DEPARTMENT OF THE NAVY
COMMANDER
NAVAL EDUCATION AND TRAINING COMMAND
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18 JUN 2025

LETTER OF PROMULGATION FOR NAVEDTRA 142

1. The Naval Education and Training (NAVEDTRA) M-142 series of manuals has been extensively revised. This revision merges the Ready Relevant Learning process, the Naval Education and Training Command (NETC) End-to-End process, and the OPNAV acquisition process into one Navy Training Process (NTP). The NTP is more agile, relies on type commanders to push training requirements to NETC, and eliminates a multitude of outdated and often conflicting policy and guidance.

2. The NAVEDTRA 142 series of manuals define the NTP and provide fundamental direction for the development of curricula, the delivery of instruction, and the management and evaluation of training programs, within NETC.

3. This publication is a major change and should be read in its entirety.

4. This publication is available electronically at: https://netc.navy.mil/Resources/NETC-Directives/.

5. NETC N71 solicits any comments and recommendations to improve the NAVEDTRA 142 series of manuals through the following link: https://flankspeed.sharepoint-mil.us/sites/MYNAVYHR_NETC/N7/Lists/ChngRqstForm/AllItems.aspx or comments may be submitted to netc-n7@us.navy.mil.

6. Reviewed and approved.

J. J. CZERENKO

Navy Training Process

Phase II: Requirements Development

SECURITY CLASSIFICATION: UNCLASSIFIED

18 JUN 2025

DISTRIBUTION STATEMENT A: Approved for public release; distribution is unlimited.

Record of Changes

Number and Description of Change:	Entered By:	Date:

Foreword

Naval Education and Training Series Manuals:

The Naval Education and Training (NAVEDTRA) M-142 series of manuals provide policy and guidance within the Naval Education and Training Command (NETC) for the development of curricula, delivery of instruction, and management and evaluation of training programs. This manual supersedes the following documents:

- NAVEDTRA 137A, Job Duty Task Analysis Management Manual
- NAVEDTRA 138, Front End Analysis Management Manual
- NETCINST 1500.6B, NETC Front End Analysis
- Ready Relevant Learning Guidance Memorandum #20-0002, Learning Objective Standards
- Ready Relevant Learning Guidance Memorandum #20-0005A, Standard Operating Procedures for Managing Rating Scoping

Scope:

The NAVEDTRA M-142.2 Phase II Requirements Development, Navy Training Process (NTP) steps 3 through 5 will depend on the application, depth, and nature of the project. The application may be for a mission, job, or an occupation training requirement. The depth could range from modification of an existing training program to training requirements development for a new weapons system.

NOTE: Acquisition communities perform Front End Analysis (FEA) as delineated in OPNAVINST 1500.76E during the development of a Navy Training Systems Plan (NTSP) to satisfy Navy and Marine Corps Acquisition Category Programs. The NTP is aligned to the FEAs performed to support acquisition programs.

The guidelines set forth in this series of manuals are not intended to conflict with any higher-level authority policies or procedures. In instances where there appears to be a conflict or disagreement, please notify NETC N71. NETC N71 solicits any comments and recommendations to improve the NAVEDTRA M-142 series of manuals through

the following link: https://flankspeed.sharepoint-mil.us/sites/MYNAVYHR_NETC/N7/Lists/ChngRqstForm/AllItems.aspx or comments may be submitted to netc-n7@us.navy.mil. This manual is intended for use by military, civil service, and contractor personnel engaged in the development and modification of Navy training materials.

NOTE: All links in this manual must be copied and pasted into a browser to access the document being referenced.

Contractual Use of this Manual:

Throughout the NAVEDTRA M-142 series, examples are provided to illustrate and clarify points being discussed. It is important to note in the case of an item identified as an "example," this item is not intended to be copied exactly in all situations, but rather provided to help clarify the information being discussed. The content for items shown as examples are representative and may be tailored by the user for specific situations.

Table 1: Guidance Terms

Term	Meaning
Must	**This action, behavior, or construct is required by the guidelines.**
Will	**This denotes a required action in the future**
May	**This action, behavior, or construct is permitted; however, it is discretionary, not required.**
Can	**This refers to the inherent behavior of software and/or computer languages. Do not use to mean that an action, behavior, or construct is permissible or allowed by the guidelines.**
Must not	**This action, behavior, or construct is prohibited by the guidelines.**
Should	**This suggests that something is proper, reasonable, or the best thing to do.**

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NTP Appendices are available for download:

https://flankspeed.sharepoint-mil.us/sites/MYNAVYHR_NETC/N7/1422/Forms/AllItems.aspx

Phase V Appendices

Acronym List

Acronym	Description
APL	Affective Proficiency Level
CCA	Curriculum Control Authority
CCMM	Course Curriculum Model Manager
CDS	Curriculum Data System
CDP	Course Data Processing
CO	Commanding Officer
COI	Curriculum Outline of Instruction
CMS	Course Master Schedule
CRM	Comments Resolution Matrix
DID	Data Item Description
DoT	Director of Training
EL	Enterprise Lead
EO	Enabling Objective
F2	Fielding and Feasibility
FEA	Front End Analysis
FRD	Functional Requirements Document
IC	Instructional Coordinator
IMRD	Instructional Media Requirements Document
IPRD	Instructional Performance Requirements Document
KOM	Kick-Off Meeting
KPL	Knowledge Proficiency Level
LA	Learning Analysis
LC	Learning Center
LO	Learning Objective
LS	Learning Site
LSO	Learning Standards Officer
MCD	Military Characteristics Document
MFR	Memorandum for the Record
NAVEDTRA	Naval Education and Training
NETC	Naval Education and Training Command
NETSAFA	Naval Education and Training Security Assistance Field Activity
NAWCTSD	Naval Air Warfare Center Training Systems Division
NTP	Navy Training Process
NTSP	Navy Training Systems Plan
OCCSTD	Occupational Standard
OPNAV	Office of the Chief of Naval Operations

PAC	Post Award Conference
PADDIE+M	Plan, Analyze, Design, Develop, Implement, Evaluate, and Maintain
PQS	Personnel Qualification Standard
POM	Program Objective Memorandum
PPBE	Planning, Programming, Budgeting, and Execution
ROM	Rough Order of Magnitude
RRL	Ready Relevant Learning
R3	Reuse, Repurpose, and Reference
SME	Subject Matter Expert
SPL	Skill Proficiency Level
SPO	SharePoint Online
SYSCOM	Systems Command
TA	Task Analysis
TCCD	Training Course Control Document
TDCP	Training Decision Coordinating Paper
TITA	Training Installation and Transfer Agreement
TLCE	Total Lifecycle Cost Estimate
TO	Terminal Objective
TPSD	Training Program Structure Document
TPP	Training Project Plan
TSA	Training Situation Analysis
TSD	Training Situation Document
TSPO	Training System Program Office
TSRA	Training System Requirements Analysis
TTL	Training Task List
TYCOM	Type Commander
USFFC	U. S. Fleet Forces Command

CHAPTER 1
PHASE II: REQUIREMENTS DEVELOPMENT

1.0. Introduction. The NTP adopts the Plan, Analyze, Design, Develop, Implement, Evaluate, and Maintain (PADDIE+M) Model, illustrated in Figure 1-1. Within this framework, the Analyze phase, represented by the 'A' in PADDIE+M, is critical for developing training requirements. The NAVEDTRA M-142.2 manual outlines a standardized Navy FEA methodology, which is used to identify training gaps, determine appropriate media types, and establish effective media delivery modes to address those gaps.

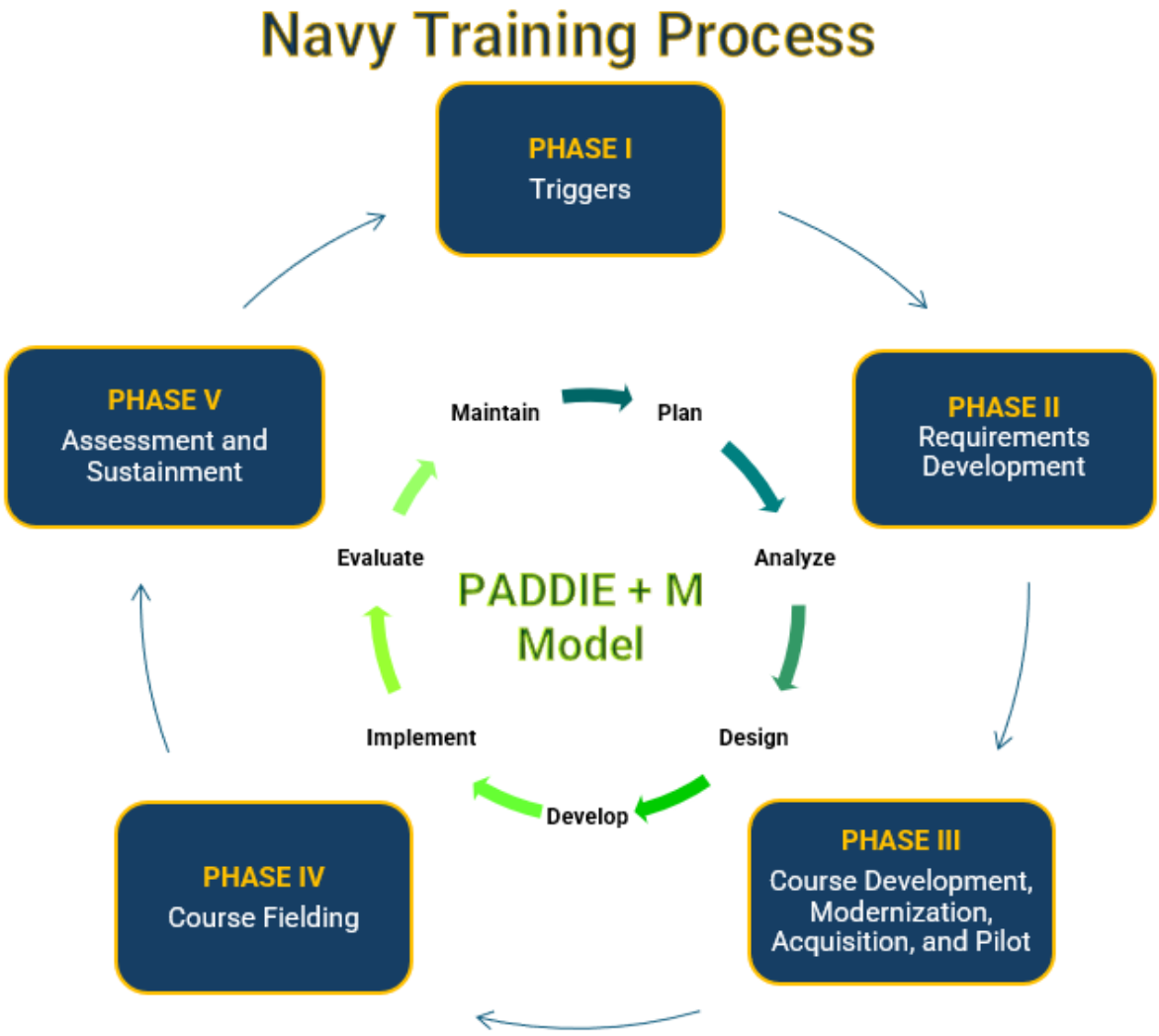


Figure 1-1: Navy Training Process Using the "PADDIE+M" Model

The requirements development process follows the structure outlined in the NTP Phase II Detailed Map (Appendix C) and NTP Workflow Tool, along with the step-by-step flows provided in this manual. Some sub-steps may be performed simultaneously or in a different order depending on the project's scope or constraints. It's important to note that, based on the specific project, not all steps may be necessary to establish a valid training requirement.

1.1. Input to Phase II. Triggers are events that initiate the assessment of deficiencies and/or requirements to meet Fleet performance and readiness, as outlined in NAVEDTRA M-142.1. The result of NTP Phase I Triggers may initiate the process of either developing new, updating existing, or discontinuing training altogether. For the specific process of trigger determination, refer to NAVEDTRA M-142.1 NTP Phase I Trigger, which includes NTP Step 1 - Alignment Meeting and NTP Step 2 - Needs Assessment. These are prerequisites before beginning Phase II Requirements Development. It is essential that a needs assessment has already been conducted to determine whether there is a problem that justifies instructional intervention.

1.2. Output of Phase II. In Phase II of the NTP, the requirements sponsor approves the training solution through a series of key documents. These include the Training Situation Document (TSD), the Instructional Performance Requirements Document (IPRD), and the Instructional Media Requirements Document (IMRD). The Military Characteristics Document (MCD) may also be included as needed. Additionally, Phase II involves the preparation of the Total Lifecycle Cost Estimate (TLCE). For Ready Relevant Learning (RRL) projects, additional documents such as the Fielding and Feasibility (F2) Reporting and the Functional Requirements Document (FRD) are provided. Further details about these documents will be covered in the upcoming chapters.

CHAPTER 2
TRAINING SYSTEMS REQUIREMENTS ANALYSIS OVERVIEW

2.0. Introduction. The Training Systems Requirement Analysis (TSRA) is a systematic series of analyses aimed at identifying and recommending appropriate training methods for new or revised training needs. These analyses outline various aspects of training requirements, including tasks, learning objectives (LO), instructional strategies, methods, media selection, and facility needs for both new and modified training programs. Additionally, they provide rationale for the development of training devices and identify potential risks in the development and implementation of training. The TSRA includes the following analyses (see NTP Requirements Workbook Appendix E):

a. **Training Situation Analysis (TSA)** – Recorded in the NTP Requirements Workbook (Tabs 2-9) and documented in a TSD.

b. **Task Analysis (TA)** – Recorded in the NTP Requirements Workbook (Tab 9C) and documented in an IPRD v1.

c. **Learning Analysis (LA)** – Recorded in the NTP Requirements Workbook (Tab 10) and documented in an IPRD v2.

d. **Media Selection** – Recorded in the NTP Requirements Workbook (Tab 11) and documented in an IMRD.

2.1. Training Decision Coordinating Paper. The Training Decision Coordinating Paper (TDCP) is a technical assessment of potential training systems derived from the TSRA. It includes a detailed description of each alternative, with cost estimates for development, implementation, and sustainment, along with a recommended solution. The TDCP, as outlined in Appendix D, serves as a guide for implementing training fielding by presenting various options along with their respective costs.

The TDCP provides valuable insights to key stakeholders, including the Program Office, NETC, type commander (TYCOM), and stakeholders, helping them make data-driven decisions. These decisions aim to enhance the training effectiveness and readiness of the U.S. Navy. The decision on where to begin the analysis process depends on prior analyses, available data, and the specific requirements of the situation.

CHAPTER 3
TRAINING SITUATION ANALYSIS

3.0. Introduction. The TSA is a key process for assessing the effectiveness of a training system in meeting current needs, as well as evaluating existing training programs and technologies to determine their suitability for addressing new training requirements. The data derived from the needs assessment, which validates performance gaps and identifies their root causes, serves as an essential input for the TSA. Proper execution of the TSA is critical, as inadequate analysis can lead to incorrect assumptions, outdated or inaccurate data, missed opportunities for reuse, and an inability to leverage existing efforts. Such oversights may cause delays, necessitating costly rework and duplication. The following sections provide guidance on how to conduct an effective TSA.

3.1. Identify Data Requirements. During the preliminary analysis, the following types of information are necessary:

a. **Source of the Problem/Deficiency** – Identifying the source of the issue (e.g., instructor observations, school/course manager's feedback, supervisor's report on graduates' job performance, student performance results, or new weapon systems).

b. **Symptoms of the Problem/Deficiency** – Specific details regarding the actual and desired performance requirements. Potential causes of problems/deficiencies include:

(1) The addition of a new tactical mission.

(2) The introduction of new or modified equipment into the operational environment.

(3) A need to improve skill levels in areas where course graduates show insufficient proficiency.

(4) The desire to enhance training in terms of effectiveness and/or cost.

c. **Previous Studies or Analyses** – Any previously conducted studies or analyses related to the identified problem or deficiency.

3.2. TSA Data Collection. TSA meetings, interviews, and site visits are conducted, as necessary, to collect data for evaluating training programs and technologies for relevance to new training requirements. The NTP Requirements Workbook (Appendix E) provides a structured tool for the analyst to organize data requirements and collect the following information:

a. Course Data (Tab 2A)

b. Facilities – Electronic Classroom (Tab 5A)

c. Training Equipment (Tab 6A)

3.3. Training Situation Document. The TSD is a crucial tool for evaluating the effectiveness of Navy training systems in meeting operational needs, identifying areas for improvement, and exploring new methods or technologies to address emerging requirements. By ensuring that training systems align with evolving demands, the TSD supports continuous improvement and the integration of advanced technologies, enhancing training relevance and effectiveness for future challenges. As part of the TSA process, the TSD outlines specific details about a training scenario, including context, environment, and performance requirements, which are analyzed to identify training needs and requirements. Detailed instructions on the preparation, format, and content of the TSD are provided in the TSD Data Item Description (DID) (DI-SESS-81517), as customized in Appendix F, ensuring consistency and effectiveness across various training scenarios.

Upon completion of the TSD, the analysis progresses to the TA and LA documented in the IPRD, and the media selection documented in the IMRD. These analyses, informed by thorough assessments of training requirements, constraints, and initial curriculum design, will guide the development of curricula and determine the best instructional media choices to support effective training.

CHAPTER 4
TASK ANALYSIS

4.0. Introduction. TA involves breaking down and organizing the work done in the Fleet into specific jobs, duties, and tasks, a process formerly referred to as job, duty, TA. The data gathered at the duty and task levels form the basis for developing LOs and plays a key role in Navy curriculum development. The attributes assigned to each task provide essential information that allows curriculum developers to create courses that align with Fleet training requirements. Depending on the available reference materials or input from subject matter experts (SME), tasks can be further divided into sub-tasks and steps for greater detail.

4.1. Task Analysis Scope and Triggers. The scope of a TA depends on factors such as complexity, required detail, and available reference materials needed to break down and organize work for curriculum development. The analysis may range from simple tasks, like modifying or adding duties (targeted TA), to more complex activities, such as structuring work for a new rating or occupation. Regardless of the level of complexity, the same process is followed.

A TA or targeted TA can be conducted to address new work requirements, including but not limited to the following triggers:

a. RRL Modernization Efforts

b. Fleet Performance Assessment

c. NTSP

d. Operational Risk Management (ORM) Assessment

e. Direct Fleet Input

f. Enlisted Occupational Standards (OCCSTD) Revision

g. Rating Merger

h. Navy Enlisted Classification, Military Occupational Specialty, and Additional Qualification Designator Establishment or Revision

i. Curriculum Control Authority (CCA) Direction

NOTE: For a detailed explanation of trigger events, refer to NAVEDTRA M-142.1.

4.2. Responsibilities. This section outlines the roles and responsibilities of individuals involved in the TA process at NETC Headquarters, NETC learning centers (LC), and among stakeholders. The roles discussed include those of the following personnel:

a. **NETC Headquarters**

(1) **Commander, NETC:**

- Promulgates policy and guidance for the NETC TA process.

(2) **NETC Director of Learning and Development Division (N7):**

- Provides oversight for TA process policy and guidance.

(3) **NETC Learning Standards Branch (N71):**

- Ensures TA process policy and guidance are current.
- Ensures NETC LCs adhere to TA process policy and guidance

(4) **NETC Enterprise Content Review and Reengineering Teams (N72):**

- Provides guidance and assistance.
- Monitors compliance.

b. **NETC LCs**

(1) **LC Commanding Officer (CO):**

- Serves as CCA unless otherwise designated (authority may be delegated to the Director of Training (DoT) or Learning Standards Officer (LSO)).
- Ensures LC compliance with NETC policy and guidance.
- Ensures the effectiveness of the LC TA process.
- Signs and forwards the TA data report to the requirement sponsor for review, validation, and approval.

(2) **LC DoT:**

- Provides oversight and guidance for the TA process.
- Approves release of TA messages.
- Assigns TA coordinator and TA facilitator(s).

(3) **LC LSO:**

- Provides guidance and assistance on the TA process.
- Reviews TA announcements, agendas, and completion report messages.

- Reviews and forwards TA data reports and cover letters to the LC DoT.
- Manages the TA process.

(4) **LC TA Coordinator:**

- Drafts TA announcement, agenda, and completion report messages.
- Plans and oversees the TA process.
- Facilitates the TA.
- Obtains and disseminates technical documentation and other relevant materials.
- Coordinates TA security issues with the security manager.
- Creates the TA data report.
- Acts as liaison with the requirement sponsor(s) to identify SMEs.
- Maintains documentation from all meetings and working groups related to the TA for retention in the course audit trail.

c. **Stakeholders:** Stakeholders are individuals or organizations with a vested interest in the training outcome and are responsible for identifying, validating, and resourcing Fleet training requirements. These may include, but are not limited to, the requirement sponsor, resource sponsor, technical warrant holder(s), systems commands (SYSCOM)/training system program office (TSPO), enlisted community manager, Naval Air Warfare Center Training Systems Division (NAWCTSD), and SMEs. Stakeholders are expected to provide relevant technical documentation as needed and participate in TA workshops. The requirement sponsor specifically plays a key role in nominating SMEs for TA workshops and validating and approving TA data.

4.3. Workshop Preparation. Advanced planning is crucial for achieving the best possible outcome. To prepare effectively for a workshop, LCs must follow these steps:

a. Assign a TA coordinator.

b. Identify internal staff and assign roles.

c. Develop a TA Plan of Action and Milestones (POA&M).

d. Identify the resources needed to conduct the workshop (e.g., facilities, lodging, maps, read-aheads, etc.).

e. Consider facility requirements, which should include, but are not limited to:

(1) Internet connectivity.

(2) Large display/data viewing capability.

(3) Facility security classification.

NOTE: If the TA scope includes multiple working groups, ensure that each group is adequately resourced for their assigned tasks.

f. Collect and review relevant reference materials, then upload them to the SharePoint Online (SPO). Relevant documents might include:

(1) OCCSTD

(2) Training Task List (TTL) (if applicable)

(3) Previous TA data

(4) Technical publications

(5) Casualty Reports

(6) Assessments

(7) Surveillance data

(8) Lessons learned

(9) Personnel Qualification Standards (PQS)

(10) Operational and maintenance requirements

NOTE: Classified reference materials not authorized for uploading onto SPO will be handled per SECNAVINST 5510.36B, Department of the Navy Information Security Program.

g. Develop a preliminary work structure for the jobs and associated duties based on available reference materials. Share this structure on the SPO for review by stakeholders and SMEs. This work structure will evolve during the TA and serve as the foundation for defining the scope of work.

h. Coordinate security matters with the security manager.

i. Create a list of workshop goals, outline the agenda, establish ground rules, and set a tentative timeline. Post these details on the SPO.

j. Review the TA Facilitator Guide (Appendix G) and prepare the workshop briefing (see Appendix H example).

4.3.1. Workshop Announcement Message. The LC is responsible for drafting and distributing the workshop announcement message at least 60 calendar days prior to the

scheduled workshop date. This message will invite stakeholders and request the assignment of SMEs.

NOTE: A minimum of three SMEs is required to conduct a TA workshop. SME participation is mandatory, and each SME must remain for the entire duration of the workshop.

The announcement message must include the following details:

a. Purpose of the TA.

b. Date and location (full address).

c. Tentative agenda.

d. Request for SME nominations.

e. Link to the SPO.

f. Request for feedback on the proposed preliminary work structure, including job(s) and associated duties.

g. Request for participants to provide point of contact information.

h. Security/classification requirements.

NOTE: The scope of the workshop, including the number of task statements and the complexity of the analysis, may require the formation of multiple working groups. If more than one working group is necessary, additional SMEs will be needed. Each working group will also require a group leader to facilitate discussions and a designated person to collect and enter data.

4.3.2. Final Workshop Preparation. The TA coordinator will post the final agenda at least 30 calendar days prior to the scheduled workshop date. Final preparations include:

a. Ensure that all briefs and reference materials are available for the workshop.

b. Brief the CO or DoT on the status of workshop preparation.

c. Contact all workshop participants to address any known concerns or logistics issues.

d. Confirm the workshop location and verify that necessary equipment is available and functional.

e. Ensure that all attendees have the required access to any secured locations, as needed.

4.4. Conducting a Workshop. TA facilitators are responsible for leading the workshop and ensuring that the group clearly defines the roles and tasks associated with the targeted rating/occupation. They must also ensure the accurate collection of all relevant data. To support this process, facilitators may use the TA Model (Appendix I) and TA Job Aid (Appendix J) to gather input from SMEs. Additionally, the TA Facilitator Guide (Appendix G) offers a flexible, step-by-step framework for conducting the workshop, which can be tailored to meet the unique needs of each TA.

4.4.1. Task Analysis Wrap-up and Approval Process. Requirement sponsors may approve TA data if present at the workshop. However, to ensure accuracy and alignment, the data must be reviewed before the Step 3 Decision Meeting (RRL Gate 1). The following steps outline the approval process:

a. TA Coordinator Action: The TA coordinator will upload the completed spreadsheet to the Curriculum Data System (CDS) and submit the data.

b. Stakeholder Review: If stakeholders or the requirement sponsor have any comments or changes during the review, they will be documented using a Comments Resolution Matrix (CRM) (Appendix K) and submitted to the TA coordinator.

c. Update and Final Report: The TA coordinator will update the data in CDS and prepare a final report for approval during the Step 3 Decision Meeting (RRL Gate 1).

d. Requirement Sponsor/TYCOM Approval: The requirement sponsor/TYCOM approves all data collected up to the Step 3 Decision Meeting (RRL Gate 1) by signing a Memorandum for the Record (MFR) (Appendix AD).

e. Final Approval in CDS: Upon receipt of the requirement sponsor's approval, the TA coordinator will approve the data in CDS. At this point, the data will be locked, and no further modifications can be made.

4.5. Task Analysis Output. The output of the TA will consist of a validated TA and TTL, derived from the Train/No Train decision for each task. This output will then be used to populate the LA Model (Appendix L). A high-level flow chart of the TA process is shown in Figure 4-1.

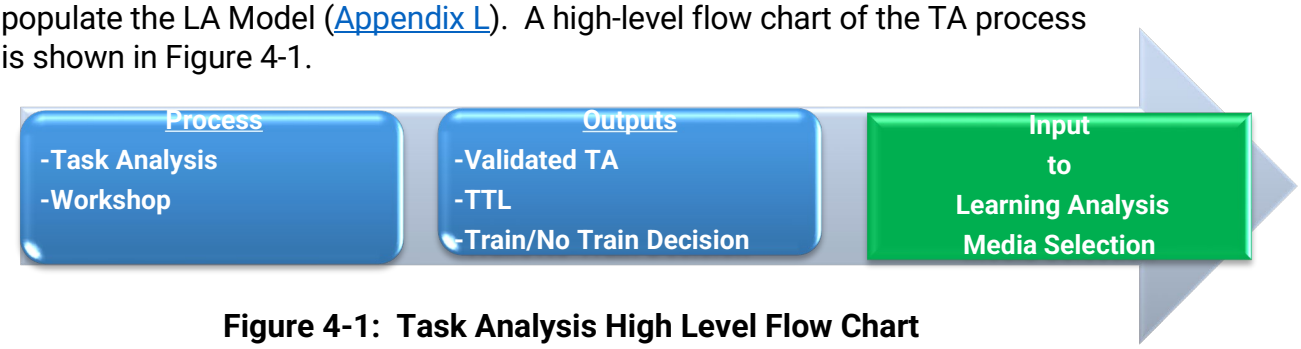


Figure 4-1: Task Analysis High Level Flow Chart

NOTE: The TA data collected in the TA Model spreadsheet (Appendix I) must be transferred to the NTP Requirements Workbook (Tab 9C) (Appendix E) to consolidate all Phase II data in a single location.

4.5.1. Training Task List. The TTL is a comprehensive list of duties and tasks that will be trained in a course. It serves as the primary output of the TA step and forms the foundation for the development or revision of a course. It outlines the specific duties and tasks that support the course mission and identifies the job-related activities learners will be able to perform by the end of the course. To construct a TTL, an analysis is conducted on both the course mission and relevant technical documentation. Once developed, the TTL is used to guide the creation of LOs and instructional strategies, including delivery methods, pre-instructional activities, presentations, student participation, and assessment methods.

4.6. Instructional Performance Requirements Document. The IPRD defines the training content and its sequence. It specifies the human performance requirements that form the foundation for designing and developing targeted training and performance support. TA data is used to create the IPRD v1, providing critical information for designing the training program. The IPRD DID (DI-SESS-81518), as customized in Appendix F, outlines the preparation instructions, format, and content necessary to produce the IPRD.

CHAPTER 5
LEARNING ANALYSIS

5.0. Introduction. The LA provides comprehensive descriptions of the work performed, including the TTL and associated task attributes. By utilizing TTL data, the LA process develops LOs that support performance-based training, instructional strategies for formal training at the point of need, and methods for selecting appropriate media for subsequent training stages. Additionally, sensory, fidelity, and media characteristic data are gathered for each LO to ensure the effectiveness of the training delivery.

5.1. Learning Objectives. LOs define the expected achievements of a student upon completion of the training. They are structured to reflect the operational conditions, behaviors, and standards associated with a specific job and then translated into a learning environment. LOs are categorized into terminal objectives (TO) and enabling objectives (EO).

5.1.1. Terminal Objectives

a. Definition: TOs represent the overarching goal of a lesson. It describes the final competency or outcome that a student should be able to demonstrate by the end of the lesson. TOs are typically derived from one or more duties listed in the TTL.

b. Focus: TOs are broad and aim to answer the question, "What will the student be able to do upon completing the lesson?" TOs reflect the ultimate learning outcome that students must achieve.

5.1.2. Enabling Objectives

a. Definition: EOs are smaller, specific sub-objectives that contribute to the overall TO. They detail measurable, observable actions or behaviors students must demonstrate in order to progress toward achieving the TO. EOs are developed based on one or more tasks from the TTL and identify the necessary behaviors required to complete a task successfully.

b. Focus: EOs break down the broader TO into smaller, manageable steps. Each section of the lesson typically includes one or more EOs, helping students build the required skills progressively.

The TOs and EOs are linked in a structured way to ensure that students are gradually developing the skills and knowledge needed to meet the overall goals. The correct order of these objectives plays a key role in shaping the curriculum outline of instruction (COI), which structures the course into modules, lessons, and sections in a coherent

and logical teaching sequence. Once all LOs are defined, they are tied to their corresponding TA items.

NOTE: For course indoctrination and introduction sections, which are not based on duties and tasks from the TTL, LOs are not typically required.

For accurate assessment of student progress and understanding, it is essential that LOs are testable. When crafting LOs, they must be clear, measurable, and directly aligned with the intended outcomes of the course or program. Additionally, test questions must be developed in conjunction with the LOs to ensure that assessments are valid and truly reflect the competencies students are expected to demonstrate. This alignment not only provides a more reliable measure of student achievement but also helps guide instruction, ensuring that students are evaluated based on the most relevant knowledge and skills for their academic goals.

5.2. Learning Objective Elements. A well-crafted LO is composed of three essential elements: condition, behavior, and standard. Each element serves a specific purpose in clearly defining what the learner will achieve.

5.2.1. Condition. The condition statement sets the context for the learning experience. It outlines the factors, circumstances, and resources that either aid or limit the learner's ability to demonstrate the desired behavior. This may include the tools, environment, or specific situation that will be available to the learner during the learning activity. For example, "Given a set of data..." or "Using a calculator..."

5.2.2. Behavior. The behavior element defines the specific action the learner is expected to perform to demonstrate mastery of the LO. This element is typically action-oriented and emphasizes observable outcomes that can be assessed. It ensures that the learning goal is clear, measurable, and actionable.

The behavior statement should be precise, measurable, and use verbs that describe concrete actions, such as "identify," "explain," "demonstrate," "calculate," or "apply." These verbs guide the learner's actions and help in assessing whether they have achieved the intended outcome.

The behavior component consists of three essential parts:

a. **Subject:** This refers to the learner or the object of the action. For example, "The learner," "The student," or a specific role or entity, depending on the context.

b. **Verb**: A performance action verb indicates what the student is expected to do in order to demonstrate mastery of a LO. These verbs are selected based on the required proficiency and are categorized into three domains: cognitive

(knowledge), psychomotor (skill), and affective (attitudes). Each domain has its own taxonomy that helps determine the appropriate verb and corresponding proficiency level. See Appendix M for an example of action verbs. Below are the key domains and their levels:

(1) **Cognitive (Knowledge)** – This domain is based on Bloom's Revised Taxonomy, which organizes cognitive skills into six levels of increasing complexity (Anderson & Krathwohl, 2001). It is important to understand that NETC uses five different knowledge proficiency levels (KPL) for assigning the level of proficiency to which the course will be trained to and each LO that will be tested to. See Table 2 for the description of the five knowledge proficiency levels.

Table 2: Knowledge Proficiency Levels

Level	Description
KPL1 - Remember	The student can recall facts, basic concepts, or other rote pieces of information.
KPL2 - Understand	The student can grasp the meaning of information, interpret, and summarize pieces of information.
KPL3 - Apply	The student can use knowledge and principles to solve problems, apply information in new situations, or carry out other procedures as necessary.
KPL4 - Analyze	The student can break down information into parts, examining relationships between parts, and drawing conclusions accordingly.
KPL5 - Evaluate/Create	For Navy training, evaluate and create are combined into one level. Evaluate is making judgments based on criteria and standards. Create is generating new ideas, products, or ways of viewing things.

(2) **Psychomotor (Skill)** - This domain, based on Dave's Taxonomy, involves physical movement, coordination, and the use of motor skills. These skills are developed through practice and are assessed based on proficiency in areas such as speed, strength, endurance, coordination, and precision (Dave, 1970). The proficiency levels range from basic skill imitation to mastery. See Table 3 for a description of the five skill proficiency levels (SPL).

Table 3: Skill Proficiency Levels

Level	Description
SPL1 - Imitation	This is where the student can copy the skill or task while observing a demonstration.
SPL2 - Manipulation	This is where the student can perform certain skills or tasks from memory when they are given a set of directions.
SPL3 - Precision	This is where the student can perform the skill or task with precision and no assistance from the instructor.
SPL4 - Articulation	This is where the student can coordinate and adapt the actions of the skill or task for consistency and novelty.
SPL5 - Naturalization	This is where the student has developed muscle memory to the point where they are performing the skill from memory without putting extra thought behind it.

(3) **Affective (Attitudes)** - Teaching in the affective domain focuses on the development of values, ethics, emotions, and social behaviors. This domain is more complex, as it combines cognition, behavior, and emotions. Affective learning is demonstrated through behaviors that indicate attitudes such as awareness, concern, and the ability to respond to others in socially appropriate ways (Anderson & Krathwohl, 2001). Krathwohl's Taxonomy categorizes this domain into five levels, from passive awareness to active behavior changes. See Table 4 for a description of the five affective proficiency levels (APL).

Table 4: Affective Proficiency Levels

Level	Description
APL1 - Receiving	This is where the student passively demonstrates awareness, a willingness to hear, and selected attention. Without this level, no learning can occur. The information being taught must be received in the first place for the encoding process to being, in other words, the information is beginning to become integrated into long term memory.

APL2 - Responding	This is where the student actively attends and reacts to stimuli and is a participant in the learning process, which is crucial for learning to occur. The student needs to be responsive to the material, in other words, they need to know why this is important and why they should care.
APL3 - Valuing	This is where the student attaches a value to an object, concept, or piece of information. Values are expressed in overt behaviors and are often visible. The student will invest and care about the topic being taught on.
APL4 - Organizing	This is where students can put together information and ideas and accommodate them within their own framework of personal values, comparing, relating, and elaborating on what has been learned. There is an integration of new information into existing knowledge.
APL5 - Characterizing	This is where the student has held a particular belief or value that now exerts influence on his or her behavior so that it becomes representative.

c. **Object**: The object is what the performance action verb acts upon. CDS requires the object of the task and is categorized into one of the following groups: platform, system, subsystem, component, or non-Equipment.

5.2.3. Standard. The standard defines the level of performance expected from the student when demonstrating the behavior described in the LO. Each LO has one specific standard that must be clear and precise enough to reflect the required proficiency. The standard specifies the quantity and/or quality of the student's performance to indicate whether the objective has been met.

For skill-based objectives, the standard is often expressed in terms of completeness, accuracy, or time. The CDS mandates the inclusion of a standard for every LO, regardless of whether it pertains to the quantity or quality of the student's performance. It's essential that the standard provides a clear, measurable expectation for achievement.

Examples of standards include:

a. Within +/- 10% accuracy – The student's performance should fall within a 10% margin of error.

b. Within 1 hour – The task must be completed within a specific time frame, such as 1 hour.

c. To the nearest tenth (unit) – The student must report results with precision to one decimal place.

d. To two decimal points – The student must ensure their results are accurate to two decimal places.

e. In the correct order – The student must perform actions or steps in the exact sequence required.

f. With 100% accuracy – This applies to knowledge-based LOs, requiring perfect accuracy unless no other option is available.

g. In accordance with publication XYZ (series) – This standard is used when the work must comply with a specific document or publication, but only when no more specific standard can be applied.

By clearly defining the standard, training can ensure that students meet the expected proficiency, and the LOs are successfully achieved.

5.3. Learning Objective Standard versus Testing Standard. The standard for an LO differs from the testing standard or score. The LO standard specifies the level of performance a student must demonstrate to show proficiency. On the other hand, the testing standard determines whether a student has met the objective, often with a passing score that is below 100%. For instance, a passing score might be set at 70%.

While a score of 70% may be enough to pass, it doesn't imply that the student only needs to understand 70% of the material. The challenge in test design lies in identifying which parts of the objective are critical for basic proficiency and determining how many correct answers are needed to reflect that level of understanding.

For knowledge-based LOs, the required standard is typically 100% accuracy, unless an alternative standard is specified. However, for practical reasons, the testing standard may be set lower than 100%.

5.4. Learning Analysis Workshop. LA facilitators are responsible for leading the workshop and ensuring that the group clearly defines the roles and tasks associated with the targeted rating/occupation. They must also ensure the accurate collection of all

relevant data. To support this process, facilitators may use the LA Model (Appendix L) and LA Job Aid (Appendix N) to gather input from SMEs.

5.5. Learning Analysis Output. The output of the LA is a list of LOs along with the sensory, fidelity, and media requirements necessary to select the most effective media for training.

a. **Sensory Characteristics:** Sensory characteristics refer to the types of sensory input that learners experience during training. These inputs can include visual, auditory, or tactile elements, depending on the goals of the training. For example, training materials might incorporate visuals such as diagrams, video clips, or interactive simulations, as well as audio components like spoken instructions or environmental sounds, all designed to enhance learner engagement and comprehension.

b. **Fidelity:** Fidelity refers to the degree to which the training environment replicates real-life situations or job contexts. High-fidelity training often involves immersive simulations or live exercises that closely reflect real-world conditions. In contrast, lower-fidelity training may rely on simpler approaches, such as classroom sessions or basic simulations. The chosen level of fidelity depends on the desired learning outcomes and available resources.

c. **Media Characteristics:** Media characteristics encompass the formats, technologies, and delivery methods used for training materials. This includes decisions about whether the training will be delivered via video, interactive simulations, e-learning modules, instructor-led sessions, or a combination of these formats. Additionally, media characteristics consider factors such as accessibility, ease of use, and the level of learner interaction with the chosen mediums.

By addressing these elements, the LA ensures that each LO is supported by the appropriate sensory engagement, realistic context, and media tools, optimizing the learner's ability to acquire the required skills and knowledge. Data from the "Learning Analysis Model" Excel tab is used to guide further analysis and media selection. LA data is used to create the IPRD v2, providing critical information for designing the training program. Figure 5-1 illustrates a high-level flowchart of the LA process.

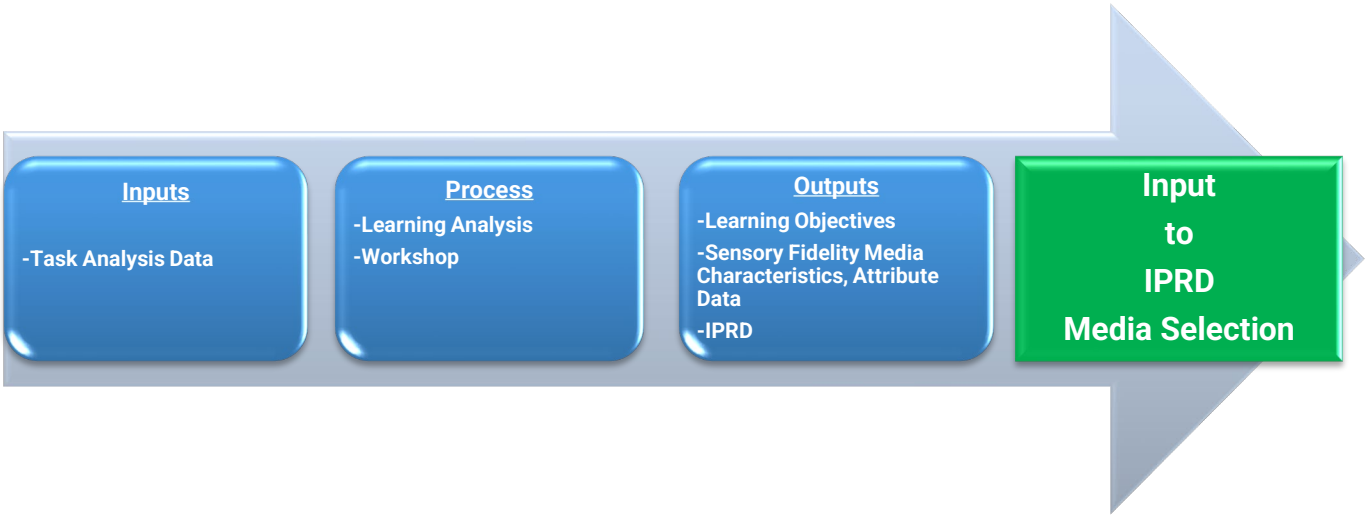


Figure 5-1: LA High-Level Flowchart

CHAPTER 6
MEDIA SELECTION

6.0. Introduction. Media selection is the process of choosing the right combination of training tools and delivery methods based on the sensory, fidelity, and media characteristics identified in the LA Model. It ensures that training content is engaging, effective, and aligned with specific LOs. This can include visual aids, simulations, instructor-led sessions, or e-learning, tailored to learners' needs. The goal is to provide a comprehensive, immersive experience that optimizes learning and helps learners efficiently acquire the required skills and knowledge.

6.1. Media Selection Inputs. The media selection process relies on data from the IPRD, gathered during TA and LA steps. A media selection analysis is conducted, reviewing each LO. For each LO, one or more content delivery formats are selected to meet the sensory, fidelity, and media characteristic requirements. This step includes collaboration with SMEs to estimate the recommended training time for each LO, measured in minutes or hours, aligned with the chosen delivery formats. The Media Selection Model (Appendix O) and the Media Selection Job Aid (Appendix P) may be used to define and collect data from SMEs.

6.2. Military Characteristics Document. The MCD defines the essential physical and functional characteristics that a training device or Training Support Equipment must possess to meet specific instructional system requirements. It specifies the military functions that must be simulated or supported and provides a foundational reference for system development, acquisition, and lifecycle planning.

The MCD is developed following stakeholder approval of the media selection analysis and may serve as a supporting document for a program objective memorandum (POM) submission if necessary. It expands upon earlier planning documents such as the IPRD and IMRD, ensuring alignment with identified instructional needs.

When complex media is selected, such as simulations, virtual reality, augmented reality, or integrated digital and physical media, the MCD becomes critical. It outlines the functional requirements and design specifications for these advanced systems, which aim to deliver immersive, realistic training environments. These environments replicate real world scenarios that may be too costly, hazardous, or impractical to reproduce physically, allowing learners to safely practice critical skills in a controlled setting. This integration of complex media enhances engagement, realism, and effectiveness in training.

Initially, the MCD provides a conceptual description of the training device in terms of the functions and tasks it will support. As the design matures, it is refined to include detailed technical specifications and establish the physical and functional baseline. This evolution ensures the training solution continues to meet operational needs while accommodating production, cost, supportability, and maintainability constraints.

Importantly, the MCD includes results from a task analysis, identifying the operational and maintenance requirements associated with the new or modified warfare system. This ensures the training device not only meets instructional objectives but also supports fleet readiness by preparing personnel to operate and sustain the system effectively.

By focusing on what the training system must do rather than prescribing how it should be built, the MCD offers design flexibility while maintaining fidelity to performance requirements. As a bridge between instructional goals and technical execution, it plays a vital role in ensuring the delivery of high quality, mission representative training solutions.

6.3. Reuse, Repurpose, and Reference. Once requirements are gathered, the principles of reuse, repurpose, and reference (R3) serves as key guides in the development and maintenance of instructional materials and resources in instructional design. R3 focuses on identifying and evaluating existing course content and materials that can be leveraged. Users are encouraged to search for relevant content in existing courses or databases, enabling them to incorporate materials for R3 purposes.

Users must explore existing course materials or databases to identify and utilize content for R3 in the following ways:

a. **Reuse:** Using an existing object in a new learning event without modifying its instructional treatment, context, or content.

b. **Repurpose:** Using an existing object in a new learning event with minor to moderate modifications to its instructional treatment, context, or content.

c. **Reference:** Using an existing object as an informational source of inspiration for generating ideas for new learning events.

Content items may be sourced and repurposed across various communities, including other services, agencies, and academia, to address training gaps identified during the analysis phase. R3 applications—such as modular content, technical publications, simulations, and resources—can be used for formal instructional purposes or for other types of information dissemination, such as just-in-time training, on-the-job training, and supplemental learning.

By embracing the principles of R3, instructional designers can streamline the learning development process. This not only enhances efficiency and effectiveness but also promotes sustainability by reducing waste and maximizing the value of existing resources.

6.4. Media Selection Outputs. The Media Selection Model Excel Tab generates suggested media content solutions, along with relevant media attribute data, to aid in course development, modernization, and acquisition efforts. Media selection activities are carried out and recorded within the IMRD.

The outputs from the Media Selection Model Excel spreadsheet are integrated into the IMRD. This document holds significant importance throughout different project phases, such as In Progress Reviews, RRL Gates, and its inclusion in the FRD.

6.5. Instructional Media Requirements Document. The IMRD outlines how to train or support performance. It leverages selected outputs from the IPRD and provides a baseline for determining instructional delivery system requirements, the recommended mix of instructional media, and the primary and alternate training media options. This data serves as the foundation for the design and development of targeted training and performance support interventions that aid in acquiring essential skills. The IMRD determines the optimal instructional system requirements by developing and conducting:

a. Media Selection Model

b. Instructional Delivery System and Media Selection

c. Instructional Delivery System Functional Descriptions for Simulations

d. Instructional Delivery System Functional Descriptions for Training Devices

Media selection data is used to create the IMRD and is necessary to support the design of a training program. The IMRD DID (DI-SESS-81519C), as tailored in Appendix F, contains preparation instructions, format, and content guidelines to produce the IMRD.

Once the IMRD is finalized, the next recommended step is to initiate Phase III: Course Development, Modernization, Acquisition, and Pilot as referenced in the NAVEDTRA M-142.3. Phase III leverages Phase II requirements for detailed design, content development, and evaluation, culminating in a pilot and fielding of the training.

CHAPTER 7
TRAINING PROGRAM STRUCTURE DOCUMENT

7.0. Introduction. The Training Program Structure Document (TPSD) provides training planning data and training course control data. This information is relative to long-range training program resource requirements, for personnel and equipment, and their implementation. These training data product documents the detailed configuration baseline of a training course. The TPSD DID (DI-SESS-81521B), as tailored in Appendix F, contains preparation instructions, format, and content guidelines to produce the TPSD.

The draft TPSD will be initiated utilizing the specifications outlined in the IPRD, IMRD, and MCD. The draft TPSD consists of the following documents:

a. Training Project Plan (TPP)

b. Draft Training Course Control Document (TCCD)

(1) COI with LOs

(2) Course Master Schedule (CMS)

(3) Resource Requirements List

7.1. Training Project Plan. The TPP is the overarching course management document and serves as the blueprint for all curriculum development and revision efforts, as well as course modifications and cancellations. When approved, the TPP becomes the authorization to undertake a course transfer, cancellation, revision, modification, or new development effort and initiate resource requisitions or reallocations. The following seven TPP triggers require NETC concurrence for TPP approval:

a. Addition of a new course (new TPP).

b. A course that changes the instructional strategy or delivery method (revision TPP).

c. A course that changes in length (measured in whole days) (revision TPP).

d. A course which increases or decreases resource requirements (revision TPP).

e. Addition or deletion of a course (course data processing (CDP)) at a specific learning site (LS) or transfer of course curriculum model manager (CCMM) (revision TPP).

f. Transfer of a course between CCAs:

(1) Current CCA (cancellation TPP).

(2) New CCA (new TPP).

g. Cancellation of a course (cancellation TPP).

7.1.1. Training Project Plan Categories. There are four categories of TPPs: new, revision, modification, and cancellation.

a. **New TPP**. The New TPP is for the development of a new course. This TPP is comprehensive and is based on the data captured during Phase II of the NTP. The TPP for new courses is developed alongside the resource requirements to ensure that all necessary resources are properly allocated. Approval for a new course requires NETC concurrence and formal OPNAV approval for resources related to the development, delivery, and sustainment of the new course.

b. **Revision TPP**. A Revision TPP is used when there are changes to existing courses due to new training requirements, safety issues, equipment modifications, advancements in learning technologies, or other valid reasons. The reason for the revision must be clearly explained in the justification section of the TPP. If additional resources are needed to implement the revision, the project cannot continue without funding from a Resource Sponsor. TPPs for revisions that do not meet the NETC concurrence triggers are reviewed and approved by the CCA.

c. **Modification TPP**. A Modification TPP is used to document changes to a course under development with an approved TPP, but the course has not yet been approved. These changes could include updates to details such as changing the course's:

(1) CCA

(2) CCMM

(3) CDP (addition or deletion)

(4) Training Type (Appendix AG)

(5) Course Mission Statement

(6) Occupational Classification/Prerequisites

(7) Overview

(8) Course Length

(9) Class Capacity

(10) Class Convenings

(11) Average Onboard

(12) Student Throughput

(13) Justification, to include References, Reason/Source of Information, Summary of Differences, and Impact if not Approved

(14) Safety Risks and Hazardous Materials

(15) Curriculum Development Methods

(16) Resource Requirements, to include Manpower, Funding, Facilities, and Resource Requirements List

(17) Compensation, to include both Manpower and Funding

(18) Milestones

a. **Cancellation TPP**. A Cancellation TPP is used when a course is being considered for cancellation or deactivation. Cancellation requires the approval of the Requirement Sponsor. Before proceeding with cancellation, LCs and Training Agencies must coordinate with affected Enterprises, Fleet Forces, and OPNAV Resource Sponsors to ensure there is no fleet requirement to continue the course. The justification for cancellation and the reallocation of resources, including those listed in the Resource Requirements List, must be carefully reviewed. Additionally, all course materials must be archived by the CCA for possible R3 in the future.

NOTE: Once a course is sundowned and archived, course materials will be forwarded to Naval Education and Training Security Assistance Field Activity (NETSAFA) or stored and available for 10 years to support NETSAFA's mission.

7.1.2. Training Project Plan Outline. The TPP must contain all the data and information necessary to identify and justify resources required for the training course under consideration. This document will be an output of CDS.

Specific elements of data and information must include the following items where applicable:

a. Cover Page

b. Table of Contents

c. Course Data Page

(1) Course Identification Number

(2) Training Sites

(3) Training Type (Appendix AG)

(4) Course Status

(5) Course Mission Statement

(6) Prerequisites

(7) Occupational Classification

(8) Course Overview

(9) Safety Risks and Hazardous Materials

d. Training Site(s) Summary

e. Justification

(1) Reference(s) – Justification for undertaking a course revision or new development to include resource and requirement sponsor concurrence.

(2) Reasons for and Anticipated Benefits of the Proposed Project

(3) Impact If Not Approved

f. Training Delivery Methods

g. Resource Requirements

(1) Manpower

(2) Funding

(3) Facilities

(4) Resources

- Consumable
- Ordinance
- Equipment
- Tools
- Instructional Media Material
- Publications (Applicable publications used by students and to develop the course.)
- Trainers
- Software

- Facilities
- Miscellaneous

h. Milestones

7.1.3. Training Project Plan Submission Process. All TPPs require NETC concurrence and must be submitted in SERENA along with supporting documents. Once a TPP is submitted by a LC LSO, the appropriate NETC N7 Enterprise Instructional Coordinator (IC) reviews the document. The TPP can be tracked throughout the NETC review process, with the IC working directly with the LC LSO to resolve discrepancies or request additional information. NETC departments review the TPP before final approval by the NETC N7 Learning and Development Department Director, followed by OPNAV review.

If the TPP meets one or more of the seven triggers, the TPP submission must include requirement sponsor concurrence with the justification, and documentation of resource sponsor acknowledgement of and concurrence with unfunded resources needed to implement the training (for example, an OPNAV N97 email to Submarine Learning Center N9 of 25 Apr 23, resource authorization). Additionally, when the project requires additional funding or adjustments, the CCA must ensure that one of the four reasons provided in SERENA under "Is OPNAV Review Required" is marked as “YES.”

7.1.4. Training Project Plan Submission Actions. The following actions outline the process for submitting and reviewing a TPP. These actions ensure the TPP is accurately reviewed, resourced, and documented throughout the approval process.

a. **CCA:** The minimum attachments required in SERENA when submitting a TPP for initial review to NETC are:

(1) Draft TPP

(2) Draft course master schedule (if applicable)

(3) NETC instructor computation

b. **NETC Deputy Director or Special Assistant SERENA Point of Contact:** Review the TPP to ensure all resourcing shortfalls have been clearly identified, documented, and coordinated with the applicable OPNAV N-Code.

c. **NETC N72 Enterprise Leads (EL) and ICs:** The respective N72 branch IC will coordinate the review and concur or non-concur process in SERENA using NETC SERENA TPP Workflow (Appendix Q). The final authority to concur or non-concur will lie with the EL.

d. **CCA Documentation of NETC TPP Concur or Non-Concur**: Upon EL submission of NETC concur or non-concur, SERENA will generate a notification informing the CCA. This notification will serve as official documentation for the course audit trail.

e. **NETC N73:** Validate Corporate Enterprise Training Activity Resource Systems data entered by the CCA matches the TPP. Once complete, forward the TPP staffing completion in SERENA to the CCA.

7.2. Training Course Control Document. TCCD serves as the primary development and management document for a course. Significant portions of the TCCD are typically drafted during NTP Phase II and finalized in Phase III. Before developing the TCCD, it is important to determine the current development tools and format to be used. The COI, CMS, and resource requirement list are integral parts of the TCCD. The curriculum development project team continuously reviews the TCCD throughout the development phase to ensure its currency, adequacy, and accuracy. Any changes made in subsequent documents, such as updates to LOs during the course materials development, will affect the TCCD. As a result, the TCCD will be updated to reflect these changes. The TCCD will be developed using the approved NETC authoring system. For further details on the TCCD, refer to NAVEDTRA M-142.3.

CHAPTER 8
FIELDING AND FEASIBILITY

8.0. Introduction. The F2 provides a feasibility assessment and fielding strategy framework for the delivery of modernized courses of instruction that have been analyzed for RRL. The data captured will be included within the FRD. The F2 analysis is essential for reviewing the training solution recommendations outlined in the IPRD and IMRD. Ideally, the F2 process occurs concurrently with the LA and media selection phases, with additional time allocated after the IMRD data stabilizes to finalize the F2 document.

The IPRD documents the instructional elements, while the IMRD focuses on the media elements. Together, these documents form the basis for acquiring the proposed training solutions, which may involve significant changes to existing training methods or IT infrastructure, such as new software, simulations, or specialized hardware.

NETC must thoroughly review the recommendations to assess the feasibility of implementing the proposed solutions. This includes evaluating compatibility with existing hardware, as well as identifying the necessary facilities, staffing, training equipment, and information technology infrastructure. NETC will then provide a feasibility determination to the requirement sponsor for approval.

8.1. Responsibilities. Roles and responsibilities within the F2 process are distributed across individuals at NETC Headquarters, NETC LC, and NETC LS as follows:

a. **NETC N72 (F2 Development Lead)**

- Coordinates, develops, and delivers the F2 report for inclusion in the IMRD.

b. **NETC N-Codes**

- Validate the F2 report and ensure consensus between NETC and LC.

c. **LC and LS:**

- Analyze, assess, and generate the F2 for the modernized course.
- Provide a comprehensive F2 report to NETC N-Codes.

8.2. Fielding and Feasibility Tables. The F2 tables serve as structured data repositories that are essential for organizing and managing information throughout the F2 process. For further details and examples of each table, please refer to the F2 Tables Template (Appendix R).

CHAPTER 9
TOTAL LIFECYCLE COST ESTIMATE, PROGRAM OBJECTIVE MEMORANDUM, TRAINING INSTALLATION AND TRANSFER AGREEMENT

9.0. Total Lifecycle Cost Estimate. The TLCE is a thorough evaluation that encompasses all expenses associated with a project, product, or system from start to finish. It starts during the TA phase and evolves throughout Phase II, detailed in the NTP Requirements Workbook, considering costs from acquisition to disposal, including operational, maintenance, support, and disposal expenses.

Its main purpose is to support funding requests, relying on initial data from the F2 document and inputs such as COI, CMS, and Resource Requirements List. Data collection involves extracting information from various documents such as the TPP, TCCD, and FRD (when required) with a focus on the F2.

Early establishment of the TLCE requires collaboration with relevant entities such as NETC, TSPO, and LCs. It's crucial to build business logic for costing values specific to each rating, acknowledging differences between ratings. Updates to the TLCE are influenced by various factors, and while the NETC N7 Costing Rough Order of Magnitude (ROM) tool (Appendix S and T) offer business logic, understanding how LCs conduct sustainment is equally important due to potential variations in source data depending on the gates in the NTP.

Below are key components typically included in a TLCE:

a. **Acquisition Costs**: The initial purchase or development costs of the project or system, including procurement, design, development, and installation expenses.

b. **Operating Costs**: Expenses associated with operating the project or system over its life cycle, such as labor, utilities, fuel, consumables, and other ongoing operational expenses.

c. **Maintenance and Support Costs**: Costs related to maintaining and servicing the project or system to ensure its continued functionality and reliability. This may include preventive maintenance, repairs, spare parts, and support services.

d. **Disposal Costs**: Expenses associated with decommissioning, retiring, or disposing of the project or system at the end of its useful life, including dismantling, recycling, or disposal fees.

e. **Risk and Contingency Costs**: Costs allocated for addressing potential risks, uncertainties, and contingencies that may arise during the life cycle, such as unexpected maintenance requirements, regulatory changes, or market fluctuations.

f. **Lifecycle Extensions or Upgrades**: Costs associated with extending the operational life or upgrading the capabilities of the project or system beyond its initial design, including retrofitting, modernization, or technology upgrades.

The TLCE provides decision-makers with a comprehensive understanding of the total cost implications of a project or system over its entire life cycle. By considering all relevant costs upfront, organizations can make more informed decisions regarding investment, budgeting, and resource allocation, ultimately optimizing the value and efficiency of their assets.

9.1. Program Objective Memorandum. The POM step of Phase II is to provide a recommendation from the Services and Defense Agencies to the Office of the Secretary of Defense concerning how they plan to allocate resources (funding) for a program(s) to meet the Service Program Guidance and Defense Planning Guidance. When additional resourcing is required to execute training requirements beyond current funding profiles, it is essential to submit a POM issue to the applicable resource sponsor.

Requests for additional resourcing are managed through the OPNAV Planning, Programming, Budgeting, and Execution (PPBE) process. PPBE serves as a systematic resource allocation method designed to align with leadership priorities and ensure adequate support for all Navy activities. It not only influences the acquisition process but also interacts with and is influenced by ongoing and future operations, personnel policies, and readiness objectives. When executed effectively, PPBE guarantees proper funding for acquisitions and necessary support programs, while also maintaining current priorities. A thoroughly developed POM offers, at the very least, a sound justification for the Service's overall requirements.

PPBE is a three-year process from POM submission (planning) to the start of project execution. Stakeholders must plan accordingly to ensure training resources are available to complete timely delivery of the training solution. Initial funding considerations should be developed as ROM costs during scoping to mitigate the three-year time lag of the PPBE process. This initial ROM allows for early POM submission and the ROM is then further developed into a more refined cost estimate once requirements have been approved by the requirements sponsor.

9.2. Training Installation and Transfer Agreement: Training Installation and Transfer Agreement (TITA) is a formal document used to outline the terms for transferring training responsibilities and resources between different commands, installations, or entities. It ensures that all involved parties understand their roles, responsibilities, and obligations, and that resources are allocated and managed efficiently. The TITA must be in place before the ready for training date and includes provisions for the transfer of training products, equipment, facilities, and infrastructure from a training support agency to a training agency.

The development of a TITA should begin early in Phase II and finalized in Phase IV of the NTP for a training program. This involves identifying the need for a new training program or a transfer, coordinating with all relevant stakeholders to align expectations, drafting the agreement with detailed terms, and allowing for review and approval. Early development helps address potential issues and ensures a smooth transition by clearly defining roles, responsibilities, and resource allocations.

Key components of a TITA include the scope of training, roles and responsibilities, resource allocation, transfer procedures, compliance with standards, performance metrics, terms and conditions, and dispute resolution mechanisms. The TITA promotes clarity, efficiency, accountability, and consistency in training delivery, making it essential for managing complex training operations and ensuring alignment with Navy standards.

CHAPTER 10
PHASE II: DETAILED PROCESS STEPS

10.0. Overview. This chapter features tables detailing a step-by-step process referencing the NTP Map to assist in comprehending the Phase II Requirements Development process. Detailed steps are aligned to the NTP Workflow Tool in Flankspeed**.**

Phase I NTP Detailed Map is available for download:

https://flankspeed.sharepoint-mil.us/sites/MYNAVYHR_NETC/N7/1422/Forms/AllItems.aspx

Table 5: Phase II Detailed Process Steps Legend

LEGEND	
Icon/Color	**Meaning**
	Draft/Create – Document is placed in pending files in NTP Workflow Tool.
	Upload – Document is published in the NTP Workflow Tool.
	Review – Document(s) reviewed by stakeholders.
	Update – Document is updated in NTP Workflow Tool.
	Schedule – Meeting is scheduled in NTP Workflow Tool.
	Approval – Approval process using NTP Workflow Tool or MFR.
	Decision Meeting/Gate.
	Step is conducted outside of NTP Workflow Tool.

Table 6: Training Situation Analysis Steps

PHASE II REQUIREMENTS DEVELOPMENT			
Step 3A/B – Training Situation Analysis (TSA)			
STEP	**ACTION**	**RESPONSIBILITY**	**APPENDIX**
3A-1  *(3A-1, 3A-2, 3A-3, 3A-4, 3A-5 are parallel)*	Schedule TSA/TA (if applicable Post Award Conference (PAC)) Kick-Off Meeting (KOM)	Executing Organization	
3A-2  *(3A-1, 3A-2, 3A-3, 3A-4, 3A-5 are parallel)*	Upload Government Furnished Information, as required	LC/CCA	
3A-3  *(3A-1, 3A-2, 3A-3, 3A-4, 3A-5 are parallel)*	Update NTP Requirements Workbook Training Paths, as required	NETC N72(X)/LC Coordinates with NETC N3	Appendix E – NTP Requirements Workbook (TAB 2, 7)
3A-4  *(3A-1, 3A-2, 3A-3, 3A-4, 3A-5 are parallel)*	Update NTP Requirements Workbook, as required	LC/CCA	Appendix E – NTP Requirements Workbook (TAB 2-8)
3A-5  *(3A-1, 3A-2, 3A-3, 3A-4, 3A-5 are parallel)*	Draft: • TSA/TA (if applicable, PAC)) KOM • Read Ahead Brief with Agenda	Executing Organization	
3A-6 	Stakeholders Review Read Ahead Brief and NTP Requirements Workbook (provide comments on CRM)	Executing Organization Leads All Stakeholders Participate	Appendix K –CRM

PHASE II REQUIREMENTS DEVELOPMENT Step 3A/B – Training Situation Analysis (TSA)			
STEP	**ACTION**	**RESPONSIBILITY**	**APPENDIX**
3A-7	Conduct: • TSA/TA KOM Using Brief • PAC meeting, as required • Orientation to NTP and Tools • Orientation to RRL, as required • Orientation to F2 process, as required	Executing Organization Leads NETC Collaborates All Stakeholders Participate	
3A-8 	Upload KOM Minutes	Executing Organization	
3B-1  *(3B-1, 3B-2, 3B--3, 3B-4, 3B-5 are parallel)*	Schedule Site Visit with LS	Executing Organization & LC Co-Lead NETC N72(X) Collaborates	
3B-2  *(3B-1, 3B-2, 3B--3, 3B-4, 3B-5 are parallel)*	Draft Site Visit Read Ahead with Agenda	Executing Organization	
3B-3  *(3B-1, 3B-2, 3B--3, 3B-4, 3B-5 are parallel)*	Update (Prepare) NTP Requirements Workbook Develop Surveys Prep for Site Visit Prep TSD	Executing Organization	Appendix E – NTP Requirements Workbook (TAB 2A, 5A, 6A) Appendix U – TSD Template
3B-4 *(3B-1, 3B-2, 3B--3, 3B-4, 3B-5 are parallel)*	Begin Drafting F2 Tables (Table 3-2 & Table 3-3)	NETC N3 & N1	Appendix R – F2 Tables Template

PHASE II REQUIREMENTS DEVELOPMENT Step 3A/B – Training Situation Analysis (TSA)			
STEP	**ACTION**	**RESPONSIBILITY**	**APPENDIX**
3B-5 *(3B-1, 3B-2, 3B--3, 3B-4, 3B-5 are parallel)*	Upload Integrated Government Schedule/Integrated Master Schedule	Executing Organization	
3B-6	Conduct Site Visit NETC/LC N4, N6 Coordinate to gather AS-IS Training Environment	LC and Executing Organization Co-Lead (Site Visit)	Appendix E – NTP Requirements Workbook (TAB 2A, 5A, 6A)
3B-7	Update NTP Requirements Workbook	Executing Organization	Appendix E – NTP Requirements Workbook (TAB 2A, 5A, 6A)
3B-8	Draft TSD	Executing Organization	Appendix U – TSD Template
3B-9	Stakeholders Review TSD for Concurrence and TYCOM Approval	Executing Organization Leads All Stakeholders Participate	Appendix U – TSD Template Appendix K –CRM
3B-10	Update TSD, as required from CRM	Executing Organization	

Table 7: Training Analysis Steps

PHASE II REQUIREMENTS DEVELOPMENT			
Step 3C – Training Analysis (TA)			
STEP	**ACTION**	**RESPONSIBILITY**	**APPENDIX**
3C-1 *(3C-1, 3C-2, 3C-3 are parallel)*	Schedule TA Workshop	Executing Organization	
3C-2 *(3C-1, 3C-2, 3C-3 are parallel)*	Update (Prepopulate) NTP Requirements Workbook	Executing Organization	Appendix I – Task Analysis Model Template Appendix J – Task Analysis Job Aid
3C-3 *(3C-1, 3C-2, 3C-3 are parallel)*	Draft TA Workshop Brief	Executing Organization	Appendix H – Task Analysis Workshop Brief
3C-4	Conduct TA Workshop using NTP Requirements Workbook TA Brief **Note:** Output includes TTL	Executing Organization Leads All Stakeholder Participate	Appendix G – Task Analysis Workshop Facilitator Guide Appendix H – Task Analysis Workshop Brief Appendix I – Task Analysis Model Template Appendix J – Task Analysis Job Aid
3C-5	Update NTP Requirements Workbook	Executing Organization	Appendix I – Task Analysis Model Template
3C-6	Draft IPRD v1	Executing Organization	Appendix V – IPRD Template Appendix F – Tailored DID
3C-7	Update NTP Requirements Workbook Initial TLCE NETC Coordinating with Executing Organization to update TLCE with TSA/TA costs as required	NETC N72(X) Leads All Stakeholders Collaborate	Appendix E – NTP Requirements Workbook (TAB 9A, 9B)

Table 8: Decision Meeting (Ready Relevant Learning Gate 1) Steps

PHASE II REQUIREMENTS DEVELOPMENT			
Step 3D – Decision Meeting (RRL Gate 1)			
STEP	**ACTION**	**RESPONSIBILITY**	**APPENDIX**
3D-1  *(3D-1, 3D-2, 3D-3, 3D-4, 3D-5 are parallel)*	Schedule Step 3 Decision Meeting (RRL Gate 1)	NETC N72(X)/LC	
3D-2 *(3D-1, 3D-2, 3D-3, 3D-4, 3D-5 are parallel)*	Validate IPRD v1 with NTP Requirements Workbook	NETC N72(X)/LC	Appendix E – NTP Requirements Workbook (TAB 1, 1A-1, 1A-2, 1A-3, 1B, 1C, 2, 2A, 3, 4, 5, 5A, 6, 6A, 7, 8, 9A, 9B, 9C, 9D)
3D-3  *(3D-1, 3D-2, 3D-3, 3D-4, 3D-5 are parallel)*	Draft Step 3 Decision Meeting (RRL Gate 1) Read Ahead Develop slides for Draft RRL Gate 1 Read Ahead that summarizes the TSA/TA methods and results	NETC N72(X)/LC and Executing Organization Collaborate	Appendix W – Step 3 Decision Meeting (RRL Gate 1) Template
3D-4  *(3D-1, 3D-2, 3D-3, 3D-4, 3D-5 are parallel)*	Stakeholders Review Draft TSD, IPRD v1, TA data (TAB 9C), and Read Ahead (provide comments on CRM)	All Stakeholders Participate	Appendix K – CRM
3D-5  *(3D-1, 3D-2, 3D-3, 3D-4, 3D-5 are parallel)*	Update TSD, IPRD v1 from CRM	Executing Organization	Appendix K – Comments Resolution Matrix (CRM)
3D-6 	Conduct Step 3 Decision Meeting (RRL Gate 1) Brief TSA and TA	NETC N72(X) Leads with assistance from LC/CCA and Executing Organization. All Stakeholders participate	Appendix W – Step 3 Decision Meeting (RRL Gate 1) Template

PHASE II REQUIREMENTS DEVELOPMENT Step 3D – Decision Meeting (RRL Gate 1)			
STEP	**ACTION**	**RESPONSIBILITY**	**APPENDIX**
3D-7	Update TSD, IPRD v1, as required	Executing Organization	
3D-8 ☑	Approval of Step 3 Decision Meeting (RRL Gate 1) **Note:** Comments will be sent back to Step 3D-7 for updating of TSD, IPRD v1, as required.	Requirement Sponsor/TYCOM	Appendix W – Step 3 Decision Meeting (RRL Gate 1) Template
3D-9	Upload Gate 1 Meeting Minutes once approved by Requirement Sponsor/TYCOM	Executing Organization	Appendix AF – Meeting Minutes Template Appendix AD – MFR

Table 9: Learning Analysis, Fielding Feasibility Steps

PHASE II REQUIREMENTS DEVELOPMENT			
Step 4A – Learning Analysis, Fielding Feasibility (F2)			
STEP	**ACTION**	**RESPONSIBILITY**	**APPENDIX**
4A-1  *(4A-1, 4A-2, 4A-3, 4A-4, 4A-5, 4A-6, 4A-7 are parallel)*	Schedule F2 Progress Meeting	NETC N72(X)	
4A-2  *(4A-1, 4A-2, 4A-3, 4A-4, 4A-5, 4A-6, 4A-7 are parallel)*	Draft F2 Progress Brief	NETC N72(X)	Appendix X – F2 Brief Template
4A-3  *(4A-1, 4A-2, 4A-3, 4A-4, 4A-5, 4A-6, 4A-7 are parallel)*	Update Stakeholders for Learning and Media Analysis Workshop	Executing Organization	Appendix Y – Stakeholder Registration List
4A-4  *(4A-1, 4A-2, 4A-3, 4A-4, 4A-5, 4A-6, 4A-7 are parallel)*	Schedule LA Workshop	Executing Organization	
4A-5  *(4A-1, 4A-2, 4A-3, 4A-4, 4A-5, 4A-6, 4A-7 are parallel)*	Update (Prepopulate) NTP Requirements Workbook	Executing Organization	Appendix L – Learning Analysis Model Template Appendix N – Learning Analysis Job Aid
4A-6  *(4A-1, 4A-2, 4A-3, 4A-4, 4A-5, 4A-6, 4A-7 are parallel)*	Draft LA Workshop Read Ahead with Agenda	Executing Organization	
4A-7  *(4A-1, 4A-2, 4A-3,*	Schedule Media Selection Workshop	Executing Organization	

PHASE II REQUIREMENTS DEVELOPMENT Step 4A – Learning Analysis, Fielding Feasibility (F2)			
STEP	**ACTION**	**RESPONSIBILITY**	**APPENDIX**
4A-4, 4A-5, 4A-6, 4A-7 are parallel)			
4A-8 *(4A-8, 4A-9, 4A-10, 4A-11 are parallel)*	Assess existing LOs for performance-based training strategy revise as necessary	Executing Organization	Appendix E – NTP Requirements Workbook (TAB 10)
4A-9 *(4A-8, 4A-9, 4A-10, 4A-11 are parallel)*	Develop LOs for formal training gaps identified during TA	Executing Organization	Appendix E – NTP Requirements Workbook (TAB 10)
4A-10 *(4A-8, 4A-9, 4A-10, 4A-11 are parallel)*	Categorized LOs by learning type (knowledge, skill, and attitudes) and learning level	Executing Organization	Appendix E – NTP Requirements Workbook (TAB 10)
4A-11 *(4A-8, 4A-9, 4A-10, 4A-11 are parallel)*	Construct learning analysis hierarchies for most effective and efficient learning sequence Determine sequence, cluster, hierarchy, and prioritization of LOs	Executing Organization	Appendix E – NTP Requirements Workbook (TAB 10)
4A-12	Conduct LA Workshop. Brief Stakeholders Identify sensory stimulus requirements for each LO using NTP Requirements Workbook	Executing Organization Leads Fleet/LS SMEs Support LC Informed All Stakeholders Participate	Appendix L – Learning Analysis Model Template Appendix N – Learning Analysis Job Aid
4A-13	Determine Instructional strategies for formal training requirements that specifically address the point of need leveraging	Executing Organization Leads LC/LS Collaborates	Appendix L – Learning Analysis Model Template Appendix N – Learning Analysis Job Aid

PHASE II REQUIREMENTS DEVELOPMENT Step 4A – Learning Analysis, Fielding Feasibility (F2)			
STEP	**ACTION**	**RESPONSIBILITY**	**APPENDIX**
(4A-14, 4A-15 are parallel)	Needs Analysis, TSA, and TA Data		
4A-14 *(4A-14, 4A-15 are parallel)*	Select Instructional methods to deliver the training content and to provide guidance for students to retain the knowledge and skills imparted	Executing Organization Leads LC/LS Collaborates	Appendix L – Learning Analysis Model Template Appendix N – Learning Analysis Job Aid
4A-15	Update IPRD and NTP Workbook	Executing Organization	Appendix V – IPRD Template Appendix L – Learning Analysis Model Template
4A-16	Review LA (provide comments on CRM, if required)	LC/CCA	Appendix K – CRM
4A-17	Conduct F2 In-Depth Progress Meeting	NETC N72(X) Coordinate with NETC N1, N3, N4, N6, N9	Appendix X – F2 Brief Template
4A-18	Update IPRD and NTP Workbook from CRM, if required	Executing Organization	Appendix V – IPRD Template Appendix L – Learning Analysis Model Template

Table 10: Decision Meeting (Ready Relevant Learning Gate 2) Steps

PHASE II REQUIREMENTS DEVELOPMENT			
Step 4B – Decision Meeting (RRL Gate 2)			
STEP	**ACTION**	**RESPONSIBILITY**	**APPENDIX**
4B-1 *(4B-1, 4B-2 are parallel)*	Schedule Step 4 Decision Meeting (RRL Gate 2)	Executing Organization	
4B-2 *(4B-1, 4B-2 are parallel)*	Draft Step 4 Decision Meeting (RRL Gate 2) Brief	Executing Organization	Appendix Z – Step 4 Decision Meeting (RRL Gate 2) Template
4B-3	Stakeholders review Step 4 Decision Meeting (RRL Gate 2) Brief IPRD (provide comments on CRM)	NETC N72(X) and Executing Organization Co-Lead All Stakeholders Participate	Appendix V – IPRD Template Appendix K – CRM
4B-4	Conduct Step 4 Decision Meeting (RRL Gate 2) IPRD and Data in NTP Requirements Workbook to receive Stakeholders decision to proceed with media selection Update MFR with decision TYCOM Approval	Executing Organization Leads All Stakeholders Participate	
4B-5	Update IPRD and Data in NTP Requirements Workbook, as required	Executing Organization	Appendix E – NTP Requirements Workbook
4B-6	Approve Step 4 Decision Meeting (RRL Gate 2) **Note:** Approve electronically, via e-mail or sign MFR. Any comments will be sent back to Step 4B-5 to incorporate.	Requirement Sponsor/TYCOM	
4B-7	Upload: • Meeting Minutes • Signed MFR, as required.	Executing Organization	

Table 11: Media Selection, Fielding Feasibility Continued

PHASE II REQUIREMENTS DEVELOPMENT Step 5A – Media Selection, Fielding Feasibility (F2) Continued			
STEP	**ACTION**	**RESPONSIBILITY**	**APPENDIX**
5A-1 *(5A-1, 5A-2, 5A-3 are parallel)*	Identify instructional concepts, course, and lesson strategy for IMRD	Executing Organization	Appendix AA – IMRD Template Appendix E – NTP Requirements Workbook
5A-2 *(5A-1, 5A-2, 5A-3 are parallel)*	Match sensory stimulus requirements with sensory stimulus features to identify a candidate list of media in developing the IMRD	Executing Organization	Appendix AA – IMRD Template Appendix E – NTP Requirements Workbook
5A-3 *(5A-1, 5A-2, 5A-3 are parallel)*	Select the media delivery format based on resource constraints, classroom logistics, and all other considerations for IMRD	Executing Organization Leads LC Collaborates	Appendix AA – IMRD Template Appendix E – NTP Requirements Workbook
5A-4  *(5A-4, 5A-6, 5A-7, 5A-8, 5A-9 are parallel)*	Update IPRD v2, if required	Executing Organization	Appendix V – IPRD Template
5A-5 	Schedule F2 Validation Workshop	NETC N72(X)	
5A-6  *(5A-4, 5A-6, 5A-7, 5A-8, 5A-9 are parallel)*	Draft Media Selection Workshop Brief Read Ahead and Agenda	Executing Organization	
5A-7  *(5A-4, 5A-6, 5A-7,*	Draft MCD, if required	Executing Organization	Appendix AA – IMRD Template

PHASE II REQUIREMENTS DEVELOPMENT Step 5A – Media Selection, Fielding Feasibility (F2) Continued			
STEP	**ACTION**	**RESPONSIBILITY**	**APPENDIX**
5A-8, 5A-9 are parallel)			
5A-8 *(5A-4, 5A-6, 5A-7, 5A-8, 5A-9 are parallel)*	Draft IMRD	Executing Organization	Appendix AA – IMRD Template
5A-9 (5A-4, 5A-6, 5A-7, 5A-8, 5A-9 are parallel)	Draft Initial Course Risk Assessment	LC/CCA	
5A-10	Draft F2 Validation Read Ahead and Agenda	Executing Organization	
5A-11	Review and update documents	Executing Organization Leads LC/CCA Collaborates	
5A-12	Conduct Media Selection Workshop	Executing Organization Leads All Stakeholders Participate	Appendix O – Media Selection Model Appendix P – Media Selection Job Aid
5A-13	Conduct Media Functional Workshop (if required) based on Media Selection	Executing Organization	
5A-14	Draft F2 Tables for IPRD NETC N72(X)-Table 3-1, 3-8 NETC N3-Table 3-2 NETC N1-Table 3-3	NETC	Appendix R – F2 Tables Template

PHASE II REQUIREMENTS DEVELOPMENT Step 5A – Media Selection, Fielding Feasibility (F2) Continued			
STEP	**ACTION**	**RESPONSIBILITY**	**APPENDIX**
	NETC N4 - Table 3-4 NETC N6 - Table 3-5, 3-6, 3-7 NETC N9 - Table 3-9, 3-10		
5A-15	Conduct F2 Validation Workshop Based on Media Selection Validation Finalize All F2 Tables	NETC N72(X)	Appendix R – F2 Tables Template Appendix X – F2 Brief Template
5A-16	Update TLCE Sheet	SYSCOM/TSPO	Appendix E – NTP Requirements Workbook (TAB 9A, 9B)
5A-17	Update Final F2 Tables for IPRD and FRD	NETC N72(X)	Appendix R – F2 Tables Template
5A-18 (5A-18, 5A-19 are parallel)	Draft FRD, if required	Executing Organization	Appendix AB – FRD Template
5A-19 (5A-19, 5A-19 are parallel)	Draft TPP, COI CMS, RRL, TCCD (TPSD items)	Executing Organization	Appendix F – Tailored DIDs

Table 12: Decision Meeting (Ready Relevant Learning Gate 3) Steps

PHASE II REQUIREMENTS DEVELOPMENT Step 5B – Decision Meeting (RRL Gate 3)			
STEP	**ACTION**	**RESPONSIBILITY**	**APPENDIX**
5B-1  *(5B-1, 5B-2 are parallel)*	Schedule Step 5 Decision Meeting (RRL Gate 3)	Executing Organization	
5B-2  *(5B-1, 5B-2 are parallel)*	Draft Step 5 Decision Meeting (RRL Gate 3) Brief	Executing Organization	Appendix AC – Step 5 Decision Meeting (RRL Gate 3) Template

5B-3
 
	Stakeholders Review and provide comments on following documents:
	• Final F2 Report
	• Step 5 Decision Meeting (RRL Gate 3) Read Ahead Brief
	• **For RRL**: FRD with Addendums
	  ○ Final IPRD and IMRD with NTP Requirements Workbook
	  ○ Final TPP*
	  ○ MCD (if required)
	*Resource Sponsor and Requirements Sponsor concur with TPP
		Executing Organization Leads
		NETC N72(X) and LC/CCA Collaborate
		All Stakeholders Participate
			Appendix AE – MCD Template

5B-4  *(5B-4, 5B-5 are parallel)*	Update Documents, as required, from CRM Comments	Executing Organization Leads NETC Reviews	

PHASE II REQUIREMENTS DEVELOPMENT Step 5B – Decision Meeting (RRL Gate 3)			
STEP	**ACTION**	**RESPONSIBILITY**	**APPENDIX**
5B-5  *(5B-4, 5B-5 are parallel)*	Draft Step 5 Decision Meeting (RRL Gate 3) MFR **RRL Only:** U.S. Fleet Forces Command (USFFC) signature required on MFR	Executing Organizations Leads NETC Reviews	Appendix AD – MFR Template

5B-6
 
	Conduct Step 5 Decision Meeting (RRL Gate 3)
	• Final F2 Report
	• For RRL: FRD with ADDENDUMS
	  ○ Final IPRD and IMRD with NTP Requirements Workbook
	  ○ Initial TPSD
	  ○ MCD (if required)
	
	Update MFR with decision to proceed with Course Development, Modernization, Acquisition and Pilot
		Executing Organization Leads with NETC Supports
		All Stakeholders Participate
			Appendix AE – MCD Template

5B-7 	Update Documents, as required	Executing Organization	
5B-8a 	Approve Step 5 Decision Meeting (RRL Gate 3) (Electronically, via email, or sign MFR) **Note:** Comments made will be sent back to Executing Organization to incorporate	TYCOM	

PHASE II REQUIREMENTS DEVELOPMENT Step 5B – Decision Meeting (RRL Gate 3)			
STEP	**ACTION**	**RESPONSIBILITY**	**APPENDIX**
5B-8b ☑	Approve Step 5 Decision Meeting (RRL Gate 3) (Electronically, via e-mail, or sign MFR) **Note:** Comments made will be sent back to Executing Organization to incorporate	USFFC (RRL Only)	
5B-9	Upload Meeting Minutes Upload signed MFR, as required **NOTE:** Following Initial Draft Design, documents will be updated during Course Development, Modernization, Acquisition by contractor. DRAFT TPSD: TPP, MCD (as required).	Executing Organization	Appendix AF - Meeting Minute Templates Appendix AD - MFR Template
5B-10	Approve TPP	CCA	

APPENDIX A
BIBLIOGRAPHY

Anderson, L. W., & Krathwohl, D. R. (2001). *A taxonomy for learning, teaching, and assessing: A revision of Bloom's taxonomy*. Addison Wesley Longman, Inc.

Dave, R. H. (1970). *Psychomotor levels. In R.J. Armstrong (Ed.), Developing and writing educational objectives (pp. 33-34)*. Tucson AZ: Educational Innovators Press.

APPENDIX B
REFERENCE

REFERENCE	TITLE
NAVEDTRA M-142.1	NTP Phase I Triggers
NAVEDTRA M-142.3	NTP Phase III Course Development, Modernization, Acquisition, and Pilot
OPNAVINST 1500.76E	Naval Training Systems Requirements and Management
SECNAV 5510.36B	Department of the Navy Information Security Program

APPENDIX C
NAVY TRAINING PROCESS PHASE II DETAILED MAP

NTP Phase II Detailed Map can be viewed here:

https://flankspeed.sharepoint-mil.us/sites/MYNAVYHR_NETC/N7/1422/Forms/AllItems.aspx

APPENDIX D
TRAINING DECISION COORDINATING PAPER TEMPLATE

TDCP template can be viewed here:

https://flankspeed.sharepoint-mil.us/sites/MYNAVYHR_NETC/N7/1422/Forms/AllItems.aspx

APPENDIX E
NAVY TRAINING PROCESS REQUIREMENTS WORKBOOK

NTP Requirements Workbook can be viewed here:

https://flankspeed.sharepoint-mil.us/sites/MYNAVYHR_NETC/N7/1422/Forms/AllItems.aspx

APPENDIX F
TAILORED DATA ITEM DESCRIPTIONS TEMPLATE

Tailored DIDs template can be viewed here:

https://flankspeed.sharepoint-mil.us/sites/MYNAVYHR_NETC/N7/1422/Forms/AllItems.aspx

APPENDIX G
TASK ANALYSIS WORKSHOP FACILITATOR GUIDE

TA Workshop Facilitator Guide can be viewed here:

https://flankspeed.sharepoint-mil.us/sites/MYNAVYHR_NETC/N7/1422/Forms/AllItems.aspx

APPENDIX H
TASK ANALYSIS WORKSHOP BRIEF TEMPLATE

TA Workshop Brief template can be viewed here:

https://flankspeed.sharepoint-mil.us/sites/MYNAVYHR_NETC/N7/1422/Forms/AllItems.aspx

APPENDIX I
TASK ANALYSIS MODEL TEMPLATE

TA Model template can be viewed here:

https://flankspeed.sharepoint-mil.us/sites/MYNAVYHR_NETC/N7/1422/Forms/AllItems.aspx

APPENDIX J
TASK ANALYSIS JOB AID

TA Job Aid can be viewed here:

https://flankspeed.sharepoint-mil.us/sites/MYNAVYHR_NETC/N7/1422/Forms/AllItems.aspx

APPENDIX K
COMMENTS RESOLUTION MATRIX TEMPLATE

CRM template can be viewed here:

https://flankspeed.sharepoint-mil.us/sites/MYNAVYHR_NETC/N7/1422/Forms/AllItems.aspx

APPENDIX L
LEARNING ANALYSIS MODEL TEMPLATE

LA Model template can be viewed here:

https://flankspeed.sharepoint-mil.us/sites/MYNAVYHR_NETC/N7/1422/Forms/AllItems.aspx

APPENDIX M
ACTION VERBS (EXAMPLE)

KNOWLEDGE				
Verbs				Learning Level and Definition
Advise	Elaborate	List	Recount	**Learning Level:** Fact Learning **Definition:** Verbal or symbolic information (e.g., names, formulas, facts, etc.).
Answer	Express	Name	Specify	
Brief	Identify	Read	State	
Calculate	Inform	Recall	Tell	
Define	Instruct	Recommend		
Appraise	Compute	Evaluate	Measure	**Learning Level:** Rule Learning **Definition:** Using two or more facts in a manner that provides regularity of behavior in an infinite variation of situations.
Compile	Encrypt	Format	Outline	
Compose	Estimate	Forward	Route	
Check	Delete	Pause	Start	**Learning Level:** Procedure Learning **Definition:** Performing step-by-step actions in the proper sequence.
Condense	Implement	Resume	Stop	
Edit	Initiate	Set up		
Allocate	Correlate	Finalize	Reorganize	**Learning Level:** Discrimination Learning **Definition:** Grouping similar and dissimilar items according to their distinct characteristics.
Arrange	Cross-check	Group	Restate	
Assign	Designate	Label	Schedule	
Categorize	Differentiate	Level	Select	
Classify	Discriminate	Match	Separate	
Collate	Distinguish	Organize	Sort	
Compare	Distribute	Rank	Task	
Confirm	Divide	Realign	Template	
Consolidate	Eliminate	Redistribute	Translate	
Contrast	Extract	Reexamine	Tune	
Analyze	Derive	Generate	Project	**Learning Level:** Problem Solving **Definition:** Synthesizing lower levels of knowledge for the resolution of problems.
Annotate	Design	Hypothesize	Resolve	
Apply	Determine	Illustrate	Revise	
Change	Diagram	Infer	Search	
Combine	Discover	Investigate	Solve	
Conclude	Draft	Locate	Summarize	
Convert	Effect	Manipulate	Synthesize	
Create	Explain	Modify	Triage	
Criticize	Extend	Plan	Use	
Decide	Find	Predict	War game	
Defend	Generalize	Produce		
SKILLS				
Verbs				Learning Levels and Definition
Detect	Hear	See	Taste	**Learning Level:** Perception (Encoding) **Definition:** Sensory stimuli that translate into physical performance.
Feel	Scan	Smell	Visualize	
Assault	Fall	Pull	Throw	**Learning Level:** Gross Motor Skills **Definition:** Manual dexterity in the performance of physical skills.
Carry	Hold	Run	Turn	
Creep	Jump	Stay	Twist	
Depart	Lift	Swim	Wear	
Advance	Guide	Maneuver	Take off	**Learning Level:** Continuous Movement **Definition:** Tracking or making compensatory movements based on feedback.
Control	Hover	Regulate	Track	
Follow	Land	Steer	Traverse	
Able	Cross	Prepare	Set	**Learning Level:** Readiness **Definition:** Having readiness to take a particular action.
Assist	Delay	Prime	Stand to	
Challenge	Guard	Ready		

SKILLS - Continued				
Verbs				Learning Levels and Definition
Access	Dispose	Mount	Rotate	**Learning Level:** Mechanism **Definition:** Performing a complex physical or mental skill.
Activate	Disseminate	Move	Save	
Actuate	Drive	Navigate	Secure	
Adjust	Egress	Obtain	Send	
Administer	Elevate	Open	Service	
Align	Emplace	Operate	Shut down	
Archive	Employ	Order	Sight	
Arm	Engage	Park	Signal	
Assemble	Energize	Perform	Splint	
Attach	Enter	Place	Squeeze	
Balance	Establish	Plot	Stockpile	
Breach	Evacuate	Police	Store	
Calibrate	Exchange	Position	Stow	
Camouflage	Fill out	Post	Strike	
Center	Fire	Press	Submit	
Charge	Fit	Pressurize	Supervise	
Clean	Fuel	Process	Support	
Clear	Ground	Procure	Sweep	
Close	Harden	Provide	Take	
Collect	Hoist	Publish	Take charge	
Connect	Initialize	Raise	Tap	
Cover	Input	Range	Test	
Debrief	Insert	Reach	Tighten	
Debug	Inspect	Receive	Trace	
Decontaminate	Install	Record	Transfer	
Deliver	Integrate	Reestablish	Transmit	
Destroy	Intercept	Refuel	Transport	
Diagnose	Isolate	Release	Treat	
Dig	Issue	Relocate	Troubleshoot	
Disassemble	Jack	Remove	Type	
Disconnect	Launch	Repair	Unload	
Disengage	Load	Replace	Update	
Dismantle	Log	Replenish	Utilize	
Dispatch	Lubricate	Reset	Write	
Displace	Maintain	Retrieve	Zero	
Display	Manage	Return		
Acclimatize	Direct	Occupy	Reconcile	**Learning Level:** Adaptation **Definition:** Modifying a complex physical or mental skill to accommodate a new situation.
Accommodate	Draw	Orient	Recover	
Adapt	Evade	Pack	Reduce	
Ambush	Infiltrate	Patrol	Relieve	
Attack	Lay	Prevent	Suppress	
Bypass	Lead	Program	Tailor	
Conduct	Map	Protect	Temper	
Deploy	Neutralize	Queue	Train	
Cause	Contrive	Initiate	Make	**Learning Level:** Origination **Definition:** Creating a new complex physical or mental skill to accommodate a new situation.
Construct	Correct	Invent	Originate	

ATTITUDES				
Verbs				Learning level and Definition
Attend closely Listen Listen attentively	Monitor Observe Perceive Recognize	Reconnoiter Show awareness	Show sensitivity Wait	**Learning Level:** Receiving (Perception; Situation Awareness) **Definition:** Demonstrating mental preparedness to perceive the normal, abnormal, and emergency condition cues associated with the performance of an operational procedure.
Accomplish Achieve Acknowledge Announce Ask Communicate Complete	Complete assignment Comply Demonstrate Describe Encode Execute	Give Indicate Interpret Notify Obey rules React Report	Request Respond Resume Show	**Learning Level**: Responding (Interpreting) **Definition:** Demonstrating mental preparedness to encode operational cues as indicators of normal, abnormal, and emergency conditions associated with the performance of an operational procedure**.**
Alert Appreciate Approve Assess Authenticate	Belief Cancel Choose Judge Justify	Prioritize Propose Qualify Reassess Review	Share Study Validate Verify	**Learning Level:** Valuing (Judgment) **Definition:** Demonstrating the ability to judge the worth or quality of normal, abnormal, and emergency cues associated with the performance of an operational procedure.
Allow Alter Assume	Command Coordinate Enforce	Ensure Influence Prescribe	Serve	**Learning Level:** Competence (Application of resource management strategies and tactics.) **Definition**: Demonstrating the mental preparedness to make decisions using prioritized strategies and tactics in response to normal, abnormal, and emergency condition cues associated with the performance of operational procedures.
Conceive Conjecture	Develop Devise	Formulate Imagine	Innovate	**Learning Level:** Innovation (Generation of new resource management strategies and tactics) **Definition:** Demonstrating the mental preparedness to make decisions by generating the results expected upon completion of prioritized strategies or tactics in response to normal, abnormal, and emergency cues associated with performance of an operational procedure, and generating prioritized strategies and tactics in response to abnormal or emergency cues.

APPENDIX N
LEARNING ANALYSIS JOB AID

LA Job Aid can be viewed here:

https://flankspeed.sharepoint-mil.us/sites/MYNAVYHR_NETC/N7/1422/Forms/AllItems.aspx

APPENDIX O
MEDIA SELECTION MODEL TEMPLATE

Media Selection Model template can be viewed here:

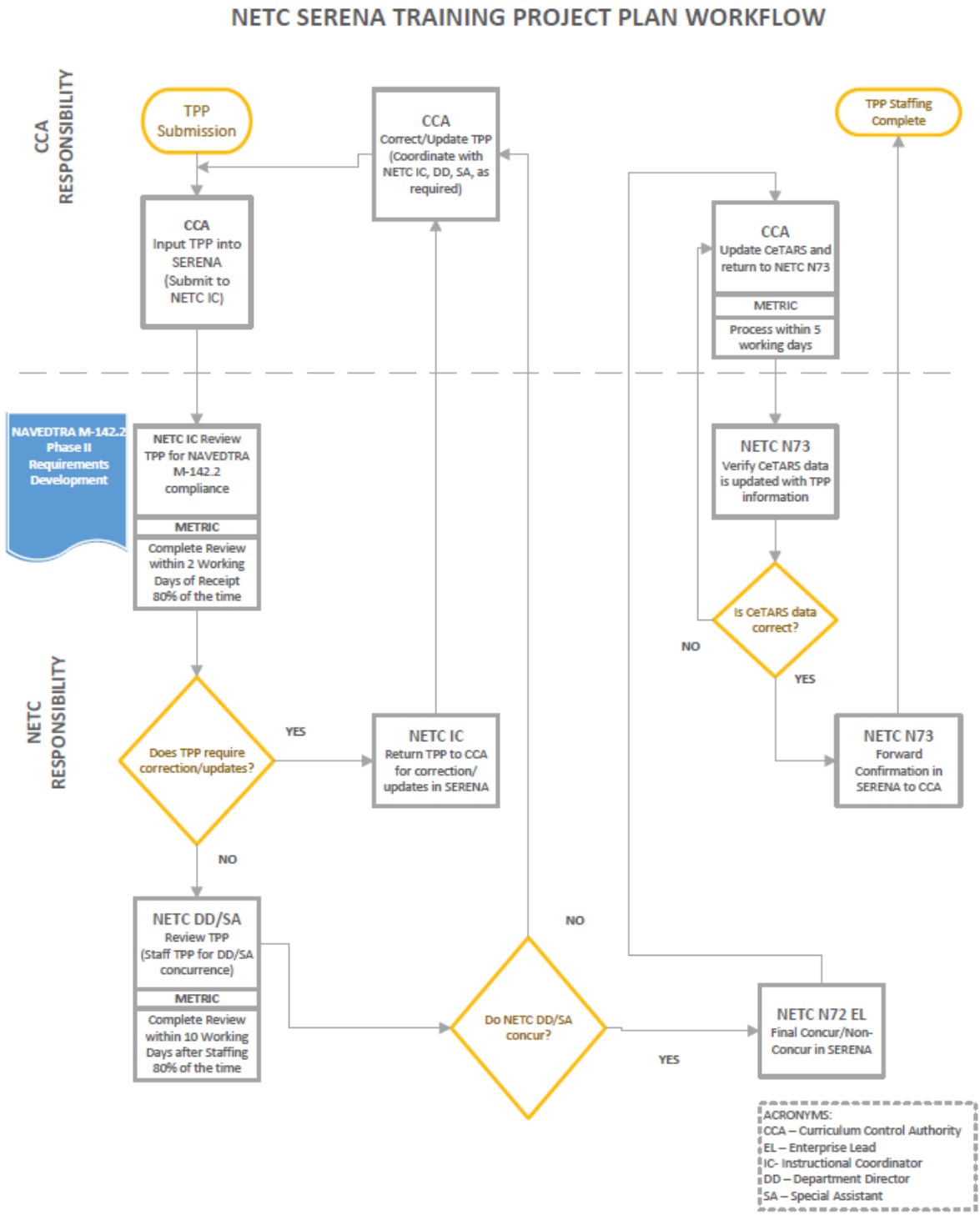
https://flankspeed.sharepoint-mil.us/sites/MYNAVYHR_NETC/N7/1422/Forms/AllItems.aspx

APPENDIX P
MEDIA SELECTION MODEL JOB AID

Media Selection Model Job Aid can be viewed here:

https://flankspeed.sharepoint-mil.us/sites/MYNAVYHR_NETC/N7/1422/Forms/AllItems.aspx

APPENDIX Q
NAVAL EDUCATION AND TRAINING COMMAND SERENA TRAINING PROJECT PLAN WORKFLOW



APPENDIX R
FIELDING AND FEASIBILITY TABLES TEMPLATE

F2 Tables template can be viewed here:

https://flankspeed.sharepoint-mil.us/sites/MYNAVYHR_NETC/N7/1422/Forms/AllItems.aspx

APPENDIX S
COSTING DATA ROUGH ORDER OF MAGNITUDE TOOL TEMPLATE

Costing Data ROM Tool template can be viewed here:

https://flankspeed.sharepoint-mil.us/sites/MYNAVYHR_NETC/N7/1422/Forms/AllItems.aspx

APPENDIX T
COSTING ROUGH ORDER OF MAGNITUDE TOOL INSTRUCTIONS

Costing ROM Tool Instructions can be viewed here:

https://flankspeed.sharepoint-mil.us/sites/MYNAVYHR_NETC/N7/1422/Forms/AllItems.aspx

APPENDIX U
TRAINING SITUATION DOCUMENT TEMPLATE

TSD template can be viewed here:

https://flankspeed.sharepoint-mil.us/sites/MYNAVYHR_NETC/N7/1422/Forms/AllItems.aspx

APPENDIX V
INSTRUCTIONAL PERFORMANCE REQUIREMENTS DOCUMENT TEMPLATE

IPRD template can be viewed here:

https://flankspeed.sharepoint-mil.us/sites/MYNAVYHR_NETC/N7/1422/Forms/AllItems.aspx

APPENDIX W
STEP 3 DECISION MEETING (READY RELEVANT LEARNING GATE 1) TEMPLATE

Step 3 Decision Meeting (RRL Gate 1) template can be viewed here:

https://flankspeed.sharepoint-mil.us/sites/MYNAVYHR_NETC/N7/1422/Forms/AllItems.aspx

APPENDIX X
FIELDING AND FEASIBILITY BRIEF TEMPLATE

F2 Brief template can be viewed here:

https://flankspeed.sharepoint-mil.us/sites/MYNAVYHR_NETC/N7/1422/Forms/AllItems.aspx

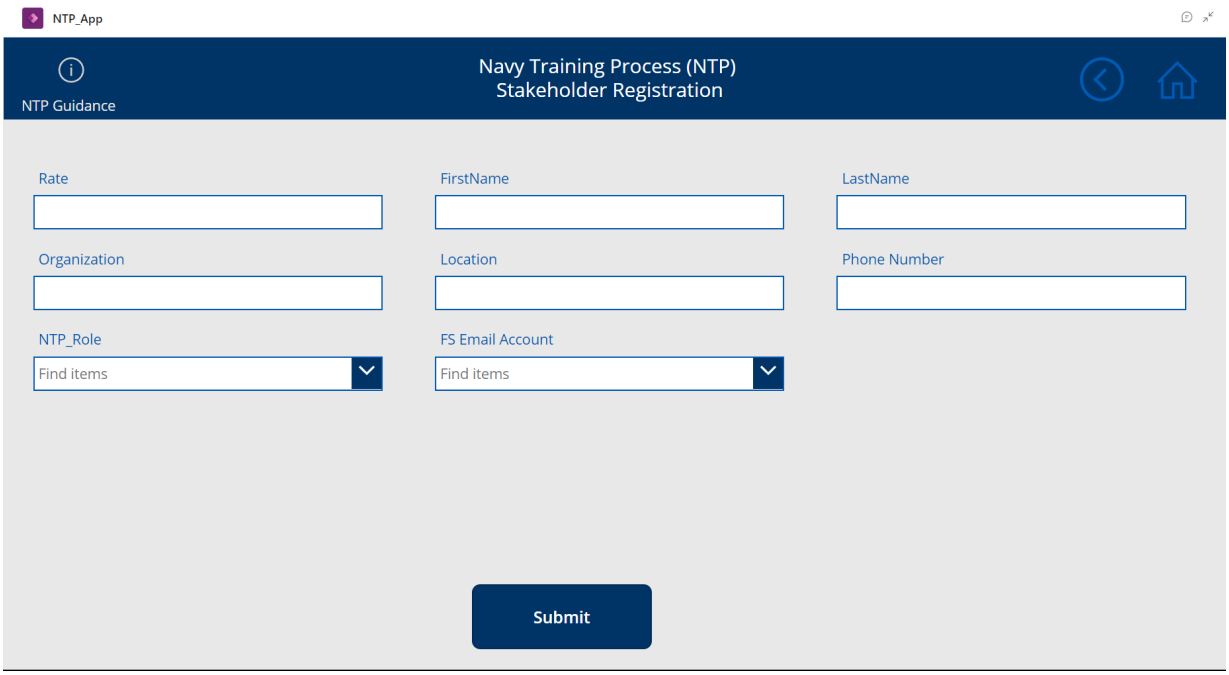
APPENDIX Y
STAKEHOLDER REGISTRATION LIST TEMPLATE

Purpose: Identify, input, and update rating stakeholders into SPO using Flank Speed NTP stakeholder registration.

Responsibility: NETC N72(X) will maintain primary responsibility to ensure list is up to date, adding stakeholders as identified in supporting commands. Executing organization will collaborate all stakeholders for rating entering RRL modernization.

Action: At the beginning of any project identified as a trigger, respective NETC N72 enterprise content review and re-engineering teams will enter stakeholder information in the stakeholder registration screen of the respective enterprise Teams channel. The following fields should be entered:

-Rate (CIV, CTR, MIL Rank)
-First and Last Name
-Organization
-Location
-Phone Number
-NTP Role
-FS E-mail Account



Updates: It is important to update the stakeholder list at the beginning of each phase of the NTP. Organization leads can update anytime.

NOTE: Identify stakeholders immediately following a trigger event. Program offices and program managers may have course modifications/new courses that will affect the rating analysis. Delays will be likely be encountered if there are changes to courses of which stakeholders are not aware. Program offices can be found in Part I of the applicable NTSP.

Roles	Access
LC/CCA Stakeholder	View Only
LC/CCA Action Officer	Upload files, schedule, etc.
LC/CCA Approver	Approval Authority
LS Stakeholder	View Only
LS Action Officer	Upload files, schedule, etc.
NAWCTSD Action Officer	Upload files, schedule, etc.
NETC Action Officer	Upload files, schedule, etc.
NETC Approver	Approval Authority
NETC Stakeholder	View Only
NTP Project Lead	Full Access
N00R Approver	RRL Only
Resource Sponsor	Approval Authority
Fleet Stakeholder	View Only
TYCOM Action Officer	Requirement Sponsor
TYCOM Approver	Approval Authority

APPENDIX Z
STEP 4 DECISION MEETING (READY RELEVANT LEARNING GATE 2) TEMPLATE

Step 4 Decision Meeting (RRL Gate 2) template can be viewed here:

https://flankspeed.sharepoint-mil.us/sites/MYNAVYHR_NETC/N7/1422/Forms/AllItems.aspx

APPENDIX AA
INSTRUCTIONAL MEDIA REQUIREMENTS DOCUMENT TEMPLATE

IMRD template can be viewed here:

https://flankspeed.sharepoint-mil.us/sites/MYNAVYHR_NETC/N7/1422/Forms/AllItems.aspx

APPENDIX AB
FUNCTIONAL REQUIREMENTS DOCUMENT TEMPLATE

FRD template can be viewed here:

https://flankspeed.sharepoint-mil.us/sites/MYNAVYHR_NETC/N7/1422/Forms/AllItems.aspx

APPENDIX AC
STEP 5 DECISION MEETING (READY RELEVAN LEARNING GATE 3) TEMPLATE

Step 5 Decision Meeting (RRL Gate 3) template can be viewed here:

https://flankspeed.sharepoint-mil.us/sites/MYNAVYHR_NETC/N7/1422/Forms/AllItems.aspx

APPENDIX AD
MEMORANDUM FOR THE RECORD TEMPLATE

SSIC
Ser #
dd mmm yy

From: Name of Command
To: Name of Command

Subj: <rating abbreviation> RATING <Needs Assessment / Gate 3/ Gate 6> APPROVAL

Ref: (a) NAVEDTRA M-142.2

Encl: (1) NTP Requirements Workbook for <XXX> rating dated <DD MMM YYYY>
(2) Total Lifecycle Cost Estimate (TLCE) Worksheet

1. Per reference (a), enclosures (1) through (x) document the approved learning center (LC)/curriculum control authority (CCA) training and management materials and associated artifacts for the <XXX> rating.

2. <Lead TYCOM>, as the lead representative for the <XXX> rating, approves the following per enclosure (1):

- <list as appropriate for Gate>
  EXAMPLE
- Paths to modernize
- Courses within paths
- Course versions/revisions
- Current version of occupational standards
- TSA/TTA data

3. All CCA-approved documentation has been uploaded to the NTP SPO Site.

4. My point of contact is <TYCOM, TITLE, NAME, COMM, and EMAIL>.

NOTE: Per USFFC N1T e-mail to all TYCOM of 25 January 2023, Gates 1 through 6 processes, a digitally signed e-mail serves as official Naval correspondence and will be used for Gates 1, 2, 4, and 5. This MFR will be used to document Trigger Decision/Needs Assessment, Step 5 (Gate 3), and Step 7 (Gate 6) as required.

Signed

Copy to:
List Command/Activity

APPENDIX AE
MILITARY CHARACTERISTICS DOCUMENT TEMPLATE

MCD template can be viewed here:

https://flankspeed.sharepoint-mil.us/sites/MYNAVYHR_NETC/N7/1422/Forms/AllItems.aspx

APPENDIX AF
MEETING MINUTES TEMPLATE

Rating:	Rating Name
Course/Platform/Navy Enlisted Classification:	
Location:	Online (Microsoft Teams) with teleconference
Date:	Thursday, Day Month Year
Start Time:	0000 (ET)
Stop Time:	0000 (ET)

Attended	Name of Participant	Email	Organization	Role

Meeting Purpose: Add content (Look at Example)

Topic – Presenters First Last Name

- Add Content
  - Add Content

Next Sync – Day Month Year

Item	Action Item	Command	Suspense Date	Status
A1	**Action Add Content** Add updates from each meeting until closed			Open Closed
A2				
A3				
A4				

APPENDIX AG
CETARS TYPE COURSE CODES

CETARS Type Course Codes can be viewed here:

https://flankspeed.sharepoint-mil.us/sites/MYNAVYHR_NETC/N7/1422/Forms/AllItems.aspx