



**5TH NCCCO FOUNDATION
Industry Forum**

**Responsibilities of Crane
Operators, Riggers, Lift Directors
and Other Site Personnel**

**Thom Sickelsteel, CEO, National Commission for the
Certification of Crane Operators (NCCCO)**

October 29, 2020

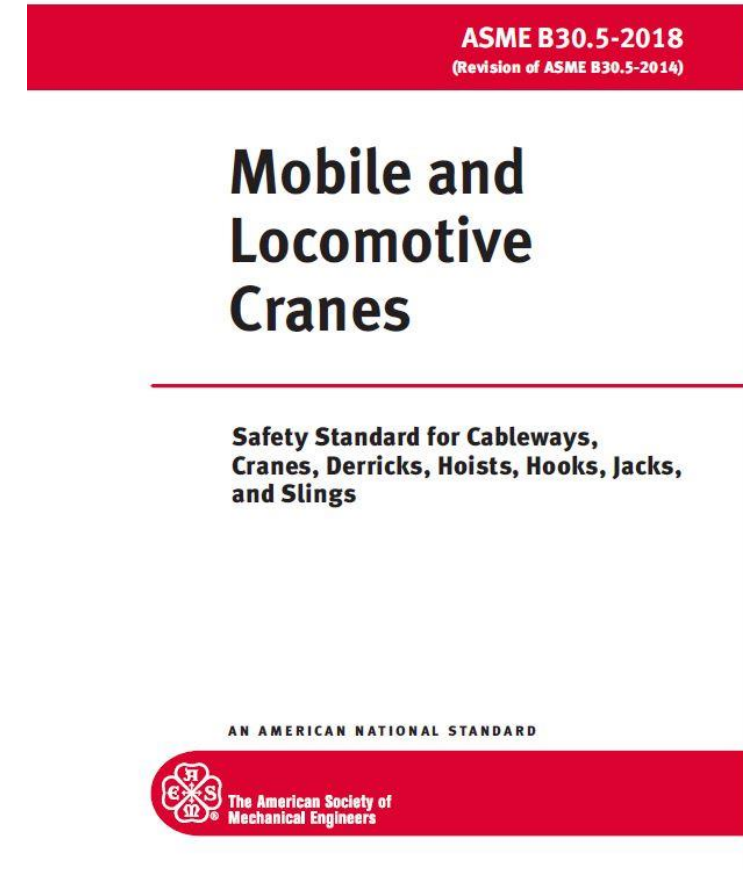
Industry Standards

- Panel of a wide range of industry experts
- Industry consensus document
- Updated 3-5 years
- Responds to questions / inquiry
- Broad scope



Industry Standards

- B30-3 (2019) – Tower Cranes
- B30-4 (2020) – Portal and Pedestal
- B30-5 (2018) – Mobile
- B30-9 (2018) – Slings
- B30-10 (2019) – Hooks
- B30-20 (2018) – Below the Hook Devices
- B30-22 (2016) – Articulating
- B30-23 (2016) – Personnel Lifting
- B30-26 (2015) – Rigging Hardware
- B30-29 (2018) – Self-Erecting Tower Crane



Areas of Responsibility

Controlling Entity
Site Supervision

Crane User

Crane Owner

Lift Director

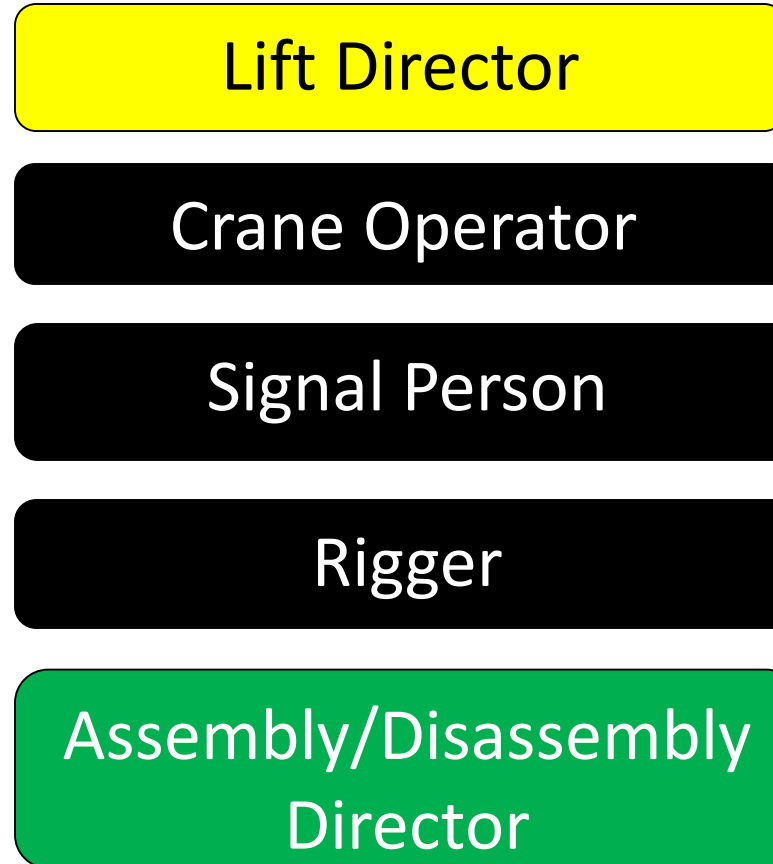
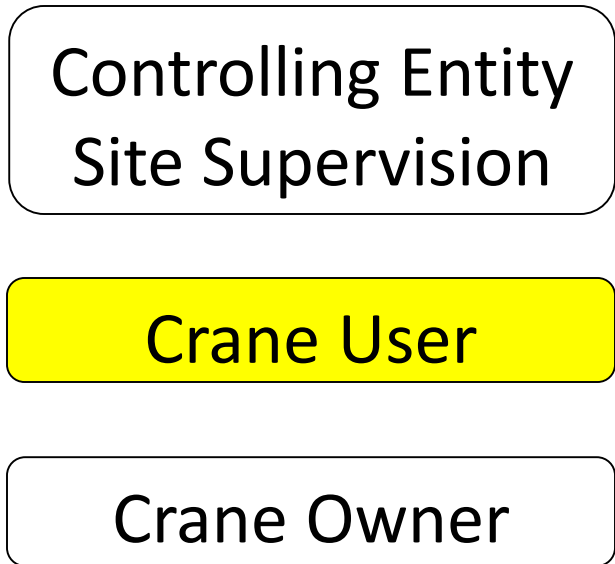
Crane Operator

Signal Person

Rigger

Assembly/Disassembly
Director

Areas of Responsibility



Definitions

- Site Supervisor
 - “Exercises supervisory control over the work site on which a crane is being used and over the work that is being performed on that site.”
- Crane User
 - “Arranges the crane’s presence on a worksite and controls its use there.”
- Crane Owner
 - “Has custodial control of a crane by virtue of a lease or ownership.”

Site Supervisor - Responsibilities

- Crane is inspected and is in good condition
- Determining if additional regulations are applicable
- Ensuring a qualified person is designated as the **LIFT DIRECTOR**
- Ensuring crane operations are coordinated with other jobsite activities.
- Ensuring that the area for the crane is adequately prepared.
 - Access, room, suitable ground, traffic control
- Ensuring Assembly/Disassembly supervised by a qualified person.

Site Supervisor – Responsibilities (continued)

- Ensuring crane operators meet the requirements
- Ensuring conditions that may adversely affect crane ops are addressed
- Allowing crane operations near powerlines only when requirements are met
- Special lifting operations
- Rigging crew is supervised by a qualified person.
- Ensuring crane maintenance is performed.

Crane User - Responsibilities

- Complying with regulations, standards, and manufacturer's requirements.
- Using supervisors for crane activities that are qualified.
- Ensuring the crane is in proper operating condition
 - Verifying crane owner has provided the documentation and frequent inspections have been completed.
- Verifying that the crane has the necessary lifting capacity to perform the work.
- Using crane operators that meet the requirements.

Crane User – Responsibilities (continued)

- Ensuring the assigned operator(s) have been notified of adjustments or repairs that have not yet been completed.
- Designating personnel for maintenance, repair, transport, assembly and disassembly.
- Ensuring all inspection, testing and maintenance programs specified are followed
- Informing crane owner if rope on the crane is replaced or shortened

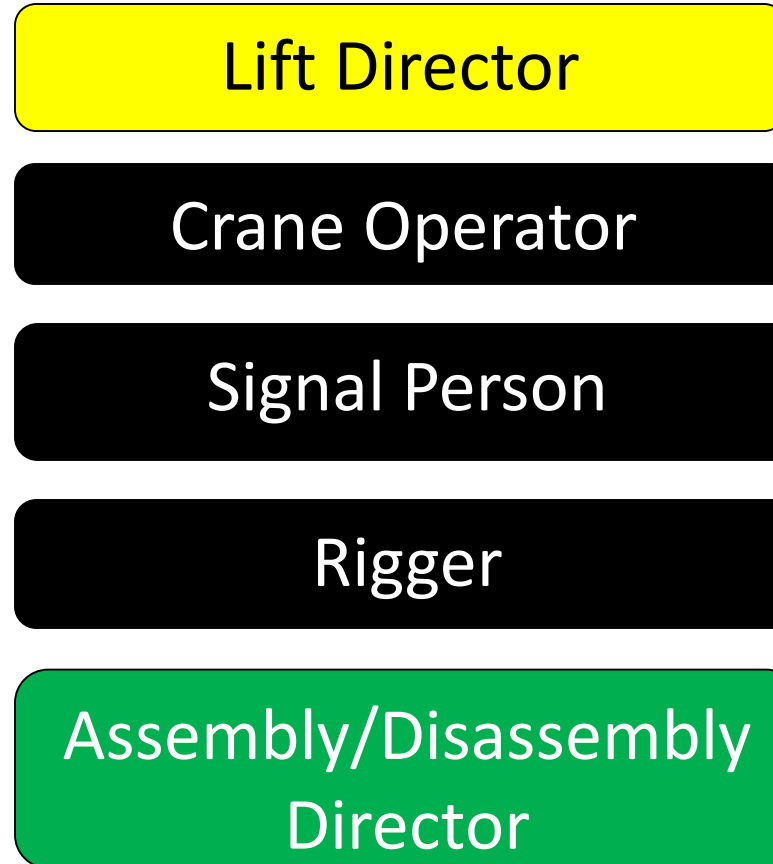
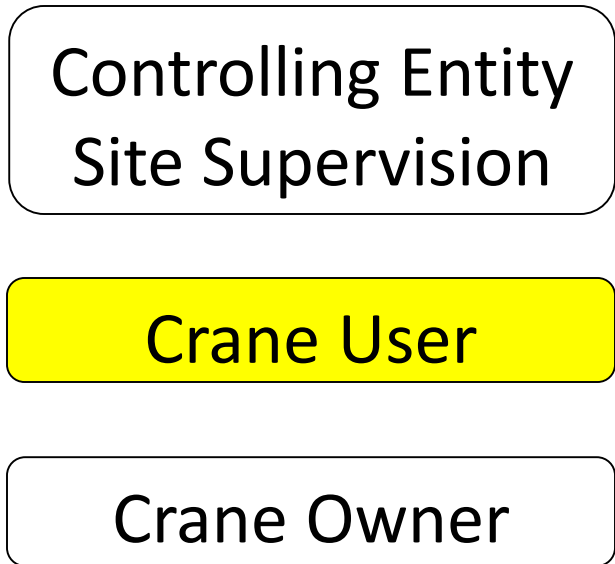
Crane Owner - Responsibilities

- Provide a crane that meets the requirements of the standards and the Crane User.
- Providing crane and all components specified by manufacturer to meet Crane Users requested configuration and capacity.
- Providing additional technical information when requested by Crane User.
- Providing assembly/disassembly, operation, maintenance and warning decals.

Crane Owner – Responsibilities (continued)

- Establishing an inspection, testing and maintenance program.
- Designating personnel for maintenance, repair, transport, assembly and disassembly.
- Maintaining rope information for the rope installed on each drum.

Areas of Responsibility



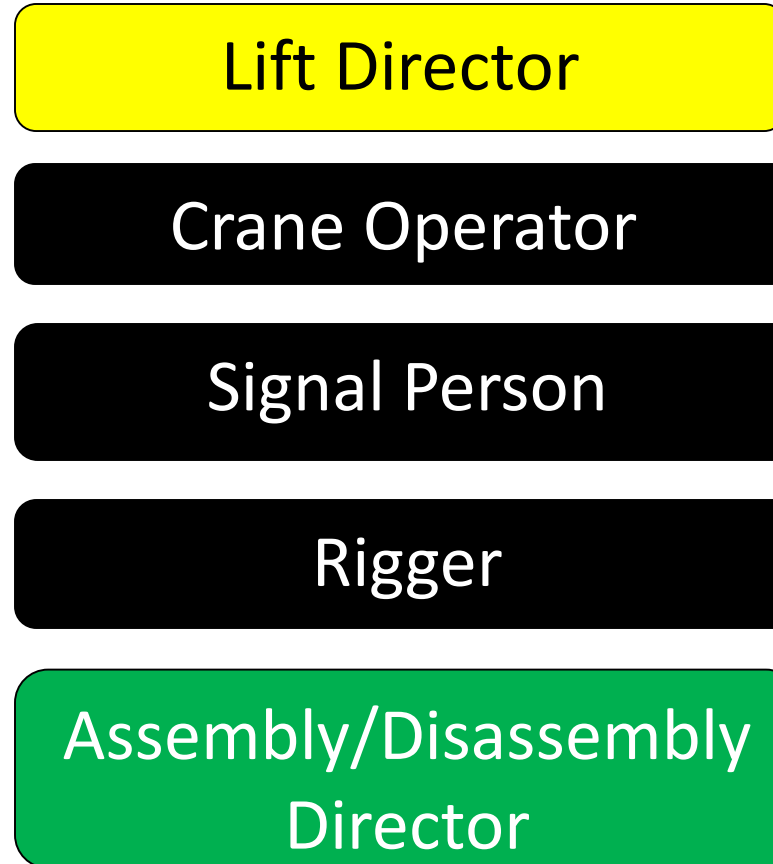
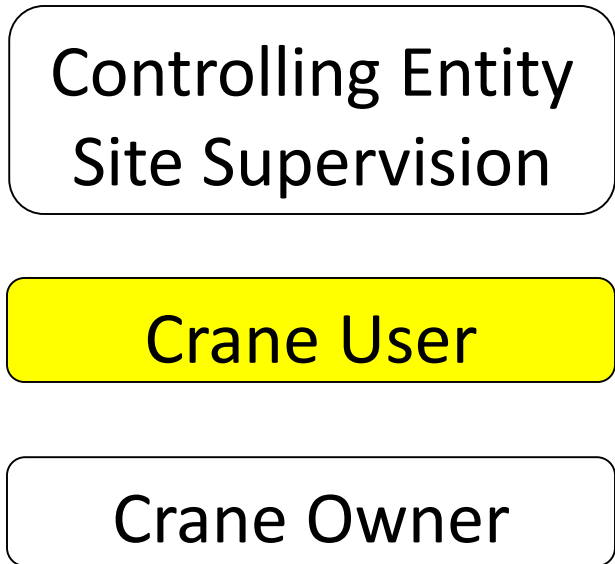
Lift Director - Responsibilities

- ASME - Qualified Individual
 - Being present at the **jobsite** during lifting operations.
 - Ensuring the area needed for crane operations has been prepared before operations commence.
 - Ensuring personnel involved understand their responsibilities, assigned duties, and associated hazards.
 - Addressing safety concerns and being responsible if they overrule concerns and directs operations to continue.

Lift Director – Responsibilities (continued)

- ASME - **Qualified** Individual
 - Appointing the signal person(s) and ensuring they are qualified.
 - Ensuring compliance when working near power lines or lifting personnel.
 - Ensuring the load rigging is performed by a competent rigger.
 - Ensuring precautions are implemented in special lifting operations.

Areas of Responsibility



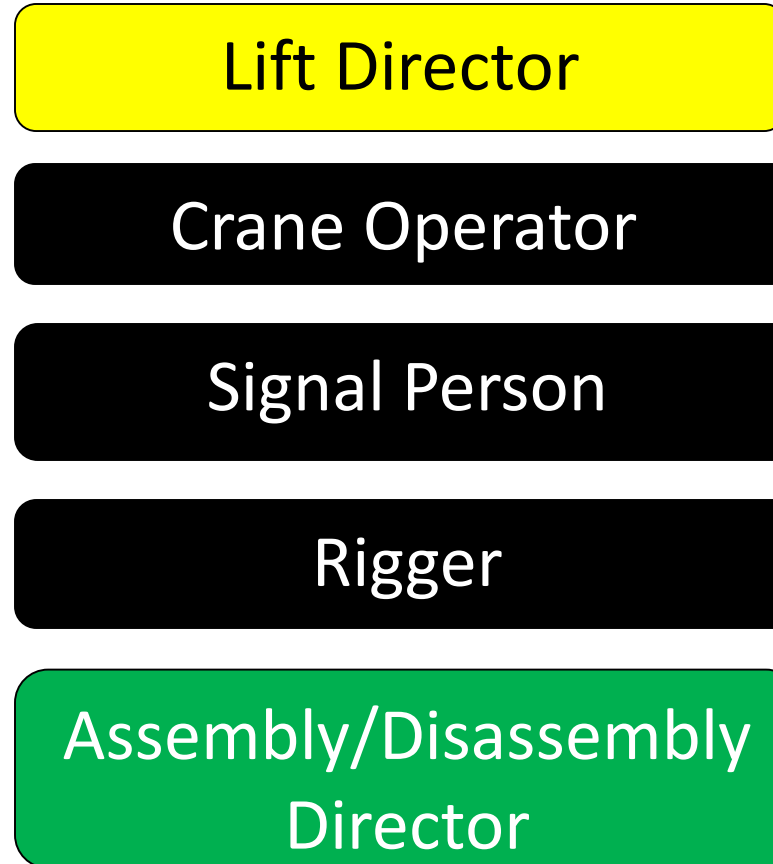
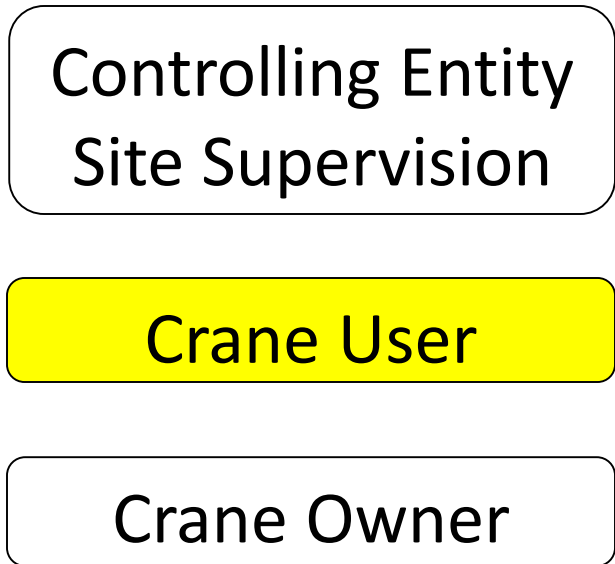
Crane Operator - Responsibilities

- Reviewing requirements for the crane with the Lift Director
- Knowing what types of site conditions could adversely affect the operation of the crane and consulting with the Lift Director
- **Crane – Hook to Wheels / Hook to Foundation**
- Inspecting the crane
- Reporting needed adjustments or repairs to designated person

Crane Operator – Responsibilities (continued)

- Calculating or determining net capacity
- Considering all factors known that might effect crane capacity and reviewing with Lift Director
- Knowing standard signals
- Understand basic load rigging

Areas of Responsibility



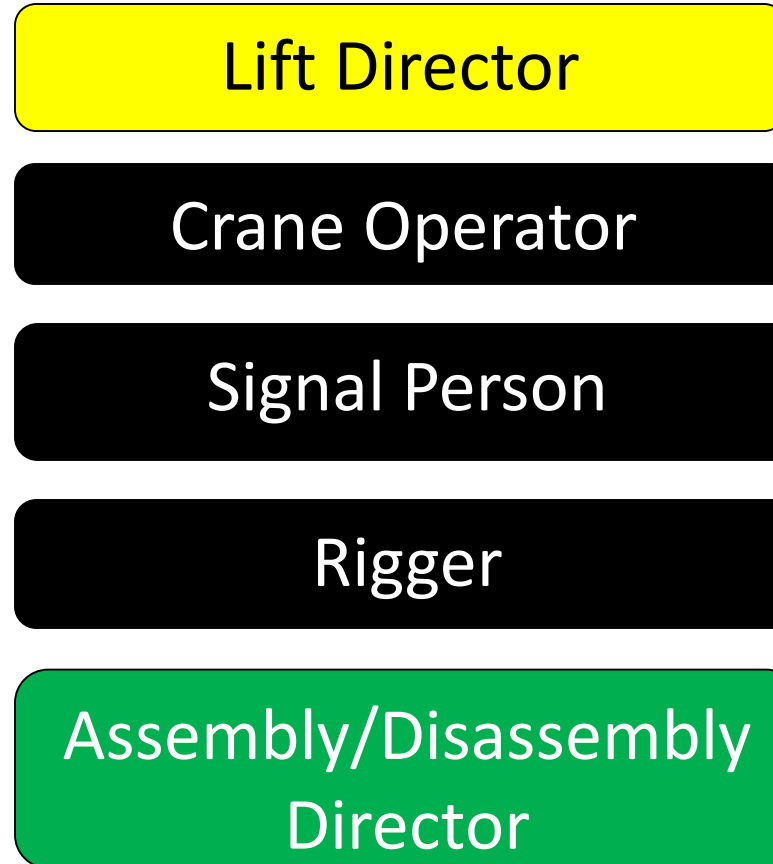
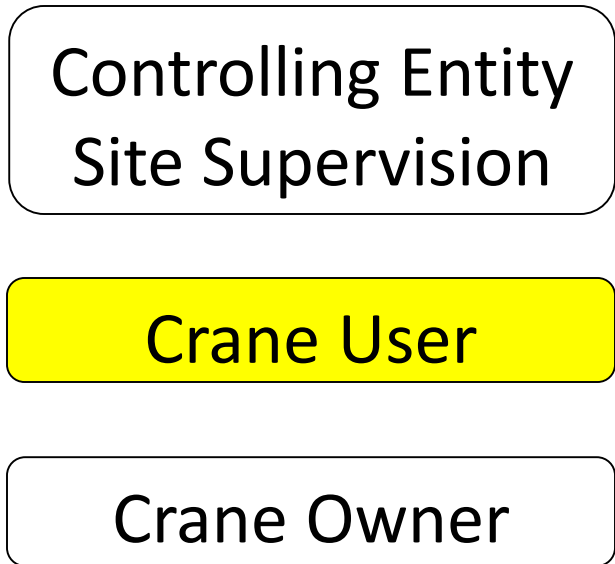
Signal Person - Responsibilities

ASME – **Qualified Person**

Revised for 2021 + Responsibilities



Areas of Responsibility



Rigger - Responsibilities

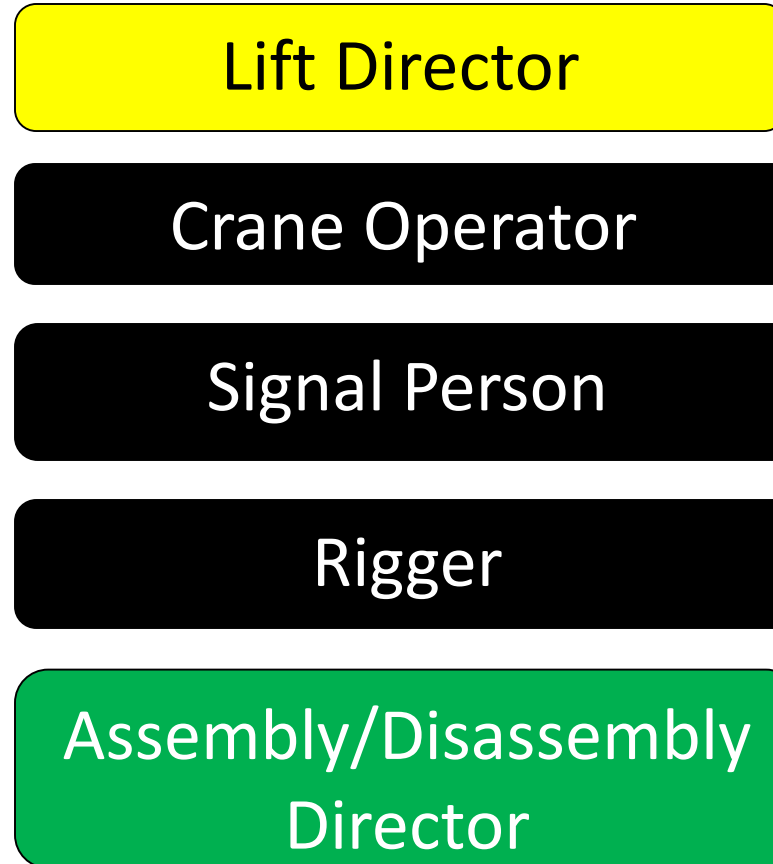
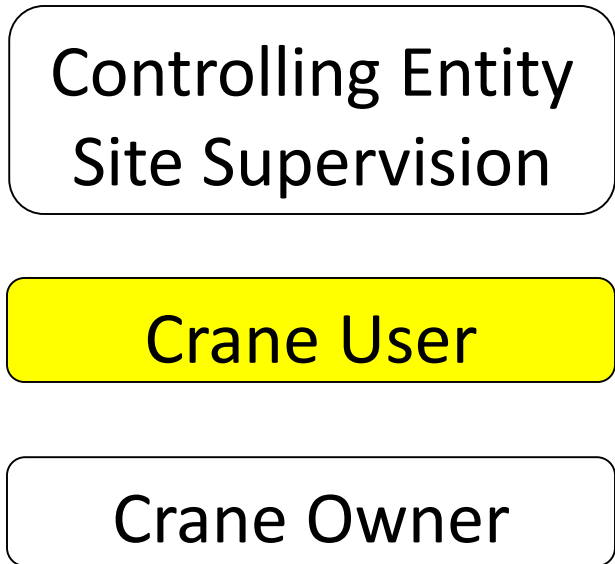
- ASME – Supervised by a qualified Person – 2021 Revision targeted area.
- **ASME – Revised 2018**
 - Ensuring the weight of the load and its approximate center of gravity have been obtained.
 - Selecting the proper rigging equipment, inspecting it, and complying with applicable ASME volumes.
 - Ensuring the rated load of the rigging equipment as configured is sufficient for the load based on number of legs, hitch and effects of angles.
 - Properly attaching the rigging equipment

Rigger – Responsibilities (continued)

- **ASME – Revised 2018**

- Ensuring that rigging equipment is adequately protected from abrasion, cutting or other damage during load handling activities.
- Rigging the load in a manner to ensure balance and stability
- Knowing and understanding the applicable signals for equipment in use.

Areas of Responsibility

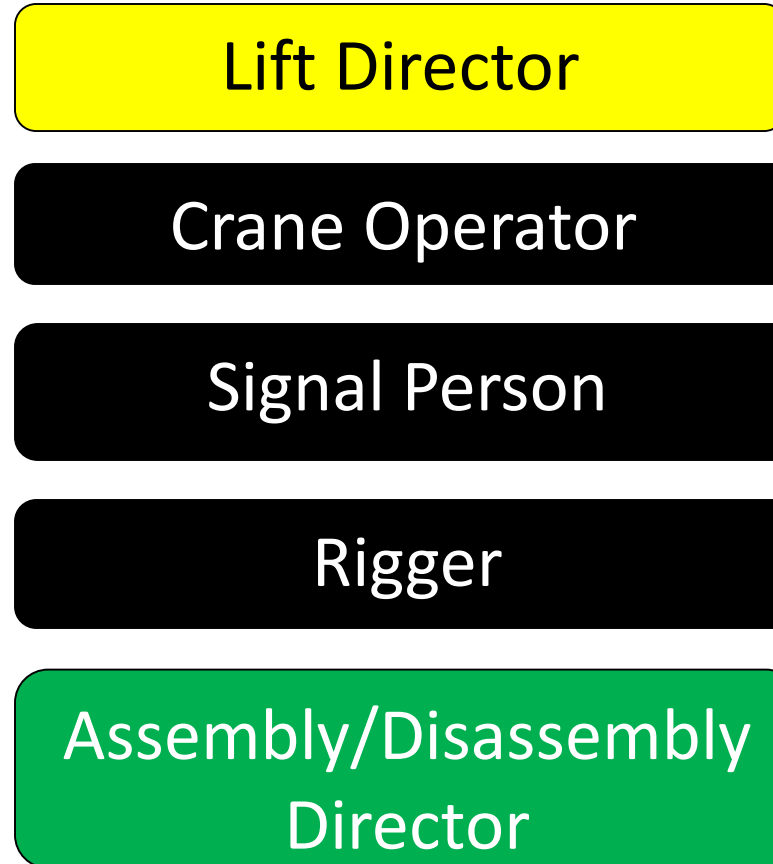
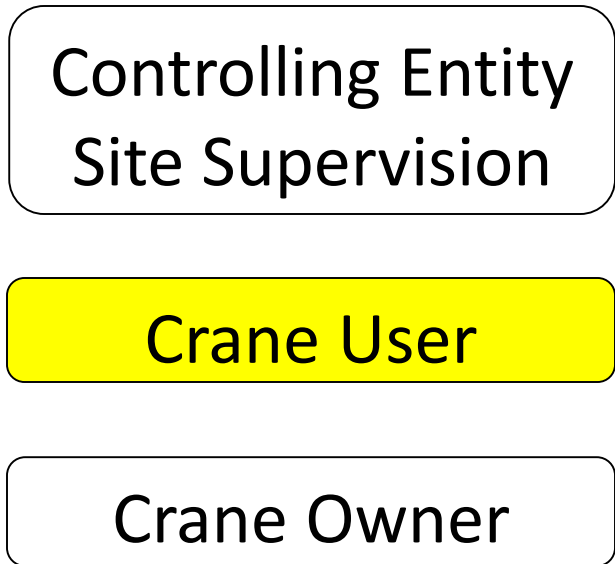


Assembly/Disassembly Director

- Responsibilities

- Hold an assembly / disassembly safety meeting before work begins to check that crew members understand tasks and hazards.
- Follow the manufacturer or employer procedures for assembly / disassembly
- Follow manufacturer prohibitions
- Mitigate 12 specific hazards ranging from blocking, center of gravity, assist crane loading, and winds.
- Responsible for post assembly inspection

Areas of Responsibility





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THANK YOU FOR YOUR ATTENTION

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