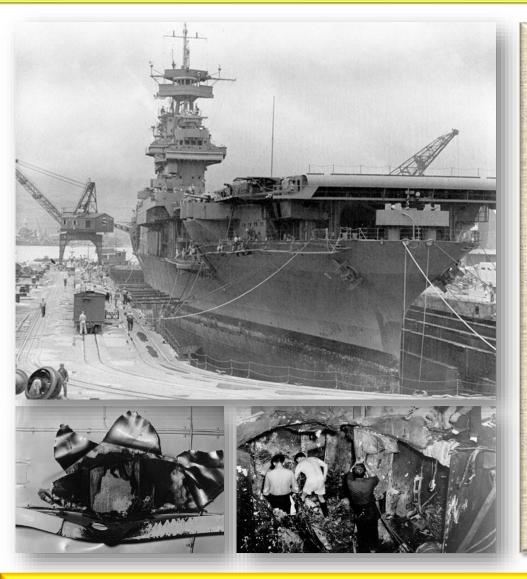


The U.S. Navy's Military Sealift Command



"It Can be Done!"



USS YORKTOWN Damage Report: 551-pound bomb plunged through flight deck 15 feet inboard of island:

- Bomb penetrated fifty feet into the ship before exploding above the forward engine room.
- Six compartments destroyed.
- Lighting system destroyed on three decks across 24 frames.
- Gears controlling the No.2 elevator were damaged.
- Lost radar and refrigeration system.
- Near miss bombs opened seams from frames 100 to 130.
- Fuel-oil compartments ruptured.

ESTIMATED REPAIR TIME: 90 DAYS

"We must have this ship back in three days."

-- Adm. Chester W. Nimitz, Commander in Chief Pacific Fleet

An Exponential Maritime Environment



Cold War
UNCLASSIFIED

Post-WWII

Today

Global Force Presence

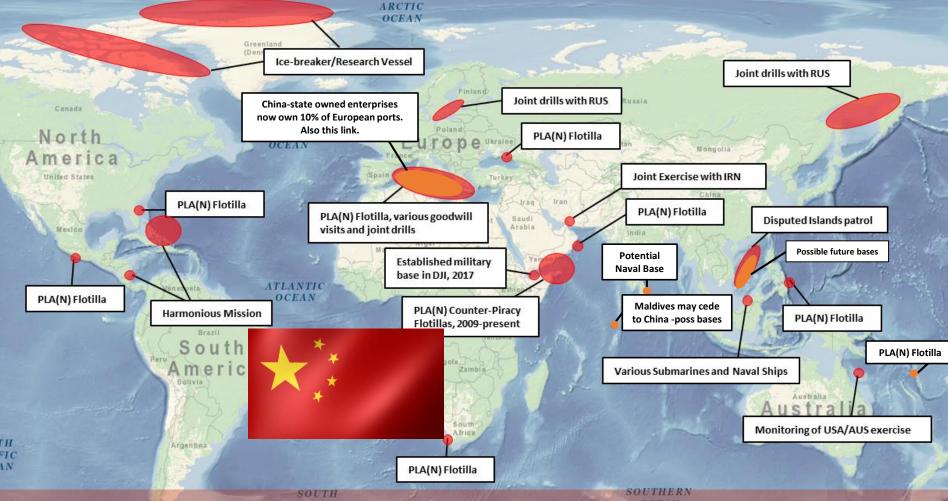


"Control of the sea, by maritime commerce and naval supremacy together, means predominant influence in the world."

-- Alfred Thayer Mahan

Global Force Requires Global Presence

PLA(N) Global Force Disposition



"We should enhance our capacity for exploiting marine resources... resolutely safeguard China's maritime rights and interests, and build China into a maritime power."

-- 2012 Chairman of Communist Party, Hu Jintao

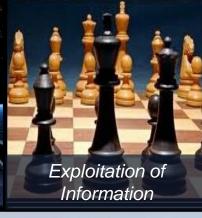
Global Force Requires Global Presence

The Competition is Thinking Differently





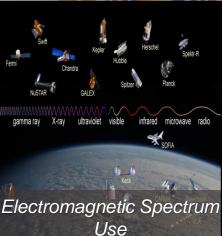










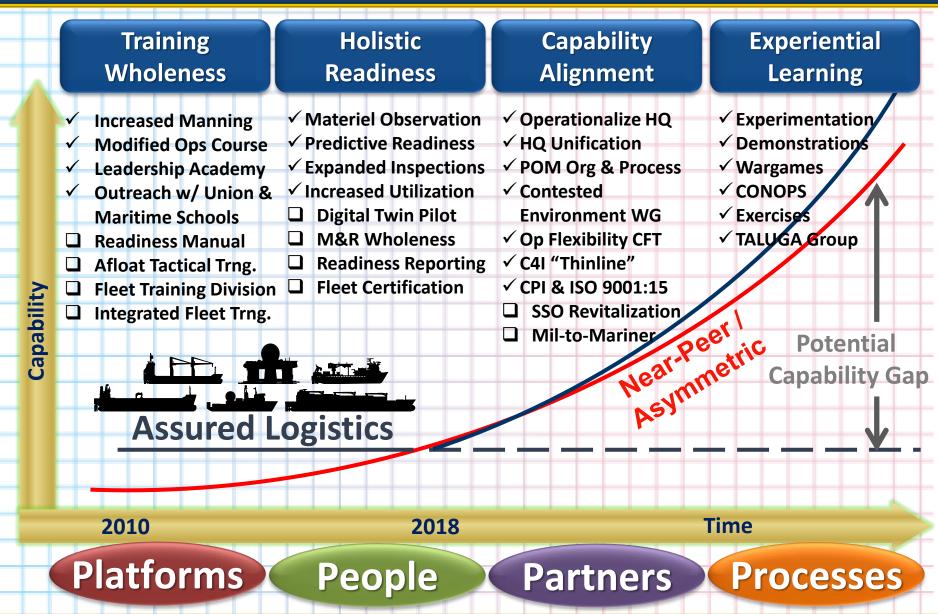








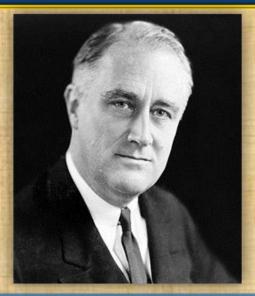
Avoiding a Capability Gap



We must "Bend The Curve" of capability

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How Can the Ship Repair Industry "Bend the Curve?"



"Powerful enemies must be out-fought and out-produced. It is not enough to turn out just a few more planes, a few more tanks, a few more guns, a few more ships than can be turned out by our enemies. We must out-produce them overwhelmingly, so that there can be no question of our ability to provide a crushing superiority of equipment in any theatre of the world war."

-- President Franklin D. Roosevelt



Unassailable Supply Chain



Capacity for Rapid Expansion



Unwavering Partnerships



Culture Focused on **Advancing** Capabilities



Impenetrable <u>Cyber</u> Networks

MSC 2029

| | | de la | | PL Market State St |
|--------------------------------------|---|--|--|--|
| Combat Logistics Force | Service & Command Support | Special Mission | Prepositioning | Sealift |
| Sustain our Navy at and from the sea | Provide towing, rescue/salvage, hospital ships, and command and control platforms | Support oceanography, underwater surveillance, missile tracking, submarine, and special warfare | Preposition combat cargo around the world | Move military equipment and supplies |
| | T . 1 1 . | 111001 | | |
| | lotal ships | / M&R bud | gets today | |
| 29 \$267M | 25 \$151M | 24 \$54M | 29 \$86M | 30 \$81M |
| | 25 | 24 | 29 | |
| | 25 | 24 \$54M | 29 | |

Proportional growth in M&R capacity will be needed to meet demand.

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Operating in a Contested Environment

Contested Environment High Low **Formation Skills Mission Assurance Threat Analysis Capital Improvements Cyber Resiliency Parts Inventory Holistic Readiness** Survivability **OPCON C2 Training Wholeness** Counter-ISR **Repair Damaged Ships Industry Awareness Counter-Detection Personnel Recovery Counter-Targeting Personnel Treatment Strategic Partnerships SLOC Defense** Reset "In Stride" "Operationalize" **Cyber Hardening Navy/Joint Interoperability Submarines** Mariner Resiliency/Depth **Assured Communications Military Planning** Surface Ships Aircraft Surge Sealift/RRF **Maritime ISR Space-based ISR** Torpedoes VISA/MSP Anti-Ship Cruise Missiles Ballistic Missiles **Commercial Base** Cyber Attack **Jamming**

"History does not long entrust the care of freedom to the weak or the timid."

-- President Dwight D. Eisenhower

CY2017 Major Shipyard Availabilities



CY2016 Major Shipyard Availabilities



Total Overseas: \$83M

4.6 times more money spent on domestic ship repair than overseas

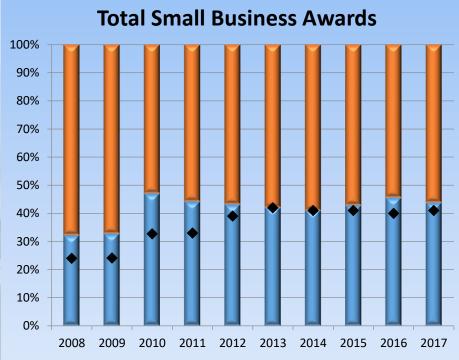
Title 10 Exemption

Small Business



- Operational environment requires presence
- Type/Quantity of ships determined by missions
- No more "hubbed" ships than needed





◆ Small Business Goal

■ Total Small Business Awards

Small Business Set-Aside

Other Than Small Business Awards

- 10-yr average: 35%
- Uphold FAR/DFAR
- Opportunity for large/small cooperation

Projected Maintenance Availabilities

| Ship Type | #Availabilities | <u> Maintenance</u> | Type | Time Frame |
|------------------|-----------------|---------------------|-------------|------------|
| Fleet Oiler | 34 | ROH/DD Ja | an 18 – Dec | c 23 |
| (T-AO) | 53 | MTA | | |
| Dry Cargo/Ammo | 29 | ROH/DD | Jan 18 | – Dec 23 |
| (T-AKE) | 23 | MTA | | |
| Fast Combat Spt | 4 | ROH/DD | Jan 18 | – Dec 23 |
| (T-AOE) | 4 | MTA | | |
| Rescue & Salvage | 4 | ROH/DD | Jan 18 | – Dec 23 |
| (T-ARS) | 3 | MTA | | |
| Fleet Ocean Tug | 3 | ROH/DD | Jan 18 | – Dec 23 |
| (T-ATF) | 0 | MTA | | |

Timeframe is Jan 2018- Dec 2023

NOTE: All are subject to change due to mission/tasking requirements.

MTA = Mid-Term Availability

ROH = Regular Overhaul

DD = Drydocking

Projected Maintenance Availabilities

| Ship Type | #Availabilities | Maintenance T | ype Time Frame _ |
|-----------------------|-----------------|----------------------|------------------|
| Hospital (T-AH) | 0 | ROH/DD | Jan 18 – Dec 23 |
| 5 | MTA | | |
| Cable Laying (T-ARC) | 2 | ROH/DD MTA | Jan 18 – Dec 23 |
| Fast Transport (T-EPF | F) 34 | DD/PSA | Jan 18 – Dec 23 |
| Sea Base (T-ESB) | 1 3 1 | PSA ROH/DD MTA | Jan 18 – Dec 23 |
| Ocean Survey (T-AGS | S) 4 | ROH/DD/PSA | Jan 18 – Dec 23 |

Timeframe is Jan 2018- Dec 2023

NOTE: All are subject to change due to mission/tasking requirements.

MTA = Mid-Term Availability ROH = Regular Overhaul DD = Drydocking PSA = Post Shakedown Availability

Projected Maintenance Availabilities

| Ship Type | #Availa | bilities | Maintenance Ty | pe Time Frame |
|--|---------|----------|-----------------------|-----------------|
| Missile Instru. (T- | -AGM) | 1 | ROH/DD | Jan 18 - Dec 23 |
| Command (LCC) | 1 | 3 | ROH/DD MTA | Jan 18 - Dec 23 |
| Sub Tender (AS) | 1 | 2 | ROH/DD MTA | Jan 18 - Dec 23 |
| Prepositioning T-AKR/T-AK/T-ES HST | 5 5 | 11 DD | DD | Jan 18 – Dec 23 |
| Surge/Sealift T-AKR/T-AK | 0 | DD | J | lan 18 – Dec 23 |

Timeframes are Jan 2018 – Dec 2023

NOTE: All are subject to change due to mission/tasking requirements.

MTA = Mid-Term Availability ROH

ROH = Regular Overhaul DD = Drydocking

Maintenance Plans (GO/GO)

(Government-Owned/Government-Operated)

Our standard logistics ship overhaul cycle includes:

Drydocking Availabilities every 2.5 years (45-60 days)

Mid-term Availabilities every 18 months (30-45 days)

Quarterly Voyage Repair periods (2 weeks pier-side)

Inspections and Surveys at regular intervals:

Continuous ABS surveys (5-year cycle)

Annual USCG inspections

Ship Material Assessment and Readiness Testing (every 5 years by MSC engineers)

Annual Safety Management and Environmental Audits

Continuous maintenance pier-side whenever practical

Note: High-Speed Vessels require annual dry-docking

Maintenance Plans (GO/CO)

(Government-Owned/Contractor-Operated)

Overhauls:

Full Operating Status ships – Drydocking Availabilities:*

Every 5 years (45-60 days) with underwater inspections at 2.5 years

Every 3 years to support sponsor cargo requirements

Every 2.5 years for CONUS 30-month cargo maintenance

Reduced Operating Status ships – Drydocking Availabilities:

Every 5 years (45-60 days) ABS waiver of mid-term drydocking

Inspections and Surveys at regular intervals:

ABS surveys:

- Continuous 5-year cycle
- Annual USCG inspections
- Annual Internal Safety Management System audits:
- 30-month ABS/USCG

Continuous maintenance pier-side whenever practical

Third Party Regulatory Picture

Maintain and operate our ships to commercial standards

American Bureau of Shipping classification

 Standards for hull, machinery, electrical, and structural design, maintenance and repair

United States Coast Guard

- Provides criteria for the design, operation, inspection and maintenance of commercial ships
- Focuses primarily on safety of life at sea and material condition of ships

Most new construction ships built to these standards

Navy transfers are classed using ABS rules