

Request for Proposals

Project to Revise the AGC Professional Crane Operator
Training Program

AGC of America
THE ASSOCIATED GENERAL CONTRACTORS OF AMERICA
Quality People. Quality Projects.



The Associated General Contractors of America
2300 Wilson Blvd., Suite 400
Arlington, VA 22201

September 29, 2010

Request for Proposals

Revise AGC's Professional Crane Operator Training Program

Description of the Project

The Associated General Contractors of America, hereinafter referred to as "AGC," wishes to enter into a written work for hire contract (or "agreement") with a developer (hereinafter referred to as the "Developer") to revise the above-noted existing Professional Crane Operator Safety Program materials (hereinafter "The Course Material"). For this project, "revise" shall mean the modifying, addition of or deletion of material, and most importantly, updating and conveying the latest information available for the purpose of providing quality training for construction professionals in accordance with the Occupational Safety and Health Administration (OSHA) Cranes and Derricks in Construction Final Rule published in the Federal Register on August 9, 2010, and for the purpose of assuring crane operators have a comprehensive understanding of the operator's role and responsibilities in improving safety on jobsites where cranes are in operation.

The intended end product of this revision project will include an updated Participant's Manual, Load Charts, as well as the Instructor's Guide and Power Point presentations summarizing the modules of the course material, updated sample test questions and original graphics. All materials will become the exclusive property of AGC. Developer agrees not to seek royalties from the sale and/or delivery of any of the modules in the final Course Material.

The first edition of AGC's Professional Crane Operator Safety Program was developed in 1999 and was designed to offer a resource to contractors interested in providing high-quality safety training to crane operators with the ultimate goal of improving safety on jobsites where cranes are in operation.

One provision in the OSHA Cranes and Derricks in Construction Final Rule entails that operators are now required to be trained and qualified or certified following one of four options offered under the final rule. The final rule will become effective on November 8, 2010, with a four year phase-in period for contractors to certify or qualify crane operators.

AGC's Professional Crane Operator Training Course is designed as a preparatory course for those crane operators required to become a Certified Crane Operator through a nationally accredited crane certification (i.e. NCCCO, NCCER, CIA, etc.) under OSHA's new Cranes and Derricks in Construction standard.

To continue offering a high quality training program and to address the requirements and language in the recently issued final rule, AGC will hire an individual or group to revise and update the existing program.

Developer Qualifications

Qualified candidates will possess sound knowledge of the newly published final rule and the significant changes as compared to the previous standard, knowledge of other consensus standards relating to crane safety (i.e. ASME and ANSI), and experience with crane safety on

construction jobsites. Additionally, candidates will have strong writing skills and previous experience with curriculum writing and development.

Scope of Services to be Provided by the Developer

“Revising” of this project will entail, but is not limited to, the following:

1. Update existing material and add new materials as necessary to reflect industry advances in the designs of cranes and derricks, related hazards, and the qualifications of employees needed for safe operation.
2. Incorporate any requirements from Cranes and Derricks in Construction Final Rule published on August 9, 2010.
3. Reorder the existing sessions as necessary.
4. Delete any outdated, superfluous, or otherwise unneeded material.
5. Develop exercises or activities to facilitate participant learning.
6. Create a one hundred question examination, derived from the material found within the Participant’s Manual.
7. Include detailed learning outcomes in the Participant’s Manual, written using Bloom’s Taxonomy.
8. Include a new reference section based on existing AGC curriculum that includes:
 - Updated glossary of terms
 - An index
 - A Participant’s Registration and Evaluation Form
 - A listing of references
 - Resources and links for the participant to further learning on crane operation
9. Reformat lesson plans to current AGC curriculum standards and identify time period requirements for completion of each module within the Course Material.
10. Identify qualifications essential of an instructor to successfully teach the course.
11. Include the Instructors Registration and Evaluation Form.
12. Update the presentation slides to include all updated Course Material and ensure that all content within the presentation slides is covered in the same order in the Participant’s Manual and Instructor’s Guide, with consistent headings and language.
13. Include a new introductory section that introduces participants to the Load Chart manual.
14. Reference Appendix C to Subpart CC of Part 1926 (new cranes and derricks in construction standard) as a guide in consideration of inclusion in the new training program [see Attachment A].

Working With the Review Task Group

A designated AGC task group of industry professionals has been given the responsibility for providing subject matter expertise and peer review of the developed content. The group consists of AGC members and chapter staff committed to training the industry on the safe operation of cranes on construction job sites.

Field Test

Once complete drafts of the revised course material have been created, AGC of America will facilitate a field test in coordination with the developer. The developer will either facilitate the

field test or work with AGC to select an instructor.

The field test will include no less than 15 and no more than 30 participants of an appropriate representative group of current construction professionals. Following the field test, the developer will make necessary changes based on participant, instructor, task group, and AGC feedback.

Scope of Response

Those wishing to respond to this Request for Proposals should provide, at a minimum, the following information in Microsoft Word 2007 or Adobe PDF:

1. A brief letter of interest including:
 - a. A description of the individual or organization's *approach* to the revision project.
 - b. A description of the individual or organization's general *understanding of the scope of services* to be performed and tasks to be performed.
2. A *development plan* that conforms to the following schedule:

<u>Deadline</u>	<u>Deliverable</u>
September 29, 2010	Release of RFP
October 11, 2010 2:00 PM ET	Conference call to field RFP inquiries Dial: 1-800-377-8846 and enter the passcode 86662946#
October 18, 2010	Proposals due to AGC
October 27, 2010	Award project and execute contract
November 8, 2010	Project Kick-off Meeting
January 10-22, 2011	Field test dates TBD (will be three to five days)
January 28, 2011	Project complete and final submitted to AGC
3. A *proposed budget* which includes both a total fee and a payment schedule; schedule should include the development and delivery milestones to which payments are to be tied; budget is to include a separate line item for anticipated Developer travel expenses (reimbursed at actual) to attend a Project Kick-off Meeting and Field Test; the total fee will be a "not to exceed..." dollar amount. A final wrap-up online session with AGC staff and Task Group member to finalize the project will be presented by the development team.
4. A clearly defined *plan for coordinating final product handover*, material submission and follow-up, including the update of material in accordance with the final rule. Related charts or graphics will be provided electronically. All material should be in a final edited format in Microsoft Word 2007 for the participant and instructor material and in PowerPoint for the presentation slides.
5. A description of *past experience* of the individual or organization submitting qualifications, including a brief description of the past experience, the client's name, address and telephone number. Also provide a description of exact responsibilities for the developer(s) on the project.
6. A qualifications statement including information about the *individual or organization's personnel* working on this project including primary developer(s) and others, stating their role in the project, education, title, related qualifications, past relevant experience

and the date in which that person joined the firm. Include a list of qualifications, demonstrating experience and previous projects successfully completed.

7. A one page *writing sample* prepared by the primary developer. This sample should be illustrative of this individual's writing skills as well as management capabilities.
8. A list of two *references* to include name, title, address and telephone number.
9. A listing of any *additional information* that will assist AGC in this process.

Inquiries Concerning this RFP

Please send questions via email with your name, phone number, organization's name to curriculum@agc.org. One conference call is scheduled to answer phone inquiries on October 11, 2010 at 2:00 PM ET.

Submittal Information

Responses to this Request for Proposals should be submitted electronically by email to curriculum@agc.org by 5:00pm ET on October 18, 2010. Email confirmation will be provided upon receipt.

ABOUT AGC

AGC is the largest and most diverse trade association in the construction industry. The Association has more than 32,000 members and 95 state and local chapters throughout The United States. Among AGC's members are more than 7,000 of the nation's leading general construction contractors and approximately 25,000 specialty contractors and other firms engaged in the construction of highways, bridges, tunnels, airport runways and terminals, buildings, factories, warehouses, shopping centers, and both water and wastewater treatment facilities. AGC is dedicated to furthering the ever-changing agenda of commercial construction contractors, improving job site safety, expanding the use of cutting-edge technologies and techniques and strengthening the dialogue between contractors and owners. AGC offers a variety of industry-acclaimed professional development programs that meet the needs of construction professionals at any experience level.

Attachment A

Appendix C to Subpart CC of Part 1926 (new cranes and derricks in construction standard)

“This appendix contains information for employers, accredited testing organizations, auditors and government entities developing criteria for a written examination to test an individual's technical knowledge relating to the operation of cranes.

(a) General technical information.

(1) The functions and limitations of the crane and attachments.

(2) Wire rope:

(i) Background information necessary to understand the inspection and removal from service criteria in § 1926.1413 and § 1926.1414. Show citation box

(ii) Capacity and when multi-part rope is needed.

(iii) Relationship between line pull and safe working load.

(iv) How to determine the manufacturer's recommended rope for the crane.

(3) Rigging devices and their use, such as:

(i) Slings.

(ii) Spreaders.

(iii) Lifting beams.

(iv) Wire rope fittings, such as clips, shackles and wedge sockets.

(v) Saddles (softeners). Show citation box

(vi) Clamps (beams). Show citation box

(4) The technical limitations of protective measures against electrical hazards:

(i) Grounding.

(ii) Proximity warning devices.

(iii) Insulated links.

- (iv) Boom cages.
 - (v) Proximity to electric power lines, radii, and microwave structures.
- (5) The effects of load share and load transfer in multi-crane lifts.
- (6) Basic crane terms.
- (7) The basics of machine power flow systems:
- (i) Mechanical.
 - (ii) Electrical.
 - (iii) Pneumatic.
 - (iv) Hydraulic.
 - (v) Combination.
- (8) The significance of the instruments and gauge readings.
- (9) The effects of thermal expansion and contraction in hydraulic cylinders.
- (10) Background information necessary to understand the requirements of pre-operation and inspection.
- (11) How to use the safety devices and operational aids required under § 1926.1415 and § 1926.1416.
- (12) The difference between duty-cycle and lifting operations.
- (13) How to calculate net capacity for every possible configuration of the equipment using the manufacturer's load chart.
- (14) How to use manufacturer-approved attachments and their effect on the equipment.
- (15) How to obtain dimensions, weight, and center of gravity of the load.
- (16) The effects of dynamic loading from:
- (i) Wind.
 - (ii) Stopping and starting.
 - (iii) Impact loading.

(iv) Moving with the load.

(17) The effect of side loading.

(18) The principles of backward stability.

(b) Site information.

(1) How to identify the suitability of the supporting ground/surface to support the expected loads of the operation. Elements include:

(i) Weaknesses below the surface (such as voids, tanks, loose fill).

(ii) Weaknesses on the surface (such as retaining walls, slopes, excavations, depressions).

(2) Proper use of mats, blocking/cribbing, outriggers, stabilizers, or crawlers.

(3) Identification of site hazards such as power lines, piping, and traffic.

(4) How to review operation plans with supervisors and other workers (such as the signal person), including how to determine working height, boom length, load radius, and travel clearance.

(5) How to determine if there is adequate room for extension of crawlers or outriggers/stabilizers and counterweights.

(c) Operations.

(1) How to pick, carry, swing and place the load smoothly and safely on rubber tires and on outriggers/stabilizers or crawlers (where applicable).

(2) How to communicate at the site with supervisors, the crew and the signal person.

(3) Proper procedures and methods of reeving wire ropes and methods of reeving multiple-part lines and selecting the proper load block and/or ball.

(4) How to react to changes in conditions that affect the safe operation of the equipment.

(5) How to shut down and secure the equipment properly when leaving it unattended.

(6) Know how to apply the manufacturer's specifications for operating in various weather conditions, and understand how environmental conditions affect the safe operation of the equipment.

(7) How to properly level the equipment.

- (8) How to verify the weight of the load and rigging prior to initiating the lift.
- (9) How to determine where the load is to be picked up and placed and how to verify the radii.
- (10) Know basic rigging procedures.
- (11) How to carry out the shift inspection required in this subpart.
- (12) Know that the following operations require specific procedures and skill levels:
 - (i) Multi-crane lifts.
 - (ii) Hoisting personnel.
 - (iii) Clamshell/dragline operations.
 - (iv) Pile driving and extracting.
 - (v) Concrete operations, including poured-in-place and tilt-up.
 - (vi) Demolition operations.
 - (vii) Operations on water.
 - (viii) Magnet operations.
 - (ix) Multi-drum operations.
- (13) Know the proper procedures for operating safely under the following conditions:
 - (i) Traveling with suspended loads.
 - (ii) Approaching a two-block condition.
 - (iii) Operating near power lines.
 - (iv) Hoisting personnel.
 - (v) Using other than full outrigger/crawler or stabilizer extensions.
 - (vi) Lifting loads from beneath the surface of the water.
 - (vii) Using various approved counterweight configurations.
 - (viii) Handling loads out of the operator's vision (“operating in the blind”).

- (ix) Using electronic communication systems for signal communication.
- (14) Know the proper procedures for load control and the use of hand-held tag lines.
- (15) Know the emergency response procedure for:
- (i) Fires.
 - (ii) Power line contact.
 - (iii) Loss of stability.
 - (iv) Control malfunction.
 - (v) Two-blocking.
 - (vi) Overload.
 - (vii) Carrier or travel malfunction.
- (16) Know how to properly use outriggers and stabilizers in accordance with manufacturer specifications.

(d) Use of load charts.

- (1) Know the terminology necessary to use load charts.
- (2) Know how to ensure that the load chart is the appropriate chart for the equipment in its particular configuration and application.
- (3) Know how to use load charts. This includes knowing:
- (i) The operational limitations of load charts and footnotes.
 - (ii) How to relate the chart to the configuration of the crane, crawlers, or outriggers/stabilizers extended or retracted, jib erected or offset, and various counterweight configurations.
 - (iii) The difference between structural capacity and capacity limited by stability.
 - (iv) What is included in capacity ratings.
 - (v) The range diagram and its relationship to the load chart.
 - (vi) The work area chart and its relationship to the load chart.

(vii) Where to find and how to use the “parts-of-line” information.

(4) Know how to use the load chart together with the load indicators and/or load moment devices.”