We Rig It Right!

The Professional Rigger®

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TECHNICAL NEWS

Better Load Control

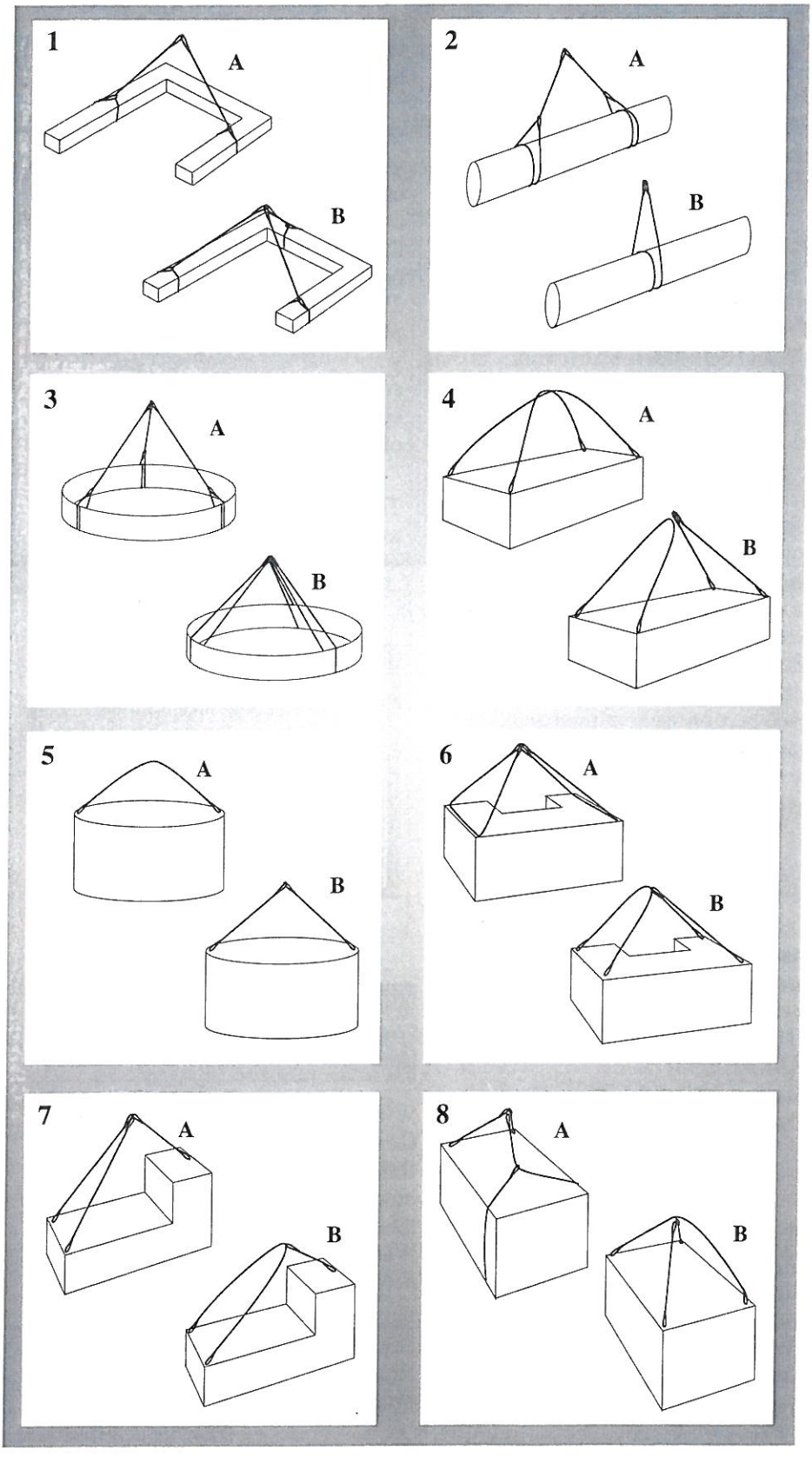
Just when we think all of the possible methods for rigging a particular load have been tried, along comes another system that requires consideration.

Each system will fall into the good or bad category. WRRC teaches riggers that there may be 4 or 5 good ways to rig a given load and a few very hazardous ways. We want riggers to be creative in designing a safe and efficient rigging technique.

Everytime a load is rigged, the rigger must assess the load's approx. weight, its center-of-gravity, the available pick points and their strength, and the overall structural integrity of the load. The rigger should also determine if the slings can slide around the load or unexpectedly over the hook.

Once a technique is decided upon, the rigger should be able to defend his rigging decision. The following workshop helps instill the concept that there are may be a thin line between a load being well rigged and one that is marginal or even hazardous. Can you determine the "better" technique which should lead to a successful load move? Can you tell from these simple line drawings which technique in each box would be the preferred method?

Review these techniques and circle the "better" technique in each box. Compare your answers to the Answer Key on Page 3, Column 3. For a review of good vs. poor rigging techniques, call WRCC at 1-800-727-6355 and order your Rigger's Reference Card today!



CLIENT NEWS

Koch Refining Co
A 3-day Comprehensive Rigging *Train-the-Trainer* Course was conducted for 5 pipefitters at Koch Refining's St. Paul, MN site. The program included written workshops addressing load weight estimation, load control and various hitch types. Special emphasis was given to teaching techniques.

WRRC's On-site CIP Courses
Certified Inspector Programs were presented to 12 individuals at **Fleet Technical Support** in San Diego, CA and **Southern California Edison** in San Clemente, CA. WRRC instructors Mike Parnell and Bill Wall presented the programs which are designed to develop and increase the participants' skill and knowledge in wire rope and rigging gear maintenance and inspection. The subjects covered during the programs were wire rope, wire rope slings, synthetic web slings, alloy chain slings, and rigging gear. Written exams on each section were administered and hands-on rigging gear inspections were performed.

OSHA / ANSI

OSHA regulations or ASME/ANSI standards are printed here as a service to our clients.
Below-the-Hook Lifting Devices
[The following are from ASME B30.20-1993]
Section 20-1.6.4 Lifting Device Operating Practices
(b) The lifting device shall not be loaded in excess of its rated load or handle any load for which it is not designed.
(g) The lifter shall be brought over the load in such a manner as to minimize swinging.
(k) The lifter shall not be used for side pulls or sliding the load unless specifically authorized by a qualified person.

IMPORTANT ANNOUNCEMENT

Some of you are still having trouble getting through when dialing our new (360) area code. The reason is that either your local telephone company or your telephone system does not recognize the new area code.

Since the old (206) area code will no longer work, you can either place your call free of charge through the operator or call us on (503) 286-8012. And please contact your local telephone service company and your telephone system supplier and inform them of the trouble you are having.

Thank you for your patience and assistance!

The Professional Rigger is a quarterly publication of Wire Rope & Rigging Consultants, Inc. It is distributed to those whose occupations require the safe and effective use of lifting and rigging equipment. For more information contact: Editor, The Professional Rigger, PO Box 728, Vancouver, WA 98666 (360) 256-5730.

NEW RELEASE

WRRC's new **"Rigging Gear Inspection Reference Card"** is now available (Section 2, Synthetic Web Slings, shown here).

See the Crane & Rigging Tool Crib for ordering information.

Synthetic Web Slings *29 CFR 1910.184 ASME B30.9 Good Practices* ②

1) Do not exceed rated capacity 2) Do not use around acid or phenolic fumes, vapors, sprays or mists. 3) Repaired slings shall be proof tested to twice rated capacity. 4) Stitching is the only acceptable method to attach end fittings and form eyes. 5) Fittings shall be of minimum breaking strength equal to that of the sling. 6) Do not use at temp. in excess of 180°. 7) Remove if: • Acid or caustic burns • Melted or charred • Snags, punctures, tears or cuts • Distortion of fittings • Broken or worn stitches	1) Slings shall be permanently marked with: a) Manufacturer name and stock number b) Rated load for types of hitches used c) Type of synthetic web material 2) Remove if: • Holes, tears, cuts, snags, crushing • No tag or illegible tag • Knots in any part of the sling • Excessive pitting or corrosion, or cracked distorted, or broken fittings • UV/sunlight damage • Other visible damage that causes doubt as to the strength of the sling 1) Use padding between sharp edges and sling. 2) Don't drag slings. Avoid shock loads. 3) Do not twist or kink the legs of a sling. 4) Do not shorten or lengthen using knots. 5) Place sling(s) in center bowl of hook. 6) Personnel stand clear of suspended load.

NEW CRANE & RIGGING ASSOCIATION FORMED

The Association of Crane & Rigging Professionals (ACRP) has been formed to improve the level of training, consulting, and inspections performed in the crane and rigging industries, and also to promote lift equipment safety and represent the Association's interests in regulatory forums. Following an organizational meeting in Orlando, Fl July 7-8, an Executive Committee was formed consisting of: President Brad Closson, President, North American Crane Bureau West, Inc., San Diego, CA; Vice President, Jim Headley, President, Crane Institute of America, Inc., Maitland, FL; and Secretary/Treasurer, Mike Parnell, President, Wire Rope & Rigging Consultants, Inc., Vancouver, WA. Parnell also serves as Chairman of the Board.

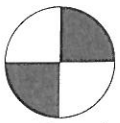
Membership is open to anyone involved or interested in cranes and rigging, particularly with regard to training, consulting, engineering, inspection and related activities. Three types of membership have been created: Professional, Corporate, and Associate. All three will be represented on the 17-member Board of Directors.

ACRP, headquartered in Vancouver, WA, plans to hold a General Assembly Workshop in Ft. Worth, TX November 3-4 immediately prior to the National Safety Council's Congress and Exhibition. Call (800) 690-3921 for information.

WRRC NEWS

Rigging Rodeo will Highlight RTW 1996 - Portland, OR

WRRC will be presenting its 7th Annual Rigging Training Workshop in **Portland, OR April 29 - May 1** (please see enclosed flyer). Workshop attendees will participate in Rigging Level I, II and III followed by Master Rigger sessions. Problem-solving training sessions address rigging applications which will challenge those who are new to rigging as well as the seasoned veteran. A crane & rigging accident case study and trainers' forum round out the event.



WRRC's Mobile Learning Center is used during the hands-on workshop, and work stations include jacking & rolling, load drifting, crane dynamics, rigging towers, new material handling devices, rigging gear inspection, mobile cranes, wire rope applications, load control and hitch systems.

A highlight to the program will be a **Rigging Rodeo** with teams competing by rigging and moving a series of loads while receiving points and prizes for accurate load weight calculation, safety, communication and efficiency in accomplishing the task. **Call today to register, as seating is limited.**

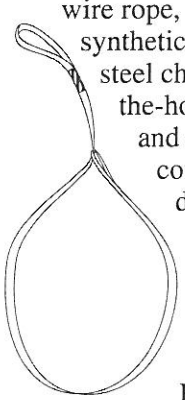
WRRC's Certified Inspector Program

Don't miss out on our next Rigging Gear Inspector's Course. The 1995/1996 course dates for programs in Vancouver, WA are:

December 11-14, 1995
March 4-7, 1996
September 16-19, 1996
December 9-12, 1996

(Please see the enclosed flyer for more information.) Call WRRC today to register and reserve your seat!

This course addresses inspection of wire rope, wire rope slings, synthetic web slings, alloy steel chain slings, below-the-hook lifting devices, and rigging gear, and covers proof and destructive testing.



The instructional format is based on OSHA CFR 29 1910, ASME B 30 series, ASTM A-391, and ASTM E-4. Participants are required to pass written tests and hands-on field inspections to successfully complete each section.

WRRC Training Programs

- Rigging Fundamentals
- Comprehensive Rigging
- Master Rigging
- Line Crew Rigging
- Rigging Gear Inspection
- On-site Rigging Inspections
- Crane & Rigging Management
- Socket Pouring Instruction
- Rigging Gear Testing
- Rigging Accident Investigation
- Lift Plan Procudures
- Fall Protection Testing
- Risk Hazard Analysis

These *activity-centered* and *performance-based* programs are conducted on-site and are customized to meet the individual needs of our clients. Call today for a proposal.

Answer Key Error June Newsletter Rigging Quiz

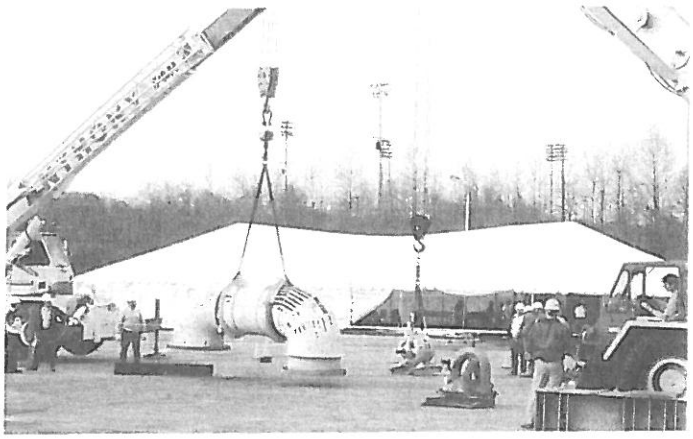
The answer to Question No. 7 in the June Newsletter was printed incorrectly. The answer is "A, More". When making a two-legged lift, the sling leg in the most vertical plane will carry more load than the more slanted sling. A good way to remember this is that the sling leg which is attached closest to the center of gravity will be the most heavily loaded.

Answer Key - Load Control Quiz, pg.1 -

1. B
2. A
3. A
4. B
5. B
6. B
7. A
8. A

Remember, call to order your Rigger's Reference Card today, 1-800-727-6355.

Rigging Training Workshop 1995



PORTLAND

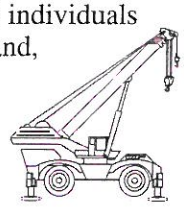
CRANE & EQUIPMENT TRAINING, INC. • PO Box 728, Vancouver, WA 98666 • Bus (360)256-5832

Training Services

- Mobile Cranes
- Overhead Cranes
- Bulldozers
- Backhoes
- Front-end Loaders
- Fork Lifts
- Man-Baskets (SPP)
- Scrapers
- Trenchers
- Bucket Trucks
- CDL
- Load Securement
- Aerial Work Platforms
- Snow Cats

Portland General Electric

CET's Harley Gist conducted two 4-day Mobile Crane Operator *Train-the-Trainer* Programs for 8 individuals at PGE's Portland, OR location. Subjects addressed included load chart interpretatation and crane operator responsibilities.



Idaho Power

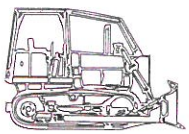
CET was contracted to provide Bridge Crane Inspection Training for operators at IPCo's Oxbow Dam location. A total of 8 operators participated in the training which required hands-on performance inspections.

Burlington Northern

Seattle, WA was the site of a 3-day Overhead Crane Operator Training Program. A total of 8 operators participated in the training which required hands-on performance inspections using daily, monthly and annual checklists.

Pacific Gas Transmission

Mr. David Young contracted CET to conduct Dozer, Grader and Yard Tractor Operator Training at PGT's Oregon locations. Participants were given various job task assignments to complete, and evaluations of their operating techniques were documented.



CRANE & LIFT INSPECTIONS, INC. • PO Box 728, Vancouver, WA 98666 • Bus (360)256-2862

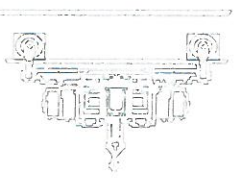
Inspection Services

- Overhead Cranes
- Gantry Cranes
- Forklifts
- Mobile Cranes
- Aerial Work Platforms
- Bucket Trucks
- Man-Baskets (SPP)
- Container Cranes
- Monorail Cranes
- Manual, Air & Elec. Hoists
- Jib Cranes
- Winching Systems

Oregon / Washington

CLI's Dave Pelkey performed a series of tests/inspections for the following clients:

- PGE's Trojan Nuclear Plant
- Valley Rental
- South Bend Packers
- Howard Moe Enterprises



Baltimore Gas & Electric

CLI was contracted to perform annual inspections on 6 overhead cranes ranging in size from 3 - 100 ton at BG&E's Wagner Fossil Power Plant.

On the "Slope"

CLI's affiliate company in Anchorage, AK, Alaska Crane & Lift Inspections, Inc. (ACLI), recently completed inspections for the Port of Homer, Port of Anchorage, Sea-Land, Corps of Engineers, Unocal, and Tesoro Alaska Petroleum.

The inspections consisted of pedestal, mobile, overhead, and container cranes.