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Safe Operation of Passenger Terminals

by
Ron Signorino

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Ron began his career in the marine cargo handling industry in 1969, as a member of the International Longshoremen's Association. He then enjoyed a fifteen year career with the Occupational Safety & Health Administration (OSHA) - the last thirteen of which were spent at the Agency's Washington, DC headquarters. There he served as OSHA's principal technical authority relating to the maritime industry and its occupational safety and health considerations. He was the principal author of a number of Federal regulations, including 29 CFR Part 1917 [OSHA's Regulations for Marine Terminals]. For the next ten years Ron was North American director of regulatory affairs for the Maersk organization. Since 2000, Ron Signorino has been president of The Blueoceana Company, Inc., a firm providing legislative and regulatory advocacy services to the transportation industry, worldwide.

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SAFE OPERATION OF MARINE PASSENGER TERMINALS

1. Introduction

- 1.1 General safety considerations and a safe system of work are important issues at marine terminals that involve the embarkation and disembarkation of passengers.
- 1.2 It is all the more important to consider that passengers are usually members of the general public who know nothing of marine terminals, warranting an even greater degree of care in the formulation and administration of safe work systems and access/egress systems at such facilities.
- 1.3 This safety briefing pamphlet considers the basic requirements associated with the safe operation of such facilities. As each facility presents its own unique characteristics of design and operation, care should be exercised in adapting the following basic requirements to any one particular marine passenger terminal.
- 1.4 In all instances, relevant national laws should be complied with.

2. General Requirements

- 2.1 The various areas within the terminal where employees, ship's crew and passengers may be present should be determined.
- 2.2 The perimeter of all passenger marine terminals should be securely fenced and adequately illuminated.
- 2.3 Access by passengers should be limited to appropriate areas physically segregated from all other operations, whenever practicable.
 - 2.3.1 Areas to which access by passengers is prohibited should be clearly marked.
 - 2.3.2 These areas should be monitored and controlled to ensure that passengers remain in the permitted areas.
- 2.4 Terminal management should ensure that aisles, walkways, stairways, corridors, entry/exit portals, etc., provide sufficient active and passive space for the safe and orderly transition of the anticipated number of passengers and personnel.
- 2.5 Terminal employees and ship's crew should only be permitted into areas of the terminal that require their presence in the furtherance of their assigned duties.
 - 2.5.1 Such areas should be clearly marked.
 - 2.5.2 Appropriate personal protective equipment shown as necessary by a risk assessment should be worn.

- 2.6 A safe system of work for the terminal's employees and other persons authorised to be present should be formulated.
- 2.7 A safe system of getting passengers to and from areas of the terminal that are used for the embarkation/disembarkation process should be determined.
- 2.8 Terminal management should ensure that all persons employed on the site are sufficiently trained in the tasks they are expected to perform, and in all related safety and security topics that are required for the safe and effective running of the terminal. Records of such training should be maintained and course content reviewed periodically.
- 2.9 A safe system of traffic flow and parking, where applicable, (including exclusion zones for certain vehicles) should be devised, sign posted, marked and carefully administered.
 - 2.9.1 Vehicle access routes and passenger drop off/pick up areas should be monitored and supervised, to ensure an effective and efficient flow of traffic.
 - 2.9.2 Additional signs and other traffic control measures should be provided as necessary during visits by cruise ships, when unusually large numbers of vehicles may be present for short periods.
 - 2.9.3 Whenever possible, passenger traffic should be segregated from other traffic, including that provisioning the ship.
- 2.10 Terminal management should ensure that all physical operating plant (such as conveyors, loading ramps, elevators, escalators, means of access supporting gear, etc.) is maintained and inspected on an ongoing basis and consistent with the requirements of the relevant national authority. Records of such maintenance and inspection should be kept.
- 2.11 Terminal management should formulate an emergency action/contingency plan that is flexible in relation to all foreseeable adverse circumstances. All employees should be trained in the practical workings of the plan, and should fully understand his/her individual role in making the plan work successfully.
- 2.12 Terminal management should ensure that first aid services are available. All on-site managers and members of security staff should be in the possession of all relevant emergency service telephone numbers.

3. Entering and Leaving Marine Passenger Terminals

- 3.1 Only authorised person and vehicles (including contractors and their vehicles) should be permitted to enter marine passenger terminals. This should be in strict compliance with the terminal's safety rules and procedures of which they shall be made aware.

- 3.2 All persons so permitted must display appropriate identification and should successfully undergo security examinations of their person and their belongings (consistent with the requirements of the relevant national authority).
- 3.3 Terminal staff and security personnel should be on the lookout for unauthorised persons, and should report any untoward events or persons to a central point established for the purpose of ensuring terminal security.
- 3.4 Clear entrance separations (where feasible) should be established for the independent flow of commercial and private vehicular traffic. Vehicular entrance routes should be clearly marked and illuminated.
- 3.5 Pedestrian entrance walkways should be clearly marked and illuminated. When such walkways intersect with any established vehicular route(s), there shall be clear indications to both pedestrians and vehicles of each other's potential presence, and of the necessity to take care.

4. Internal Vehicular Roadways and Pedestrian Walkways

- 4.1 Traffic management plans should be established within all marine passenger terminals. They should, wherever possible, conform to arrangements required on the public roads.
- 4.2 A maximum speed limit for all vehicles should be established, conspicuously posted at reasonable intervals and vigorously enforced.
- 4.3 Pedestrian walkway signs and markings should, wherever possible, be pictorial and reflect international standards and should cover all relevant information necessary to facilitate safe pedestrian transit, both inward and outward.
- 4.4 Internal vehicular roadways and pedestrian walkways should be level, paved and free of rubbish, potholes or any other unnecessary obstructions.
- 4.5 All vehicular roadways and pedestrian walkways should be adequately illuminated¹ for their full length.

5. Vehicles and Equipment Drivers

- 5.1 No person should be allowed to operate a power-operated vehicle or any other materials handling device (including any lifting appliance) unless competent and authorised by his/her employer to do so. Such authorisation should only be given to persons who are at least 18 years of age and who have been suitably trained

¹ The levels of illumination should conform to national laws based on international standards.

and tested on the type of vehicle or equipment they are to operate². Such authorisation might include a driver/operator licensing system or certification process individually or jointly administered by the employer, a port association, a labor organisation.

- 5.2 All authorised drivers/operators should be medically fit for their tasks. Such fitness should be monitored at regular intervals.
- 5.3 Authorised drivers/operators should also be monitored for continued competence. Re-assessment and retraining should be carried out as appropriate.
- 5.4 Unauthorised personnel should be strictly prohibited from riding on or in any vehicle, equipment or plant. Where it is necessary to carry authorised passengers, such as an instructor, a proper seat or safe position should be provided.
- 5.5 No person should be permitted to be within the terminal under the influence of alcohol or drugs. Alcohol and drug policies should take into account that drugs used as legitimately prescribed medication may also impair judgment and ability.

6. Embarkation/Disembarkation of Passengers

- 6.1 Terminal management should agree with the ship's officers the safe means of passengers embarking/disembarking from the ship.
 - 6.1.1 Where this involves ship's equipment, the ship is responsible for providing a safe access/egress that is of good construction, safely deployed, properly maintained and adequate for the purpose
 - 6.1.2 Where this involves shoreside equipment, the terminal is responsible for providing a safe access/egress that is of good construction, safely deployed, properly maintained and adequate for the purpose
 - 6.1.2.1 Linkspan systems should be utilised and maintained in accordance with the manufacturer's recommendations.
 - 6.1.2.2 Linkspan systems should be inspected before each use by a designated person.
- 6.2 Terminal management should, in conjunction with the ship's officers, agree upon and carry out a coordinated system of orderly embarkation/disembarkation, which permits instant communication and effective teamwork between the parties and which ensures a controlled ebb and flow of passengers.

7. Baggage Handling

- 7.1 Baggage Handlers and Porters should be trained in the proper methods of lifting and placing heavy objects.

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² Suitably supervised trainees excepted.

- 7.2 Hand trucks should be inspected before the start of each work shift, with the goal of ensuring that the wheels are fully round, smooth and that they move freely. Equally, any hand truck load extensions should be firmly secured to the main load plate and able to accept the loads imposed upon them.
- 7.3 Porters should never leave hand trucks or baggage baskets unattended.
- 7.4 Porters should never release their hold on a hand truck or baggage basket until it comes to a complete stop.
- 7.5 Porters should be trained in appropriate means of interacting with the public, and to be mindful of the large number (and haste) of many vehicles entering and exiting passenger drop-off and pick up areas.
- 7.6 Baggage Bin Use
 - 7.6.1 When placing bags into baggage bins, baggage handlers should always place the baggage through the door end of the bin.
 - 7.6.2 Baggage bins should not be overloaded, and should not be filled to a level above their top rail.
 - 7.6.3 When conveying baggage bins to side ports, the lift truck's forks (tynes) should fit completely and securely into the bin's underside channels.
 - 7.6.4 As baggage bins are lifted and placed through side ports, forklift operators should be under the guidance of and accepting signals from authorized personnel aboard and should never begin the process of disengaging from a bin until such time as clear instructions are given to do so.
 - 7.6.5 Forklift operators delivering baggage bins to side ports should allow enough room between themselves and other forklifts, so as to better ensure smooth delivery and minimize the likelihood of collision. All forklift trucks so used should incorporate a reverse alerter (back up) alarm, a flashing (or strobe) light, an operator restraint system and shall trail with the load whenever forward vision is obstructed.
- 7.7 Baggage Handling With Conveyors
 - 7.7.1 In the event that baggage loading/unloading is carried out by powered conveyor(s), care should be taken to ensure that the conveyor lengths are securely and accurately positioned and supported.
 - 7.7.2 When powered conveyors are used, terminal management should ensure that an appropriate number of strategically placed emergency stop devices are available for instant use.
 - 7.7.3 In the case of a conveyor jam or fault, and in other cases wherein maintenance on powered conveyor systems becomes necessary, appropriate procedures for the switch off of power should be instituted and adhered to.

- 7.7.4 Before power is restored to any such powered conveyor system, all employees in the vicinity of such system shall be alerted as to the imminent restoration of power.

8. Handling of Ship's Stores

- 8.1 The means of access to any vessel requiring boarding for the purpose of loading ship's stores should be of adequate design and able to safely sustain the loads imposed upon it.
- 8.2 Lifting appliances and associated gear utilised to load ship's stores, whether vessel or shore-based, should be tested and certificated in the manner prescribed by the relevant national authority.
- 8.3 All loading of ship's stores aboard a vessel should be coordinated by and under the direction of a ship's officer, who should oversee the loading process and all shipboard activities that comprise it.
- 8.4 When unloading ship's stores from commercial motor vehicles, lifting or slinging gear used to engage pallets should be fitted with chains and not rope. Care should be taken in preventing any part of the vehicle or the stores, themselves, from fouling the chain's path.
- 8.5 Forklift trucks used to move ship's stores out of commercial motor vehicles and to the vessel, should employ a reverse alerter (backup) alarm, a revolving (or strobe) light and an operator restraint system.

9. Fire and Other Emergency Measures

- 9.1 All emergency access and exit points should be kept free from obstruction and should be properly maintained at all times.
- 9.2 All lifesaving and fire fighting equipment should be kept in good order and periodically inspected and their inspection recorded. Any defect noted should be reported and appropriate action taken. Similarly, any fire extinguisher discharged should be immediately recharged.
- 9.3 Firefighting equipment (including fire extinguishers) should have their locations clearly marked and illuminated.
- 9.4 In the event of a shipboard fire, terminal management should be in a position to direct firefighting personal to the appropriate shoreside water connections, and to axe(s) that may (if necessary; in an extreme event where normal unmooring operations cannot be undertaken) be used to sever mooring lines.
- 9.5 A fire watch shall be maintained in the event that any hotwork must be carried out upon the terminal or upon any vessel berthed at the terminal.
- 9.6 A public address system should be present, allowing instantaneous communication with all areas of the terminal.

- 9.7 Terminal management should ensure that at least one emergency (Stokes) basket (with accompanying lifting bridle), one life ring (with 90 feet of line) and one blanket is available for use and placed near the means of access stevedoring personnel use in carrying out baggage and ship's stores-related services.

10. Ionizing Radiation

- 10.1 Stevedoring personnel, whether porters, baggage handlers, ship's stores loaders, superintendents, security staff, etc., shall be trained in and mindful of the potential dangers presented by exposure to sources of ionizing radiation which may be present as part of any non-invasive security scanning systems used to safeguard vessels, passengers and the terminal from terrorist threats.
- 10.2 Terminal management should establish restricted and exclusionary zones at safe distances from the sources of such radiation, and shall limit employee exposure to the lowest possible level through such means.