

APPENDIX L

BEACH AND PORT OPERATIONS CHECKLIST

This appendix is for SLRP NSE, BOG, and POG members when evaluating beaches and ports. The OCU will also use this checklist to determine lighterage requirements, lighterage configurations, and other types of craft that may be used during the offload.

Beach Operations

Preliminary Data Required in the Planning Phase

- Prevailing winds.
- Refraction diagram.
- Prevailing sea and swell.
- Beach slope.
- Beach irregularities.
- Prevailing surf.
- Currents.
- Tides.
- Beach composition.
- Ability to use the following equipment:
 - ◆ ROWPU.
 - ◆ AABFS.
 - ◆ Amphibious assault bulk water system.
- Trafficability of beach.
- Grid coordinates of left and right limits of the beach.
- Offshore obstructions.
- Littoral drift.
- Datum points.
- Sounding interval.
- Sounding lines.
- Underwater obstacles.

Data Required to Begin Instream Offload

Surf swell conditions include significant breaker height, depth, and angle of breakers to the beach, wave length directly outside the breaker line, and period of breakers. Other conditions follow:

- Tides.
- Currents (longshore).
- Depth of water and beach gradient.
- Beach features (width of the surf zone).
- Sea state.

Note: aerial reconnaissance of projected off-load sites should be conducted as soon as possible after sites are established. Reconnaissance results will permit for adjusting and correcting the original forecast.

Surf Observation Reports

Depending on the specific operation, surf conditions are reported by various organizations such as SEAL teams, beachmasters or force reconnaissance. These SUROB reports are essential to assist decisionmaking regarding the timing of an instream offload, and are passed to the CMPF, OCU, and OCO for action. Information includes the following:

- Initial report: establishes starting point for beach operations.
- Periodic reports: submitted twice daily when conditions change after the offload starts. Additional SUROB reports are prepared as needed to maintain a safe offload.
- To complete a SUROB report, observers watch 100 breakers, then report findings for a given date and local time. Report elements are shown in table L-1:

Table L-1. SUROB Report Elements.

Index	Description
ALFA	Significant breaker height: the average height of the one-third highest breaker on that beach.
BRAVO	Maximum breaker height: the highest breaker observed on that beach.
CHARLIE	Period of breaker: the time interval between breakers.
DELTA	The types of breakers and percentage of each.
ECHO	Breaker angle: the acute angle, in degrees, that a breaker makes with the beach and its direction relative to the beach (right/left flank).
FOXTROT	Littoral current: The longshore current's direction and speed.
GOLF	The number of lines of breakers in and the width of the surf zone measured in ft.
HOTEL	Remarks: information important to landing operations; e.g., wind direction and velocity; visibility; debris in the surf zone; secondary wave system; or dangerous conditions.

SUROB report information is processed accordingly by the PCO using modification tables. The final product is an abstract number called the *modified surf index* (MSI). (The MSI is a single dimensionless number that provides a relative measure of the conditions likely to be encountered in the surf zone.) For reported or forecasted conditions, the MSI is a guide to judge the feasibility of landing operations for each type of lighterage and amphibious vehicles.

MSI Calculation

When applied to a known or forecasted surf condition, the MSI calculation provides the commander with an objective method of arriving at a safe and reasonable decision with respect to committing lighterage and amphibious vehicles. The *modified surf limit* (MSL) is the maximum surf that should be attempted for routine operations. If the MSI exceeds the MSL for the craft or vehicle, the instream offload is not feasible without increasing the casualty rate. If the MSI is less than the MSL of the craft, the landing is feasible.

Modification tables to complete calculations are in COMNAVSURFPAC/COMNAVSURFLANTINST 3840.1, *COMNAVSURFPAC/COMNAVSURFLANTINST Joint Surf Manual*, chapter 11.

Tasks

- Plan for wave, beach, and surf conditions.
- Select beaches and touchdown points for craft and lighterage.
- Initial layout of AAA including MPE/S flow and staging areas.
- Intermediate indecisions on selecting craft, lighterage, and vehicles for instream offloads.
- Ensure beach task organizations become operational.
- Provide initial briefing of key personnel.
- Conduct initial and final operations and safety briefings for personnel controlling the offload.
- Participate in planning the layout of the AAA.
- Conduct final instream offload briefing to all personnel.

Port Operations

Port operations involve the loading/unloading of ships; the reception, processing, and staging of personnel; and the receipt, storage, marshalling (for onward movement) of cargo. To conduct port operations, the POG should be organized as follows:

- Port operations/command center.
- Reports processing section.
- MHE/CHE section.
- Maintenance contact teams.
- Communications support section.
- NSE.
- Emergency medical support center.

Tasks

The tasks below expand upon those identified in appendix F, particularly the Port Survey Guide's.

- Prepare port facilities chart. Include the following locations:
 - ◆ Anchorages.
 - ◆ Piers and berths.
 - ◆ Class V, container, and HAZMAT storage areas.
 - ◆ Portable heads and trash disposal containers.
 - ◆ PP&P work site.
 - ◆ Washdown sites and facilities supporting the backload.
- Conduct underwater survey of piers and berths.
- Make arrangements for pilots, tugs, and other services.
- Satisfy local customs and agricultural requirements applicable to arrival of the MPS.
- Finalize security requirements including liaison with HN.
- Produce ship arrival and departure schedules.
- Develop staging area requirements plan.
- Determine port throughput and warehouse storage capacity.
- Verify and publish port operating hours/HNS schedule.
- Develop billeting and messing requirements plan.
- Determine MHE/transportation support requirements and plans for the following:
 - ◆ Vehicle operator types.
 - ◆ Special licensing requirements.
 - ◆ Special permits required.
 - ◆ Special equipment needs.
 - ◆ Refueling support.
 - ◆ Maintenance and wrecker support.
 - ◆ Traffic control.
- Validate ESQD/special requirements and waivers granted for handling ammunition (offloaded and staged).
- Finalize the following communication requirements:
 - ◆ Radio.
 - ◆ Wire.
 - ◆ Telephone.
 - ◆ Satellite/NIPRNET and SIPRNET.