

### BEFORE STARTING TO LIFT, CHECK THE FOLLOWING:

#### 1. KNOW THE LOAD

- a. Weight of the item being lifted
- b. Know the center of gravity
- c. Load Composition/Considerations
  - i. Liquid
    1. Additional Weight
  - ii. Components of load
    1. Number of pieces
    2. Pieces properly attached
  - iii. Structural integrity of load
    1. Lifting points properly positioned and adequate
    2. Consider the need to use a spreader bar

#### 2. CRANE CONFIGURATION AND SET-UP

- a. Solid ground or adequate matting
- b. Level-within 1%
- c. Barge work has special considerations and load charts
  - i. Crane is secure on barge
  - ii. Listing is within acceptable limits
- d. Proper counterweight configuration and secure placement
- e. Proper outrigger placement with pads or dunnage
- f. Protected Swing Radius
- g. Secure Landing area, proper rigging and movement of load
- h. Load Moment Indicator (LMI) properly used
  - i. All operator aids working properly

#### 3. BOOM CONFIGURATION

- a. Length of boom- does it match the job (Not too long or too short)
  - i. Attachments-Properly Secured?
    1. Jibs
    2. Luffers
  - ii. Pin hydraulic booms
- b. Angle of boom-
  - i. Clears obstacles
  - ii. No interface with other cranes

#### 4. RADIUS OF LOAD FROM CENTER OF CRANE

- a. Within capacity of the **correct** chart

#### 5. PROPER RIGGING

- a. Properly sized for load to be lifted
- b. Proper configuration for load
- c. Weight of rigging is added to weight of load or deducted from the capacity
  - i. Block \_\_\_\_\_ lbs.
  - ii. Rigging \_\_\_\_\_ lbs.
  - iii. Line \_\_\_\_\_ lbs.

#### 6. ENVIRONMENTAL CONCERNS

- a. Wind
  - i. No more than 20 MPH or manufacturer's recommendation
  - ii. Consider added surface area of load when considering speed
- b. Visibility
  - i. Operator must be able to see load to landing site or be under direction of signal person (hand, voice or audible)
- c. Added weight-Considerations from:
  - i. Snow
  - ii. Ice
  - iii. Water

#### 7. EXTERNAL OBSTACLES TO CONSIDER

- a. Power lines
- b. Buildings
- c. Previous Excavations/Trenches
- d. Underground hazards
  - i. Vaults
  - ii. Pipes/Utilities

#### 8. COMMUNICATION WITH RIGGERS

- a. Sight-hand signals
- b. Voice-contact with rigger/signal person
- c. Blind lifts
  - i. Hand-off responsibility from rigger
  - ii. Load ownership from lift to set down

#### 9. QUALIFIED LIFTING PERSONNEL

- a. Lift Director
- b. Crane Operator(s)
- c. Riggers
- d. Signal person
- e. Oiler/Trainee
- f. Management/Supervision

#### BEST PRACTICES

##### Lift Director

1, 2a, 2g, 4, 5, 6, 7 & 8

##### Crane Operator

2b, 2d, 2e, 2f, 2h & 3

##### Rigger

1, 2g, 4, 5 & 8

##### Signal Person

1, 4, 6, 7 & 8

##### Oiler/Trainee

1, 2, 3, 4, 5, 6, 7 & 8

##### Management/Supervision

1, 2, 3, 4, 5, 6, 7 & 8

These are Best Practices developed by the Florida Crane Safety Alliance based on both the consensus standard ANSI B30.5-2007 edition and OSHA's Subpart CC.

## WORKING AROUND POWER LINES

