# Critical Lift Plan

**U.S. Army Corps of Engineers**  
**CRITICAL LIFT PLAN**  
For use of this form, see EM 385-1-1, Section 16. Proponent agency is Crane HHWG.

**Date:**    
**Location:**    
**Prepared By:**    
**USACE District:**

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A "critical lift" can be defined as any non-routine crane lift requiring detailed planning and additional or unusual safety precautions. Critical lifts include lifts made where the load weight is greater than 75% of the rated capacity of the crane; lifts which require the load to be lifted, swung or placed out of the operator's view (except Change 6 exemption); lifts made with more than one crane; lifts involving non-routine or technically difficult rigging arrangement; hoisting personnel with a lift.

## A. TOTAL LOAD

<table>
<thead>
<tr>
<th>1. Load Weight</th>
<th>lbs</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Wt. of Aux. Block</td>
<td>lbs</td>
</tr>
<tr>
<td>3. Wt. of Main Block</td>
<td>lbs</td>
</tr>
<tr>
<td>4. Wt. of Lifting Beam</td>
<td>lbs</td>
</tr>
<tr>
<td>5. Wt. of Sling/Shackles</td>
<td>lbs</td>
</tr>
<tr>
<td>6. Wt. of Jib/Ext. (erected/stowed)</td>
<td>lbs</td>
</tr>
<tr>
<td>7. Wt. of Hoist Rope</td>
<td>lbs</td>
</tr>
<tr>
<td>8. Other:</td>
<td>lbs</td>
</tr>
</tbody>
</table>

**TOTAL WEIGHT**

**Note:** Source of load weight (Drawings, Calcs, etc.) must be attached on Page 2.

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## B. CRANE

<table>
<thead>
<tr>
<th>1. Type of Crane</th>
<th>Mobile Hydraulic Truck</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Maximum Crane Capacity</td>
<td>lbs</td>
</tr>
<tr>
<td>3. Radius (Maximum)</td>
<td>ft</td>
</tr>
<tr>
<td>4. Radius (Minimum)</td>
<td>ft</td>
</tr>
<tr>
<td>5. Boom Length (Maximum)</td>
<td>ft</td>
</tr>
<tr>
<td>6. Boom Length (Minimum)</td>
<td>ft</td>
</tr>
<tr>
<td>7. Crane Capacity (Max Radius)</td>
<td>lbs</td>
</tr>
<tr>
<td>8. Crane Capacity (Min Radius)</td>
<td>lbs</td>
</tr>
<tr>
<td>9. Boom Angle (Maximum)</td>
<td>deg</td>
</tr>
<tr>
<td>10. Boom Angle (Minimum)</td>
<td>deg</td>
</tr>
<tr>
<td>11. Gross Load of Crane</td>
<td>lbs</td>
</tr>
</tbody>
</table>

**12. Lift is _____% of the Crane's rated capacity**

**13. If Jib/Ext. is to be used:**

- **Length:** ft
- **Offset:** ft

**14. Rated Capacity of Jib/Ext.:** lbs

**15. Load Test:**

**16. Signatures**

---

## C. HOIST ROPE

<table>
<thead>
<tr>
<th>1. # of Parts</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Rope Diameter</td>
<td></td>
</tr>
<tr>
<td>3. Capacity</td>
<td></td>
</tr>
</tbody>
</table>

**Main**  
**Aux 1**  
**Aux 2**

---

## D. RIGGING

<table>
<thead>
<tr>
<th>1. Hitch Type(s)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>2. No. of Slings:</td>
<td>Size:</td>
</tr>
<tr>
<td>3. Sling Type:</td>
<td></td>
</tr>
<tr>
<td>4. Sling Assembly Capacity:</td>
<td>lbs</td>
</tr>
<tr>
<td>5. Shackle Size(s):</td>
<td></td>
</tr>
<tr>
<td>6. Shackle Rated Capacity(s):</td>
<td>lbs</td>
</tr>
</tbody>
</table>

---

## E. Crane Placement (Mobile Cranes Only)

<table>
<thead>
<tr>
<th>1. Maximum Bearing Pressure</th>
<th>PSF</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Ground Conditions Suitable for Load?</td>
<td>YES / NO</td>
</tr>
<tr>
<td>3. High Voltage or Electrical Hazards?</td>
<td>YES / NO</td>
</tr>
<tr>
<td>4. Obstructions to Lift or Swing?</td>
<td>YES / NO</td>
</tr>
</tbody>
</table>

**Note:** Bearing Pressure Calculations must be attached on Page 3.

**Note:** If Electrical Hazards are present they must be shown on Page 4.

**Note:** If Obstructions are present they must be shown on Page 4.

## F. OPERATOR QUALIFICATIONS

<table>
<thead>
<tr>
<th>1. Certified Operator?</th>
<th>YES / NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Option?</td>
<td></td>
</tr>
<tr>
<td>3. Certified for Type, Class &amp; Capacity?</td>
<td>YES / NO</td>
</tr>
<tr>
<td>4. Designated in writing by emp.</td>
<td></td>
</tr>
</tbody>
</table>

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## G. PRE-LIFT CHECKLIST

<table>
<thead>
<tr>
<th>(YES)</th>
<th>N/A</th>
<th>(NO)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Crane Inspected</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Rigging Inspected</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Crane Set-up</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Overhead Hazard Check</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Swing Check</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Counterweight Check</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Operator Qualifications</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Signal Person Qualifications</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Rigger Qualifications</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Load Chart in Crane</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Load Test</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Tag Lines</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. Wind Conditions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. Traffic Hazard Check</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15. Site Control</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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## H. SIGNATURES

<table>
<thead>
<tr>
<th>1. Crane Operator</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Rigger</td>
<td></td>
</tr>
<tr>
<td>3. Signal Person</td>
<td></td>
</tr>
<tr>
<td>4. Lift Supervisor</td>
<td></td>
</tr>
<tr>
<td>5. Other</td>
<td></td>
</tr>
<tr>
<td>6. Other</td>
<td></td>
</tr>
</tbody>
</table>

---

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**Note:** Crane HHWG.
**LOAD CALCULATIONS**

Show here or attach calculations, drawings, etc.

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16-78
<table>
<thead>
<tr>
<th>BEARING PRESSURES &amp; GROUND CONDITIONS</th>
</tr>
</thead>
</table>

Show here or attach calculations, drawings, etc.
### LOAD CHART

*Show here or attach load chart*
<table>
<thead>
<tr>
<th>OPERATOR, RIGGER, SINGAL PERSON QUALIFICATIONS</th>
</tr>
</thead>
</table>

Show here or attach operator qualifications

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Page 5 of 6
For use of this form, see EM 385-1-1, Section 16. Proponent agency is Crane HHWG.

<table>
<thead>
<tr>
<th>SITE PLAN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Show here or attach site plan and sequencing</td>
</tr>
</tbody>
</table>

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