MIFACE INVESTIGATION REPORT: #07MI073

SUBJECT: Journeyman Lineman Run Over by Off-Road Vehicle While Directing the Vehicle onto a Transport Trailer

Summary

On June 26, 2007, a 34-year-old male journeyman lineman was killed when a Go-Tract Model GT300 he was directing onto a trailer struck him. After replacing the cross-arms and three insulators on an energized 46kV line, the 4-person crew, all of whom were journeyman lineman, were loading the Go-Tract onto the trailer. Coworker #1, the lineman in charge, was operating the Go-Tract. Coworkers #2 and #3 were standing on the ground directing the operator. The decedent was standing on the trailer directing Coworker #1. Coworker #1 was attempting to "inch" the Go-Tract forward for a second time by using the clutch pedal so it could be secured by chains located at the front of the trailer. The decedent may have tripped and fell onto the tongue of the trailer. The Go-Tract did not stop when the operator engaged the clutch and continued forward, striking the decedent and coming to rest against the rear of a utility truck (Figure 1). A coworker activated the firm's emergency system, and emergency response was called. The decedent was declared dead at the scene.

Figure 1. Final position of Go-Tract against truck

RECOMMENDATIONS

- Employers should conduct a job safety analysis and develop safe work procedures based upon hazards found.
- Employers should review older equipment safety features to determine if safety upgrades could be installed.
- Employers should determine if an hours-of-service maintenance schedule can be established that would include the complete teardown of the power unit to detect hidden wear.
- Employers should develop a communication plan that identifies specific locations so emergency responders can receive correct directions to a site.

- Employers should ensure that a responsible person such as a supervisor/manager periodically monitors workers who are assigned to remote locations.
- Employers should periodically review the health and safety materials in their training library to determine if the materials reflect "best practices" and compliance with company policies and regulatory requirements.

INTRODUCTION

On June 26, 2007, a 34-year-old male journeyman lineman was killed when he was struck by a Go-Tract Model GT300 he was directing onto a trailer. On the same day as the fatal incident, MIFACE investigators were informed by the Michigan Occupational Safety and Health Administration (MIOSHA) personnel, who had received a report on their 24-hour-a-day hotline that this work-related fatal injury had occurred. On October 29, 2007, MIFACE interviewed a Human Resources employee at one of the company's service centers. During the course of writing this report, the police report and pictures, death certificate, medical examiner report, and the MIOSHA file and citations were reviewed. Pictures used in Figures 1 and 3 are courtesy of the responding police department. The employer supplied the pictures used in Figures 2 and 4. MIFACE removed identifying information from pictures supplied by the police and the employer.

The company for whom the decedent worked provides electric and/or natural gas service. Collectively in all of the company offices, the firm employed over 3000 individuals. The office to which the decedent was assigned employed 340 individuals. The decedent was a journeyman lineman, and had worked for this energy company for approximately one year. He had worked for another energy company prior to this employment. The decedent was an hourly, full time employee who worked 10-hour days. He began work at 7:00 a.m., and his shift would have been completed at 5:50 p.m. He was a member of the union.

The decedent wore the appropriate personal protective equipment when he performed the utility line repair. He was not wearing a reflective vest as required by company policy while working near the roadway. The company had a written safety and health program. The safety director reported to the corporate Human Resources Vice President. The company had a joint health and safety committee, which met on a monthly basis. Prior to each job, the lineman in charge conducted a pre-job meeting with the crew. The company held weekly tailgate talks, and employees received additional safety and health training in a classroom setting.

Supervisors were responsible for the crews in their departments. Supervisors were responsible for holding and documenting monthly safety meetings. Corporate Health and Safety developed and provided the safety topics to the supervisors. Topics and the length of training varied depending on the topic(s) presented. In the field, any employee could stop the job if there was an unsafe condition.

The employer shared with the MIFACE investigator the Go-Tract pictures, the Safe Loading and Unloading protocol they developed in response to this incident (Appendix A), the company Investigation and Analysis Report, and the Go-Tract Operating and Maintenance Instruction Manual.

At the conclusion of its investigation, MIOSHA General Industry Safety and Health Division issued the following Serious citation to the employer citing ACT 154 PA of 1974, SEC 11(a): The employer did not furnish to each employee employment and a place of employment which is free from hazards that are causing or are likely to cause death or serious physical harm to the employee, in that the employer has not developed written procedures and has not conducted training for employees who load or unload the Go-Tract on/off trailers and general operations of the Go-Tract. Among other methods, one feasible and acceptable abatement method to correct this hazard is to have a written procedure and train employees who load and unload mobile equipment onto or off trailers.

Company Mitigation

The company assembled an investigation team consisting of both union and management representatives from multiple departments. The investigation team found that a combination of the failure of the clutch hydraulic system to completely disengage, the lack of a policy that prevented employees from standing on trailer decks while a unit is in motion, and the response of the Go-Tract operator who became very concerned when he lost sight of his coworker were the contributing factors leading to this fatal incident. Based on the findings, the investigation team made the following recommendations with timelines for completion to departmental staff. A communication plan was developed to inform employees.

To address the failure of the clutch hydraulic system:

- Immediately retire the Go-Tract 300 unit involved in the incident.
- Install “Kill Switch” on all Go-Tract units.
- Evaluate applicability and desirability of installing a failsafe system (e.g. “Kill Switch”) in heavy equipment where appropriate.
- Bulletin to immediately stop utilization of manual transmission Go-Tract units until an inspection of its clutch components is completed.
- Formal evaluation of the preventive maintenance documents to ensure appropriate systems is addressed.
- Identify optional units to replace current Go-Tract personnel and material units to provide access to remote locations.

To address the lack of formal policy or procedures on the safe loading and positioning of heavy equipment:

- Develop Safety Alert directing employees to keep clear of heavy equipment operation and to stay off of equipment trailers that are being loaded.

- Develop a policy for safely loading and positioning heavy equipment. Managers to assure procedures are developed and implemented.
- Permanent removal of the existing Go-Tract lesson plan and video in the employer's training library because the video showed an employee standing on the trailer deck during loading and positioning of the unit.
- Investigate permanently affixed visual indicators that aid crews when loading and aligning vehicles on trailers.

To address Go-Tract operator response:

- Abnormal Operating Condition (available response time and distance plus mechanical failure) was identified. After Kill Switch is installed, train employees in the proper use of the "Kill Switch".

INVESTIGATION

The Go-Tract Model GT300 (hereafter referred to as the Go-Tract) was bought new in 1983 (in service for 24 years). It was used as an off road vehicle to transport crew, tools and materials to a job site when warranted by wet terrain.

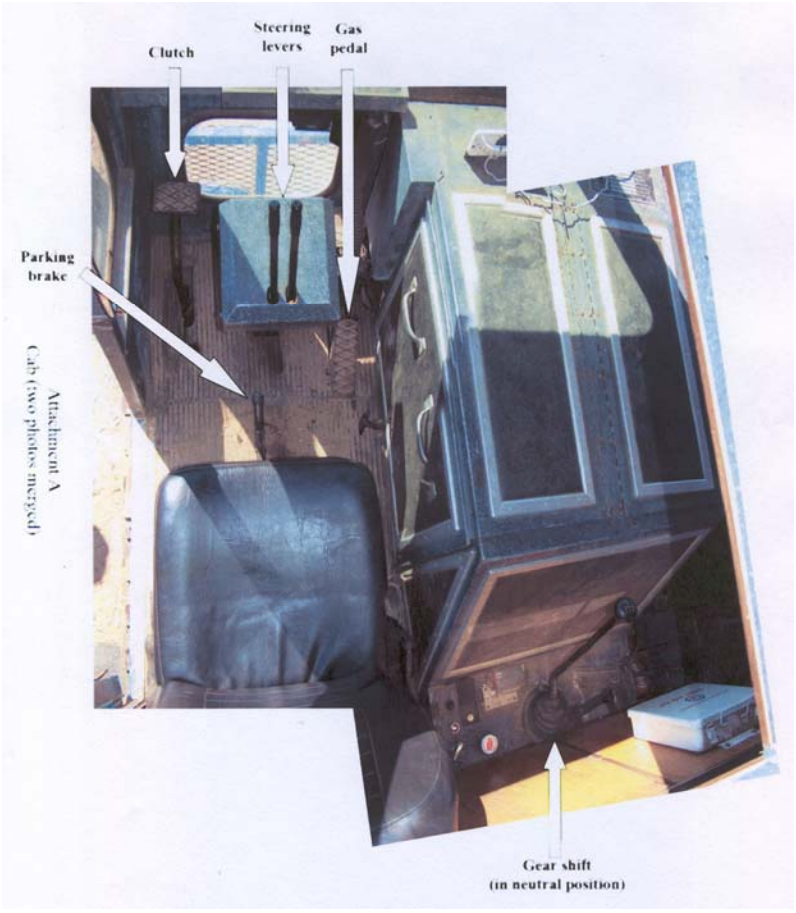

Figure 2. Picture of Go-Tract operator compartment

The Go-Tract operating controls are identified in Figure 2. A key was used to start and shut off the engine. There were two foot pedals; left for the clutch and right for the gas. A parking brake lever was located under the operator seat. Two hand levers were used to steer the machine. The gear selector lever was located to the far right and slightly behind the driver's position. Because the lever was not easily accessible, the driver had to turn his head and place and reach slightly behind to place his hand directly on the lever to move it. The position of the operator in relation to the

gearshift lever made it awkward to reach the lever when the unit was in first gear. The clutch was the primary means of controlling forward and reverse motion (working with the weight of the vehicle) as well as being used for stopping the vehicle (but not as a vehicle brake).

The Go-Tract had all preventative maintenance and demand maintenance performed. In December of 2006, the Go-Tract underwent clutch repair by a contracted heavy equipment repair firm. There were no outstanding service or repair requests for the vehicle. All crewmembers had experience operating the Go-Tract. Operator training was conducted on-the-job with an experienced operator in the back seat.

The four-person crew was assigned to replace the cross-arms and three insulators on an energized 46kV line on a figure 12 structure, which was located in a wet swampy area approximately 250 feet from the road. The crew consisted of one Line Worker in Charge (Coworker #1), and three journeyman line workers (Coworkers #2, #3 and the decedent). The crew met in the morning at a nearby substation at 7:00 a.m. Coworkers #2 and #3 drove the truck with the Go-Tract secured on the trailer by chains bolted to the front and back of the trailer. A ratchet system secured the tension for the chains. The decedent drove a bucket truck with a live line tool trailer attached to the job site. Coworker #1 drove the company pick up truck. The decedent and Coworker #1 arrived first and placed required safety cones and signs and waited for the truck/trailer to arrive.

After arriving at the jobsite, Coworkers #2 and #3 unloaded the Go-Tract from a 1993 Butler trailer connected to a 2000 International utility truck. The unloading process consisted of first releasing the rear chain tension via the binders and then unhooking the chains once the tension was released. The Go-Tract was inched forward using the clutch to reduce tension on the front binders. The front chains would then be unhooked and the unit driven off of the trailer. As Coworker #3 spotted, Coworker #2 drove the Go-Tract off the trailer.

Coworker #2 drove the Go-Tract to the passenger side of the bucket truck. Tools and equipment needed to make the repairs were loaded onto the vehicle. Coworker #2 drove the vehicle to the utility pole with Coworker #3 in the passenger seat, and Coworker #1 and the decedent in the back. When the crew arrived at the utility pole, Coworker #1 completed a verbal pre-job briefing for the work to be performed.

While Coworker #1 worked from the ground, the decedent and his two coworkers completed the structural/line line repairs. All work was completed and after a short break, Coworker #1 drove the Go-Tract from the job site to the passenger side of the live line trailer. The decedent was in the passenger seat and Coworker #2 was in the back. Coworker #3 walked back to the truck. Tools and equipment were unloaded and stored in the live line trailer. Coworker #1 then proceeded to load the Go-Tract on the Butler trailer.

The decedent and his two coworkers positioned themselves on the ground in front of the trailer to guide Coworker #1 as he proceeded up the trailer ramp in first gear to the trailer

deck. Once the Go-Tract was on the trailer deck, the decedent and Coworker #2 signaled by hand for Coworker #1 to stop. Coworker #1 disengaged the clutch (clutch pedal pressed to the floor) and the Go-Tract stopped. Coworker #2 stretched the driver's side chain to see if it would reach; it did not. Coworker #2 stayed where he was, and Coworker #3, with his back to the Go-Tract and trailer, crossed the tongue of the trailer to the passenger side to help secure the Go-Tract with the passenger-side chains once it was properly positioned.

As Coworker #2 moved to the passenger side, the decedent stepped onto the trailer bed and knelt down in an attempt to hook the chain from the front of the trailer to the Go-Tract. He could not hook the chain to the Go-Tract, so he stood up and signaled by hand for Coworker #1 to inch it forward, so Coworker #1 engaged the clutch by allowing the clutch pedal to raise (eased out). Upon the signal, Coworker #1 stopped the vehicle by disengaging the clutch. The decedent knelt down to hook up the front chain, but the chain again did not reach the vehicle. The decedent stood up and motioned for Coworker #1to again inch forward to be closer to the front of the trailer. Coworker #1 eased out the clutch to inch forward.

At this point, it appears that the decedent stepped back, and while looking to the back of the truck, tripped and fell onto the tongue of the trailer. Coworker #1 tried to stop the vehicle. While keeping the clutch fully depressed, Coworker #1 attempted to knock the gear lever from first gear into neutral with his right hand/arm. The Go-Tract continued to move forward, and then traveled over the decedent, who was laying on his back on the trailer tongue (Figure 3). The machine came to rest on the trailer tongue against the rear of the utility truck (Figures 1 and 4).

Figure 3. Position and location of decedent at time of incident.

As the fatal incident occurred, Coworker #2 yelled for Coworker #1 to stop the vehicle. When the Go-Tract stopped, Coworker #1 jumped out and told Coworker #2, who was already en route to the truck, to hit the emergency stop button in the truck for dispatch. The emergency stop button permitted workers on site to bypass normal radio traffic to connect directly to the company's dispatch system. Dispatch was informed by Coworker #2 about the emergency and that an ambulance was required. Dispatch called for emergency response. While awaiting the arrival of emergency response, Coworker #2

started the utility truck to determine if they could use the truck boom to pick up the Go-Tract and remove it from on top of the decedent. The boom was unable to rotate to the rear because the Go-Tract was in its rotational movement area. The crew then waited for the arrival of the Fire Department and Sheriff.

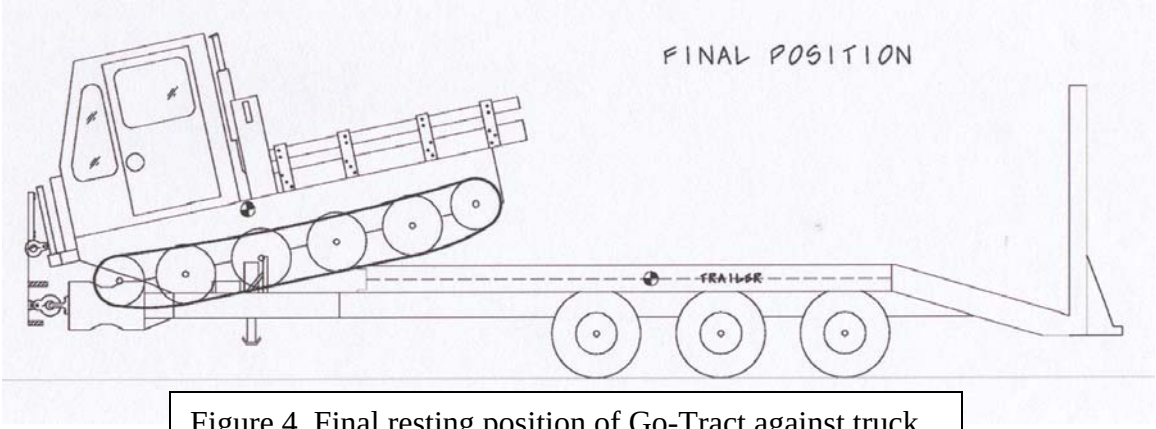

Figure 4. Final resting position of Go-Tract against truck

When emergency response, the police, and company personnel arrived, the Go-Tract was in first gear. The parking brake was not set as required by the operating manual, most likely due to the emergency situation. All remedial actions had to wait on the medical examiner's arrival to pronounce the decedent dead at the scene. A wrecker was contacted and arrived to lift the Go-Tract from the decedent and trailer.

The employer conducted testing on the Go-Tract after the incident and found that the engine and throttle cable operated in proper working order. When the clutch was used, it initially worked; i.e., forward motion when easing out, stopping when pushing in. After about 15 minutes of using the clutch to inch forward and stop, there was a malfunction. Instead of stopping when the clutch was pushed in, the Go-Tract moved forward. The Go-Tract was taken to a local equipment dealer for diagnostic tests to determine why it could move with the clutch engaged. Diagnostics tests conducted by a certified mechanic showed that the clutch master cylinder intermittently allowed partial engagement of the transmission due to cylinder pitting and rust debris within the cylinder. This is an internal part that cannot be visually inspected unless taken apart. The master cylinder was not taken apart on a preventative maintenance schedule unless an employee noted and documented that the clutch was not working properly.

CAUSE OF DEATH

The cause of death as stated on the death certificate was craniocerebral trauma. The toxicology report was negative for alcohol and screened drugs.

RECOMMENDATIONS/DISCUSSION

- Employers should conduct a job safety analysis and develop safe work procedures based upon hazards found.

Although the vehicle had been in service for many years, at the time of the incident the firm did not have a written policy for loading and unloading the Go-Tract. The Go-Tract Operator's manual did not have a section on loading/unloading from a trailer. The employees were apparently unaware of the dangers of loading the Go-Tract while standing on the trailer. The MIOSHA file indicated that employees had developed an unwritten loading procedure. The file indicated that it was common for one person to stand on the front of the trailer to direct the driver and the two coworkers, one standing on each side of the trailer on the ground. The person on the trailer hooked up the chains, then the driver of the Go-Tract would back up after the chains were hooked so they would tighten. The back chains were hooked and then binders were used to bind down all of the chains.

To prevent incidents such as this, MIFACE recommends that employers conduct a job hazard analysis of work areas, equipment, and job tasks with the employees. A job hazard analysis is a review of all the work activities that the employee is responsible for and the equipment that is needed. Each task should be examined for possible mechanical, electrical, chemical, and other hazards the worker may encounter. Because the company has a joint Health and Safety Committee, this could be a task the Committee undertakes. Once hazards are identified and while remedial actions are being implemented, employees should be trained. Additional information on conducting a job hazard analysis can be found in the REFERENCES section of this report.

After the incident, the company conducted a hazard assessment of the loading process and developed a safe loading and unloading procedure based upon the hazard determination. The company's written Loading and Unloading Procedure is located in Appendix A. All employees should be trained in safe equipment practices, with detailed training provided to equipment operators and assistants. Training, for both the Loading and Unloading procedure and how to operate the Go-Tract should be conducted in the employee's primary language. MIFACE recommends that the employer add as part of their Loading and Unloading Procedure that operators test the controls prior to using the Go-Tract.

- Employers should review older equipment's safety features to determine if safety upgrades could be installed.

As machine technology has progressed, so have the safety features installed on these machines. Many pieces of older equipment are not equipped with current safety features. After the incident, the company surveyed their similar pieces of equipment and determined that an additional safety feature ("Kill Switch") could be installed. The Kill Switch, an engine-kill button, should be clearly labeled and mounted where it is easily

accessible and visible to the operator. Although the Go-Tract key would have turned off the engine and stopped forward movement, it was not used. An engine-kill switch mounted on the unit might have allowed the operator to stop the machine quickly. An engine-kill button mounted where it is easily accessible, visible and clearly labeled, would allow a quick method of stopping the machine's movement.

- Employers should determine if an hours-of-service maintenance schedule can be established that would include the complete teardown of the power unit to detect hidden wear.

Per the Go-Tract Operating and Maintenance Instructions, periodic servicing of the clutch was limited to checking the clutch pedal for freedom of movement and greasing the clutch release bearing and clutch shaft. The periodic servicing instructions included periodic service at 100 hours, 300 hours and 1000 hours for other components, but did not include the clutch master cylinder.

One of the identified factors in this incident was the condition of the clutch master cylinder, which had never been disassembled, cleaned, and reassembled. The fatality may have been averted if at some point during the past 24 years of service, this maintenance function had been performed.

- Employers should develop a communication plan that identifies specific locations so emergency responders can receive correct directions to a site.

The Sheriff department report stated that the officers dispatched to the incident area in order to assist fire and rescue had difficulty locating the medical emergency. The Department was advised "they were looking for the utility crew where one of the subjects had a medical emergency. They were having difficulty locating where the incident was located". An officer, who had previously been in the area and had seen the utility crew, advised the Department and responding personnel to the correct location.

The company should develop a system for the proper identification of remote work locations. In a panic situation, callers may not be able to give adequate information to dispatch so correct location information can be relayed to emergency response personnel. In addition, employers should ensure workers specifically know where they are working, and how to direct emergency services to the location in case of an emergency.

- Employers should ensure that a responsible person such as a supervisor/manager periodically monitors workers who are assigned to remote locations.

Although not a factor in this incident, the decedent was not wearing a reflective vest as required by company policy when working at the road's edge. Coworker #1, who was the line worker in charge, did not enforce the use of the safety vest. Periodic monitoring of work site safety would communicate management's commitment to a safe work place and help to make the safety program more effective.

- Employers should periodically review the health and safety materials in their training library to determine if the materials reflect "best practices" and compliance with company policies and regulatory requirements.

The company's health and safety training library contained a training video supplied by the manufacturer, which demonstrated Go-Tract loading onto a trailer with a spotter standing on the trailer. The company stated that they try to have a comprehensive review every three years and that they encourage continuous feedback from those who use the library materials on a regular basis. According to the company representative, the company's last major change out was based upon input from the end users. It is unknown if safety personnel reviewed the Go-Tract video for potential hazardous work practices or if the end user alerted the company's safety staff that a hazardous work practice was contained in the video.

REFERENCES

MIOSHA standards cited in this report may be found at and downloaded from the MIOSHA, Michigan Department of Labor and Economic Growth (DLEG) website at: www.michigan.gov/mioshastandards. MIOSHA standards are available for a fee by writing to: Michigan Department of Labor and Economic Growth, MIOSHA Standards Section, P.O. Box 30643, Lansing, Michigan 48909-8143 or calling (517) 322-1845.

- Michigan Public Act 154 PA of 1974
- NIOSH In-house FACE Report 2003-13: 18-year-old Dies After Being Entangled in a Portable Mortar Mixer - South Carolina http://www.cdc.gov/niosh/face/In-house/full200313.html
- Landscaper Crushed between Backhoe and Truck FACE 02-MJ-025 http://www.state.nj.us/health/eoh/survweb/02nj025.pdf

KEY WORDS: Machine, Struck by, Go-Tract, Equipment Loading, Utility

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APPENDIX A

Company Loading, Unloading and Securing Equipment Procedure*

*** MIFACE has removed identifiers from the company Procedure**

Loading, Unloading and Securing Equipment

GENERAL/SUMMARY

This Procedure describes the requirements for loading, unloading and securing engine-driven tracked and/or tired equipment on trailers.

RESPONSIBILITY

Employees must comply with this Procedure when loading and unloading engine-driven tracked and/or tired equipment.

TRAINING, REASSESSMENT AND RE-QUALIFICATION REQUIREMENTS

Initial training

Employees who may act as a spotter or operator during loading and unloading of equipment must attend a formal training class that covers the following:

Loading and unloading
Securing equipment for transport
Spotting for loading and unloading
Equipment daily operation and safety inspections

Annual refresher training

Annual refresher training for employees who spot or load and/or unload equipment is required. The annual refresher training will be a documented safety meeting.

Additional training

Employee A, Employee B or Employee C may request additional training for an employee at any time.

Reassessment/re-qualification requirements

Employee B will reassess employees involved in any related incident that results in:

A near miss
Damage to company, customer or public facilities
Damage to the motor equipment, or
Personal injury or loss of life

If re-qualification is required Employee B must document the need for re-qualification. Re-qualification requires formal training by a designated trainer with the authority to qualify operators.

PROCEDURE

Equipment Loading Zone (ELZ)

The Equipment Loading Zone (ELZ) is an open 10-foot buffer around all equipment during loading and unloading.

The operator of the equipment must maintain the ELZ during loading and unloading. If someone enters the ELZ the operator must stop the equipment, until the ELZ is clear.

During loading and unloading, no one is allowed:

- On the trailer or the vehicle attached to the trailer.
- To cross between the trailer and the towing vehicle.
- In the ELZ until equipment being **loaded** has come to a complete stop, appropriate appendages have been lowered, the parking brake has been set, and the equipment engine has been turned off.
- In the ELZ until equipment being **unloaded** clears the trailer.

Spotter requirements

A spotter is required during equipment loading and unloading when proper set-up and alignment (as described below) cannot be performed by an equipment operator working alone.

The equipment operator and spotter **must agree on hand signals** to be used, before they begin loading/unloading.

The spotter must be positioned to maintain an open line of sight with the operator of the equipment, and at a location no closer to the motor equipment than the outside perimeter of the ELZ. A spotter assists the equipment operator with maintaining the ELZ.

Only one spotter shall guide an operator during loading and unloading.

Set-up and alignment

Trailer must be attached to a towing vehicle before loading or unloading begins.

EXCEPTION: Follow manufacturer's instructions for "goose-neck" trailers.

Trailer lengths and widths vary, so the alignment of trailer and equipment also will vary from situation to situation.

When preparing to load a piece of equipment, the equipment must be directly aligned with the center of the trailer.

During loading and unloading, the operator must:

- Maintain equal distance between equipment tires/tracks and the two sides of the trailer.
- Keep equipment front and rear tires or tracks parallel with trailer tires.
- **When loading**, position equipment on the trailer to assure optimum weight distribution and tongue weight.
- **Before unloading**, observe area behind trailer to ensure area is clear.

If working **without a spotter**, the operator of the equipment must be able to continuously see the alignment between the trailer and the equipment.

If operator is working **with a spotter (see spotter requirements below)** the spotter must monitor this alignment for the operator of the equipment.

Mode or gear

Operate **trenchers** in the "crowd" or "creep" mode.

Operate **all other equipment** in first gear or lowest range.

Use manufacturer's recommended gear or mode instructions if different than this.

Engine speed

Operate all equipment at minimum throttle to allow the equipment to safely travel up or down trailer ramps.

Use manufacturer's recommended engine speed instructions if different than this.

Maintain low center of gravity

Keep backhoe loader bucket as low as possible without touching the trailer bed, while loading and unloading.

Securing loaded equipment

Four-point cargo securement (tie-down) and appendage securement is required for all transported equipment. The four-point cargo securement (tie-down) and appendage securement is incorporated in the Equipment Operator Training Class as described in DOT Federal Motor Carrier Load Securement (FMCLS) Rule 393.130.

Shock loading chains, slings, ropes, and ratchets is a motor vehicle carrier violation, and is **not an acceptable practice**. Shock loading occurs when the equipment is moved to tighten the tie-downs.

After the equipment is positioned correctly on the trailer and the equipment engine has been turned off, and the brakes locked if equipped with brakes, secure the equipment and any appendages. Individually attach and adjust each tie-down for proper cargo securement. Each tie-down must be accessible so the driver can maintain proper adjustment during transit.

REFERENCES

Company Safety Manual Sections referencing Inspections for Truck Crane (Boom Truck) and Prentice Loader provides an inspection list for Cranes on Boom Trucks and the Prentice Loader.

Company Safety Manual Section referencing Chains: Avoid applying "shock" loads to chains while securing equipment.

Company Safety Manual Section referencing Equipment Operating Zone (EOZ): identifies the requirements for working in the EOZ but not during loading or unloading operations.

Company Safety Manual Section referencing Equipment – Trailering, Loading & Unloading: discusses tie-down requirements for equipment and appendages including articulated equipment.

DOT Federal Motor Carrier Load Securement (FMCLS) Rule 393.130.
PECG 8100X.02: Excavation Equipment Operation.

Definition: Crosby Group; (Shock loading) A force that results from the rapid application of a force (such as impacting or jerking), or rapid movement of a static load. A shock load significantly adds to the static load.

National Association of Chain Manufacturers.

MIFACE
Investigation Report #07 MI 073
Evaluation

To improve the quality of the MIFACE program and our investigation reports, we would like to ask you a few questions about this report:

Please rate the report using a scale of:	**Excellent**	**Good**	**Fair**	**Poor**
	1	2	3	4

What was your general impression of this MIFACE investigation report?

Excellent	**Good**	**Fair**	**Poor**
1	2	3	4

Was the report…	**Excellent**	**Good**	**Fair**	**Poor**
Objective?	1	2	3	4
Clearly written?	1	2	3	4
Useful?	1	2	3	4

Were the recommendations …	**Excellent**	**Good**	**Fair**	**Poor**
Clearly written?	1	2	3	4
Practical?	1	2	3	4
Useful?	1	2	3	4

How will you use this report? (Check all that apply)

- ❑ Distribute to employees
- ❑ Post on bulletin board
- ❑ Use in employee training
- ❑ File for future reference
- ❑ Will not use it
- ❑ Other (specify) _____

Thank You!

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Comments:

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