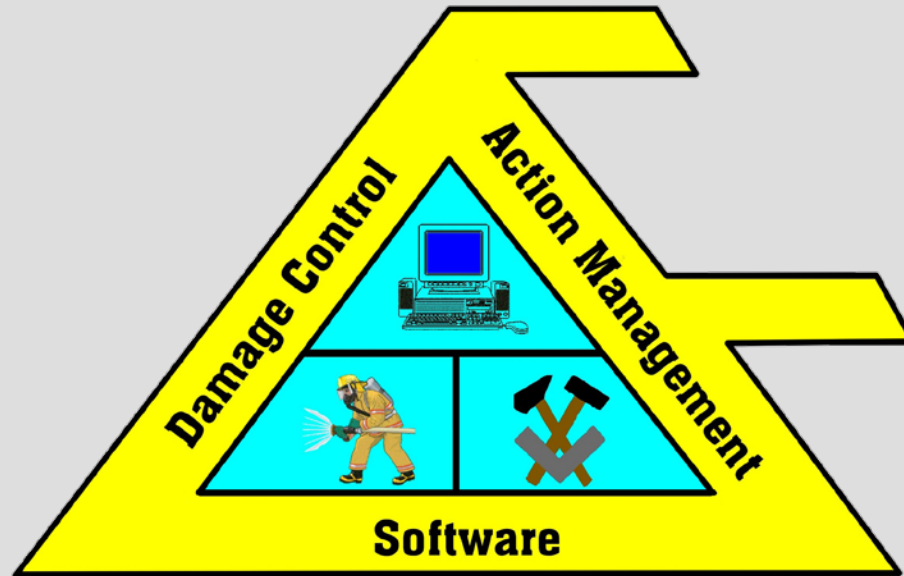


DCAMS



**Simple Casualty Knowledge Management
for shipboard Damage Control and Firefighting!
“WHAT, WHERE, WHO and HOW”**



DCAMS

Available Ship Databases

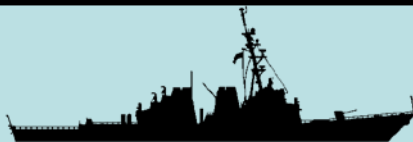
DAMAGE CONTROL ACTION MANAGEMENT SOFTWARE

SURFACE COMBATANTS



CG 47

| | |
|--------------------------|--------------------------|
| CLASS | <u>Baseline 4</u> |
| CG 48 | CLASS |
| <u>Baseline 1</u> | CG 59 |
| CLASS | CG 64 |
| CG 49 | CG 65 |
| | CG 66 |
| <u>Baseline 2</u> | CG 66 |
| CLASS | CG 68 |
| CG 54 | CG 70 |
| <u>Baseline 3</u> | CG 72 |
| CLASS | CG 73 |



DDG 51

| | |
|---------------------|-----------------------|
| <u>FLT I</u> | <u>FLT II</u> |
| CLASS | CLASS |
| DDG 51 | DDG 72 |
| DDG 52 | DDG 74 |
| DDG 53 | <u>FLT IIA</u> |
| DDG 54 | CLASS |
| DDG 56 | DDG 79 |
| DDG 59 | DDG 80 |
| DDG 61 | DDG 81 |
| DDG 66 | DDG 82 |
| DDG 67 | DDG 83 |
| DDG 68 | DDG 84 |
| DDG 69 | DDG 85 |
| DDG 70 | |



FFG 7

| |
|--------------|
| CLASS |
| FFG 32 |
| FFG 52 |
| FFG 53 |
| FFG 60 |
| FFG 61 |

CLASS = Generic Ship Class Database Available



DCAMS

DAMAGE CONTROL ACTION MANAGEMENT SOFTWARE

Available Ship Databases



CV 63 **CVN 68**
CLASS CLASS

CV 63 CVN 68

CV 67 CVN 69
CLASS CVN 71

CV 67 CVN 73

CVN 65 CVN 75
CLASS CVN 76
CVN 65



LHA 1
CLASS

LHA 1

LHA 2

LHA 5



LSD 41
CLASS

LSD 47

LSD 48



LHD 1 **LHD 5**
CLASS CLASS

LHD 2

LHD 5

LHD 6

LHD 7



LPD 17
CLASS

LPD 17



AOE 6
CLASS

AOE 6

AOE 7

AOE 8

AOE 10



MCM 1
CLASS

MCM 1



MHC 51
CLASS

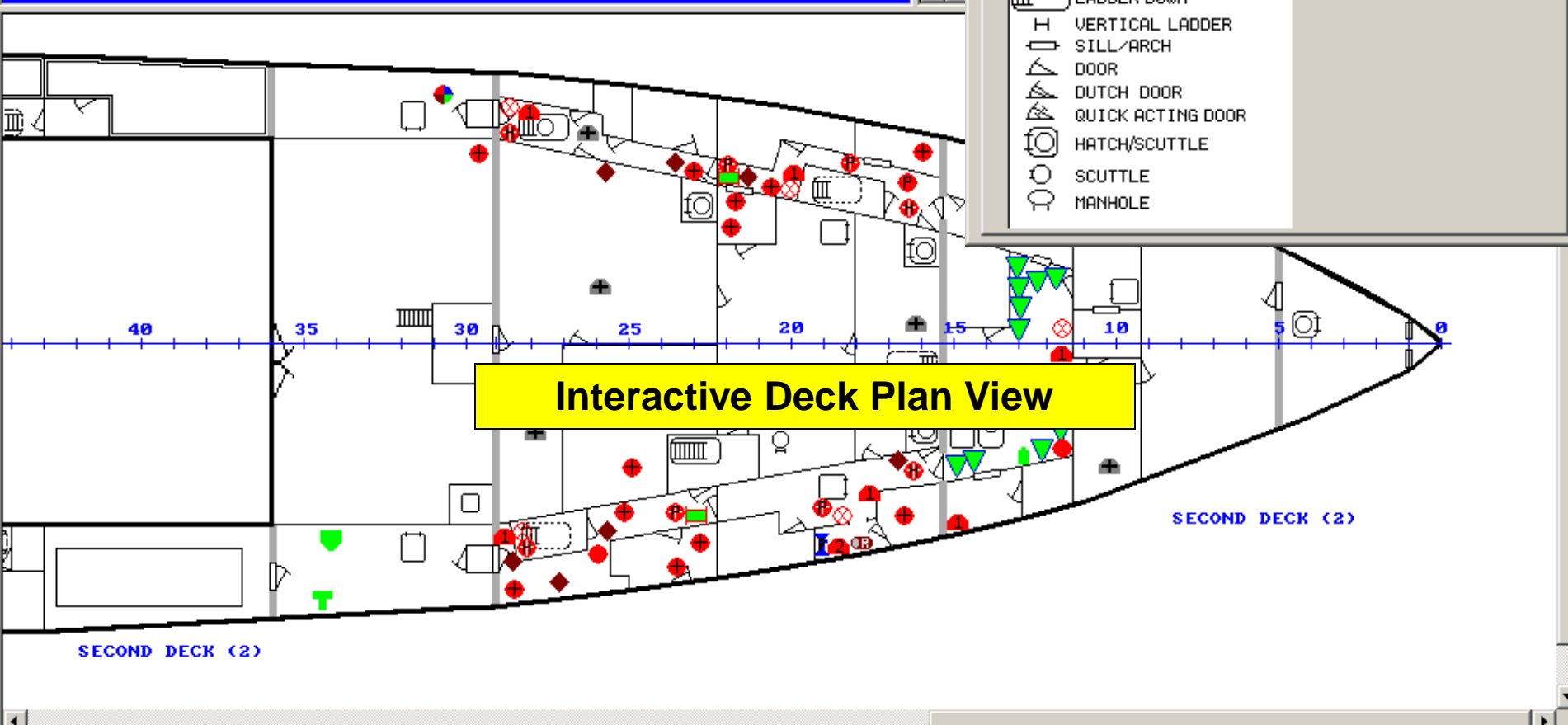
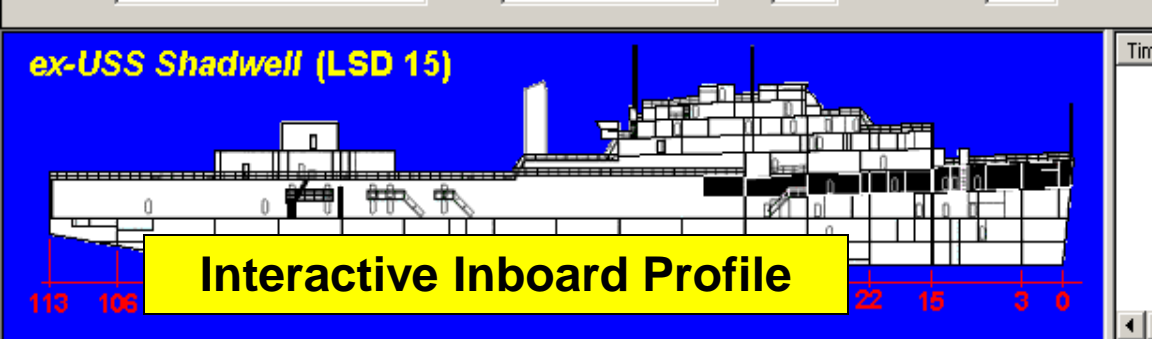
MHC 51



PC 1
CLASS

PC 1

CLASS = Generic Ship Class Database Available

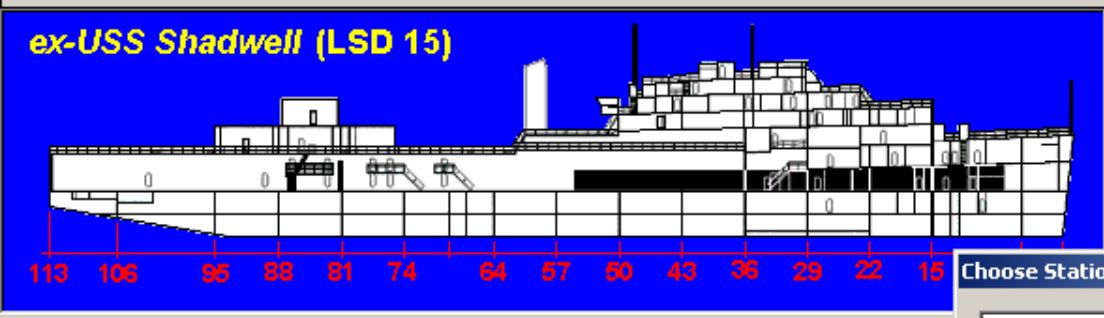


Key Icon List

| Casualty | Boundary | Personnel | Sensors |
|-----------|----------|-----------|------------------|
| Deck View | DC | NWP | Fire Suppression |

Title

- WATERTIGHT
- FIRE ZONE
- CPS ZONE
- FIRE ZONE/CPS ZONE
- 2 WAY LADDER
- LADDER UP
- LADDER DOWN
- VERTICAL LADDER
- SILL/ARCH
- DOOR
- DUTCH DOOR
- QUICK ACTING DOOR
- HATCH/SCUTTLE
- SCUTTLE
- MANHOLE



| Time | Name | Action | Station | Compartment | Number | Deck | Frame |
|------|------|--------|---------|-------------|--------|------|-------|
|------|------|--------|---------|-------------|--------|------|-------|

Log In

Select User:

DC Maintenance

Enter Password:

xxxxx

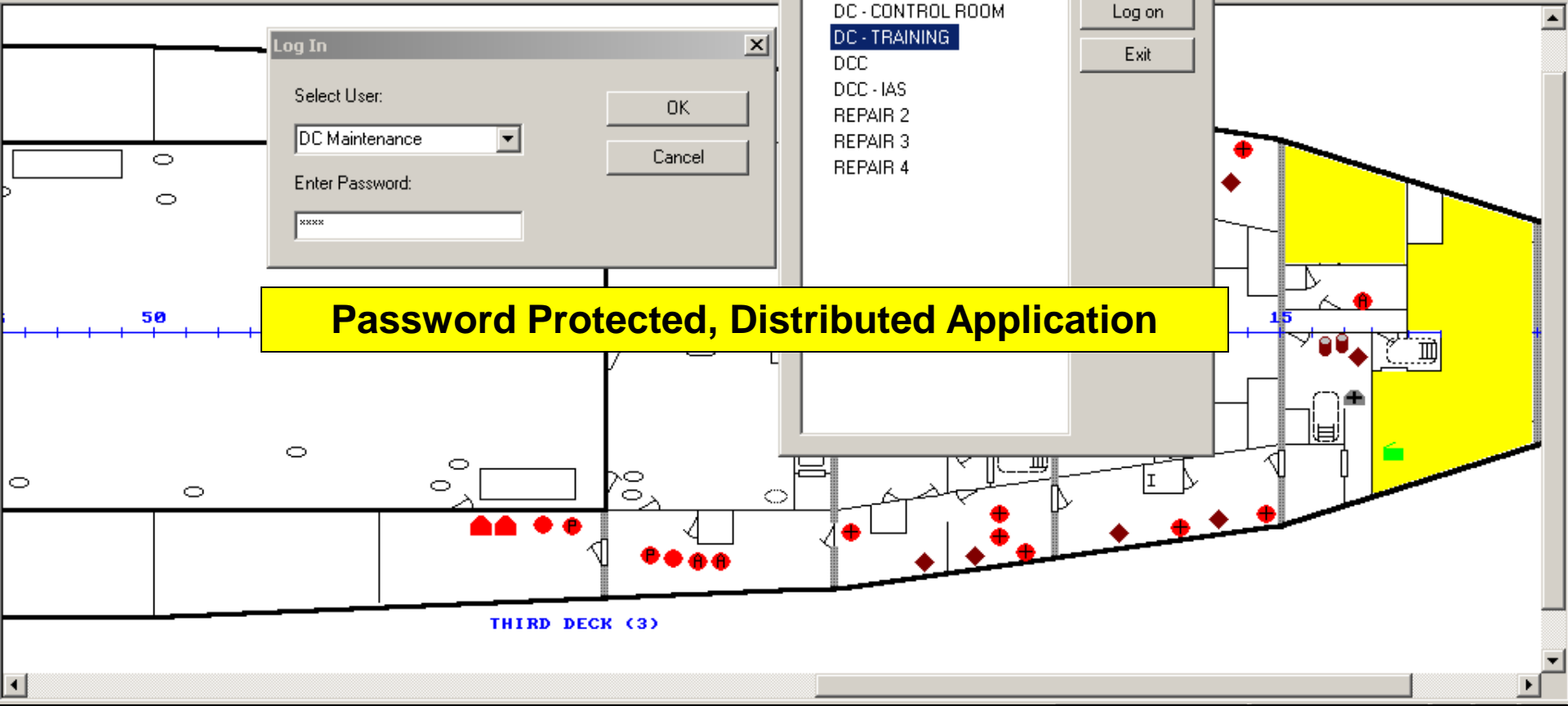
OK Cancel

Choose Station ID

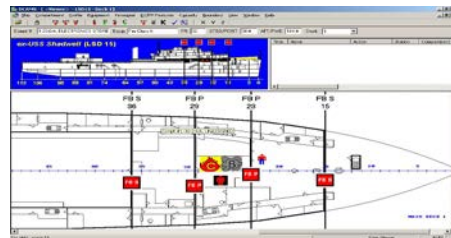
- DC - CONTROL ROOM
- DC - TRAINING**
- DCC
- DCC - IAS
- REPAIR 2
- REPAIR 3
- REPAIR 4

Log on Exit

Password Protected, Distributed Application



DCAMS Distributed Architecture

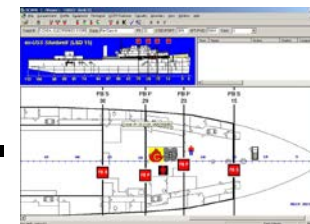


DC CENTRAL
LARGE TOUCH
SCREEN DISPLAY

DCRS 3
RUGGEDIZED
LAPTOP



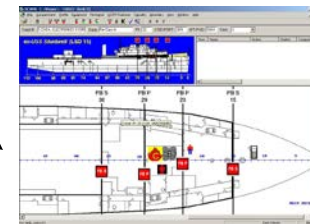
DCRS 2
RUGGEDIZED
LAPTOP



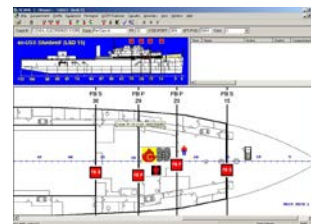
SHIP WIDE
AREA NETWORK



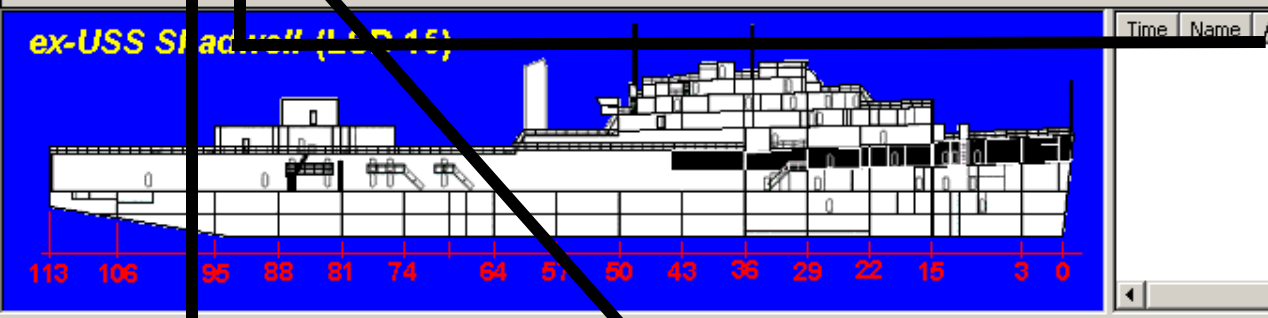
INVESTIGATOR
RUGGEDIZED
WEARABLE
(optional)



ON-SCENE
LEADER
RUGGEDIZED
WEARABLE
(optional)



DCRS 5 RUGGEDIZED
LAPTOP



Key Icon List

| Casualty | Boundary | Personnel | Sensors |
|-----------|----------|-----------|------------------|
| Deck View | DC | NWP | Fire Suppression |

NWP Color Coding

- Ammunition/Weapons/Ordnance
- Battle Dressing Station
- CBR Defense
- Damage Control
- Decontamination Station
- Fuel/Oil
- Medical/Dental

Critical Spaces

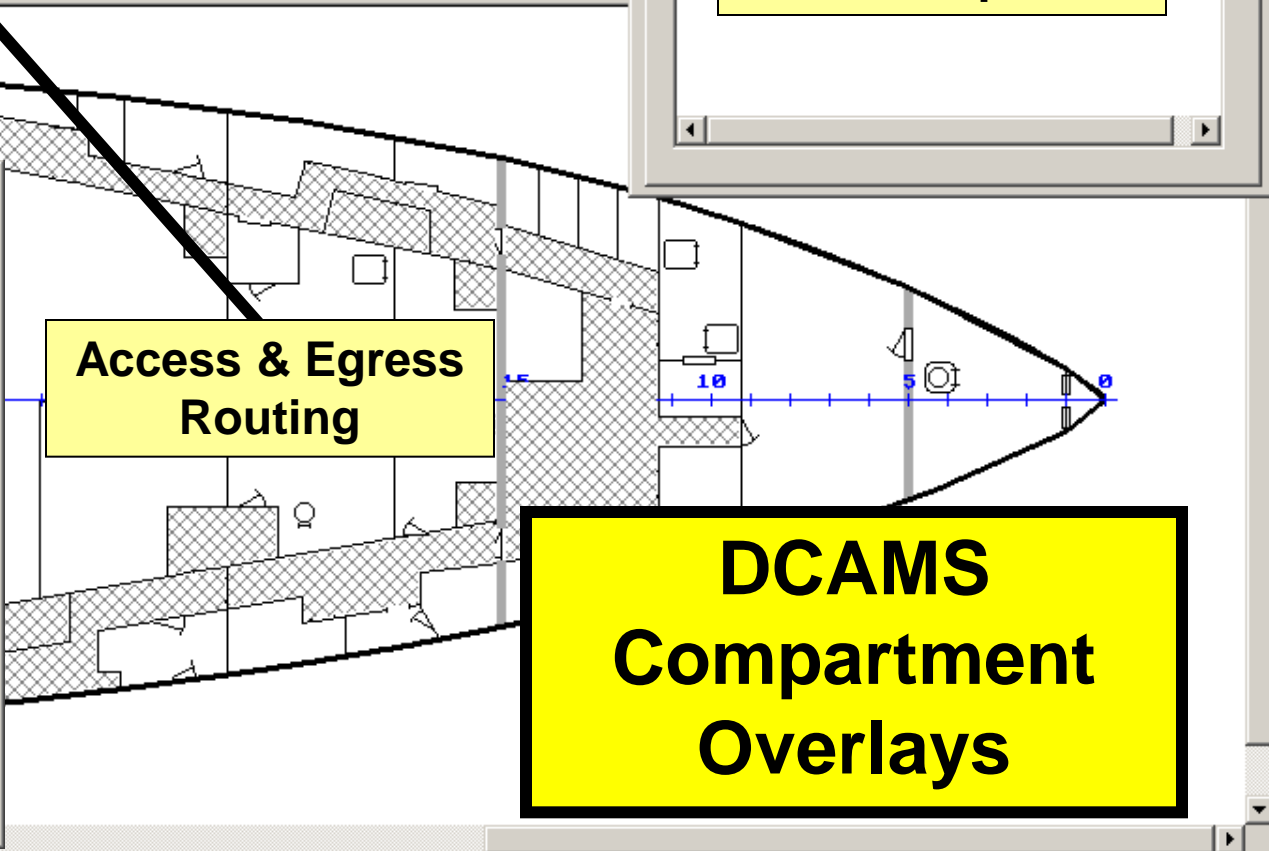
Key Icon List

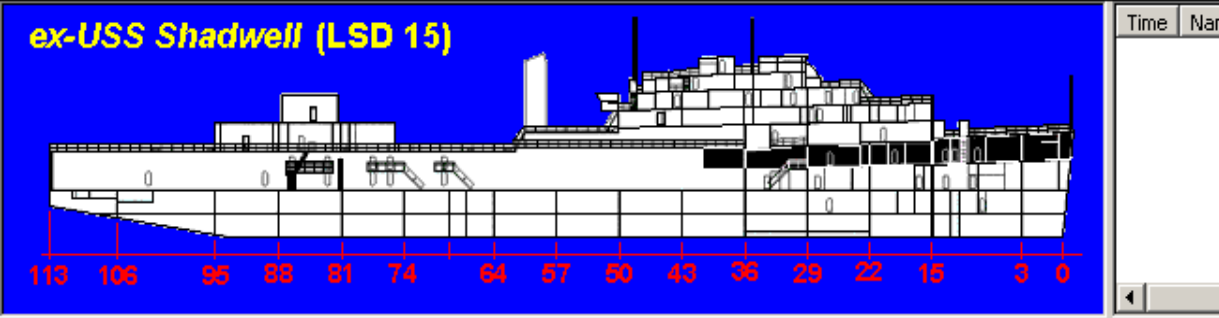
| Casualty | Boundary | Personnel | Sensors |
|-----------|----------|-----------|------------------|
| Deck View | DC | NWP | Fire Suppression |

Fire Suppression Coverage Area

- AFFF
- Berthing Sprinkler
- Halon
- HFP
- MAG Sprinkler (Dry)
- Sprinkler Group (Dry)
- Sprinkler Group (Wet)
- Water Mist

Fire Suppression Coverage





Key Icon List

| Casualty | Boundary | Personnel | Sensors |
|-----------|----------|-----------|------------------|
| Deck View | DC | NWP | Fire Suppression |

DC

- AFFF Extinguisher
- AFFF Hose Reel
- AFFF Outlet
- AFFF Station
- Block and Fall
- Box Patches
- Casualty Power DCRS
- Casualty Power Rack
- Casualty Power Terminal
- CBR Equipment
- CO2 Extinguisher
- CO2 Extinguisher DCRS
- Comms Outlet

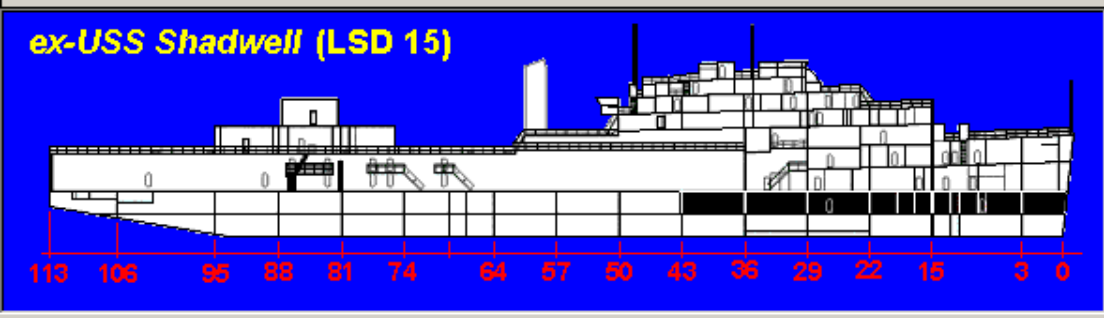
DC / FF Equipment Management

...Add,
...Move,
...Delete,
...Notate

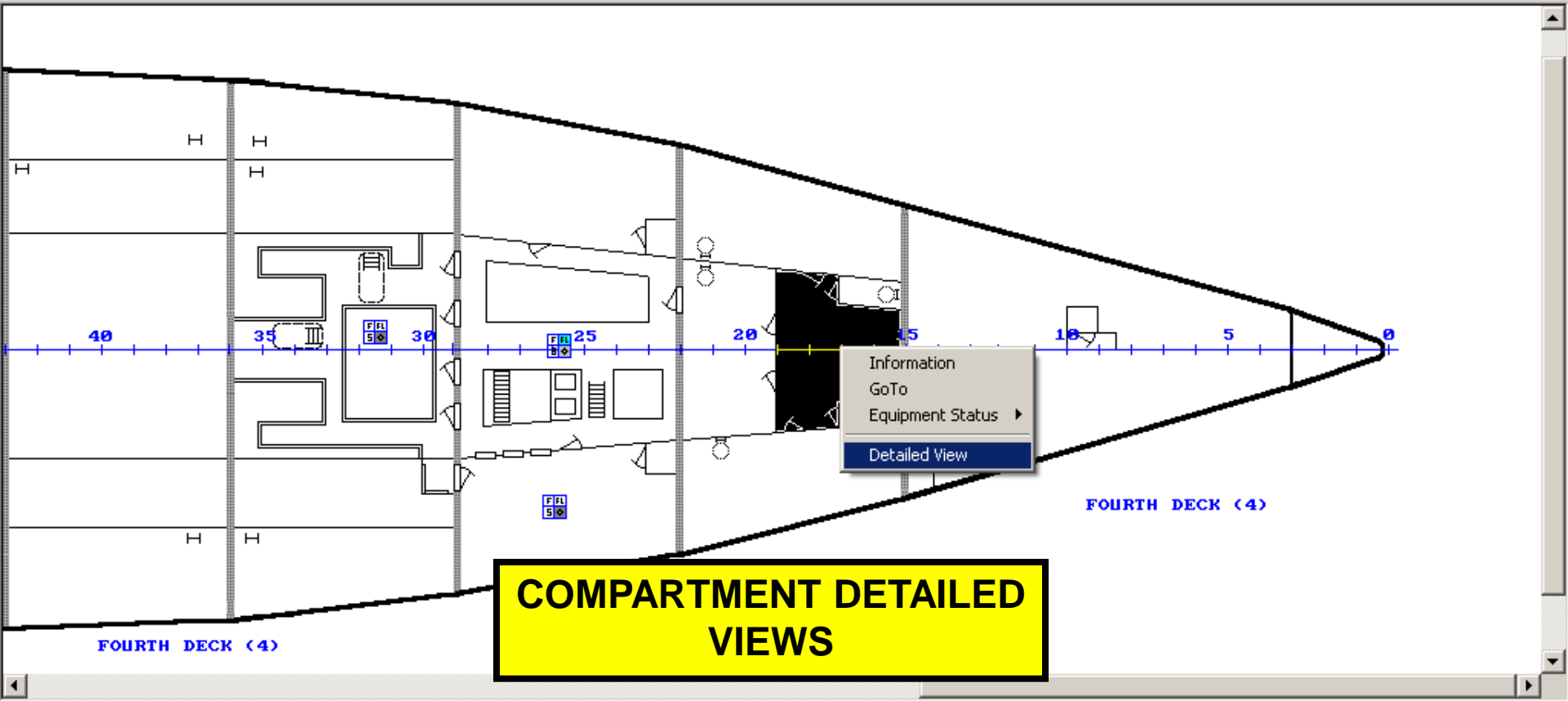
SECOND DECK (2)

SECOND DECK (2)

Compt # 4-15-0-C, WATER MIST FWD PU Equip. NDI FR 16 STBD/PORT 0 ft AFT/FWD 84 ft Deck 4

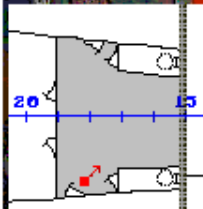
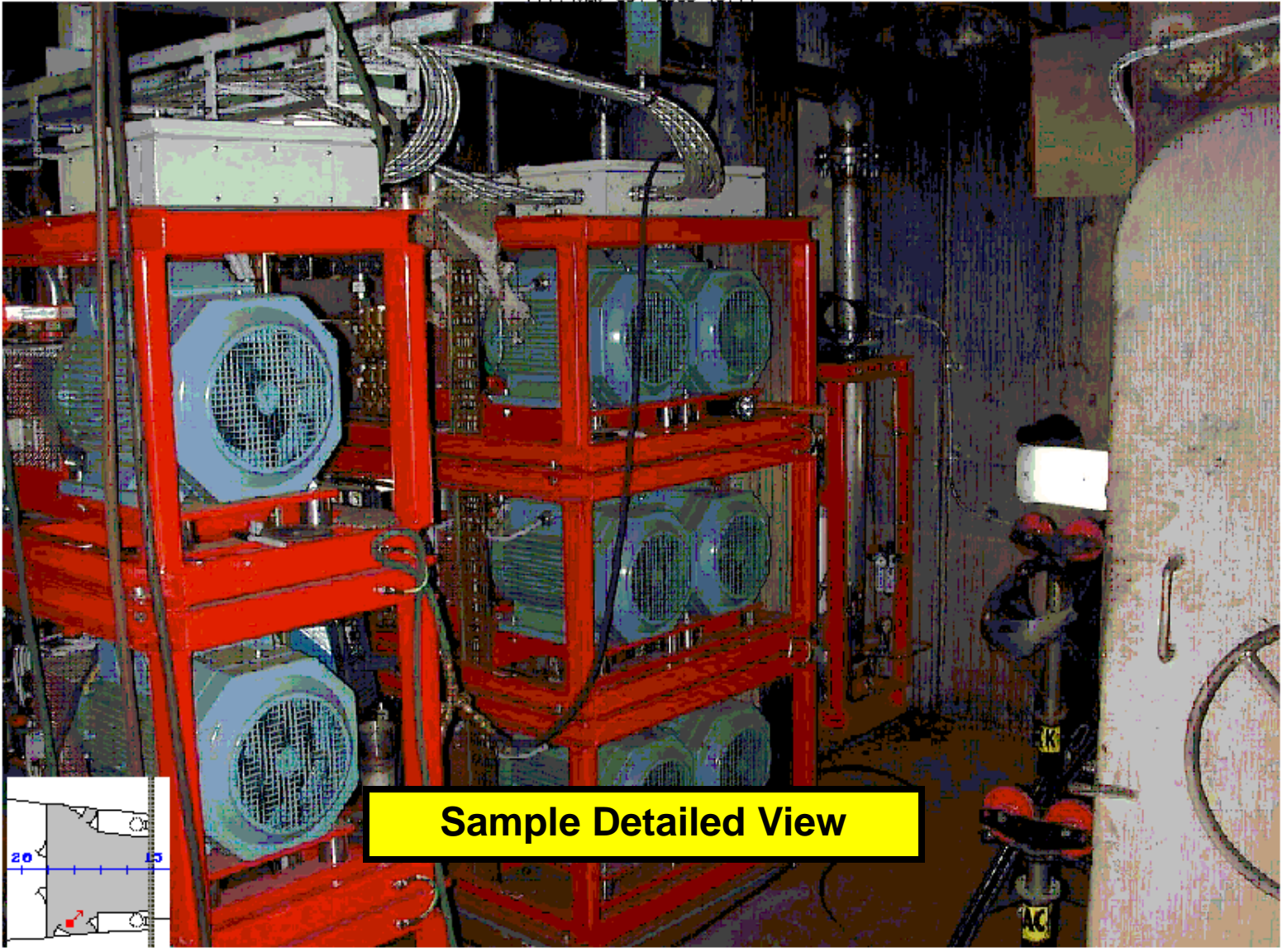


| Time | Name | Action | Station | Compartment | Number | Deck | Frame |
|------|------|--------|---------|-------------|--------|------|-------|
|------|------|--------|---------|-------------|--------|------|-------|

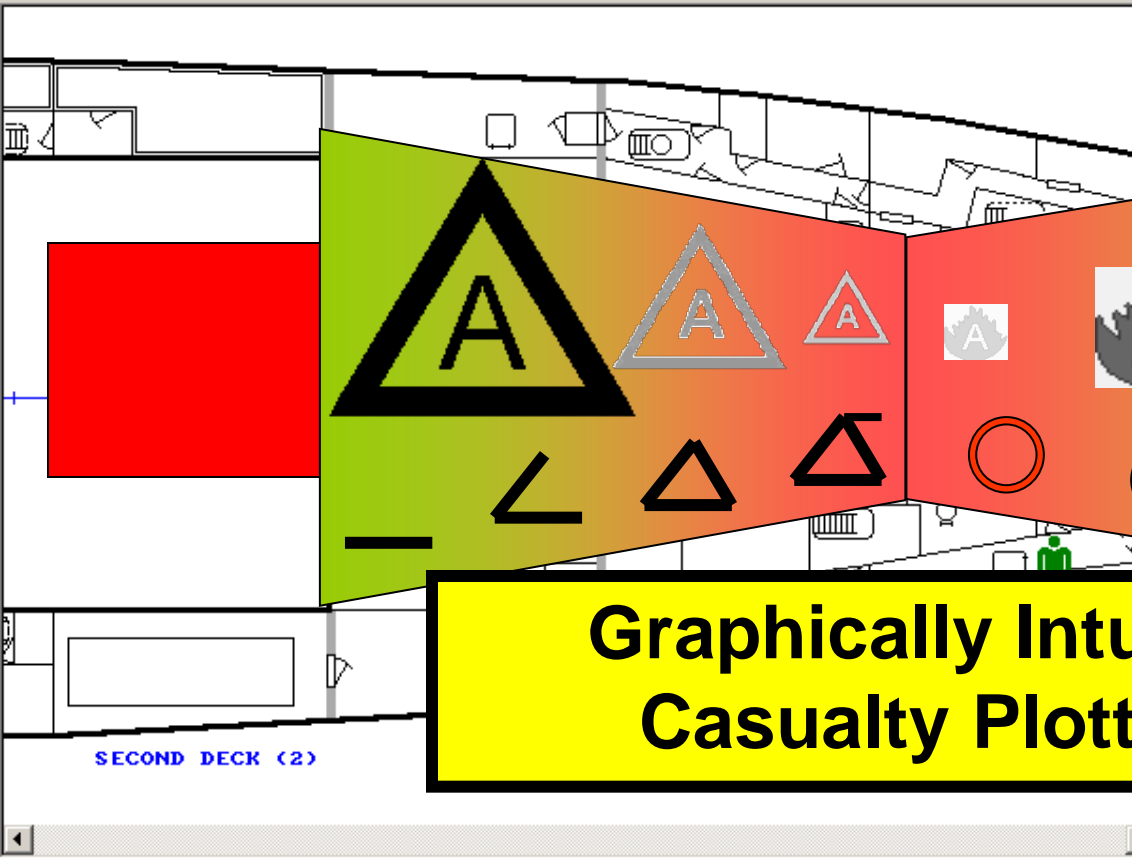
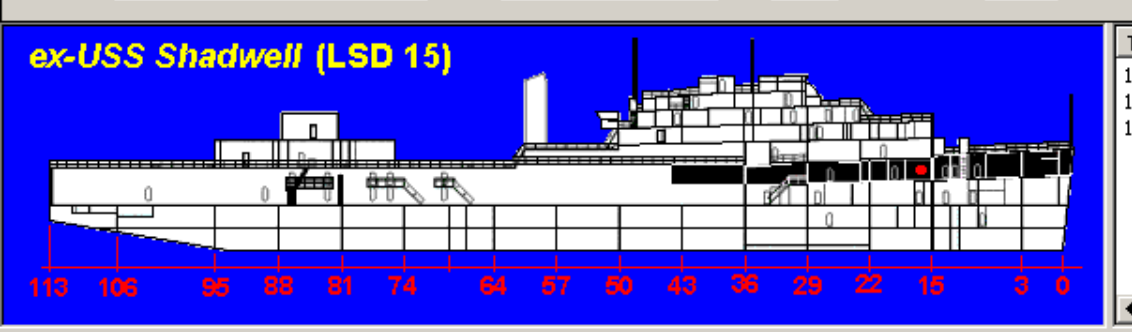


COMPARTMENT DETAILED VIEWS

DCAMS Detail View for Compartment - 4-15-0-C - Deck 4
Fri, May 09, 2008 15:11

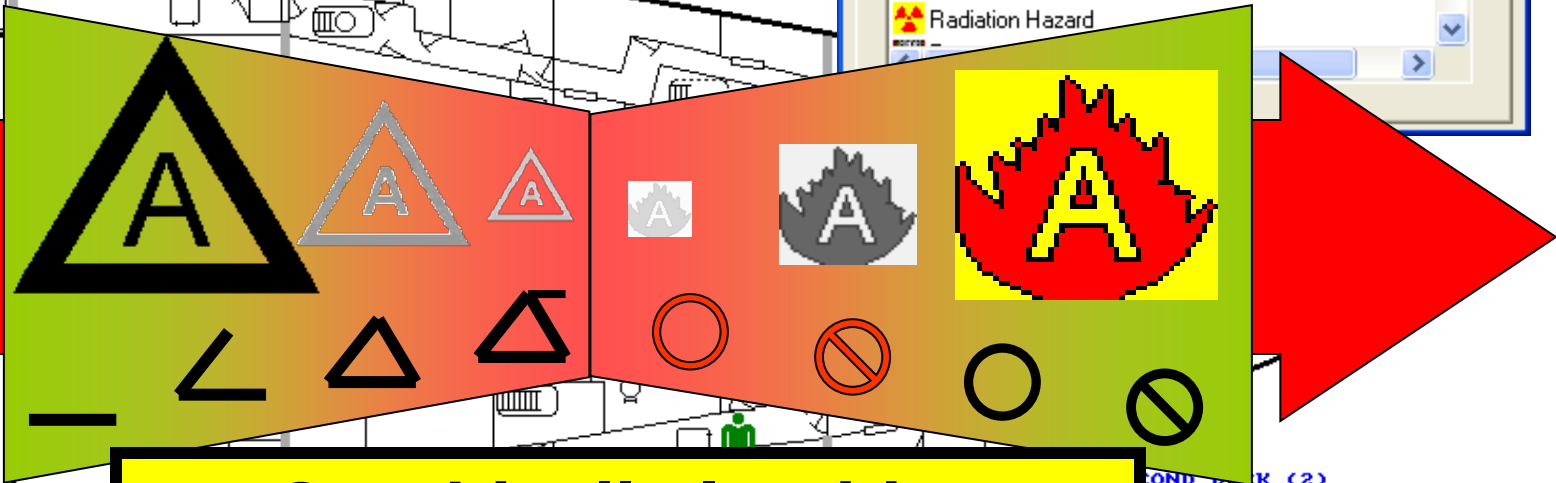


Sample Detailed View



Key Icon List

| Deck View | DC | NWP | Fire Suppression |
|-----------|----------|-----------|------------------|
| Casualty | Boundary | Personnel | Sensors |
| Casualty | | | |
| | | | |
| | | | |
| | | | |
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| | | | |



Graphically Intuitive Casualty Plotting

SECOND DECK (2)



NSTM 079 & DCAMS 5.02 Casualty Icons



Fire (unspecified)
Reported, Engaged, No



Smoke (unknown)
Reported, Engaged, No



Hole in Deck - Below
Reported, Engaged, No



Fire (Class A)
Reported, Engaged, No



Black Smoke
Reported, Engaged, No



Hole in Deck - Over
Reported, Engaged, No



Fire (Class B)
Reported, Engaged, No



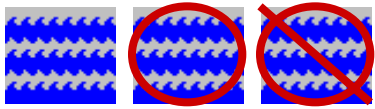
White Smoke
Reported, Engaged, No



Hole in Bulkhead
Reported, Engaged, No



Fire (Class C)
Reported, Engaged, No



Flooding
Reported, Engaged, No



Fragmentation
Reported, Engaged, No



Fire (Class D)
Reported, Engaged, No



Heat Transfer
Reported



Debris
Reported, Engaged, No



NSTM 079 & DCAMS 5.02 Casualty Icons



Rupture
Reported, Engaged, No



AFFF Rupture
Reported, Engaged, No



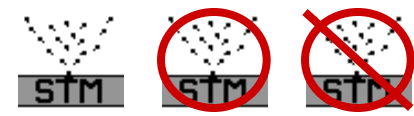
Rupture-Potable Water
Reported, Engaged, No



Rupture - Fire Main
Reported, Engaged, No



Rupture - Chill Water
Reported, Engaged, No



Rupture - Steam
Reported, Engaged, No



Rupture- Fuel Oil
Reported, Engaged, No



Rupture- Electrical Cooling Water
Reported, Engaged, No



Rupture- Salt Water
Reported, Engaged, No



Rupture- JP5
Reported, Engaged, No



Rupture- Hydraulic Oil
Reported, Engaged, No



Rupture-Lube Oil
Reported, Engaged, No



Rupture-Pressurized Air
Reported, Engaged, No



NSTM 079 & DCAMS 5.02 Casualty Icons



Point of Impact
Reported, Engaged, No



Communications Lost
Reported, Engaged, No



Chemical Hazard
Reported, Engaged, No



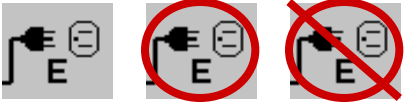
Structural Damage
Reported, Engaged, No



Mechanical Failure
Reported, Engaged, No



Biohazard
Reported, Engaged, No



Electrical Power Lost
Reported, Engaged, No



Mechanical Damage
Reported, Engaged, No



Radiation Hazard
Reported, Engaged, No



Electrical Damage
Reported, Engaged, No



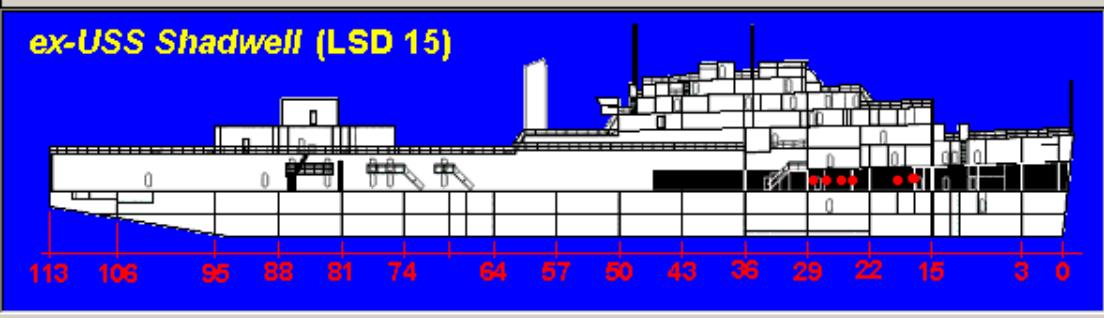
HAZMAT/Toxic Spill
Reported, Engaged, No



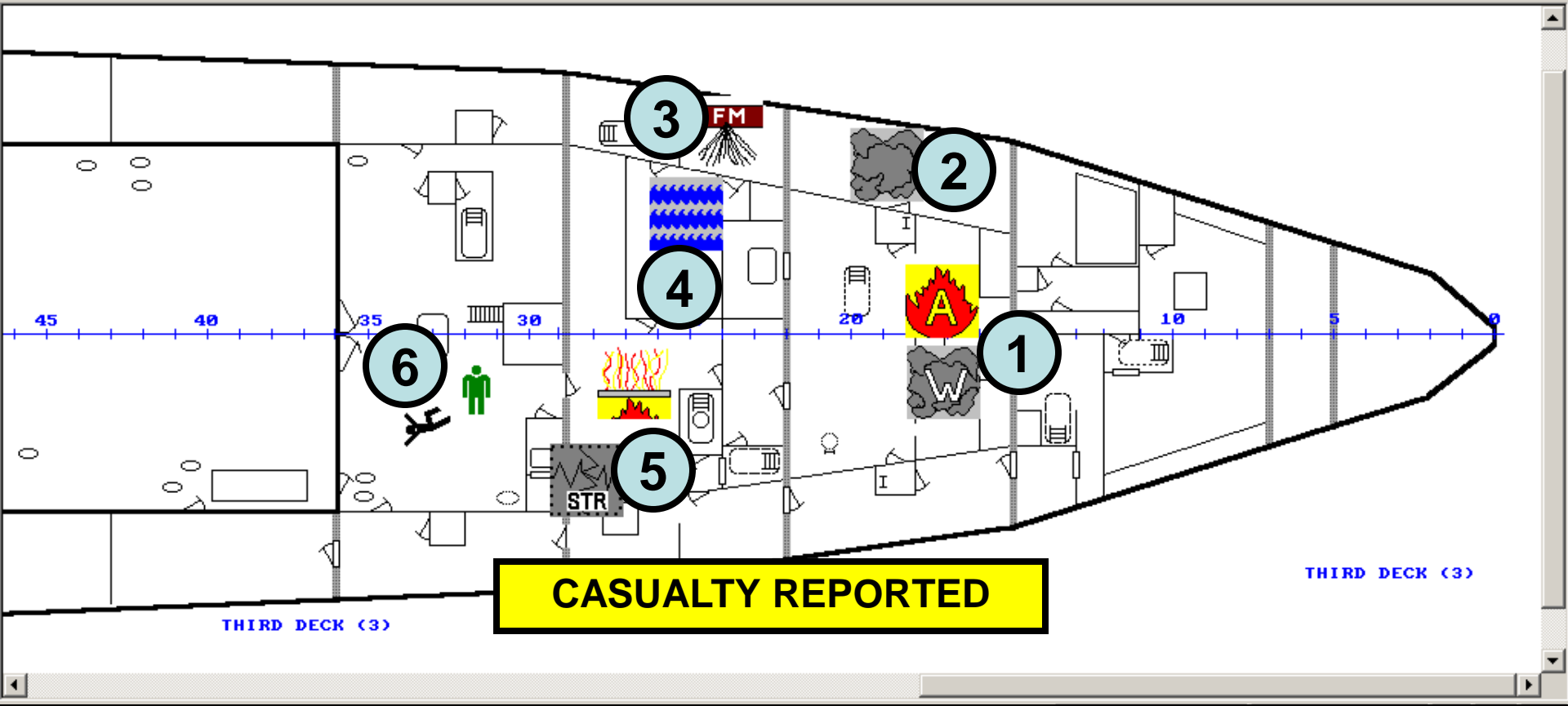
Casualty Power Lost
Reported, Engaged, No

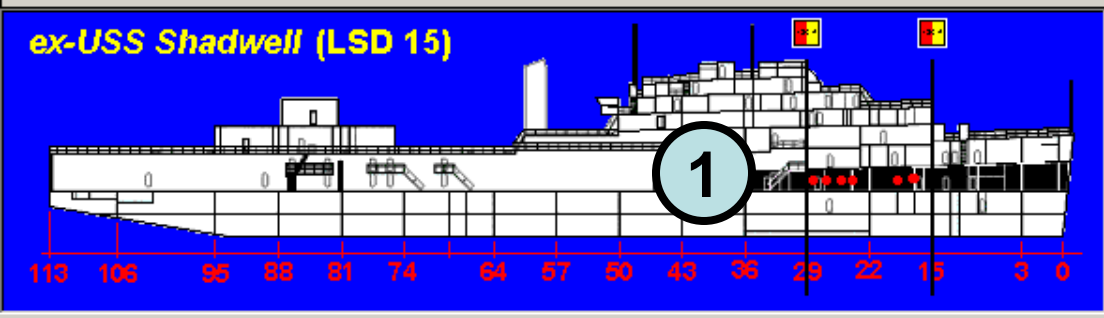


Unexploded Ordnance
Reported, Engaged, No

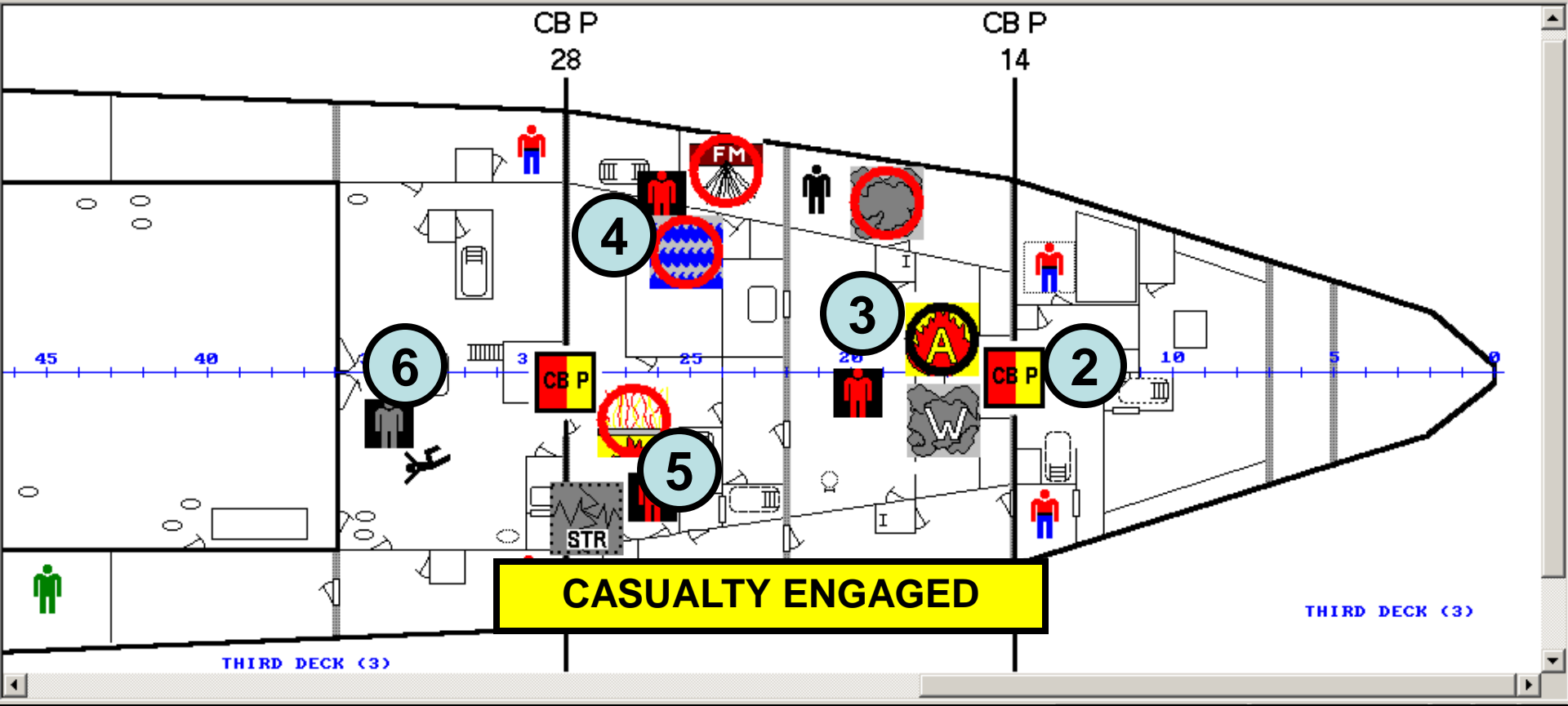


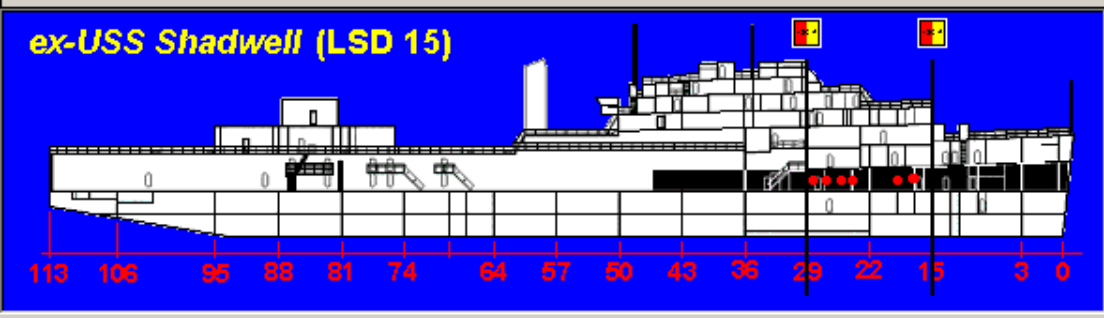
| Time | Name | Action | Station | Compartment |
|------|---------------------|--------|----------|-----------------------|
| 1344 | Smoke White | Added | REPAIR 2 | CREW LIVING SPACE |
| 1344 | Smoke | Added | REPAIR 2 | FIRE PUMP ROOM |
| 1345 | Flooding | Added | REPAIR 2 | TOMAHAWK EQPT ROOM |
| 1345 | Rupture - Fire Main | Added | REPAIR 2 | NODE ROOM # 8 |
| 1346 | Heat Transfer | Added | REPAIR 2 | ENGINEERING STOREROOM |
| 1346 | Structural Damage | Added | REPAIR 2 | ENGINEERING STOREROOM |
| 1346 | Casualties | Added | REPAIR 2 | UNASSIGNED |
| 1346 | Investigator Team | Added | REPAIR 2 | UNASSIGNED |



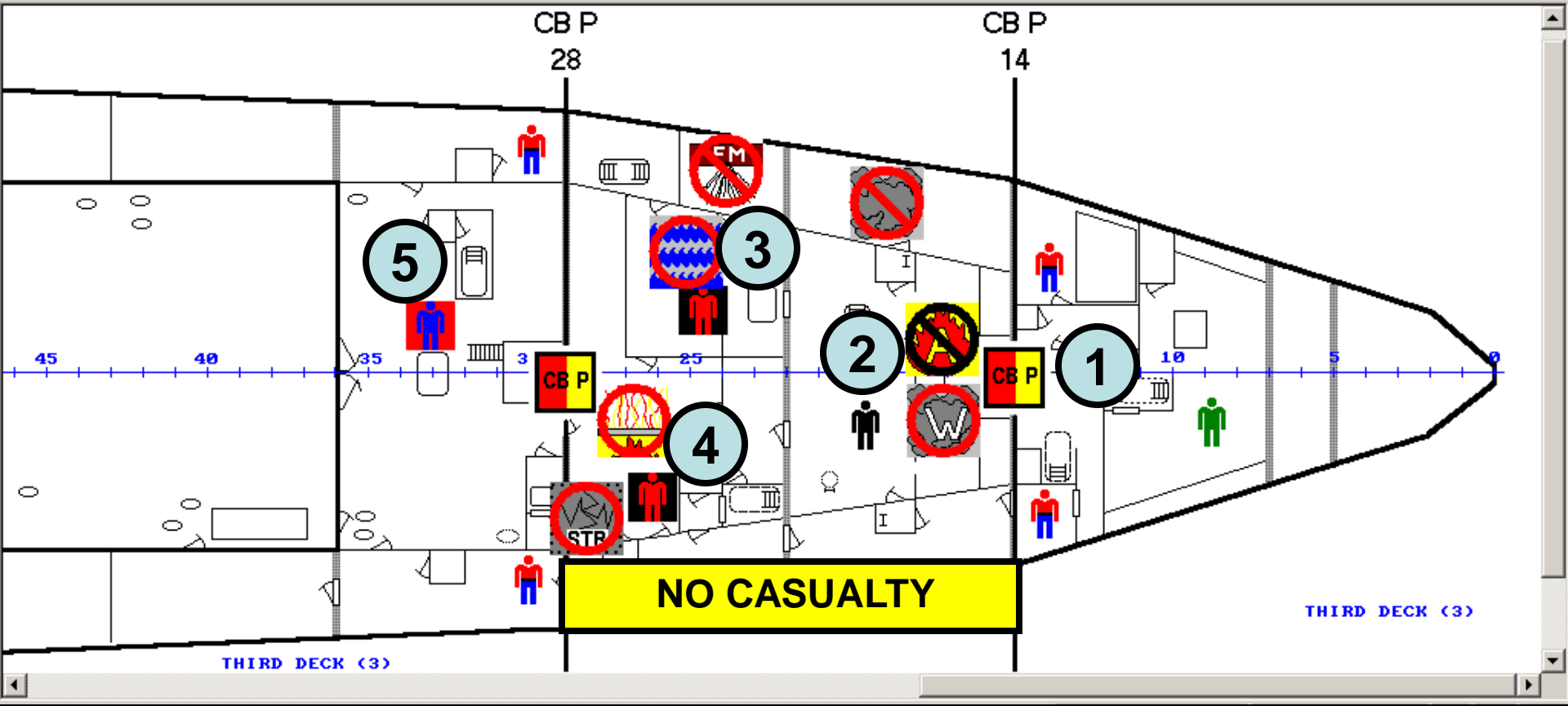


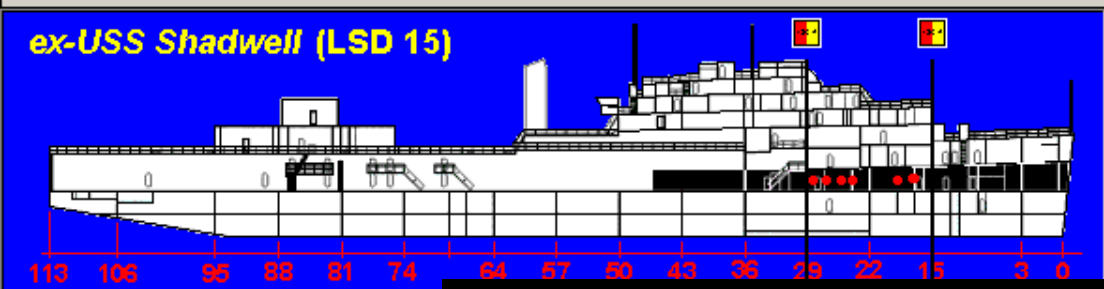
| Time | Name | Action | Station | Compartmer |
|------|-------------------|----------------|----------|------------|
| 1353 | Attack Team | Added | REPAIR 2 | ENGINEERIN |
| 1353 | Heat Transfer | Status Engaged | REPAIR 2 | ENGINEERIN |
| 1354 | Investigator Team | Moved | REPAIR 2 | UNASSIGNEI |
| 1354 | Other Personnel | Added | REPAIR 2 | UNASSIGNEI |
| 1354 | Boundary Man | Added | REPAIR 2 | UNASSIGNEI |
| 1354 | Boundary Man | Added | REPAIR 2 | UNASSIGNEI |
| 1354 | Boundary Man | Added | REPAIR 2 | WATER MIS |
| 1354 | Boundary Man | Added | REPAIR 2 | PASSAGE |





| Time | Name | Action | Station | Compartmer |
|------|---------------------|----------------|----------|------------|
| 1402 | Desmoking Team | Moved | REPAIR 2 | COMMUNICA |
| 1402 | Rupture - Fire Main | Status No | REPAIR 2 | NODE ROOM |
| 1402 | Attack Team | Moved | REPAIR 2 | TOMAHAWK |
| 1402 | Structural Damage | Status Engaged | REPAIR 2 | ENGINEERIN |
| 1403 | Other Personnel | Deleted | REPAIR 2 | UNASSIGNEI |
| 1403 | Casualties | Deleted | REPAIR 2 | UNASSIGNEI |
| 1403 | Investigator Team | Moved | REPAIR 2 | MAIN DC ST |
| 1403 | Incident Commander | Added | REPAIR 2 | UNASSIGNEI |





| Time | Name | Action | Station | Compartmer |
|------|-------------------|----------------|----------|-------------|
| 1353 | Attack Team | Added | REPAIR 2 | ENGINEERING |
| 1353 | Heat Transfer | Status Engaged | REPAIR 2 | ENGINEERING |
| 1354 | Investigator Team | Moved | REPAIR 2 | UNASSIGNED |
| 1354 | Other Personnel | Added | REPAIR 2 | UNASSIGNED |
| 1354 | Boundary Man | Added | REPAIR 2 | UNASSIGNED |
| 1354 | Boundary Man | Added | REPAIR 2 | UNASSIGNED |
| 1354 | Boundary Man | Added | REPAIR 2 | WATER MIST |
| 1354 | Boundary Man | Added | REPAIR 2 | PASSAGE |

Damage Control Checklist

AOR Casualty Status

DCRS 2

Casualty Check List

| Comp. # | Compartment Name | Casualty |
|----------|-----------------------|---------------------|
| 3-15-0-L | CREW LIVING SPACE | Fire Class A |
| 3-15-0-L | CREW LIVING SPACE | Smoke White |
| 3-15-4-E | FIRE PUMP ROOM | Smoke |
| 3-22-4-Q | NODE ROOM # 8 | Rupture - Fire Main |
| 3-24-0-A | ENGINEERING STOREROOM | Heat Transfer |
| 3-24-0-A | ENGINEERING STOREROOM | Structural Damage |
| 3-24-2-A | TOMAHAWK EQPT ROOM | Flooding |

| Fire Class A | | | 3-15-0-L | CREW LIVING SPACE |
|-------------------------------------|-------------------------------------|-------------------------------------|-----------------|----------------------------------|
| Ordered | Executed | N/A | Check List Item | |
| <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 11 | Secure re-entry Bilge Sprinkling |
| <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 12 | Establish fire boundaries |
| 13:52 | 13:57 | | | |
| <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 13 | Establish smoke boundaries |
| 13:52 | 13:57 | | | |
| <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 14 | Rapid response on scene |
| 13:52 | 13:57 | | | |
| <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 15 | Engaging casualty |
| 13:52 | 13:52 | | | |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 16 | Establish communications |

...Decision Aids
...Request Action
...Enhanced Communications

DCAMS Points of Contact

Program Point of Contact:



HANK KUZMA
NAVSEA, CODE 05P4
DAMAGE CONTROL/FIRE PROTECTION
(202) 781-3634
Fax: (202) 781-4564/65
kuzmahj@navsea.navy.mil
www.navsea.navy.mil/05P6

Technical Support:

www.dcams.org
support@dcams.org