Moderator:



Richard E. Westney

Chairman, Westney Consulting Group





Redefining Our Industry

**Panelist** 



#### Don Vardeman

Vice President Worldwide Projects,
Anadarko Petroleum





#### **Re**defining Our Industry

**Panelist** 



**Scott Boisvert** 

Project Manager, Merck & Co., Inc.





Redefining Our Industry

**Panelist** 



Todd Zabelle

CEO, Strategic Project Solutions





#### **Re**defining Our Industry

**Panelist** 



**Mathew Riley** 

Director BAA





Redefining Our Industry

#### True or False?

 The more front-end loading, the better cost and schedule performance will be

1. True 86%

2. False 14%

 Cost – Schedule – Quality: You can have any two, but never all three

1. True 17%

2. False

Fixed price contracts produce better contractor

performance than reimbursable cost contracts

1. True 25%

2. False

**75%** 



3.





## Cooperation & Collaboration – Topics for Today

- Why was a more collaborative approach needed?
- What are the basic concepts?
- What challenges/barriers had to be overcome?
- Examples of improved performance
- Recommendations & Lessons Learned









# Why Was a More Collaborative Approach Needed? (SPS)

- Today's business environment requires:
  - Better control of time to market
  - Life-cycle performance improvement
  - The need to adopt to ever-evolving environmental requirements







# Why Was a More Collaborative Approach Needed? Anadarko

- 1995: applying new technology for deepwater oil production – required collaboration & cooperation between engineer, fabricator, installer and owner
- Very small owner team empowered to deliver a solution









# Why Was a More Collaborative Approach Needed? Merck

- Schedule driven project at West Point, PA manufacturing plant
- Challenge for 24 months (vs. 27 best)
- Permitting issues delayed construction start by 2 months







# Why Was a More Collaborative Approach Needed? Case Study: BAA Terminal 5







#### **Discussion Question:**

# When should new methods of Collaboration & Cooperation be applied?

- 1. On mega-projects
- 1%
- 2. On projects with new technology
- 2%
- 3. On projects with aggressive schedules 3%
- 4. On all projects

82%

5. Only on projects with special challenges 12%





### What Are the Basic Concepts? Anadarko

- Integrated project team incl. owners (operator + partners), and contractors
- Put project priorities first; requires
  - Trust
  - Open communication
  - Executive Steering Committee
  - Effective issues management
- Open to standardization







### What Are the Basic Concepts? Merck

- Integrated key subcontractors into design effort
- 50% design package from A/E issued for bid
- Tailored selection criteria emphasizing quality of team, integration ideas, VIPs
- Insisted on frequent communication among contractors, A/E and with Merck
- Encouraged "lean" ideas to simplify process & save time (e.g., IFC package)
- Unit-price type contracts convert to LS





### What Are the Basic Concepts? SPS

- Value from the perspective of the end-user customer vs. project-centric objectives
- Relational agreements vs. transactional
- Concurrent processing vs. sequential









# What Are the Basic Concepts? Case Study: BAA Terminal 5







#### **Discussion Question:**

All the approaches use some form of "integrated teams". How easy is it to form an effective integrated team across companies?

1. Very easy

1%

2. Not too difficult

11%

3. Somewhat difficult

54%

4. Brutally difficult

34%







### What Challenges / Barriers Had to be Overcome? Anadarko

- Global fabrication requires coordination of work on several continents
- Goal alignment getting people to appreciate the value of the C&C effort and that their efforts are appreciated *Project Stock Certificates* for <u>all</u> participants
- Empowering the team to execute "best for project" decisions





#### GUNNISON PRO



One Share

### What Challenges / Barriers Had to be Overcome? Merck

- Selling the new approach to management (a license to steal?)
- Selling the new approach to the A/E Firm (will all this collaboration kill the schedule?)
- Selling the new approach to the contractors (just another buzzword?)





### What Challenges / Barriers Had to be Overcome? SPS

- "Social" issues
  - Site supervisor: "Can I <u>really</u> participate in the scheduling?"
  - Scheduler: "So what is my job now?"
  - Crafts: "Overtime is reduced so how is this a good thing?"
  - CM: "So what is my role now?"
  - Do traditional project controls help or hurt?
  - How to behave in this new environment?







# What Challenges / Barriers Had to be Overcome? Case Study: BAA Terminal 5







#### **Discussion Question:**

What is the source of the biggest challenges in improving Collaboration & Cooperation?

1. Management

65%

2. Project Manager

25%

3. Site Supervision



4. Crafts / Unions







### **Examples of Improved Performance Anadarko**

- Benefits under any form of contract
- Open communication in China fab. yard provided early warning of schedule delay, was basis for jointly developed solution (that reduced cost and schedule!)
- Benchmarking shows 20% faster and more than 20% lower cost with excellent safety performance and operability







### **Examples of Improved Performance Merck**

- When clashes discovered, Merck was presented with a solution (not a problem).
- "Everyone is a lot less frustrated."
- "This gives us a chance to show what we can do, given the right environment."
- Greatly reduced change: 6% vs. >20% historical average.
- At 95% complete, team is one month ahead and >10% under budget







### **Examples of Improved Performance SPS**

- Chemicals project: schedule reduced by 7 months
- Refinery: 40% reduction in labor cost
- Pulp & Paper: record time for TAR (70% of best previous duration)
- Impact of project performance on HEALTH (in addition to Safety)









# **Examples of Improved Performance Case Study: BAA Terminal 5**







#### **Discussion Question:**

What percentage of your projects are actually fun for all the participants?

1. A few 39%

2. About half

20%

3. Most of them

16%

4. You're kidding, right?

25%





#### **Discussion Question:**

Does the form of contract impact Collaboration & Cooperation effectiveness?

1. Yes, a great deal

85%

2. Somewhat



3. No, not at all







### Recommendations & Lessons Learned Anadarko

- Trust Truth Openness
- Empowerment Literally enabling people to influence the outcome. "Steel by itself is pretty dumb - it is people who make it into something."
- Listening to people makes them feel valued





### Recommendations & Lessons Learned Merck

- Easiest to implement when the parties have worked together
- Use open book pricing
- Owner behavior drives contractor's
  - Open-minded
  - Listen well
  - Model C&C





### Recommendations & Lessons Learned SPS

- Get started competitors are!
- Don't wait for the "perfect project" innovation happens best when driven by necessity
- It won't be easy but stay the course!





#### **Recommendations & Lessons** Learned Case Study: BAA Terminal 5







