master of Science in Operations Research) or 3211G-code (if granted a Master of Science in Applied Science (Operations Research).

Note 11: L-coded officer authorized when officer completes a four course Systems Analysis Certificate (Curriculum 281) through NPS or an equivalent certificate from a civilian institution. If an L-coded officer completes the entire Master of Systems Analysis curriculum 363, the L-code is replaced by a P-code.

Note 12: P-coded billet authorized when the billet requires all Operations Research Analysis (3211) Core Skill Requirements.

Note 13: P-coded officer authorized when the officer completes a master's degree in Operation Research, Masters in Systems Analysis, or an equivalent degree that meets all NPS Operations Analysis Curriculum 363 ESRs. NPS programs that lead to a Master of Science in Applied Science (Operations Research) will not be considered for a P-code but will be authorized a G-code.

Note 14: Q-coded billet authorized when all of the following are met:

- a. Billet requires all Operations Research Analysis (3211) Core Skill Requirements.
- b. Billet range and scope requires the incumbent to already hold either a P- or Q-code and have successfully completed a previous tour in an Operations Analysis P- or Q-coded billet.

Note 15: Q-coded officer authorized when officer with a P-code completes at least 18 consecutive months in a B-, C-, D-, H-, P-, or Q-coded Operations Research Analysis (3211) coded billet. G-coded officers cannot obtain Q-codes, but will be authorized F-codes. An experience package requesting this code shall be submitted to the SME listed in ref (c) for adjudication.

Note 16: S-coded officer authorized when an officer who holds a 3211E subspecialty code completes at least 18 consecutive months in an H- or P-coded Operations Research Analysis (3211) coded billet. No other officers are eligible for the S-code. An experience package requesting this code shall be submitted to the SME listed in ref (c) for adjudication.

| APPROVED: | Director, N81 | | [Date] |
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| APPROVED: | President, NPS | | [Date] |
| APPROVED: | Director, N71 | · U | [Date] |