





### **INTRODUCTION**

The Specialized Carriers & Rigging Association Safety Talks publication provides safety talks particularly targeted toward the crane, rigging, and millwright segments of the construction industry. Each talk is designed for field presentation and contains signature sheets for verification that individuals received and understood the presentation. Safety Talks are designed to enhance safety on the job site and instill safety concerns in the mind of each employee. These talks can be used as a best practice in following OSHA's Title 29, Code of Federal Regulations (CFR), Part 1926 for Construction, 1926.21(b)(2) which states, "The employer shall instruct each employee in the recognition and avoidance of unsafe conditions and the regulations applicable to his work environment to control or eliminate any hazards or other exposure to illness or injury." SC&RA recommends industry participants constantly upgrade safety procedures and maintain the highest proficiency in the constantly changing workplace.

### **ACKNOWLEDGMENT**

The Specialized Carriers & Rigging Association thanks the members of the Crane & Rigging Group's Safety Talks Task Force and Safety Education & Training Committee for their time and expertise in updating these Safety Talks.

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# **BASIC RADIO SIGNALS**

With the crane industry building cranes with longer booms, heavier capacities and more optional attachments, cranes have become a more common and necessary piece of equipment on job sites. More often than not, the areas of operation do not allow for the industry standard, line of sight, hand signals. Operators and riggers are finding that radio communication is being utilized more and more, as the primary method of communication on-site. As such, all construction workers should become familiar with their use. It is imperative that verbal communication be easy to understand by both the operator and the signalman, and both review their radio protocol prior to commencing the lift.

# **BEST PRACTICES FOR RADIO COMMUNICATION:**

The following recommendations may help in establishing a safe and effective communication format. It is important to note the following items are merely suggestions, and are not intended to represent or supersede current industry standards or individual company procedures:

- 1 Conduct a pre-lift plan with signalman, affected workers, and appropriate site supervisory personnel.
- 2 Verify that you are utilizing a qualified signal person with proper documentation.
- 3 Test radios to ensure they are in proper working order.
- 4 The operator should begin by calling the signalman by name, and in turn the signalman should respond to the operator by name.
- Radio signals should be given just as standard hand signals, i.e., use load line, use whip line, boom up and hold load, boom down and hold load, all stop, swing right, swing left, up with load slowly, down with load slowly, boom up, boom down, extend boom, retract boom, dog it off, trolley in, trolley out, etc.
- When giving the "swing" command, the signalman must always provide direction, (i.e., left or right) as if they were sitting in the operator's seat. Additionally, the signalman should always provide the approximate length of the swing.
- Once the lift is under way, the signalman must never break radio communication with the operator. Remain in constant communication never unkey the mike.
- The signalman should slowly repeat the requested command over and over. This lets the operator know everything is okay.
- 9 If the signalman breaks communication, the operator will stop. The operator will then acknowledge the signalman by name and will continue only when the signalman maintains constant communication.
- 10 If the operator needs to communicate with the signalman, the operator should stop and give three short blasts of the horn. The signalman will then unkey the mike and the operator will then be able to establish verbal contact.
- Just as in basic hand signals, boom up and hold load or boom down and hold load radio signals should never be given when the operator cannot see the load.

### **SUMMARY**

- With the widespread use of cranes on construction projects today and the frequent inability of crane operators to see the load at all times, the use of radio communication to coordinate lifting operations has become commonplace.
- The ability of the operator and signalman to communication clearly and effectively is a vital component of safe crane operations.



# Acknowledgement of understanding of safety rules and regulations for

# **BASIC RADIO SIGNALS**

Date of Meeting	Person Conducting Meeting

## THIS LIST WILL BE KEPT IN THE COMPANY'S FILE.

After the information has been explained to the work force, everybody must sign below:

Print Name:	Signature: