

ASME B30.6-2020
(Revision of ASME B30.6-2015)

Derricks

**Safety Standard for Cableways,
Cranes, Derricks, Hoists, Hooks, Jacks,
and Slings**

AN AMERICAN NATIONAL STANDARD



**The American Society of
Mechanical Engineers**

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HONORARY MEMBERS

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(d) the type of attachments

(e) the number, size, and arrangement of sheaves or other parts

(f) environmental conditions causing corrosion or wear

(g) many variables that must be considered in each individual case

The requirements and recommendations provided in the volumes must be interpreted accordingly, and judgment used in determining their application.

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The requirements and recommendations provided in the volumes must be interpreted accordingly, and judgment used in determining their application.

concerns have been addressed or the continuation of derrick operations is directed by the lift director.

The operator shall be responsible for the following listed items:

- (a) reviewing the requirements for the derrick with the lift director before commencing operations.
- (b) knowing what types of site conditions could adversely affect the operation of the derrick and consulting with the lift director concerning the possible presence of these conditions.
- (c) understanding and applying the information contained in the derrick manufacturer's operating manual.
- (d) understanding the derrick's functions and limitations as well as its particular operating characteristics.
- (e) using the derrick's load/capacity chart(s) and diagrams and applying all notes and warnings related to the charts to confirm the correct derrick configuration to suit the load, site, and lift conditions.
- (f) refusing to operate the derrick when any portion of the load or derrick would enter the danger zone of energized power lines shown in [Figure 6-3.5.3.1-2](#).
- (g) performing a frequent inspection of the derrick as specified in [para. 6-2.1.2](#).
- (h) promptly reporting the need for any adjustments or repairs to a designated person.
- (i) following applicable lock-out/tag-out procedures.
- (j) not operating the derrick when physically or mentally unfit.
- (k) ensuring that all controls are in the off or neutral position and that all personnel are in the clear before energizing the derrick or starting the engine.
- (l) not engaging in any practice that will divert his/her attention while operating the derrick controls.
- (m) testing the derrick function controls that will be used and operating only if those function controls respond properly.
- (n) operating the derrick functions, under normal operating conditions, in a smooth and controlled manner.
- (o) knowing and following the procedures specified by the manufacturer or approved by a qualified person, for assembly, disassembly, setting up, and reeving the derrick, as applicable.
- (p) ensuring that the load and rigging weight(s) have been provided.
- (q) calculating or determining the net capacity for all configurations that will be used and verifying, using the load/capacity chart(s), that the derrick has sufficient net capacity for the proposed lift.
- (r) considering all factors known that might affect the derrick capacity and informing the lift director of the need to make appropriate adjustments.
- (s) knowing the standard and special signals as specified in [Figure 6-3.4.2-1](#) and responding to such signals from the designated signalperson. (When a signalperson is not required as part of the lift operation, the operator is

then responsible for the movement of the derrick. However, the operator shall obey a stop signal at all times, no matter who gives it.)

- (t) understanding basic load-rigging procedures.
- (u) if power fails during operations
 - (1) setting all brakes and locking devices
 - (2) moving all clutch and/or other power controls to the off or neutral position
 - (3) landing any suspended load under brake control if practical
- (v) before leaving the derrick unattended
 - (1) landing any suspended load.
 - (2) disengaging the master clutch.
 - (3) setting winch brakes, swing brakes, boom brakes, and other locking devices.
 - (4) placing all controls in the off or neutral position.
 - (5) stopping the engine. An exception to this may exist when derrick operation is frequently interrupted during a shift and the operator must leave the derrick controls. Under these circumstances, the engine may remain running, and (1) through (4) shall apply. The operator shall be situated where any entry to the derrick controls position can be observed.
 - (6) considering the recommendations of the manufacturer for securing the derrick, when a local weather storm warning exists.

6-3.2.4 Responsibilities of Riggers

(20)

Riggers assigned to a load handling activity shall at a minimum be responsible for the following:

- (a) ensuring the weight of the load and its approximate center of gravity have been obtained, provided, or calculated
- (b) selecting the proper rigging equipment, inspecting it, and complying with the applicable operating practices according to the criteria of the applicable ASME volume (i.e., ASME B30.9, ASME B30.10, ASME B30.20, ASME B30.23, and ASME B30.26)
- (c) ensuring the rated load of the rigging equipment as selected and configured is sufficient for the load to be handled, based on the number of legs, hitch configuration, and effects of angles
- (d) properly attaching the rigging equipment to the hook, shackle, or other load handling device
- (e) ensuring that rigging equipment is adequately protected from abrasion, cutting, or other damage during load handling activities
- (f) rigging the load in a manner to ensure balance and stability during the load handling activity
- (g) knowing and understanding the applicable signals for the equipment in use
- (h) installing and using a tag line(s) when additional load control is required

concerns have been addressed or the continuation of derrick operations is directed by the lift director.

The operator shall be responsible for the following listed items:

- (a) reviewing the requirements for the derrick with the lift director before commencing operations.
- (b) knowing what types of site conditions could adversely affect the operation of the derrick and consulting with the lift director concerning the possible presence of these conditions.
- (c) understanding and applying the information contained in the derrick manufacturer's operating manual.
- (d) understanding the derrick's functions and limitations as well as its particular operating characteristics.
- (e) using the derrick's load/capacity chart(s) and diagrams and applying all notes and warnings related to the charts to confirm the correct derrick configuration to suit the load, site, and lift conditions.
- (f) refusing to operate the derrick when any portion of the load or derrick would enter the danger zone of energized power lines shown in [Figure 6-3.5.3.1-2](#).
- (g) performing a frequent inspection of the derrick as specified in [para. 6-2.1.2](#).
- (h) promptly reporting the need for any adjustments or repairs to a designated person.
- (i) following applicable lock-out/tag-out procedures.
- (j) not operating the derrick when physically or mentally unfit.
- (k) ensuring that all controls are in the off or neutral position and that all personnel are in the clear before energizing the derrick or starting the engine.
- (l) not engaging in any practice that will divert his/her attention while operating the derrick controls.
- (m) testing the derrick function controls that will be used and operating only if those function controls respond properly.
- (n) operating the derrick functions, under normal operating conditions, in a smooth and controlled manner.
- (o) knowing and following the procedures specified by the manufacturer or approved by a qualified person, for assembly, disassembly, setting up, and reeving the derrick, as applicable.
- (p) ensuring that the load and rigging weight(s) have been provided.
- (q) calculating or determining the net capacity for all configurations that will be used and verifying, using the load/capacity chart(s), that the derrick has sufficient net capacity for the proposed lift.
- (r) considering all factors known that might affect the derrick capacity and informing the lift director of the need to make appropriate adjustments.
- (s) knowing the standard and special signals as specified in [Figure 6-3.4.2-1](#) and responding to such signals from the designated signalperson. (When a signalperson is not required as part of the lift operation, the operator is

then responsible for the movement of the derrick. However, the operator shall obey a stop signal at all times, no matter who gives it.)

- (t) understanding basic load-rigging procedures.
- (u) if power fails during operations
 - (1) setting all brakes and locking devices
 - (2) moving all clutch and/or other power controls to the off or neutral position
 - (3) landing any suspended load under brake control if practical
- (v) before leaving the derrick unattended
 - (1) landing any suspended load.
 - (2) disengaging the master clutch.
 - (3) setting winch brakes, swing brakes, boom brakes, and other locking devices.
 - (4) placing all controls in the off or neutral position.
 - (5) stopping the engine. An exception to this may exist when derrick operation is frequently interrupted during a shift and the operator must leave the derrick controls. Under these circumstances, the engine may remain running, and (1) through (4) shall apply. The operator shall be situated where any entry to the derrick controls position can be observed.
 - (6) considering the recommendations of the manufacturer for securing the derrick, when a local weather storm warning exists.

6-3.2.4 Responsibilities of Riggers

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Riggers assigned to a load handling activity shall at a minimum be responsible for the following:

- (a) ensuring the weight of the load and its approximate center of gravity have been obtained, provided, or calculated
- (b) selecting the proper rigging equipment, inspecting it, and complying with the applicable operating practices according to the criteria of the applicable ASME volume (i.e., ASME B30.9, ASME B30.10, ASME B30.20, ASME B30.23, and ASME B30.26)
- (c) ensuring the rated load of the rigging equipment as selected and configured is sufficient for the load to be handled, based on the number of legs, hitch configuration, and effects of angles
- (d) properly attaching the rigging equipment to the hook, shackle, or other load handling device
- (e) ensuring that rigging equipment is adequately protected from abrasion, cutting, or other damage during load handling activities
- (f) rigging the load in a manner to ensure balance and stability during the load handling activity
- (g) knowing and understanding the applicable signals for the equipment in use
- (h) installing and using a tag line(s) when additional load control is required

concerns have been addressed or the continuation of derrick operations is directed by the lift director.

The operator shall be responsible for the following listed items:

- (a) reviewing the requirements for the derrick with the lift director before commencing operations.
- (b) knowing what types of site conditions could adversely affect the operation of the derrick and consulting with the lift director concerning the possible presence of these conditions.
- (c) understanding and applying the information contained in the derrick manufacturer's operating manual.
- (d) understanding the derrick's functions and limitations as well as its particular operating characteristics.
- (e) using the derrick's load/capacity chart(s) and diagrams and applying all notes and warnings related to the charts to confirm the correct derrick configuration to suit the load, site, and lift conditions.
- (f) refusing to operate the derrick when any portion of the load or derrick would enter the danger zone of energized power lines shown in [Figure 6-3.5.3.1-2](#).
- (g) performing a frequent inspection of the derrick as specified in [para. 6-2.1.2](#).
- (h) promptly reporting the need for any adjustments or repairs to a designated person.
- (i) following applicable lock-out/tag-out procedures.
- (j) not operating the derrick when physically or mentally unfit.
- (k) ensuring that all controls are in the off or neutral position and that all personnel are in the clear before energizing the derrick or starting the engine.
- (l) not engaging in any practice that will divert his/her attention while operating the derrick controls.
- (m) testing the derrick function controls that will be used and operating only if those function controls respond properly.
- (n) operating the derrick functions, under normal operating conditions, in a smooth and controlled manner.
- (o) knowing and following the procedures specified by the manufacturer or approved by a qualified person, for assembly, disassembly, setting up, and reeving the derrick, as applicable.
- (p) ensuring that the load and rigging weight(s) have been provided.
- (q) calculating or determining the net capacity for all configurations that will be used and verifying, using the load/capacity chart(s), that the derrick has sufficient net capacity for the proposed lift.
- (r) considering all factors known that might affect the derrick capacity and informing the lift director of the need to make appropriate adjustments.
- (s) knowing the standard and special signals as specified in [Figure 6-3.4.2-1](#) and responding to such signals from the designated signalperson. (When a signalperson is not required as part of the lift operation, the operator is

then responsible for the movement of the derrick. However, the operator shall obey a stop signal at all times, no matter who gives it.)

- (t) understanding basic load-rigging procedures.
- (u) if power fails during operations
 - (1) setting all brakes and locking devices
 - (2) moving all clutch and/or other power controls to the off or neutral position
 - (3) landing any suspended load under brake control if practical
- (v) before leaving the derrick unattended
 - (1) landing any suspended load.
 - (2) disengaging the master clutch.
 - (3) setting winch brakes, swing brakes, boom brakes, and other locking devices.
 - (4) placing all controls in the off or neutral position.
 - (5) stopping the engine. An exception to this may exist when derrick operation is frequently interrupted during a shift and the operator must leave the derrick controls. Under these circumstances, the engine may remain running, and (1) through (4) shall apply. The operator shall be situated where any entry to the derrick controls position can be observed.
 - (6) considering the recommendations of the manufacturer for securing the derrick, when a local weather storm warning exists.

6-3.2.4 Responsibilities of Riggers

(20)

Riggers assigned to a load handling activity shall at a minimum be responsible for the following:

- (a) ensuring the weight of the load and its approximate center of gravity have been obtained, provided, or calculated
- (b) selecting the proper rigging equipment, inspecting it, and complying with the applicable operating practices according to the criteria of the applicable ASME volume (i.e., ASME B30.9, ASME B30.10, ASME B30.20, ASME B30.23, and ASME B30.26)
- (c) ensuring the rated load of the rigging equipment as selected and configured is sufficient for the load to be handled, based on the number of legs, hitch configuration, and effects of angles
- (d) properly attaching the rigging equipment to the hook, shackle, or other load handling device
- (e) ensuring that rigging equipment is adequately protected from abrasion, cutting, or other damage during load handling activities
- (f) rigging the load in a manner to ensure balance and stability during the load handling activity
- (g) knowing and understanding the applicable signals for the equipment in use
- (h) installing and using a tag line(s) when additional load control is required

concerns have been addressed or the continuation of derrick operations is directed by the lift director.

The operator shall be responsible for the following listed items:

- (a) reviewing the requirements for the derrick with the lift director before commencing operations.
- (b) knowing what types of site conditions could adversely affect the operation of the derrick and consulting with the lift director concerning the possible presence of these conditions.
- (c) understanding and applying the information contained in the derrick manufacturer's operating manual.
- (d) understanding the derrick's functions and limitations as well as its particular operating characteristics.
- (e) using the derrick's load/capacity chart(s) and diagrams and applying all notes and warnings related to the charts to confirm the correct derrick configuration to suit the load, site, and lift conditions.
- (f) refusing to operate the derrick when any portion of the load or derrick would enter the danger zone of energized power lines shown in [Figure 6-3.5.3.1-2](#).
- (g) performing a frequent inspection of the derrick as specified in [para. 6-2.1.2](#).
- (h) promptly reporting the need for any adjustments or repairs to a designated person.
- (i) following applicable lock-out/tag-out procedures.
- (j) not operating the derrick when physically or mentally unfit.
- (k) ensuring that all controls are in the off or neutral position and that all personnel are in the clear before energizing the derrick or starting the engine.
- (l) not engaging in any practice that will divert his/her attention while operating the derrick controls.
- (m) testing the derrick function controls that will be used and operating only if those function controls respond properly.
- (n) operating the derrick functions, under normal operating conditions, in a smooth and controlled manner.
- (o) knowing and following the procedures specified by the manufacturer or approved by a qualified person, for assembly, disassembly, setting up, and reeving the derrick, as applicable.
- (p) ensuring that the load and rigging weight(s) have been provided.
- (q) calculating or determining the net capacity for all configurations that will be used and verifying, using the load/capacity chart(s), that the derrick has sufficient net capacity for the proposed lift.
- (r) considering all factors known that might affect the derrick capacity and informing the lift director of the need to make appropriate adjustments.
- (s) knowing the standard and special signals as specified in [Figure 6-3.4.2-1](#) and responding to such signals from the designated signalperson. (When a signalperson is not required as part of the lift operation, the operator is

then responsible for the movement of the derrick. However, the operator shall obey a stop signal at all times, no matter who gives it.)

- (t) understanding basic load-rigging procedures.
- (u) if power fails during operations
 - (1) setting all brakes and locking devices
 - (2) moving all clutch and/or other power controls to the off or neutral position
 - (3) landing any suspended load under brake control if practical
- (v) before leaving the derrick unattended
 - (1) landing any suspended load.
 - (2) disengaging the master clutch.
 - (3) setting winch brakes, swing brakes, boom brakes, and other locking devices.
 - (4) placing all controls in the off or neutral position.
 - (5) stopping the engine. An exception to this may exist when derrick operation is frequently interrupted during a shift and the operator must leave the derrick controls. Under these circumstances, the engine may remain running, and (1) through (4) shall apply. The operator shall be situated where any entry to the derrick controls position can be observed.
 - (6) considering the recommendations of the manufacturer for securing the derrick, when a local weather storm warning exists.

6-3.2.4 Responsibilities of Riggers

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Riggers assigned to a load handling activity shall at a minimum be responsible for the following:

- (a) ensuring the weight of the load and its approximate center of gravity have been obtained, provided, or calculated
- (b) selecting the proper rigging equipment, inspecting it, and complying with the applicable operating practices according to the criteria of the applicable ASME volume (i.e., ASME B30.9, ASME B30.10, ASME B30.20, ASME B30.23, and ASME B30.26)
- (c) ensuring the rated load of the rigging equipment as selected and configured is sufficient for the load to be handled, based on the number of legs, hitch configuration, and effects of angles
- (d) properly attaching the rigging equipment to the hook, shackle, or other load handling device
- (e) ensuring that rigging equipment is adequately protected from abrasion, cutting, or other damage during load handling activities
- (f) rigging the load in a manner to ensure balance and stability during the load handling activity
- (g) knowing and understanding the applicable signals for the equipment in use
- (h) installing and using a tag line(s) when additional load control is required

concerns have been addressed or the continuation of derrick operations is directed by the lift director.

The operator shall be responsible for the following listed items:

- (a) reviewing the requirements for the derrick with the lift director before commencing operations.
- (b) knowing what types of site conditions could adversely affect the operation of the derrick and consulting with the lift director concerning the possible presence of these conditions.
- (c) understanding and applying the information contained in the derrick manufacturer's operating manual.
- (d) understanding the derrick's functions and limitations as well as its particular operating characteristics.
- (e) using the derrick's load/capacity chart(s) and diagrams and applying all notes and warnings related to the charts to confirm the correct derrick configuration to suit the load, site, and lift conditions.
- (f) refusing to operate the derrick when any portion of the load or derrick would enter the danger zone of energized power lines shown in [Figure 6-3.5.3.1-2](#).
- (g) performing a frequent inspection of the derrick as specified in [para. 6-2.1.2](#).
- (h) promptly reporting the need for any adjustments or repairs to a designated person.
- (i) following applicable lock-out/tag-out procedures.
- (j) not operating the derrick when physically or mentally unfit.
- (k) ensuring that all controls are in the off or neutral position and that all personnel are in the clear before energizing the derrick or starting the engine.
- (l) not engaging in any practice that will divert his/her attention while operating the derrick controls.
- (m) testing the derrick function controls that will be used and operating only if those function controls respond properly.
- (n) operating the derrick functions, under normal operating conditions, in a smooth and controlled manner.
- (o) knowing and following the procedures specified by the manufacturer or approved by a qualified person, for assembly, disassembly, setting up, and reeving the derrick, as applicable.
- (p) ensuring that the load and rigging weight(s) have been provided.
- (q) calculating or determining the net capacity for all configurations that will be used and verifying, using the load/capacity chart(s), that the derrick has sufficient net capacity for the proposed lift.
- (r) considering all factors known that might affect the derrick capacity and informing the lift director of the need to make appropriate adjustments.
- (s) knowing the standard and special signals as specified in [Figure 6-3.4.2-1](#) and responding to such signals from the designated signalperson. (When a signalperson is not required as part of the lift operation, the operator is

then responsible for the movement of the derrick. However, the operator shall obey a stop signal at all times, no matter who gives it.)

- (t) understanding basic load-rigging procedures.
- (u) if power fails during operations
 - (1) setting all brakes and locking devices
 - (2) moving all clutch and/or other power controls to the off or neutral position
 - (3) landing any suspended load under brake control if practical
- (v) before leaving the derrick unattended
 - (1) landing any suspended load.
 - (2) disengaging the master clutch.
 - (3) setting winch brakes, swing brakes, boom brakes, and other locking devices.
 - (4) placing all controls in the off or neutral position.
 - (5) stopping the engine. An exception to this may exist when derrick operation is frequently interrupted during a shift and the operator must leave the derrick controls. Under these circumstances, the engine may remain running, and (1) through (4) shall apply. The operator shall be situated where any entry to the derrick controls position can be observed.
 - (6) considering the recommendations of the manufacturer for securing the derrick, when a local weather storm warning exists.

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- (a) ensuring the weight of the load and its approximate center of gravity have been obtained, provided, or calculated
- (b) selecting the proper rigging equipment, inspecting it, and complying with the applicable operating practices according to the criteria of the applicable ASME volume (i.e., ASME B30.9, ASME B30.10, ASME B30.20, ASME B30.23, and ASME B30.26)
- (c) ensuring the rated load of the rigging equipment as selected and configured is sufficient for the load to be handled, based on the number of legs, hitch configuration, and effects of angles
- (d) properly attaching the rigging equipment to the hook, shackle, or other load handling device
- (e) ensuring that rigging equipment is adequately protected from abrasion, cutting, or other damage during load handling activities
- (f) rigging the load in a manner to ensure balance and stability during the load handling activity
- (g) knowing and understanding the applicable signals for the equipment in use
- (h) installing and using a tag line(s) when additional load control is required

concerns have been addressed or the continuation of derrick operations is directed by the lift director.

The operator shall be responsible for the following listed items:

- (a) reviewing the requirements for the derrick with the lift director before commencing operations.
- (b) knowing what types of site conditions could adversely affect the operation of the derrick and consulting with the lift director concerning the possible presence of these conditions.
- (c) understanding and applying the information contained in the derrick manufacturer's operating manual.
- (d) understanding the derrick's functions and limitations as well as its particular operating characteristics.
- (e) using the derrick's load/capacity chart(s) and diagrams and applying all notes and warnings related to the charts to confirm the correct derrick configuration to suit the load, site, and lift conditions.
- (f) refusing to operate the derrick when any portion of the load or derrick would enter the danger zone of energized power lines shown in [Figure 6-3.5.3.1-2](#).
- (g) performing a frequent inspection of the derrick as specified in [para. 6-2.1.2](#).
- (h) promptly reporting the need for any adjustments or repairs to a designated person.
- (i) following applicable lock-out/tag-out procedures.
- (j) not operating the derrick when physically or mentally unfit.
- (k) ensuring that all controls are in the off or neutral position and that all personnel are in the clear before energizing the derrick or starting the engine.
- (l) not engaging in any practice that will divert his/her attention while operating the derrick controls.
- (m) testing the derrick function controls that will be used and operating only if those function controls respond properly.
- (n) operating the derrick functions, under normal operating conditions, in a smooth and controlled manner.
- (o) knowing and following the procedures specified by the manufacturer or approved by a qualified person, for assembly, disassembly, setting up, and reeving the derrick, as applicable.
- (p) ensuring that the load and rigging weight(s) have been provided.
- (q) calculating or determining the net capacity for all configurations that will be used and verifying, using the load/capacity chart(s), that the derrick has sufficient net capacity for the proposed lift.
- (r) considering all factors known that might affect the derrick capacity and informing the lift director of the need to make appropriate adjustments.
- (s) knowing the standard and special signals as specified in [Figure 6-3.4.2-1](#) and responding to such signals from the designated signalperson. (When a signalperson is not required as part of the lift operation, the operator is

then responsible for the movement of the derrick. However, the operator shall obey a stop signal at all times, no matter who gives it.)

- (t) understanding basic load-rigging procedures.
- (u) if power fails during operations
 - (1) setting all brakes and locking devices
 - (2) moving all clutch and/or other power controls to the off or neutral position
 - (3) landing any suspended load under brake control if practical
- (v) before leaving the derrick unattended
 - (1) landing any suspended load.
 - (2) disengaging the master clutch.
 - (3) setting winch brakes, swing brakes, boom brakes, and other locking devices.
 - (4) placing all controls in the off or neutral position.
 - (5) stopping the engine. An exception to this may exist when derrick operation is frequently interrupted during a shift and the operator must leave the derrick controls. Under these circumstances, the engine may remain running, and (1) through (4) shall apply. The operator shall be situated where any entry to the derrick controls position can be observed.
 - (6) considering the recommendations of the manufacturer for securing the derrick, when a local weather storm warning exists.

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- (a) ensuring the weight of the load and its approximate center of gravity have been obtained, provided, or calculated
- (b) selecting the proper rigging equipment, inspecting it, and complying with the applicable operating practices according to the criteria of the applicable ASME volume (i.e., ASME B30.9, ASME B30.10, ASME B30.20, ASME B30.23, and ASME B30.26)
- (c) ensuring the rated load of the rigging equipment as selected and configured is sufficient for the load to be handled, based on the number of legs, hitch configuration, and effects of angles
- (d) properly attaching the rigging equipment to the hook, shackle, or other load handling device
- (e) ensuring that rigging equipment is adequately protected from abrasion, cutting, or other damage during load handling activities
- (f) rigging the load in a manner to ensure balance and stability during the load handling activity
- (g) knowing and understanding the applicable signals for the equipment in use
- (h) installing and using a tag line(s) when additional load control is required

concerns have been addressed or the continuation of derrick operations is directed by the lift director.

The operator shall be responsible for the following listed items:

- (a) reviewing the requirements for the derrick with the lift director before commencing operations.
- (b) knowing what types of site conditions could adversely affect the operation of the derrick and consulting with the lift director concerning the possible presence of these conditions.
- (c) understanding and applying the information contained in the derrick manufacturer's operating manual.
- (d) understanding the derrick's functions and limitations as well as its particular operating characteristics.
- (e) using the derrick's load/capacity chart(s) and diagrams and applying all notes and warnings related to the charts to confirm the correct derrick configuration to suit the load, site, and lift conditions.
- (f) refusing to operate the derrick when any portion of the load or derrick would enter the danger zone of energized power lines shown in [Figure 6-3.5.3.1-2](#).
- (g) performing a frequent inspection of the derrick as specified in [para. 6-2.1.2](#).
- (h) promptly reporting the need for any adjustments or repairs to a designated person.
- (i) following applicable lock-out/tag-out procedures.
- (j) not operating the derrick when physically or mentally unfit.
- (k) ensuring that all controls are in the off or neutral position and that all personnel are in the clear before energizing the derrick or starting the engine.
- (l) not engaging in any practice that will divert his/her attention while operating the derrick controls.
- (m) testing the derrick function controls that will be used and operating only if those function controls respond properly.
- (n) operating the derrick functions, under normal operating conditions, in a smooth and controlled manner.
- (o) knowing and following the procedures specified by the manufacturer or approved by a qualified person, for assembly, disassembly, setting up, and reeving the derrick, as applicable.
- (p) ensuring that the load and rigging weight(s) have been provided.
- (q) calculating or determining the net capacity for all configurations that will be used and verifying, using the load/capacity chart(s), that the derrick has sufficient net capacity for the proposed lift.
- (r) considering all factors known that might affect the derrick capacity and informing the lift director of the need to make appropriate adjustments.
- (s) knowing the standard and special signals as specified in [Figure 6-3.4.2-1](#) and responding to such signals from the designated signalperson. (When a signalperson is not required as part of the lift operation, the operator is

then responsible for the movement of the derrick. However, the operator shall obey a stop signal at all times, no matter who gives it.)

- (t) understanding basic load-rigging procedures.
- (u) if power fails during operations
 - (1) setting all brakes and locking devices
 - (2) moving all clutch and/or other power controls to the off or neutral position
 - (3) landing any suspended load under brake control if practical
- (v) before leaving the derrick unattended
 - (1) landing any suspended load.
 - (2) disengaging the master clutch.
 - (3) setting winch brakes, swing brakes, boom brakes, and other locking devices.
 - (4) placing all controls in the off or neutral position.
 - (5) stopping the engine. An exception to this may exist when derrick operation is frequently interrupted during a shift and the operator must leave the derrick controls. Under these circumstances, the engine may remain running, and (1) through (4) shall apply. The operator shall be situated where any entry to the derrick controls position can be observed.
 - (6) considering the recommendations of the manufacturer for securing the derrick, when a local weather storm warning exists.

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- (a) ensuring the weight of the load and its approximate center of gravity have been obtained, provided, or calculated
- (b) selecting the proper rigging equipment, inspecting it, and complying with the applicable operating practices according to the criteria of the applicable ASME volume (i.e., ASME B30.9, ASME B30.10, ASME B30.20, ASME B30.23, and ASME B30.26)
- (c) ensuring the rated load of the rigging equipment as selected and configured is sufficient for the load to be handled, based on the number of legs, hitch configuration, and effects of angles
- (d) properly attaching the rigging equipment to the hook, shackle, or other load handling device
- (e) ensuring that rigging equipment is adequately protected from abrasion, cutting, or other damage during load handling activities
- (f) rigging the load in a manner to ensure balance and stability during the load handling activity
- (g) knowing and understanding the applicable signals for the equipment in use
- (h) installing and using a tag line(s) when additional load control is required

concerns have been addressed or the continuation of derrick operations is directed by the lift director.

The operator shall be responsible for the following listed items:

- (a) reviewing the requirements for the derrick with the lift director before commencing operations.
- (b) knowing what types of site conditions could adversely affect the operation of the derrick and consulting with the lift director concerning the possible presence of these conditions.
- (c) understanding and applying the information contained in the derrick manufacturer's operating manual.
- (d) understanding the derrick's functions and limitations as well as its particular operating characteristics.
- (e) using the derrick's load/capacity chart(s) and diagrams and applying all notes and warnings related to the charts to confirm the correct derrick configuration to suit the load, site, and lift conditions.
- (f) refusing to operate the derrick when any portion of the load or derrick would enter the danger zone of energized power lines shown in [Figure 6-3.5.3.1-2](#).
- (g) performing a frequent inspection of the derrick as specified in [para. 6-2.1.2](#).
- (h) promptly reporting the need for any adjustments or repairs to a designated person.
- (i) following applicable lock-out/tag-out procedures.
- (j) not operating the derrick when physically or mentally unfit.
- (k) ensuring that all controls are in the off or neutral position and that all personnel are in the clear before energizing the derrick or starting the engine.
- (l) not engaging in any practice that will divert his/her attention while operating the derrick controls.
- (m) testing the derrick function controls that will be used and operating only if those function controls respond properly.
- (n) operating the derrick functions, under normal operating conditions, in a smooth and controlled manner.
- (o) knowing and following the procedures specified by the manufacturer or approved by a qualified person, for assembly, disassembly, setting up, and reeving the derrick, as applicable.
- (p) ensuring that the load and rigging weight(s) have been provided.
- (q) calculating or determining the net capacity for all configurations that will be used and verifying, using the load/capacity chart(s), that the derrick has sufficient net capacity for the proposed lift.
- (r) considering all factors known that might affect the derrick capacity and informing the lift director of the need to make appropriate adjustments.
- (s) knowing the standard and special signals as specified in [Figure 6-3.4.2-1](#) and responding to such signals from the designated signalperson. (When a signalperson is not required as part of the lift operation, the operator is

then responsible for the movement of the derrick. However, the operator shall obey a stop signal at all times, no matter who gives it.)

- (t) understanding basic load-rigging procedures.
- (u) if power fails during operations
 - (1) setting all brakes and locking devices
 - (2) moving all clutch and/or other power controls to the off or neutral position
 - (3) landing any suspended load under brake control if practical
- (v) before leaving the derrick unattended
 - (1) landing any suspended load.
 - (2) disengaging the master clutch.
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 - (6) considering the recommendations of the manufacturer for securing the derrick, when a local weather storm warning exists.

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Riggers assigned to a load handling activity shall at a minimum be responsible for the following:

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- (c) ensuring the rated load of the rigging equipment as selected and configured is sufficient for the load to be handled, based on the number of legs, hitch configuration, and effects of angles
- (d) properly attaching the rigging equipment to the hook, shackle, or other load handling device
- (e) ensuring that rigging equipment is adequately protected from abrasion, cutting, or other damage during load handling activities
- (f) rigging the load in a manner to ensure balance and stability during the load handling activity
- (g) knowing and understanding the applicable signals for the equipment in use
- (h) installing and using a tag line(s) when additional load control is required

concerns have been addressed or the continuation of derrick operations is directed by the lift director.

The operator shall be responsible for the following listed items:

- (a) reviewing the requirements for the derrick with the lift director before commencing operations.
- (b) knowing what types of site conditions could adversely affect the operation of the derrick and consulting with the lift director concerning the possible presence of these conditions.
- (c) understanding and applying the information contained in the derrick manufacturer's operating manual.
- (d) understanding the derrick's functions and limitations as well as its particular operating characteristics.
- (e) using the derrick's load/capacity chart(s) and diagrams and applying all notes and warnings related to the charts to confirm the correct derrick configuration to suit the load, site, and lift conditions.
- (f) refusing to operate the derrick when any portion of the load or derrick would enter the danger zone of energized power lines shown in [Figure 6-3.5.3.1-2](#).
- (g) performing a frequent inspection of the derrick as specified in [para. 6-2.1.2](#).
- (h) promptly reporting the need for any adjustments or repairs to a designated person.
- (i) following applicable lock-out/tag-out procedures.
- (j) not operating the derrick when physically or mentally unfit.
- (k) ensuring that all controls are in the off or neutral position and that all personnel are in the clear before energizing the derrick or starting the engine.
- (l) not engaging in any practice that will divert his/her attention while operating the derrick controls.
- (m) testing the derrick function controls that will be used and operating only if those function controls respond properly.
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- (p) ensuring that the load and rigging weight(s) have been provided.
- (q) calculating or determining the net capacity for all configurations that will be used and verifying, using the load/capacity chart(s), that the derrick has sufficient net capacity for the proposed lift.
- (r) considering all factors known that might affect the derrick capacity and informing the lift director of the need to make appropriate adjustments.
- (s) knowing the standard and special signals as specified in [Figure 6-3.4.2-1](#) and responding to such signals from the designated signalperson. (When a signalperson is not required as part of the lift operation, the operator is

then responsible for the movement of the derrick. However, the operator shall obey a stop signal at all times, no matter who gives it.)

- (t) understanding basic load-rigging procedures.
- (u) if power fails during operations
 - (1) setting all brakes and locking devices
 - (2) moving all clutch and/or other power controls to the off or neutral position
 - (3) landing any suspended load under brake control if practical
- (v) before leaving the derrick unattended
 - (1) landing any suspended load.
 - (2) disengaging the master clutch.
 - (3) setting winch brakes, swing brakes, boom brakes, and other locking devices.
 - (4) placing all controls in the off or neutral position.
 - (5) stopping the engine. An exception to this may exist when derrick operation is frequently interrupted during a shift and the operator must leave the derrick controls. Under these circumstances, the engine may remain running, and (1) through (4) shall apply. The operator shall be situated where any entry to the derrick controls position can be observed.
 - (6) considering the recommendations of the manufacturer for securing the derrick, when a local weather storm warning exists.

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Riggers assigned to a load handling activity shall at a minimum be responsible for the following:

- (a) ensuring the weight of the load and its approximate center of gravity have been obtained, provided, or calculated
- (b) selecting the proper rigging equipment, inspecting it, and complying with the applicable operating practices according to the criteria of the applicable ASME volume (i.e., ASME B30.9, ASME B30.10, ASME B30.20, ASME B30.23, and ASME B30.26)
- (c) ensuring the rated load of the rigging equipment as selected and configured is sufficient for the load to be handled, based on the number of legs, hitch configuration, and effects of angles
- (d) properly attaching the rigging equipment to the hook, shackle, or other load handling device
- (e) ensuring that rigging equipment is adequately protected from abrasion, cutting, or other damage during load handling activities
- (f) rigging the load in a manner to ensure balance and stability during the load handling activity
- (g) knowing and understanding the applicable signals for the equipment in use
- (h) installing and using a tag line(s) when additional load control is required

derrick is not operating below energized electric power lines, the following steps shall be taken to minimize the hazard of electrocution or serious injury as a result of contact between the energized electric power lines and the derrick, load line, or load:

(-a) The derrick, load line, rigging, or load shall not enter into the resultant specified clearance.

(-b) The lift director shall conduct an onsite planning meeting with the operator and the other workers who will be in the area of the derrick or load to review the location of the electric power line(s) and the steps that shall be implemented to prevent encroachment.

(-c) Tag lines, when required, shall be of a nonconductive type. Nonconductive material can become conductive when exposed to moisture or contamination.

(-d) Erect and maintain an elevated warning line, barricade, or line of signs, in view of the operator, equipped with flags or similar high visibility markings to mark the working radius at or farther than the specified clearance distance from the electric power lines.

(-e) Implement at least one of the following measures: [If at any time the operator is unable to see the elevated warning line, barricade, or line of signs, a dedicated spotter shall be used in addition to complying with (-2) or (-3).]

(-1) a dedicated spotter that shall

(+a) be provided with any visual aids required to assist in identifying and maintaining the specified clearance distance

(+b) be positioned to accurately gauge the clearance distance

(+c) use communication methods that enable the dedicated spotter to communicate directly with the operator

(+d) give timely information to the operator so that the specified clearance can be maintained

(-2) a device that automatically warns the operator when to stop movement (This device shall be set to give the operator sufficient warning to prevent encroachment.)

(-3) a device that automatically limits range of movement, set to prevent encroachment

6-3.5.3.5 Operation Below Energized Electric Power Lines. No part of the derrick, load line, or load (including rigging) shall be allowed directly below an electric power line unless:

(a) The electric power lines are deenergized in accordance with para. 6-3.5.3.2 or 6-3.5.3.3, or

(b) Where the electric power lines remain energized during derrick operations below electric power lines, the following is required:

(1) The horizontal and vertical distance of movement of electric power lines due to the wind, sag, or other conditions shall be added to the initial specified clearance as established in para. 6-3.5.3.1. A qualified

representative of the utility owner/operator of the electric power lines shall be consulted for specific movement distances.

(2) Identify if the derrick is capable of reaching within the resultant specified clearance.

If the load or uppermost part of the derrick is capable of entering within the resultant specified clearance, and the derrick is operating below energized electric power lines, the requirements of para. 6-3.5.3.6 shall be followed even if the work is not within the specified clearance.

6-3.5.3.6 Operation Within the Specified Clearance With the Electric Power Lines Energized. The following steps shall be taken to minimize the hazard of electrocution or serious injury as a result of contact between the energized electric power lines and the derrick, load line, or load.

Before such operations take place, the lift director together with a qualified representative of the utility owner/operator of the electric power lines or an engineer qualified in electric power transmission shall, after visiting the site, determine if this is the only practical way to complete the operation and set minimum approach distances and procedures for such operations. The procedures developed to comply with this section shall be documented and readily available onsite. These operations shall be under their direct supervision. The following shall be required:

(a) The lift director shall conduct an onsite planning meeting with the operator and the other workers who will be in the area of the derrick or load to review the location of the electric power line(s) and the steps that shall be implemented to prevent encroachment.

(b) Electrical system protective devices that automatically reenergize the circuit after an electrical power line contact occurrence shall be blocked or disengaged to inhibit this function.

(c) A dedicated spotter that shall

(1) be provided with any visual aids required to assist in identifying and maintaining the specified clearance distance

(2) be positioned to accurately gauge the minimum approach distances

(3) use communication methods that enable the dedicated spotter to communicate directly with the operator

(4) give timely information to the operator so that the minimum approach distances can be maintained

(d) An elevated warning line, or barricade (not attached to the derrick), in view of the operator (either directly or through video equipment), equipped with flags or similar high-visibility markings, to prevent encroachment on the minimum approach distance.

(e) If the rigging will be within the specified clearance, it shall be nonconductive.

(f) If the derrick is equipped with a device that automatically limits range of movement, it shall be used and set to prevent any part of the derrick, load line, rigging, or load from encroaching the minimum approach distances established.

(g) Tag lines, when required, shall be of a nonconductive type. Nonconductive material can become conductive when exposed to moisture or contamination.

(h) Barricades shall be used to form a perimeter to restrict access to the derrick work area.

(i) Nonessential personnel shall be removed and prohibited from the derrick work area.

(j) No one shall be permitted to touch the derrick, load line, rigging, or load unless the lift director indicates it is safe to do so.

(k) The derrick shall be grounded in accordance with the manufacturer's or a qualified person's written instructions.

(l) Insulated barriers shall be installed by the utility owner/operator of the electric power lines, except where such devices are unavailable for the line voltages involved. Installation of such barriers are not a substitute for compliance with this section.

6-3.5.4 Induced Electrical Charges

(20)

When a potentially hazardous condition exists due to an electrical charge that can be or is being induced into the equipment or materials being handled, a qualified person shall be contacted, and his recommendation for corrective actions shall be followed.

Common sources of induced electrical charges include energized power lines, as well as radio frequency (RF), radar, microwave, and other electromagnetic energy transmitters.

6-3.5.5 Cab or Operating Enclosure

(a) Necessary clothing and personal belongings shall be stored in such a manner as not to interfere with access or operation.

(b) Tools, oil cans, waste, extra fuses, and other necessary articles shall be stored in the toolbox and shall not be permitted to lie loose in or about the cab operating enclosure.

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