

# N7 Engineer Academy – Basic Part I

## Course Content

This course provides an in-depth introduction to MSC and its commercial-like ship operation and maintenance philosophy, policies, and business practices. This course consists of the following modules:

- MSC Overview
- MSC Fleet
- MSC Shoreside Organization
- MSC Afloat Organization
- MSC Engineering Directorate
- MSC Technical Authority
- MSC Ship Operation and Maintenance Philosophy
- MSC Life Cycle Management
- MSC RITEMOV
- MSC Safety Management System
- MSC Quality Management System
- Energy Conservation
- MSC TRANSALT Management
- MSC Commodities Contracts

## Target Audience

The target audience for this course is new-hire Principal Port Engineers and Assistant Port Engineers. This course is also appropriate for other new-hire N7 personnel, as well as more experienced N7 personnel who have not taken this course within the last 5 years and require refresher training.

## Pre-Requisites

There are no prerequisites for this course.

## Administration

The class size is limited to 25 students, and enrollment is on a first come, first served basis. You can self-register for this course online at <http://mscn7training.com>. Successful completion of this course requires 100% attendance.

## Schedule

This course is conducted over a period of 4 consecutive days. Classes begin at 8:00 AM and end at 5:00 PM each day. The schedule for the course modules is as follows:

Date	Time	Training Module
Day One	0800-1000	MSC Overview
	1000-1200	MSC Fleet
	1300-1500	MSC Shoreside Organization
	1500-1700	MSC Afloat Organization
Day Two	0800-1000	MSC Engineering Directorate
	1000-1100	MSC Technical Authority
	1100-1700	MSC Ship Operation and Maintenance Philosophy
Day Three	0800-1000	MSC Life Cycle Management
	1000-1200	MSC RITEMOV
	1300-1500	MSC Safety Management System
	1500-1700	MSC Quality Management System
Day Four	0800-1000	Energy Conservation
	1000-1200	MSC TRANSALT Management
	1300-1500	MSC Commodities Contracts

#### Module Descriptions:

**MSC Overview** – The topics covered in this module include: MSC’s primary roles and responsibilities, MSC’s reporting chains of command, MSC’s mission and vision, MSC’s pillars, MSC’s strategic themes, MSC’s guiding principles, MSC fleet organization, MSC fleet acquisitions, MSC customers and stakeholders, funding for MSC operations, and challenges in MSC’s external and internal environments.

**MSC Fleet** – The topics covered in this module include: MSC’s Combat Logistics Force ships, MSC’s Fleet Support and Special Missions ships, MSC’s Combatant Command Support ships, MARAD Ready Reserve Force ships, Voluntary Intermodal Sealift Agreement (VISA) ships, and Maritime Security Program (MSP) ships.

**MSC Shoreside Organization** – The topics covered in this module include: MSC’s leadership, MSC’s workforce, and MSC’s organizational structure (including Headquarters, Area Commands, Maintenance Hubs, MSC Offices, MSC Liaison Officers, MSC HQ Detachments, Maritime Prepositioning Ship Squadrons, and Naval Reserve Units).

**MSC Afloat Organization** – The topics covered in this module include: U.S. Merchant Mariners (civil service and commercial), military personnel afloat (active duty and reserves), mission sponsor detachments, and MSC shipboard departments (Deck Department, Engine Department, Logistics and Stewards Department, Medical Department, and Communications Department).

**MSC Engineering Directorate** – The topics covered in this module include: Engineering Directorate (N7), Engineering Management Systems Division (N71), Technical Division (N72), Policy Management and Fleet Standards Division (N73), Fleet Recapitalization Support Division (N74), and Life Cycle Management Division (N75).

**MSC Technical Authority** – The topics covered in this module include: the nature of technical authority, SECNAV delegation of technical authority to MSC, distinctions between programmatic authority and technical authority, independent exercise of technical authority, N7 responsibility for exercising technical authority, documentation of MSC technical authority processes, technical authority for new construction ship acquisition programs, interaction between MSC Technical Authorities and other Navy Technical Authorities, role of N7 personnel in supporting exercise of technical authority, and the distinctions between programmatic authority decision-making and technical authority decision-making.

**MSC Ship Operation and Maintenance Philosophy** – The topics covered in this module include: MSC's use of commercial ship design, operation, and maintenance standards, MSC's Safety Management System, MSC's Quality Management System, MSC's ship operating models, MSC's maintenance philosophy, MSC's maintenance model, MSC's predictive maintenance tools, MSC's web-based maintenance planning and management tools, visibility of MSC's operating and maintenance costs, and MSC's alignment of life cycle maintenance and fiscal decision-making responsibilities and authorities.

**MSC Life Cycle Management** – The topics covered in this module include: MSC's life cycle management policies and business practices.

**MSC RITEMOV** – The topics covered in this module include: origin of MSC's RITEMOV initiative, purpose of RITEMOV, and MSC's RITEMOV policies and business practices.

**MSC Safety Management System** – The topics covered in this module include: MSC's safety and environmental protection policies; U.S. and international safety, occupational health, and pollution prevention standards applicable to MSC ships; International Management Code for the Safe Operation of Ships and for Pollution; and MSC's Safety Management System.

**MSC Quality Management System** – The topics covered in this module include: what is a quality management system, MSC's quality policy, MSC's QMS portal, MSC's QMS organizational structure, and MSC's core QMS procedures.

**Energy Conservation** – The topics covered in this module include: MSC's fleet energy consumption and associated costs, MSC's energy conservation culture, energy conservation regulatory and policy requirements, and MSC's Ship Energy Efficiency Management Plan (SEEMP).

**MSC TRANSALT Management** – The topics covered in this module include: definition of an alteration, MSC policy regarding alterations, MSC Transportation Alterations (TRANSALTs), TRANSALT management roles and responsibilities, and MSC's TRANSALT process.

**MSC Commodities Contracts** – The topics covered in this module include: the objectives of MSC's commodities contracts, available contracts, products and services available via each contract, and ordering products and services.