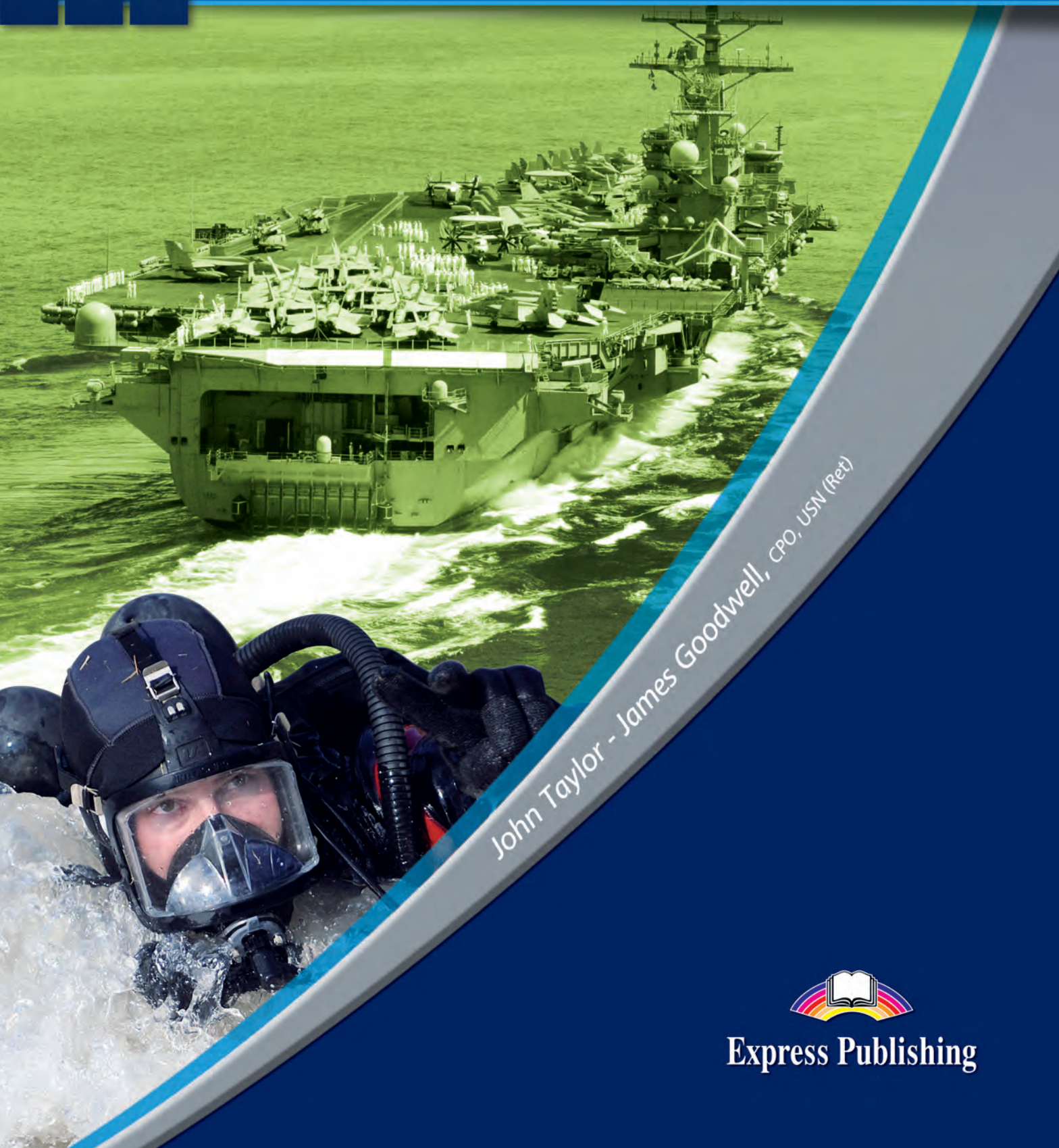


NAVY

**CAREER
PATHS**



John Taylor - James Goodwell, CPO, USN (Ret)



Express Publishing

**CAREER
PATHS**

NAVY

BOOK

1

John Taylor

James Goodwell, CPO,USN (Ret)



Express Publishing

ESP Navy Book 1

Scope and Sequence

Unit	Topic	Vocabulary	Function
1	Ship Structure: Exterior	bulwark, fantail, forecastle, freeboard, hull, keel, mast, propeller, screw, shell plating, stem, sternpost, superstructure, waterline, weather deck	Describing conditions
2	Ship Structure: Interior	bulkhead, compartment, deck, hatch, head, ladder, level, overhead, partition, passageway, platform, watertight door	Describing locations
3	Nautical Directions	abaft, aft, alee, astern, athwartship, below, bow, centerline, forward, inboard, leeward, nautical, outboard, port, starboard, stern, topside	Correcting an error
4	Ship Systems	compressed air system, drainage system, electrical system, fuel system, mooring system, potable water system, propulsion system, saltwater system, steering system, ventilation system	Describing a problem
5	Audio Communication	affirmative, J system, MC system, negative, phonetic alphabet, proword, radio communication, roger, say again, voice tube, wilco	Asking for repetition
6	Visual Communication	directional method, flag hoist, flaghoist, flashing light system, infrared, Morse code, Nancy system, non-directional method, semaphore, semaphore flag, signal flag	Pointing out a problem
7	Weather	fog, gale warning, hail, hurricane warning, ice, icing, precipitation, rain, small-craft warning, snow, storm warning, swell, typhoon, wave, weather, wind	Making a recommendation
8	First Aid	bandage, bleeding, burn, chest compression, CPR, defibrillator, first aid, fracture, pulse, rescue breathing, shock, splint	Listing events
9	Rank and Rate	chevron, enlisted, line officer, officer, pay grade, rank, rank device, rate, rating, rating badge, staff corps	Offering congratulations
10	Ship Organization: Command Structure	3-M Coordinator, Captain, Chief Master-at-Arms (CMAA), commanding officer (CO), executive assistants, executive officer (XO), Legal Officer, Officer of the Deck, Personnel Officer, Safety Officer, Senior Watch Officer, Training Officer	Describing someone's record
11	Ship Organization: Departments and Divisions	aviation department, boat group, combat system, command department, communications department, engineering department, medical department, navigation department, special department, supply department, support department, weapons department	Checking for information
12	Uniforms	camouflage, cover, coveralls, decoration, full dress, Navy Working Uniform, ribbon, service dress, service stripe, service uniform, uniform of the day, utilities	Apologizing for a mistake
13	Shipboard Duties	drill, inspection, maintenance, maintenance data system (MDS), planned maintenance system (PMS), preservation, training, watch section, watch station, watchstanding	Emphasizing a point
14	Bills	administrative bills, antisneak/antiswimmer attack bill, berthing and locker bill, darken ship bill, EMCON bill, emergency bill, jettison bill, operational bill, special bill, WQS (watch, quarter and station) bill	Confirming information
15	Conditions of Readiness	Condition I, Condition II, Condition III, Condition IV, Condition V, Condition VI, conditions of readiness, general quarters, in port, man, peacetime, wartime, weapons station	Giving commands

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Table of Contents

Unit 1 – Ship Structure: Exterior	4
Unit 2 – Ship Structure: Interior	6
Unit 3 – Nautical Directions	8
Unit 4 – Ship Systems	10
Unit 5 – Audio Communication	12
Unit 6 – Visual Communication	14
Unit 7 – Weather	16
Unit 8 – First Aid	18
Unit 9 – Rank and Rate	20
Unit 10 – Ship Organization: Command Structure	22
Unit 11 – Ship Organization: Departments and Divisions	24
Unit 12 – Uniforms	26
Unit 13 – Shipboard Duties	28
Unit 14 – Bills	30
Unit 15 – Conditions of Readiness	32
Glossary	34

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BOOK

2

John Taylor

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ESP Navy Book 2

Scope and Sequence

Unit	Topic	Vocabulary	Function
1	Ships: Ship Characteristics	armament, combat, endurance, maneuverability, offensive, overtake, seaworthiness, speed, steam, survivability, weather conditions	Making comparisons
2	Ships: Aircraft Carriers	aircraft, aircraft carrier, CATOBAR, class, displacement, flight deck, forward presence, hangar deck, launch, maritime security, power projection, sea control, sortie deterrence, STOBAR, STOVL	Describing abilities
3	Ships: Cruisers	ACS, Aegis combat system, AW, Battle Force, BMD, cruiser, gas turbine engine, medium-sized, multi-mission, NSFS, SUW, USW, VLS	Getting more information
4	Ships: Destroyers and Frigates	AAW, AGS, ASW, carrier task group, destroyer, detect, engage, frigate, POS, screen unit, short-range	Supporting an idea/position
5	Ships: Submarines	attack submarine (SSN), fleet ballistic-missile submarine (SSBN), guided-missile submarine (SSGN), insert, ISR, land attack, nuclear-powered, nuclear-missile exchange, SOF, strategic mission	Describing limits
6	Ships: Amphibious Warfare Ships	Amphibious Command Ship (LCC), Amphibious Transport Dock (LPD), amphibious warfare ships, assault landing, Dock-Landing Ship (LSD), General-Purpose Assault Ship (LHA), humanitarian operation, Multipurpose Assault Ship (LHD), transports, tsunami	Stating preference
7	Ships: Patrol Combatants	coastal interdiction, littoral, machine gun, patrol, Patrol Coastal Ship, patrol combatant, port, shallow water environment, special warfare, Stinger missile, terrorist attack, waterway	Getting people's attention
8	Weapons: Missiles and Rockets	AGM, AIM, airframe, ballistic missile, guidance system, missile, ordnance, powerplant, RIM, rocket, UGM, warhead	Offering congratulations
9	Weapons: Mines and Torpedoes	afterbody, air-launched, ASROC, contact mine, deck-launched, head, homing torpedo, influence mine, midsection, mine, plant, tail, torpedo, tube-launched	Describing future events
10	Weapons: Guns	ammunition, barrel, barrel diameter, barrel length, CIWS, GCS, GFC, gun, Mark, Mod, projectile, rifling	Describing capabilities
11	Seamanship: Marlinespike Seamanship	bend, bight, bitter end, coil, coil down, fake down, fiber rope, flemish down, hitch, knot, lay, line, marlinespike seamanship, part, take a turn, whipping, wire	Identifying a problem
12	Seamanship: Mooring	belay, bits, bollard, camel, cast off, cleat, closed chock, double up, fender, heave around, mooring, open chock, pier, roller chock, take a strain on, take in	Describing past events
13	Seamanship: Anchoring	anchor, anchorage, anchoring, aweigh, back down, chain stopper, ground tackle, hawespipe, outboard swivel shot, shackle, short stay, shot, up and down, veer, weigh, windlass	Talking about conditions
14	Seamanship: Towing	bull-nose, catenary, chafing chain, in step, made fast, pelican hook, towing, towing hawser, towing pad-eye, towing rig, towline, tug	Checking for completion
15	Seamanship: Deck Seamanship	block, boom, Burton Rig, cargo handling, deck seamanship, gooseneck, guy, Housefall Rig, kingpost, rig, rigging, sheave, STREAM Rig, tackle, topping lift, UNREP, wire highline rig	Offering solutions

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Table of Contents

Unit 1 – Ships: Ship Characteristics	4
Unit 2 – Ships: Aircraft Carriers	6
Unit 3 – Ships: Cruisers	8
Unit 4 – Ships: Destroyers and Frigates	10
Unit 5 – Ships: Submarines	12
Unit 6 – Ships: Amphibious Warfare Ships	14
Unit 7 – Ships: Patrol Combatants	16
Unit 8 – Weapons: Missiles and Rockets	18
Unit 9 – Weapons: Mines and Torpedoes	20
Unit 10 – Weapons: Guns	22
Unit 11 – Seamanship: Marlinespike Seamanship	24
Unit 12 – Seamanship: Mooring	26
Unit 13 – Seamanship: Anchoring	28
Unit 14 – Seamanship: Towing	30
Unit 15 – Seamanship: Deck Seamanship	32
Glossary	34

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3

John Taylor

James Goodwell, CPO, USN (Ret)



Express Publishing

ESP Navy Book 3

Scope and Sequence

Unit	Topic	Vocabulary	Function
1	Fleet Support Ships and Service Craft	ammunition ship, civilian, command ship, fast combat support ship, fleet replenishment oiler, harbor tug, LMSR, MSC, Naval Fleet Auxiliary Force, salvage ship, submarine tender, tanker	Describing upcoming events
2	Mine Warfare Ships	absorb, cable cutter, classify, destroy, explosive charge, fiberglass, locate, magnetic signature, Mine Countermeasure Ship (MCM), Mine Neutralization Vehicle (MNV), moored mine, remote-controlled, sweep, wooden frame	Delaying an action
3	Boats	landing craft, LCAC, lifeboat, Mark V Special Operations Craft, Patrol Boat, personnel boat, punt, RHIB, River, special boat, standard boat, utility boat, workboat	Stating uncertainty
4	Boat Crews and Equipment	bilge, boat officer, boat plug, bowhook, coxswain, davit, engineer, fall, hoist, launch, sea painter, sternhook	Double-checking information
5	Aircraft: Parts of an Aircraft	aileron, cockpit, elevator, fixed-wing, flap, fuselage, landing gear, mast, nose, rotor blade, rotary, rudder, skid, stabilizer, stabilizer bar, synchronized elevator, tail, tail boom, tail rotor, wing	Describing damage
6	Aircraft: Attack Aircraft	afterburner, attack, cannon, combat radius, dogfight, fighter, fly-by-wire, intercept, Mach, supersonic, target, weapons bay	Describing capabilities
7	Aircraft: Support Aircraft	aerial refueling, aeromedical evacuation, airborne early warning, Command and Control, electronic warfare, helicopter, jam, patrol, Search and rescue (SAR), transport, Unmanned aerial vehicles (UAV), vertical replenishment (VERTREP)	Describing readiness
8	Aircraft: Aircraft Squadrons	administrative department, air wing, carrier-based, detachment, land-based, maintenance department, operations department, safety department, squadron, squadron department, training department	Assigning tasks
9	Navigation: Elements of Navigation	cardinal direction, chart, compass rose, degree, equator, knot, latitude, longitude, meridian, minute, nautical mile, navigation, parallel, plot, pole, position, prime meridian, second	Confirming information
10	Navigation: Navigation Methods	and distance formula, bearing, celestial LOP, celestial navigation, dead reckoning, electronic LOP, electronic navigation, fix, GPS, line of position, piloting, radar, radio beacon, range, satellite, speed, time	Asking for repetition
11	Navigation: Navigation Instruments and Equipment	azimuth circle, bearing circle, compass, gyrocompass, magnetic compass, magnetic north pole, nautical slide rule, parallel motion protractor, parallel ruler, repeater, sextant, stadimeter, telescopic alidade, true north	Identifying main ideas
12	Navigation: Tides, Currents, and Winds	apparent wind, back, Beaufort Scale, current, drift, ebb, flood, high tide, low tide, relative wind, set, tide, true wind, veer, wind, wind speed	Describing possible events
13	Security	cold-iron watch, communications security, darken ship, electronic security, external security, internal security, operational information security, operational security, physical security, quiet ship, saboteur, shipyard security, sounding and security watch, threat condition, wartime security	Describing required actions
14	Safety and Emergency Response	abandon ship, ammunition handling, CBR attack, CPO suit, emergency destruction, fire prevention, foul weather gear, FUSDAP, general quarters, go over, hypothermia, life preserver, line handling, man overboard, MOPP	Describing success and failure
15	Damage Control	AFFF, class, closure, compartmentation, control valve, damage control (DC), dogged, fire extinguisher, fire-fighting, firemain, flooding, OBA, oxygen-breathing apparatus, shore, sprinkler system, tending line, water-tight integrity	Stressing a point

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Table of Contents

Unit 1 – Fleet Support Ships and Service Craft	4
Unit 2 – Mine Warfare Ships	6
Unit 3 – Boats	8
Unit 4 – Boat Crews and Equipment	10
Unit 5 – Aircraft: Parts of an Aircraft	12
Unit 6 – Aircraft: Attack Aircraft	14
Unit 7 – Aircraft: Support Aircraft	16
Unit 8 – Aircraft: Aircraft Squadrons	18
Unit 9 – Navigation: Elements of Navigation	20
Unit 10 – Navigation: Navigation Methods	22
Unit 11 – Navigation: Navigation Instruments and Equipment	24
Unit 12 – Navigation: Tides, Currents, and Winds	26
Unit 13 – Security	28
Unit 14 – Safety and Emergency Response	30
Unit 15 – Damage Control	32
Glossary	34

4 Ships: Destroyers and Frigates



The guided-missile destroyer USS McCampbell

When a **carrier task group** goes into battle, the commander has at their command vessels of varying size, speed and strength. But **destroyers** are the workhorses of the carrier task group. Although destroyers can serve as independent warships, they usually serve as part of a **screen unit**. Their task is to **detect** enemy units and provide defense in **AAW (anti-aircraft warfare)** and **ASW (anti-submarine warfare)** operations. They are equipped with torpedoes, missiles, and anti-submarine rockets. When they **engage** the enemy in surface warfare they employ **advanced gun systems (AGS)**.



The guided-missile frigate USS Reuben James

A **frigate** is essentially a smaller version of the destroyer with less firepower and armor. Frigates are highly maneuverable, though their armament is best at **short range**. Additionally, they are slower than destroyers, so they rarely join task groups. Instead, they escort slower ships in **POS (protection of shipping)** missions. Despite their limited firepower, frigates remain valuable tools in ASW operations.

Comprehension

1 Read, listen, and mark the statements as true (T) or false (F).

- 1 Destroyers most often serve independently.
- 2 Frigates participate in fewer types of warfare than destroyers.
- 3 Frigates and destroyers participate in AAW operations.

Vocabulary

2 Match the definitions to the correct terms.

- | | |
|------------------|----------|
| 1 __ short-range | 4 __ AGS |
| 2 __ detect | 5 __ POS |
| 3 __ engage | |

- A a weapon that can fire guided and unguided munitions
- B to battle with an enemy ship
- C a mission to protect non-combat or supply ships
- D to discover something
- E the limited distance that a gun or ship can cover

3 Fill in the blanks with the correct terms from the word bank.

Word BANK

- | | | |
|--------------------|----------------|------------------|
| <i>ASW</i> | <i>AAW</i> | <i>destroyer</i> |
| <i>screen unit</i> | <i>frigate</i> | |

- 1 The surrounded the carrier to provide protection.
- 2 The weapons system of a(n) is only effective at short range.
- 3 In, ships fire on enemy aircraft.
- 4 A(n) is equipped with AGS units.
- 5 often occurs below the water's surface.

4 Read the passage again. When are frigates more appropriate on a mission than destroyers?

Listening

5 Listen to a conversation between two officers. Choose the correct answers.

- 1 What is the conversation mainly about?
 - A the results of a POS mission
 - B how to reduce mission costs
 - C what ships are needed for a mission
 - D the enemies encountered on a mission

- 2 Why does the woman suggest using frigates?
 - A The mission requires ships with AGS.
 - B No enemy aircraft are expected.
 - C No destroyers are available.
 - D The destroyers are too slow.

Speaking

6 Listen again, and act out the dialogue from Task 5 with a partner. Then switch roles.

USE LANGUAGE SUCH AS:

- Sounds like ...*
- That's what I ...*
- But we'd better have the destroyer crews ...*

Student A: You are an officer. Talk to Student B about:

- ships' supply delivery
- types of warfare expected
- the best ships to use

Student B: You are an officer. Talk to Student A about a supply mission.

Writing

7 Use the conversation from Task 5 to complete the notes on the POS mission.

Mission Type:

Type of Escort:

Enemy activity expected:

Recommended changes:

Reason for request:

9 Navigation: Elements of Navigation



Checking a navigation chart

A traveler on land can find his way using landmarks and signs. Yet no such clues exist on the open seas to guide sailors. For that reason, sailors have developed **navigation** methods to determine where they are and to **plot** where they are going. For centuries, sailors relied on the stars to determine their **position**. Modern navigation uses a far more accurate system of **latitude** and **longitude** lines to pinpoint locations.

Nautical maps showing these lines are called **charts**. A chart's **compass rose** shows the **cardinal directions** to orient readers. Lines that run east to west are **parallels** of latitude. Longitude lines, called **meridians**, run north to south from **pole** to pole. Each set of lines is numbered from 0 to 360 **degrees** ($^{\circ}$), and each degree represents 60 **nautical miles**. Parallels start at 0° latitude, which is known as the **equator**. The **prime meridian** occupies 0° longitude.

Each degree can be further divided into smaller units to describe position more accurately. A degree contains sixty **minutes**, and a minute contains sixty **seconds**. However, it is important to note that these reflect units of distance, not time. Thus a **knot**, which is a unit of speed based on a nautical mile, is also equal to one minute.



Comprehension

- 1 Read, listen, and mark the statements as true (T) or false (F).
 - 1 Longitude lines run from east to west.
 - 2 The equator is a line of longitude.
 - 3 A degree contains 360 minutes.

Vocabulary

2 Match the definitions to the correct terms.

- | | |
|----------------|--------------------------|
| 1 ___ meridian | 6 ___ cardinal direction |
| 2 ___ latitude | 7 ___ knot |
| 3 ___ position | 8 ___ second |
| 4 ___ plot | 9 ___ pole |
| 5 ___ minute | 10 ___ parallel |

- A a measure of the distance north or south from the equator
 B to pinpoint a location or course
 C a unit of distance equal to one nautical mile
 D a line of longitude
 E north, south, east, and west
 F a specific location
 G a line of latitude
 H a unit of speed equal to one nautical mile
 I one of two points the Earth revolves around
 J a unit of distance equal to 1/60th of a nautical mile

3 Fill in the blanks with the correct terms from the word bank.



prime meridian navigation nautical mile
compass rose chart equator
longitude degree

- The sailor marked the position of the ship on a(n)
- The art of charting a course is called
- A(n) will always display north, south, east, and west.
- The line of longitude at 0° is the
- One minute is equal to one
- The is a line of latitude at 0°.
- Every line of is parallel to the others.
- A(n) contains sixty minutes.

4 Read the passage again. What is a danger of inaccurate navigational readings?

Listening

5 Listen to a conversation between a navigation officer and a captain. Choose the correct answers.

- What is the conversation mainly about?
 A correcting a navigation error
 B determining the distance to port
 C plotting course to a disabled ship
 D changing course to avoid a storm
- What information will the woman provide next?
 A the ship's position
 B the distance to travel
 C the weather conditions
 D the time to complete a course

Speaking

6 Listen again, and act out the dialogue from Task 5 with a partner. Then switch roles.

USE LANGUAGE SUCH AS:

Sir, we've received a ...
What's our present position?
Report back to me when you've ...

Student A: You are a navigation officer. Talk to Student B about:

- a distress call
- position of ships
- time to complete course

Student B: You are a captain. Talk to Student A about changing course.

Writing

7 Use the conversation from Task 5 to explain an emergency course change. Include: why you changed course, your original position, and how long it took to complete your new course.

Glossary

firemain [N-C-U15] a system on a ship that is designed to use seawater in sprinkler systems, fireplugs and AFFF stations.

fix [N-C-U10] the determination of one's exact location.

fixed-wing [ADJ-U5] (aircraft) which relies on two wings attached to the fuselage to create lift.

flap [N-C-U5] a hinged part of a wing that moves downward to increase the amount of force produced by a wing during takeoff or landing.

fleet replenishment oiler [N-C-U1] an MSC support vessel that carries fuel to naval ships and aircraft at sea.

flood [V-I-U12] (tide) to increase or rise.

flooding [N-UNC-U15] when the ship loses its water-tight integrity and water is present where it usually is not present.

foul weather gear [N-UNC-U14] heavy, sturdy clothing worn in times of harsh weather.

fly-by-wire [ADJ-U6] (flight controls) which automatically adjust without manual input from the pilot.

FUSDAP [N-UNC-U14] an acronym that is used to remind sailors which direction to move in on a ship. It stands for forward, up, starboard, down, aft, port.

fuselage [N-UNC-U5] the central part of an aircraft's body.

general quarters [N-UNC-U14] a term for an assigned work station during times of emergency.

go over [V-PHRASAL-U14] to voluntarily leave the ship and jump in the water after the order to abandon ship has been given.

GPS (Global Positioning System) [N-C-U10] a navigation system based on information received from satellites.

gyrocompass [N-C-U11] a device that contains a gyroscope rotor and through alignment with the Earth's axis, indicates true north.

harbor tug [N-C-U1] a small boat that pushes or pulls ships in and out of narrow harbor areas.

helicopter [N-C-U7] an aircraft that is lifted and kept in the air by rotating wings.

high tide [N-C-U12] the period when the ocean waters are highest on the shore.

hoist [V-T-U4] (boat) to raise it up out of the water and replace it on the ship.

hypothermia [N-UNC-U14] a dangerous condition caused by immersion in cold water, in which cold can shut down the body's vital processes and cause injury or death.

intercept [V-T-U6] to stop sth from reaching its intended destination.

internal security [N-UNC-U13] a set of practices designed to prevent attacks on a ship or naval area that come from within the installation.

jam [V-T-U7] (electronic signal) to block it from being transmitted by broadcasting another signal of the same wavelength.

knot [N-C-U9] a unit of speed that signifies nautical miles per hour.

land-based [ADJ-U8] (squadron) whose members work from a naval base on land.

landing craft [N-C-U3] a rugged, powerful, armed boat used to transport troops, vehicles, or cargo during times of combat.

landing gear [N-UNC-U5] the structure that supports an aircraft while it is on the ground and which allows it to take off and land. Wheels are the most common form of landing gear.

latitude [N-C-U9] one of the horizontal lines that form part of an imaginary grid system that covers the Earth.

launch [V-T-U4] (boat) to lower it into the water from a ship, using a crane or davits.

LCAC (N-C-U3) sophisticated type of landing craft that floats on a cushion of air, allowing it to travel over water and right up onto the shore to deliver cargo, equipment or personnel.

life preserver [N-C-U14] a plastic device used for flotation while in the water.

line handling [N-UNC-U14] the process of inspecting, preparing or working with lines.

line of position (LOP) [N-C-U10] a line on a map between one's own location and another object within sight; multiple LOPs are used to determine one's exact location.

LMSR [N-C-U1] an MSC support vessel that carries large military equipment; it means large, medium speed, roll on/roll off ship.

locate [V-T-U2] to find where sth is.

longitude [N-C-U9] one of the vertical lines that form part of an imaginary grid system that covers the Earth.

low tide [N-C-U12] the period when the ocean waters are lowest on the shore.

NAVY

Career Paths: Navy is a new educational source for people who are serving or intending to serve as naval professionals, and who want to improve their English communication skills in a profession-oriented environment. Incorporating career-specific vocabulary and contexts, each unit offers step-by-step instruction that immerses students in the four key language components: reading, listening, speaking, and writing. *Career Paths: Navy* addresses topics including parts of a ship, nautical language, types of ships, weaponry, navigation, and more.

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