THANK YOU! Breakfast Sponsor







CRANE, RIGGING & LIFTING COMMITTEE



CHAIRPERSON: DAVID WOLF, LYONDELLBASELL

Committee Mission Statement

To promote safe and effective crane, rigging, and lifting industry-related activities in the refining, petrochemical, oil and gas, and construction industries in the Gulf Coast, greater Houston Texas area.



BUSINESS ROUNDTABLE OFFICERS

VICE CHAIR: BILLY EVERETT, FAGIOLI





VICE CHAIR: DOUG WRIGHT, BARNHART CRANE, AND RIGGING

ANTI-TRUST GUIDELINES FOR CONDUCTING MEETINGS

IBR appreciates your willingness to be an important part of this organization and the services provided to our industry.

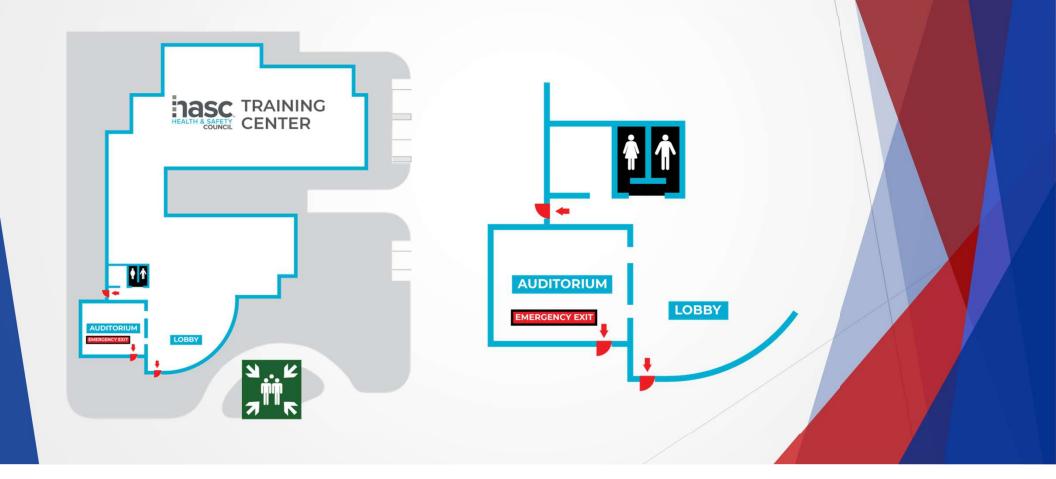
The following guidelines shall be followed in conducting meetings of IBR. This is not an exhaustive list of every possible subject to be avoided; in the event you have doubts about the propriety of any matter to be discussed in a meeting, our legal counsel is available for consultation. Generally, the anti-trust laws proscribe unlawful combinations or agreements. Sometimes "agreements" may be inferred from conduct. IBR wants to avoid even the appearance of impropriety, and this is the spirit of these guidelines.

- Do not discuss the prices of goods or services of any particular company(s).
- Do not disparage the goods or services of any particular company(s)
- Do not recommend the selection of any particular company as a supplier or customer
- Do not urge or counsel that participating companies engage in any concerted activity to accomplish any unlawful purpose, i.e., boycotting any company or coercing a company to take some desired action.
- Do not discuss matters which may be trade secrets or confidential to any company, i.e. don't engage in "off the record" comments or state matters "not to be repeated out of this room".
- Do not propose secret or "rump" sessions after the official meeting is adjourned to discuss matters which cannot lawfully be discussed at the official meeting.
- Do not recommend or sponsor the gathering of statistical data, the publishing of standards, or doing joint research without advance written approval of the Operating Committee of IBR.
- Industry Business Roundtable's purpose is to educate participating companies, so every company represented will be better informed and can make its own individual decisions. IBR members are not required to adopt the IBR recommendations or policies.

Thank you in advance for adhering to these guidelines.



Emergency Exits and Restrooms



Pledge of Allegiance

I pledge allegiance to the flag of the United States of America and to the Republic, for which it stands. One Nation, under God, Indivisible, With Liberty and justice for all.

\star

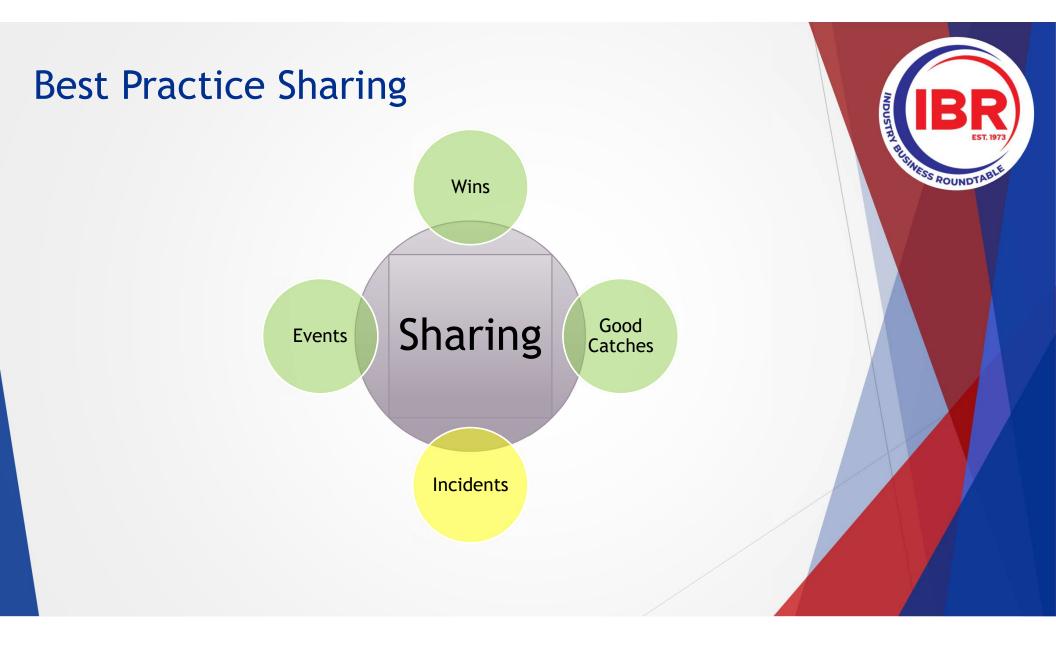
Texas Pledge

Honor the Texas Flag; I pledge allegiance to thee, Texas, one state under God, one and indivisible.

New Attendee Introductions







Safety Council Reports













OCCUPATIONAL SAFETY & HEALTH ADMINISTRATION

Welcome





Manitowoc 2250 Boom Collapse

2250 Boom Collapse Incident

- There is not a single root cause for this boom collapse. Instead, a series of events took place resulting in the incident.
- A high boom event and capacity overload on May 5 caused damage to the main boom; however, the damage was not detectable by visual inspection.
- The crane was used for light work with loads well below capacity from May 5th until July 11.
- The crane was in a condition of **potential** instant failure from May 5 till July 11 but did not collapse as the operation was of a gentle nature.
- On July 11, a slewing hard to the left resulted in the luffing jib lagging behind the main boom.
- When the slewing direction changed hard to the right, the luffing jib moved in the opposite direction, passing alignment with the main boom, resulting in excessive torque to the main boom. A marginal amount of movement between the main boom and luffing jib is normal.
- Note: Skill and judgment is required by the operator to minimize that movement.

2250 Boom Collapse Incident

- When the slewing direction changed back to the left again, the luffing jib moved again, passing alignment with the main boom, but in the opposite direction applying torque to the main boom again but in the opposite direction.
- Normally, fast, controlled slewing on this model crane would be inconsequential. However, in this case, the main boom was structurally compromised or weakened by the events on May 5.
- The ultimate collapse was due to a classic column failure caused by contractor error.
- Unable to confirm or eliminate the claim that the crane stopped slewing suddenly. The data recorder does not
 record the application of a slewing brake activation either activated by a control or by malfunction. However,
 once the crane boom was removed the slewing system worked properly.



Lessons Learned

- · Lessons learned from this event.
 - Never place cranes in an over boom event.
 - Never exceed cranes rated load chart capacity.
 - Perform thorough crane inspections.
 - Ensure smooth controlled safe operation of cranes.



2250 Boom Collapse Incident











Announcements



Next Meeting April 9, 2024

Innovation Through Collaboration!

