

Joint Seabasing Experimentation

Science & Technology and Research & Development

Skin-to-Skin Transfer



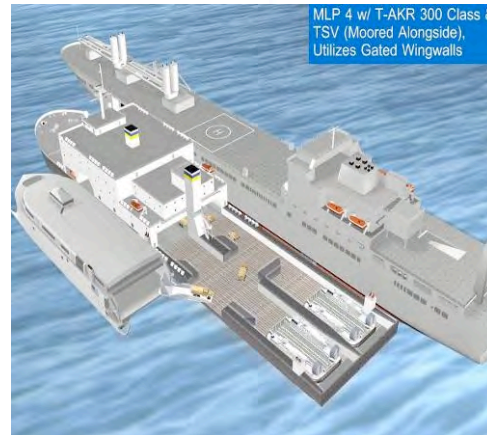
High Capacity UNREP



Selective Offload



Stabilized Cranes



Joint Modular Intermodal Container (JMIC)

Mobile Landing Platform Interface

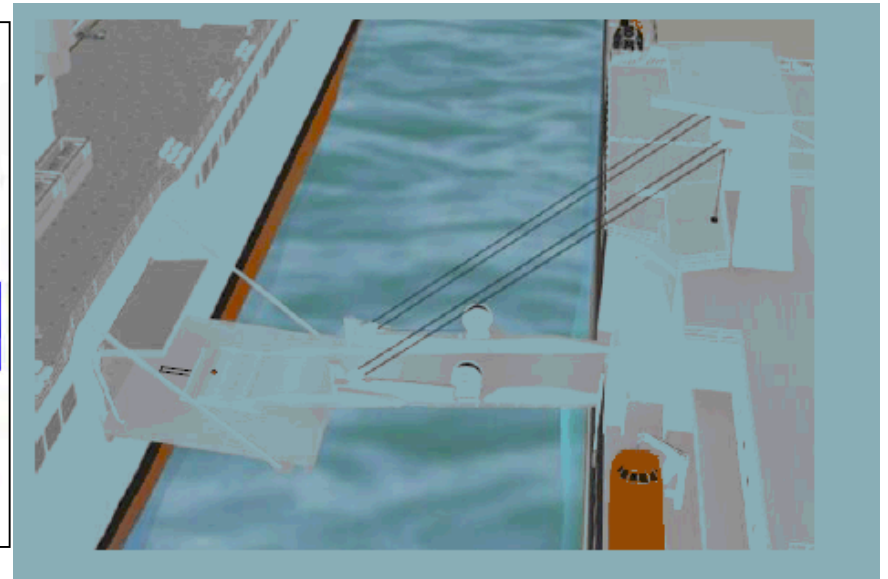
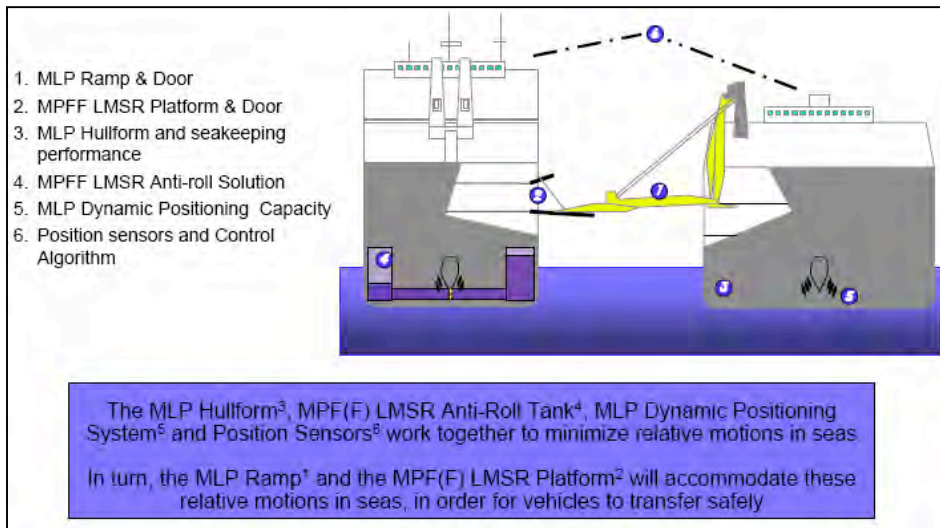


Automated Cargo Handling

At-Sea Arrival, Assembly, Employment, Sustainment

Vehicle Transfer System (VTS)

VTS is the critical new technology that enables surface movement



- Primary system to transfer vehicles and personnel from the LMSRs to the MLPs underway
- Dynamic positioning (DP) of MLP to LMSR while underway
- 1 VTS per MLP (no redundancy)
- 24 hour ship transfer (notional) period through NATO SS3

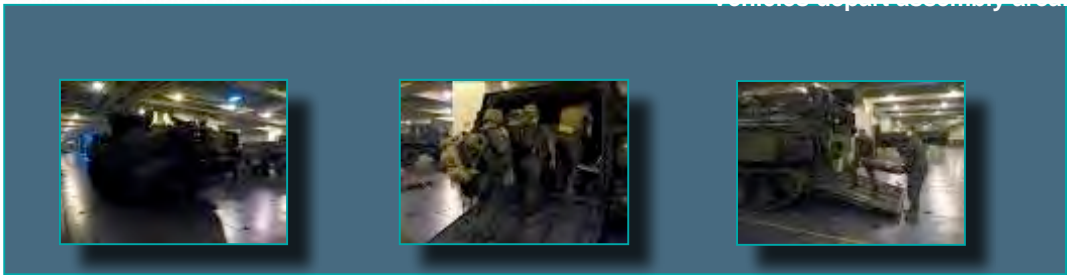
R&D Events

- Air Skid Testing (9-10, 16-17 Aug 06)
- Arrival & Assembly Events (6-19 Sept 06)
 - Pierside Testing (6-10 Sept 06)
 - At-Anchor Testing (11-13, 19 Sept 06)
 - At-Sea Testing (14-18, 20-21 Sept 06)
 - MLP-LMSR 'skin-to-skin' interface
 - MAGTF Vehicle Transfer
 - LCAC onload/offload
 - AAV Launch/Recovery
 - VIP Day 20-21 Sept 06
 - (Open water Operational Demo)
 - Industry VIP Day (26-28 Sept 06)



PMS 325 MPF(F) R&D FY06 At-Sea Arrival and Assembly Tests

Prepositioned vehicles are assembled as part of the MPF(F) mission. Timing data was collected to support discrete event modeling of assembly area operations. These simulations will be used to support LMSR assembly space sizing, arrangement and procedure development efforts.



PMS 325 MPF(F) R&D FY06 At-Sea Vehicle Selective Offload



Vehicle maneuvering tests were conducted at pier, anchor and underway with AIR SKIDS and GOJACKS. This capability would improve stow procedures and selective offload capability.



PMS 325 MPF(F) R&D FY06 At-Sea LCAC Operations



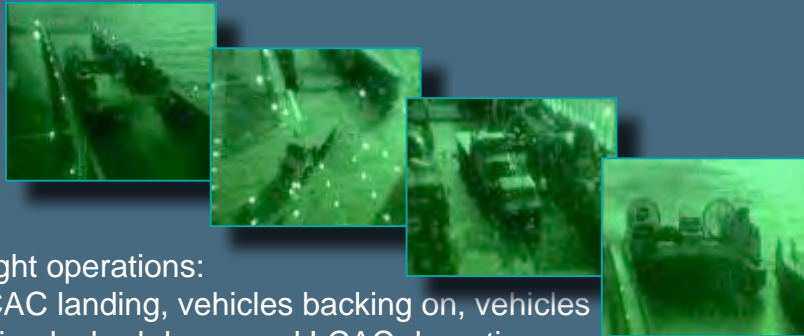
LCAC landing on the Mighty Servant 3



Alternate side wall
configuration
testing



Damaged LCAC recovery test



Night operations:
LCAC landing, vehicles backing on, vehicles
being lashed down, and LCAC departing

LCAC operations were conducted in a variety of sea states, ship headings, ship speeds and an alternate side wall configuration. This information will support the MLP design and operational procedures. LCAC night operations were conducted including vehicle transfer to support the MPF(F) goal of movement of vehicles to the shore in a period of darkness. The feasibility of damaged LCAC recovery was also demonstrated.

Seabasing Experimentation and Demonstration

Scope and Goals

- **Influence ship design effort to support methods of deployment and employment**
- **Develop and refine Doctrine**
- **Develop MPF(F) specific Tactics, Techniques and Procedures (TTP)**
- **Validate R&D technologies that support specific Arrival & Assembly operations**

Completed Planned Events

- **Sep 06 Vehicle Marshaling Area experimentation aboard USNS Red Cloud, Norfolk**
- **April 07 Cargo Flow analysis, NSWC Philadelphia**
- **Jul 07 Talisman Saber Reconstitution Observation & Documentation June - July 07**
- **Sept 07 Personnel Marshalling Area analysis, NSWC Philadelphia**
- **FY08-09 MPF(F) R&D/Experimentation Efforts**
 - At-Sea Experiment
 - Landing Force centric Arrival and Assembly
 - Personnel and Equipment Transfer efforts
 - Enhanced Air Skid Cargo/Vehicle handling system Assessment #3
- **Reconstitution**

Objectives

- **Identify assault wave stowage and sequence patterns**
 - Maximize vehicle stow density, maximize vehicle throughput
 - Enable selective access to vehicles
- **Identify marshalling requirements to maximize assault wave and personnel throughput capacity (quantity & time) within the marshalling area spaces**
- **Identify cargo/vehicle throughput capacity (quantity & time) within the marshalling area cargo/vehicle marshalling spaces**
- **Identify manpower requirements to support marshalling operations**
- **Identify MHE requirements to support marshaling operations**
- **Identify vehicle throughput capacity from stow areas through marshalling to debark interface points**
- **Identify area and throughput requirements for FIE integration**

Issues

- **Integration of R&D and experimentation efforts with TEEP events and MARFORS**
- **Availability of Personnel and PEI's from operating forces**
- **SID Funding and staffing to support experimentation and demonstrations**
- **Internal Marine Corps efforts to support transition planning and doctrine development**

Amphibious Lift Validation

- Participants: CD&I SID, N81M, N853
- Purpose: Validate Baseline MEB AE amphibious ship lift requirements
- Core Documents
 - August 05 Baseline MEB ICODES load plans
 - August 05 Excel spreadsheet cargo list sourced from August 05 ICODES load plans
 - November 06 MROC Baseline MEB equipment density list
 - NSE “placeholder” sourced from DON Lift II Study dtd Jan 1990
 - Organization for Embarkation and Assignment to Shipping (OE&AS)
- Landing Plan
 - OE&AS sequenced for “general purpose force” offload to support BLT vertical and surface forcible entry operations
 - Includes attached combat support and logistics support units

Joint Seabasing Research and Development

- MCCDC SID EXP Working Group (MCCDC, PMS325, ONR)
 - **MPF(F) Experimentation Integration Officer funding from Program Office (PMS325)**
 - **Integration of R&D and experimentation efforts with TEEP events**
- MPF(F) 'At-Sea' Seabase Experimentation
 - **Skin-to-skin operations btw the MLP and LMSR**
 - **Arrival and Assembly Operations**
 - **Experiment occurs off coast of Norfolk, VA (Aug - Sept 06)**
 - **Landing Force centric Arrival and Assembly; Personnel and Equipment Transfer efforts (6-21 Sept 06)**
- Deployable Airbeam Fendering System (DAFS) Phase II Test
 - **FPC at EWTGLant, NAB Little Creek, VA (26 July 06)**
 - **Testing at Ft Eustis, VA (28 Aug-1 Sep 06)**
- Lightweight Modular Causeway System (JETA-SPOD) ACTD
 - **Sea State test at Oregon State Univ, Tsunami Research Facility (Aug 06)**
 - **Full-scale component demo, ERDC, Vicksburg, MS (Sept 06)**
- Enhanced Air Skid Assessment #2
 - **Follow-on testing with large Motor Transport vehicles (Sep 06)**
- At Sea Personnel Transfer System (TBD Sep/Oct)