

# **- the TEN (CRANE) COMMANDMENTS -**

## **1. ASSUME NOTHING and QUESTION EVERYTHING**

- Verifying all aspects of the proposed crane hoisting is mandatory.. check the machine and verify the setup - the integrity of the load to be lifted, weight, working radius, rigging and apparatus to be utilized.

## **2. BE FIRM WITH YOUR PRIORITIZED CRITERIA**

- It is-acceptable to disappoint a customer by not making the lift as originally intended and/or not making it immediately upon arriving the jobsite.
- It is not-acceptable to hurt someone, to lose a load or, to lose a crane.

## **3. EVERYTHING STARTS FROM THE BOTTOM**

- Outrigger cribbing on top of adequate and stable soils is mandatory. Jobsite-scrounging for cribbing often leads to disaster.
- Inquire about dry wells, fuel tanks, buried lines or structures, and verify their locations and depth. The lifting-area must be known and verified.
- When setting up near excavations use the "one-on-one" rule.. for every foot of excavated depth, keep the crane back one foot from the edge and mitigate the risk.
- Freshly excavated and back-filled soil may be adequately compacted for the some equipment but probably falls far-short of the crane's requirement. The weight of the crane plus the weight of the load is what the cribbing will transfer to the ground at each outrigger.

## **4. IT'S A SETUP**

- When setting-up the crane great care and attention must prevail.
- One person should take charge and direct the sequence of setup events including the placement of support equipment and maintaining general order. Too many 'helping' hands will often lead to disaster.
- Idle and/or mobile telephone conversations must be avoided. Unfamiliar people onsite must be informed and monitored.
- Remember, even the mightiest boom can fall from the sky for the sake of a cotter pin that was missed.

## **5. THE NEIGHBORHOOD**

- The area surrounding the crane needs discipline - both in being kept clear of trucks, materials, equipment, etc. and, as well as personnel traffic.
- At minimum, roping off the swing area is a must. Anything that might distract or obstruct the crane operator's attention for even a split second is a hazard and must be avoided.

## **6. FAMILIARITY**

- It is imperative that the crane operator is permitted the time to become familiar with the crane that is to be operated.
- Assumed similarities between cranes can be dangerous ("Oh yeah, Pete ran a brand-x for years").
- There is no substitute for the "oneness" that being comfortable with a particular machine affords to both the crane operator and the associated ground crew doing related work.
- Have the crane's operations manuals, books, maintenance records, etc. handy and don't hesitate to consult them. If you're unsure, or vague, about a certain aspect of the crane operation or crane setup/dismantling then go and have a look at the books and drawings. One thing is certain.. you know they'll be coming for the 'team' when something goes wrong.
- Be proud of your expertise. Promote a good attitude and stay on top.
- Constantly inform yourself of your surroundings, the equipment and, the industry-in-general.

## **7. RESPECT**

- Today's modern mobile cranes are high tech and high performance.
- However, assuming that there's plenty of reserve in the crane's capacity is naive. If the crane could do any more, the manufacturer's sales department would have it in ink and would already be flaunting it.
- Load Moment Indicators (LMI's) must be appreciated as intended. It is only accurate for weight indication at cutoff. If a load needs to be weighed that must be accomplished with a load cell or a scale.

## 8. HAVE A LIFT PLAN

- A crane's crew-performance must take place with the 'rhythm' of a band and the 'oneness' of a hockey team. The riggers and all other participants must know the plan and implement it as it was laid out prior to the commencement of hoisting.
- This plan needs to include all job hazards.
- Clear occupants from buildings prior to hoisting over them.
- Determine a specific route-for-lifting (the boom swing) to avoid hoisting over an area that is obstructed or unsafe.
- Follow the company's policy governing hoisting in the proximity of energized wires. These policies should be more stringent than merely maintaining a 10 foot clearance and/or grounding the crane .
- Mark the "10-foot zone" clearly and obviously. Establish a work pattern that avoids the 10 foot zone and appoint a spotter that has visual and audible contact with the operator and can stop the operator's swing far enough from the 10 foot zone to come to a slow, controlled stop.
- Or alternatively.. **have the power shut-off by the electrical utility.**

## 9. COMMUNICATION

- The most common level of crane and hoisting communication is the hand signal.
- The appointed signal person must be able to clearly relate the required signals to the operator and constantly be aware of his signals-visibility to the operator.
- A dirty glove in a shadow or held close to dark clothing is a poor way to deliver the message.
- Signals relayed from person to person require slower crane operations and greater anticipation by the signal-person(s) and the crane operator.
- Often radio (or hard-wired signaling) is a much better alternative to hand signals. The primary criteria for radio signaling is that no-voice-transmission means no-crane-movement.

## 10. STATE OF WHAT?

- The crane operator has a special role in that he or she must maintain a proper state of mind and attitude.
- The crane's seat is most-definitely not a place for drugs or alcohol - nor for impatience, anger, or hostility and contempt. Any such detractions should be cooled long before the crane is setup for lifting.
- And, the bottom-line.. **do it right the first time and do it safely.**

***PROUD OF WHAT WE DO AND HOW WE DO IT***

---

**Consolidated Mobile Cranes Inc.  
Vancouver - Canada  
(604)908-8588  
www.deckcrane.com**