

FSGA/HAAF GARRISON  
FT. STEWART, GA 31314

# GARRISON SAFETY SOP – ANNEX R

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## MATERIAL HANDLING EQUIPMENT (MHE)

AKA: Powered Industrial Trucks (PIT) and Forklifts



FSGA/HAAF Safety Program SOP  
16 October 2024

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## **1. Purpose:**

This Annex to the FSGA/HAAF Garrison Safety and Occupational Health (SOH) SOP exists to prescribe policies, responsibilities, and safety standards to personnel working at or for Fort Stewart and Hunter Army Airfield Garrison (FSGA/HAAF) in the safe operation and use of material handling equipment (MHE) to include powered industrial trucks (PIT) and forklifts, and to establish requirements for proper removal of attached devices from MHE when required by specific operations.

## **2. Scope**

This Annex to the Garrison SOH SOP applies to all military and civilian personnel assigned to the FSGA/HAAF Garrison. It is intended to provide additional information so all levels of leadership, SMS, and civilian workforce can properly implement the Garrison SOH Program.

## **3. References**

29 CFR 1910.178 – Powered Industrial Trucks

AR 25-400-2, The Army Records Information Management System (ARIMS)

AR 385-10, The Army Safety Program

AR 600-55, The Army Driver and Operator Standardization Program

DA Pam 25-403 – Guide to Recordkeeping in the Army

DA Pam 385-10, Army Safety Program

## **4. Records Management:**

Records created throughout the processes prescribed by this Annex will be identified, maintained, and disposed of according to AR 25-400-2 (The Army Records Information Management System (ARIMS) and DA Pam 25-403 (Guide to Recordkeeping in the Army). The primary means of recordkeeping for the Garrison Safety Office (GSO) will be the Army Safety Management Information System (ASMIS) located at <https://mishap.safety.army.mil> . Record titles and descriptions are available on the ARIMS website <https://www.arims.army.mil>

## **5. Responsibilities**

### **Directors and Managers:**

- Directors are responsible for MHE assigned to or used in their operations.
- Directorates are responsible for inspecting and maintaining MHE IAW applicable technical manuals and ensuring lifting devices on MHE are load tested IAW TB 43-0142 and ANSI B56.1 and this regulation.
- The GSO will be contacted to determine if the operation can be safely performed without the overhead guard or the load backrest extension.

### **Operating Supervisors will:**

- Ensure equipment operators are familiar with and understand all pertinent instructions and regulations pertaining to the operation of MHE.
- Ensure MHE is maintained, operated, and used in a safe and efficient manner.

- Ensure seat belts are worn at all times when MHE is in operation.
- Report defects and maintenance requirements of MHE to fleet manager.
- Ensure each operator is assigned to a specific machine, as much as is practical.
- Ensure employee receives refresher training and evaluation of effectiveness of training when:
  - The operator has been observed to operate the vehicle in an unsafe manner.
  - The operator has been involved in an accident or near-miss incident.
  - The operator has received an evaluation that reveals that the operator is not operating the truck safely.
  - The operator is assigned to drive a different type of MHE.
  - A condition in the workplace changes in a manner that could affect safe operation.
- An evaluation of each MHE operator's performance shall be conducted at least once every three years.
- Avoidance of duplicative training. If an operator has previously received training in a topic specified in 29 CFR 1910.178(l)(3), and such training is appropriate to the MHE and working conditions encountered, additional training in that topic is not required if the operator has been evaluated and found competent to operate the MHE safely.
- Ensure assigned MHE is not operated by unauthorized personnel.
- Providing an instructor on operator-trainee problems regarding the operation of assigned MHE.
- Ensuring operators do not remove, or permit removal of any attached device from MHE under their control. No safety devices will be removed prior to concurrence and written approval by the Fleet Manager/Dispatcher and the GSO.
- Ensuring only qualified personnel remove and/or replace MHE devices.
- Ensuring fleet management/dispatch maintains a log of all MHE equipment by type, number, location, and devices to be removed. When notified, the operation is complete, necessary action will be taken to have personnel replace the device(s) onto the MHE equipment.
- Ensuring fleet management/dispatch notifies the GSO of all requests for removal of attached devices.

**MHE Operators are responsible for:**

- Operating only the equipment for which they are certified.
- Operating assigned MHE IAW training provided, OSHA and Army regulations.
- Wearing seat belts at all times while the MHE is in operation.

**6. Policy**

- Only authorized personnel will be permitted to operate MHE, PIT, and/or forklifts. NOTE: MHE will be the standardized abbreviation used throughout this Annex. Trainee operators will only operate equipment under the direct supervision of persons who have the knowledge, training, and experience to train operators and evaluate their competence and only where such operation does not endanger the trainee or other employees.
- Accidents involving MHE will be reported IAW DA Pam 385-40, Army Accident Investigations and Reporting.
- Accident prevention principles and techniques established in AR 385-10, DA Pam 385-10 and this regulation will be used in the planning of all MHE operations.
- MHE will be equipped with overhead guards (29 CFR 1910.178(m)(9). In order to comply with 29 CFR 1910.178(e)(2) and 29 CFR 1910.178(m)(10), MHE must have an approved vertical load backrest extension when the load being moved presents a hazard. Stacking of loads on the forklift truck tines should be controlled so that no more than one-third of the height of the top tier extends above the load backrest.
- When MHE operating rules pertaining to load backrest extension cannot be followed (e.g. curved roof igloos), permission and written approval must be obtained from the Garrison Safety Office (GSO) stipulating where and under what conditions the forklift truck may be used.
- MHE being used without the vertical load backrest extension must have loads palletized and banded to prevent any part of the load from falling rearward.
- Modifications and additions which affect capacity and safe operation shall not be performed without manufacturer's prior written approval. Capacity, operation, and maintenance instruction plates, tags, or decals shall be changed accordingly.

## **7. Traffic Rules**

- Observe traffic rules set forth in FSGA/HAAF Regulations.
- All traffic regulations shall be observed, including FSGA/HAAF speed limits.
- A safe distance shall be maintained approximately three MHE lengths from the MHE ahead, and the MHE shall be kept under control at all times.
- Not exceed two miles an hour inside buildings.
- Under all travel conditions the MHE shall be operated at a speed that will permit it to be brought to a stop in a safe manner.
- The driver shall be required to slow down for wet and slippery floors.
- While negotiating turns, speed shall be reduced to a safe level by means of turning the hand steering wheel in a smooth, sweeping motion. Except when maneuvering at a very low speed, the hand steering wheel shall be turned at a moderate, even rate.
- Stunt driving and horseplay shall not be permitted.
- Stop equipment at building doorways prior to entering or exiting.

- Slow down and sound the horn at cross aisles and other locations where vision is obstructed. If the load being carried obstructs forward view, the driver shall be required to travel with the load trailing.
- The driver shall be required to look in the direction of and keep a clear view of the path of travel.
- Do not park equipment within 8 feet of railroad tracks or in prohibited parking areas. When parking equipment, ensure the ignition is off and hand brake is set.
- Do not operate equipment when mechanical defects are known to exist. Under no circumstances will the equipment continue to be used. The equipment will be red tagged and affected personnel will be notified.

## **8. General Operating Rules**

- Assigned equipment is utilized only for the work intended and the equipment must be of the correct rated load capacity for the weight of the material being handled.
- Repairs on equipment are only to be performed by authorized fleet management personnel.
- Equipment attachments that are not part of the original equipment may not be used unless prior written authorization is received by fleet management.
- Trailers are properly blocked prior to loading or unloading.
- Operators must be aware the maximum lifting capacity of the forklift is based on a 24-inch load center.
- Preventive maintenance will be performed daily and defects noted on trip tickets. If at any time a MHE is found to be in need of repair, defective, or in any way unsafe, it shall be immediately taken out of service until it has been restored to safe operating condition.
- Ensure additional counterweights are not used to increase lifting capacity of the equipment.
- Bumping or pushing stacks with the MHE for the purpose of straightening or moving the stack is prohibited.
- Ensure personnel are a safe distance from suspended loads. No person shall be allowed to stand or pass under the elevated portion of any MHE, whether loaded or empty.
- Employees are prohibited from placing arms or legs between the uprights of the mast or outside the running lines of the MHE.
- MHE shall not be driven up to anyone standing in front of a bench or other fixed object.
- Ensure riders, lunch boxes, newspapers, or other extraneous items are not permitted on the equipment.
- Ensure pallets of material are not lifted when more than one-third of the top extends above the load backrest.
- Only stable or safely arranged loads shall be handled. Caution shall be exercised when handling off-center loads which cannot be centered.
- If multiple skids or pallets are to be lifted together, the items must be secured together to ensure the integrity of the lift.

- Using MHE for the purpose of elevating personnel is prohibited unless an approved lifting cage or other similar approved device is authorized for use by Safety, fleet management, and the supervisor.
- When ascending or descending grades in excess of 10 percent, loaded MHE shall be driven with the load upgrade.
- Unloaded MHE will travel forward when going down ramps with blades up and tilted back and raised as far as necessary to safely clear the road surface.
- MHE will travel with the forks elevated as far as necessary to safely clear the road surface (except when traversing rough terrain or crossing railroad tracks).
- Running over loose objects on the roadway surface shall be avoided.
- A safe distance shall be maintained from the edge of ramps or platforms while on any elevated dock, or platform or freight car. MHE shall not be used for opening or closing freight doors.
- When the MHE is parked, the fork tips will be fully lowered to rest upon the floor or ground.
- When MHE is left unattended, load engaging means shall be fully lowered, controls shall be neutralized, power shall be shut off, and brakes set. Wheels shall be blocked if the MHE is parked on an incline.
- MHE is unattended when the operator is 25 ft. or more away from the vehicle which remains in his view, or whenever the operator leaves the vehicle, and it is not in his view.

## **9. Refueling**

### **Liquid fuels (gasoline or diesel):**

- MHE equipment using liquid fuels will be refueled only at locations designated for that purpose and from approved pumps. Refueling outdoors is preferable to refueling indoors.
- Engines will be stopped, and operator will exit the vehicle prior to refueling.
- Emergency fueling will be from approved safety cans.
- Smoking or flame/spark producing devices are prohibited within 50 feet of refueling operations.
- Spillage or overfilling of fuel tanks will be avoided.
- No MHE shall be operated with a leak in the fuel system until the leak has been corrected.

### **Liquid Petroleum (LP) Gas Fuel:**

- Filling LP gas containers will be performed at locations designed for that purpose.
- LP gas containers will not be dropped, thrown, rolled, or dragged.
- LP gas containers will not be overfilled.
- Engines will be stopped, and operator will exit the vehicle prior to refueling.
- Only trained and designated personnel will refill LP gas containers.
- A soap solution will be used to check for leaks.

- Equipment equipped with permanently mounted LP gas containers will be refueled outdoors. Exchanging a removable LP gas container is preferably done outdoors.
- Smoking or flame/spark producing devices are prohibited in refilling or exchange areas.
- The service valve of the fuel container will be closed when vehicles are parked overnight or stored indoors for long periods of time.

## **10. Tractors**

- Excessive loads that could cause wheel slippage and loss of traction are not permitted.
- No more than two trailers are utilized in a trailer train.
- Brakes shall be set, and wheel blocks shall be in place to prevent movement of trucks, trailers, or railroad cars while loading or unloading. Fixed jacks may be necessary to support a semitrailer during loading or unloading when the trailer is not coupled to a tractor.
- The flooring of trucks, trailers, and railroad cars shall be checked for breaks and weakness before they are driven onto.
- Check tow cables and hooks daily to ensure they are in good condition and report unsafe cables to his supervisor for corrective action.
- Regulate and control speed when towing another vehicle to ensure the tow cable is kept tight.
- Limit the height of the load on the first trailer behind the tractor to ensure the rear view is not obstructed.
- Ensure the following rules are observed when pulling a trailer train:
  - Permit no one to ride on the trailer train.
  - Inspect all loads before moving the trailer.
  - Inspect trailer train to determine trailers are firmly coupled together.
  - Operate tractor to prevent trailers from weaving.
  - Turn corners slowly keeping the load and clearance under visual observation while making turn.

## **11. Transporting Ammo and Explosives**

- Operating supervisors will ensure bulk explosives and fused ammunition, including bombs, are enclosed in approved shipping containers prior to movement by MHE.
- MHE operators will handle explosives IAW the following precautions:
  - Containers of explosives will not be carried directly on the forks without skids or pallets unless containers are specifically designed and approved for this type of movement.
  - Loaded, unfused bombs may be carried directly on the forks.
  - Boxes of finished ammunition, if length is sufficient to be firmly supported on both forks, may be carried directly on the forks.



- Inspect loads of explosives prior to movement to ensure load is stable. Unstable loads will not be moved.

## **12. Equipment Specifications**

- Ensure MHE meets the following requirements and specifications:
  - Gasoline powered MHE is equipped with tight fitting, properly vented gas fill caps. A flame arrester will be installed in the fill pipe.
  - Gasoline and diesel-powered equipment will have flame protective devices (fine wire mesh screening), over exhaust pipe ends when operating off road in combustible vegetation.
  - MHE will be equipped with a steel overhead safety guard and a load backrest extension. Car loader lifts will be equipped with a positive mast stop.
  - Equipment will be painted IAW approved specifications and load capacity will be indicated in a conspicuous place.
- Ensure MHE used in explosive operations comply with equipment specifications listed in applicable regulations and are load tested annually IAW TB 43-0142.
- Ensure only spark enclosed equipment is operated where flammable liquids are stored. Electrical switches and motors will be explosion or vapor proof.
- Determine the equipment is free of unauthorized devices or attachments prior to operating.

## **13. Ventilation**

- Ensure sufficient ventilation is utilized when diesel, gasoline, or LP powered MHE is used to prevent carbon monoxide levels from exceeding 50 parts per million per cubic meter as an 8-hour time weighted average (TWA) concentration.
- Preclude the possibility of propane vapors creating an explosive environment.
- Notify the GSO and Occupational Health Clinic when it is suspected carbon monoxide concentration exceeds the allowable limits or natural ventilation is insufficient where diesel, gasoline, or LP driven equipment is used.
- Only electric MHE are authorized for use in environmentally controlled or closed storage areas.

## **14. Bridge Plates**

- Duckboards or bridge plates shall be properly secured before they are driven over. Dock board or bridge plates shall be driven over carefully and slowly, and their rated capacity never exceeded.
- Ensure plates have a rough or checkered surface to reduce skidding or slipping.
- Do Not operate equipment on improvised bridge plates.
- Lift bridge plates with MHE only. Bridge plates will not be manually lifted. Notify supervisor immediately if the bridge plate is not equipped with chain hooks to enable machine lifting.

## **Appendix A – Abbreviations**

AR	Army Regulation
ARIMS	Army Records Information Management System
ASMIS	Army Safety Management Information System
CFR	Code of Federal Regulations
CoC	Chain of Command
DA Pam	Department of the Army Pamphlet
DoDI	Department of Defense Instruction
FSGA	Fort Stewart Garrison
GC	Garrison Commander
GSO	Garrison Safety Office
HAAF	Hunter Army Airfield
MHE	Material Handling Equipment
OSHA	Occupational Safety and Health Administration
PIT	Powered Industrial Truck
RM	Risk Management
SM	Service Member
SOH	Safety and Occupational Health
SOHMS	Safety and Occupational Health Management Systems
SOP	Standard Operating Procedure
USO	Unit Safety Officer

## **APPENDIX B – ANNUAL GSO REVIEWS**

<b>DATE</b>	<b>REVIEWED BY</b>	<b>CHANGES Y/N</b>	<b>SUMMARY OF CHANGES</b>