LIGHTNING!

A Hazard of Summer Storms

Recently, ILA Safety Representatives have been often asked about the occupational safety & health (OSH) related aspects of marine cargo handling-related work being conducted in outdoor environments; when Summer thunderstorms are present.

While we certainly were aware of the seriousness of the issue (and of the associated hazards), we honestly had very little knowledge of our industry’s actual accident experience (in a historical sense), the regulatory requirements (OSHA), and how our industry’s management and labor interests had been collectively dealing with the issue. We decided to do a little research/fact-finding.

Accidents (Historically)

In reviewing occupational fatal accident records related to lightning strikes, we had the need to access the data maintained by the U.S Department of Labor’s Occupational Safety & Health Administration (OSHA). So, that’s what we did. In fact, we withdrew data that recorded the entire U.S. experience with regard to fatal, on-the-job lightning strikes for calendar years 2002-2012 (10 years). Here’s a link to that data:

[Occupational Fatalities in re Lightning (U.S) 2002-2012]

What we see, is that there were virtually no fatal accidents occurring within the U.S. marine cargo handling industry workplace within the retrievable data. That’s a very good thing, of course, but neither labor or management should rely on the experience of the past being that of the future. There are no guarantees when dealing with Mother Nature! We invite all readers to review the basic facts associated with OSHA’s fatal lightning strike data, just to see what sort of worker vulnerabilities may
have been present in those accidents. Avoiding those vulnerabilities is obviously a
good thing to do.

By the way, ILA would be very interested in knowing about any non-fatal lightning
strikes that may have occurred within our workplaces within that same period. So, if
there are ILA members reading this newsletter who are able to reliably relate that
type of information, the editors of Be Careful Out There! would welcome your
being in touch with one of your Safety Representatives (See listing below).

OK. So, What’s Being Done?

As a practical matter, apart from continuing work in light/moderate rain conditions
(with appropriate rain gear and appropriate consideration of a potentially wet/
slippery environment, of course), ILA workers should be seldom directly exposed to
the type of electrical storms that would support the generation of lightning strikes.
When that potential is imminent (more likely to happen than not), our Members
should be undercover in a protected/low hazard area.

Wise marine cargo handling employers monitor the weather very carefully, and all
such employers have an obligation to consider the presence of all potential hazards
and to act reasonably in responding to those potentials. Our sense, is that the vast
majority of employers who engage the service of ILA workers do consider those
hazards and do act responsibly in their response. We know of some stevedoring
firms who utilize high-tech lightning detectors/storm monitors/heat index monitors
during the core Summer months, and who ensure that their workers are withdrawn
from dangerous areas at the appropriate time.

Our research, however, reveals that these high-tech detectors/monitors can
sometimes have a substantial margin or error. Thus, they’re not always completely
reliable. There are also smartphone apps that provide similar information, but they
too have some drawbacks. As a consequence, neither ILA nor the editors of Be
Careful Out There! can make any representation here about the reliability or
accurateness of any particular lightning detection app. As an example though, here’s
a link to one we’ve looked at: LightningFinder App. From our perspective, the use of
such equipment is instructive but must be supported by ongoing, timely
meteorological observations coming from a reliable source.

ILA BROTHERS AND SISTERS WATCH EACH OTHER’S BACK FOR SAFETY; FOR EVERYTHING.....
What About The Regulations?

Well.... , believe it or not, there are no specific OSHA regulations that deal with the protection of workers from potential lightning strikes. As you might imagine, regulating OSH matters that deal with weather-related phenomena (such as tornadoes, hurricanes and lightning strikes) would be pretty difficult from a scientific perspective; almost impossible from a political perspective. But that regulatory absence doesn’t mean that OSHA has been silent.

When no published OSHA regulation addresses a workplace hazard head-on, but it can be proved that:

a. The employer failed to keep the workplace free of a hazard to which employees of that employer were exposed;

b. The hazard was recognized (within the relevant industry);

c. The hazard was causing or was likely to cause death or serious physical harm; and

d. There was a feasible and useful method to correct the hazard

OSHA may then issue an alleged violation of the OSH law’s General Duty Clause (Section 5 (a)(1) [29 USC 654]). As you might imagine, however, citing an employer and making the citation “stick” can be extremely difficult for OSHA in re lightning strike workplace hazards. In fact, it’s not often attempted. Often is not always, however, and there have been occasions wherein OSHA has cited employers in the wake of lightning strikes.

In the the following two pages, we’ve included the details of one such inspection that resulted in the issuance of a citation dealing with this particular hazard.

Our sense, is that waterfront management and labor within the ILA Districts have the ability to work together in forming intelligent decisions about working in conditions that are potentially hazardous. Those decisions, however, must be arrived at with a mutual respect for one another and abiding to the principle that all employees (both labor and management representatives) have a basic right to a safe workplace.

Should it ever be the case that either side of the management/labor equation fails to act in that reasonable and legally consistent manner, both ILA and the industry’s higher level management team want to know. Moreover, it’s important for them to know. Both of them have responsibilities to you, to your families and to this great industry we share in common.
Inspection: 310379854 - Rac Construction, Inc.

Inspection Information - Office: Tampa

Nr: 310379854  Report ID:0420600  Open Date: 08/18/2006

Rac Construction, Inc.
1508 Beaconsfield Drive
Wesley Chapel, FL 33543

SIC: 1751/Carpentry Work
NAICS: 238130/Framing Contractors

Inspection Type: Accident
Scope: Partial
Ownership: Private
Safety/Health: Safety
Planning Guide: Safety-Construction
Emphasis: L:Fall

Optional Information: Type  ID  Value
N  1  310379854
N  6  123456
N  8  EEP
N  10  IMMLANG-Y

Related Activity: Type  ID  Safety  Health
Accident  102456159

---

Violation Summary

<table>
<thead>
<tr>
<th></th>
<th>Serious</th>
<th>Willful</th>
<th>Repeat</th>
<th>Other</th>
<th>Unclass</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial Violations</td>
<td>2</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Current Violations</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Initial Penalty</td>
<td>$6400</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Current Penalty</td>
<td>$6400</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FTA Amount</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Violation Items

1. **01001** Serious 5A0001 11/07/2006 11/13/2006 $4900 $4900 $0 -
2. **01002** Serious 19260250 B01 11/07/2006 11/13/2006 $1500 $1500 $0 -

---

Accident Investigation Summary

Summary Nr: 202461703  Event: 08/17/2006  Employee Is Struck And Killed By Lightning

At approximately 4:00 p.m. on August 17, 2006, Employee #1 was framing the inside of a single family home. The foreman noticed that the sky was getting black in the distance, told the work crew to start to clean up, and sent Employee #1 to the roof to help bring down equipment. The employee picked up a nail gun and at that moment the first and only (according to witnesses) bolt of lightning hit him. He started to slide from roof, when a coworker grabbed him and hoisted him down to the ground floor. CPR was started by coworkers, but Employee #1 was pronounced dead by an emergency medical team.

Keywords: roof, lightning, struck by

---

Inspection  Degree  Nature  Occupation
1  310379854  Fatality  Electric Shock  Occupation not reported
Standard Cited: 5A0001 **OSH Act General Duty Paragraph**

<table>
<thead>
<tr>
<th>Violation Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nr: 310379854</td>
</tr>
<tr>
<td>Citation: 010001</td>
</tr>
<tr>
<td>Issuance: 11/07/2006</td>
</tr>
<tr>
<td>ReportingID: 0420600</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Viol Type</th>
<th>NrInstances: 1</th>
<th>Contest Date:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abatement Date:</td>
<td>11/13/2006 I</td>
<td></td>
</tr>
<tr>
<td>Initial Penalty:</td>
<td>4900.00</td>
<td></td>
</tr>
<tr>
<td>Current Penalty:</td>
<td>4900.00</td>
<td></td>
</tr>
<tr>
<td>Nr Exposed:</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>REA: A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gravity: 10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Haz Category:</td>
<td>STRUCK BY</td>
<td></td>
</tr>
</tbody>
</table>

**Text For Citation:** 01 Item/Group: 001 Hazard: STRUCK BY

Section 5(a)(1) of the Occupational Safety and Health Act of 1970: The employer did not furnish to each of his employees employment and a place of employment which were free from recognized hazards that were causing or were likely to cause death or serious physical harm to employees in that employees were exposed to the hazard of being struck by lightning: (a) Employees were exposed to the hazard of being struck by lightning while working on the roof of a house during lightning conditions. Among other methods, one feasible and acceptable abatement method to correct this hazard is to develop and implement a written Lightning policy that incorporates the following elements: 1. Safety guidelines and procedures to be followed by all employees, when working on construction sites, in unsheltered and unprotected conditions. 2. Provide training to all managers and employees on the lightning safety guidelines and procedures. 3. Utilize lightning detection methods, such as: purchasing and providing personal lightning detectors, which emit a loud audible warning sound before and while lightning is within striking distance; follow the "flash to bang method" as a form of detection for fast approaching thunderstorms. 4. Remove employees from the site in a timely manner after recognizing incoming lightning and or thunderstorms. 5. Implement an effective enforcement procedure.
Things to Look Out For

[Click on the frame below]

Need To Be In Touch With An ILA Safety Representative?

ILA members needing advice, assistance or guidance in considering occupational safety related circumstances and/or issues, should keep in mind that your Union’s Safety Representatives are available to consult with.

Mr. George Lynch  Tel: 917.797.5812   email: glynch@nysailafunds.net
[Located at NY/NJ]

Mr. Bennie Bryan  Tel: 912.312.4573   email: bryan1414@yahoo.com
[Located at Savannah, GA]

Mr. Bob Fiore      Tel: 305.798.5845   email: ilabobby@bellsouth.net
[Located at Miami, FL]

Whenever a serious accident occurs, or when a hazardous situation requiring a higher level of technical attention or advice is apparent, please be in touch with your Safety Representatives. Your information is valuable, could save a life and may otherwise remain unknown.

ILA BROTHERS AND SISTERS WATCH EACH OTHER’S BACK FOR SAFETY, FOR EVERYTHING.....
WE MOURN

The ILA joins the family and friends mourning the tragic death of Brother John Mahoney, a veteran checker and member of ILA Local Union 1242.

On 11 June, Brother Mahoney was struck by a reversing forklift truck while checking steel coils within a warehouse at the Beckett Street Marine Terminal in Camden, New Jersey.

OSHA, stevedoring company and ILA-initiated accident investigations are ongoing.

ILA BROTHERS AND SISTERS WATCH EACH OTHER’S BACK FOR SAFETY; FOR EVERYTHING.....