Total Ship Survivability Testing (TSST)
Impact On Afloat Training

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TSST???
Our ship’s crews need to be trained and ready, because...
…”It” Continues To Happen

USS COLE attacked by terrorists
TSST Impact On Training

- TSST was a great example of the integration of testing and training
- Immediate impact on the readiness of the TSST test crews and many lessons learned
- Long term impact on the way that we train our crews
TSST Impact On Training in USS LABOON

- Overall Readiness greatly improved!
- Total Ship Survivability Big Picture “Mind Set” adopted by the entire crew
- Shipboard Training Teams were rapidly brought up to speed - early integrated approach
- Enabled ship to accelerate training cycle and deploy early!
TSST Impact On Other Test Ships

- USS STOUT - TSST proof in testing
- USS THE SULLIVANS - Five additional scenarios tested out
- USS OSCAR AUSTIN - TSST for FLT IIA

*All COs acknowledged the GREAT training value of these trials
TSST Lessons Learned

• 120 Lessons Learned included in the final report on LABOON’s TSST

• Primarily focused on ship design and possible engineering changes

• Many workarounds and the Lessons Learned forwarded to the AEGIS fleet

• USS OSCAR AUSTIN – Report not final
TSST Lesson – Think Big Picture

*Takes teamwork and coordination at all levels to get and keep systems online after taking a hit
Big Picture Lessons (Cont)

• Casualty response and restoration priorities are set by the TAO / CO…and this requires coordination of effort.

• Any action taken to contain damage may affect critical systems or mission capabilities (power, chill water, ventilation, dry air, firemain).
Big Picture Lessons (Cont)

• Effective shipwide communications are key to the integrated effort

• Need to train without the availability of primary or secondary comms…or 1MC
Big Picture Lessons (Cont)

• Documentation / information needs to be available to support integrated response

• CSOSS, EOSS, DC procedures must correlate and complement each other to support total ship survivability efforts
Big Picture Lessons (Cont)

• Systems should be aligned for maximum sustainability...not peacetime cruising

• Watch station modifications may be required to support integrated casualty control efforts
TSST Impact on Afloat Training

• Integrated Casualty Control Training is now considered the most effective method of training to ensure ship’s survivability

• Integrated Training Team (ITT) created to develop and run Total Ship Survivability exercises

• TSST procedures and considerations are incorporated into the shipboard training team’s training
TSST Lessons Applied to ITT Training

• Train like you are going to fight! Train as an integrated team to achieve an integrated response

• ITT must coordinate training planned by the individual training teams and identify integration points in their scenario
TSST Lessons Applied to ITT Training (Cont)

• Correlated damage from each hit needs to be simultaneously imposed across all departments

• Implementation should be realistic as possible and drive crew to respond in an integrated way
TSST Lessons Applied to Afloat Training

- Proper execution of a Total Ship Survivability exercise (TSSE) likely requires more manpower and expertise than exists in the ship’s ITT

- ATG Mayport has regenerated its ability to conduct these Integrated Casualty Control exercises on ships, working with the ship’s ITT
TSST Lessons Applied to Afloat Training (Cont)

• ATG Mayport is working with NAVSEA and AEGIS program office to obtain documentation and training devices to enable conduct of TSSEs

• ATG Mayport will also assist NAVSEA in conducting “COLE-like” casualty control exercises in AEGIS CGs
TSST Lessons Applied to Afloat Training (Cont)

• ATG Mayport will review TSST lessons learned from DDG-79 and incorporate them into ITT training and TSSE exercises

• ATG Mayport is also assisting in the development of standard Integrated training scenarios that will be used during CART & FEP
TSST efforts have greatly benefited the fleet’s ability to train themselves in a Total Ship Survivability environment!

Any Questions??