Author Request (To be completed by applicant) - The following author(s) request authority to disclose the following presentation in the MORSS Final Report, for inclusion on the MORSS CD and/or posting on the MORS web site.

Name of Principal Author and all other author(s):
Ms. Robyn L Sindel

Principal Author's Organization and address:
The Boeing Company
Mail Code S270-4225 P. O. Box 516
St. Louis, MO 63166-0516
Phone: 314-233-7281
Fax: 314-233-2363
Email: robyn.l.sindel@boeing.com

Original title on 712 A/B:
Involving the Extended Value Chain in a Whole Life Target Costing Model

Revised title:__________________________________________________________

Presented in: WG-27 Cost Analysis

This presentation is believed to be:
UNCLASSIFIED AND APPROVED FOR PUBLIC RELEASE
**Involving the Extended Value Chain in a Whole Life Target Costing Model**

**The Boeing Company**
Mail Code S270-4225 P. O. Box 516 St. Louis, MO 63166-0516

Approved for public release, distribution unlimited

Involving the Extended Value Chain in a Whole Life Target Costing Model

A Study Sponsored by the CAM-I Target Costing Interest Group

Robyn Sindel
The Boeing Company
MORS Symposium
CAM-I’s Membership

- CAM-I’s international consortium consists of:
  - Manufacturing companies
  - Service organizations
  - Government
  - Professional bodies
  - Software companies
  - Consultancies
  - Academia

Who work in collaboration to solve management problems and critical business issues that are common to the group in the areas of cost, process and performance management
CAM-I Member Companies

- ABS Consulting, Inc.
- ATI
- Bank of America
- BAE Systems
- Bob Paladino & Associates, LLC
- Boeing Company
- Business Objects
- CALIBRE Systems
- Cost Vision
- CMA (Canada)
- **Department of Defense**
- Executive Management Associates
- Godrej & Boyce Manufacturing
- Grant Thornton LLP
- IBM Corporation
- International Truck & Engine Company
- On Semiconductor
- Pilbara Group Inc.
- Regence
- Rockwell Collins
- Royal Australian Navy
- SAP AG
- SAS Institute
- Synerma, Inc.
- Tata Consulting Services Limited
- **U. S. Air Force**
- **U. S. Coast Guard**
- **U. S. Marine Corps**
- **U. S. Navy**
- U. S. Patent and Trademark Office
- VEN International
How Interest Groups Create the CAM-I Body Of Knowledge

CAM-I Body of Knowledge

Interest Group Collaboration

Academic Research

Subject Matter Experts

Practitioner Experience

Existing Knowledge on Cost, Process and Performance Management
CAM-I Target Costing Best Practice Interest Group

• **Mission:**
  Develop an ongoing vehicle for sharing target costing practices among the participants

• **Members**
  - Boeing – BCA, IDS, PW
  - CostVision
  - IBM
  - Regence Group
  - Rockwell Collins
  - US Air Force
  - US Coast Guard
  - VEN International

• **Academics**
  - Dr. Shahid Ansari – Babson College
  - Dr. Mohan Gopalakrishnan – Arizona State University
Involving the Extended Value Chain in a Whole Life Target Costing Model

• Purpose and Scope
• Importance of Study
• Overview of Preliminary Findings
• How You Can Help
• How to involve Operations & Support (O&S) suppliers as partners in design process when O&S cost is a significant proportion of Life Cycle Cost
• Acquisition versus O&S Paradigm
Why is this important?

• GAO report findings on NASA (5/04):
  – Focus on annual budgets vs. managing total program costs
  – Space Station: budgets not credible -- LCC estimates not prepared
  – Underestimating full LCC creates risk that program be under-funded and subject to major cost overruns
  – 7 of 10 programs fail independent review of supplier estimates (problem: low bid to win contract)

Inadequate planning for O&S costs drives budget overruns
• **Recommendations:**
  
  – “…establish a standard framework for developing lifecycle cost estimates”

  – “base its cost estimates on a full life cycle for the program…that encompass both in-house and contractor efforts”
What We Have Done

- Literature Reviewed
- Field Interview Template Created
- Pilot Interviews Completed
- Responses Validated
- Preliminary Findings Identified
Preliminary Findings

- Contractor does not receive O&S targets
- Lacking justification for estimate
- Reluctance to commit for activities 10 + yrs out
- O&S costs takes lower priority than technical performance and schedule
- Insufficient development budget for O&S analysis
- Suppliers see skewed data
- Incentivized to win proposal, no incentive for O&S
- Estimates vary widely based on changing assumptions
- Data not collected at an appropriate level to create CERs

GAO findings were published 3 years ago, likely developed ~5 years ago. According to the preliminary findings, not much has changed
Next Steps

Complete Additional Interviews → Aggregate Key Findings → Draw Conclusions → Document Practices
How you can help

- Participate in survey
- Suggest potential interviewees
- Validate findings
- Be our guest at CAM-I in Memphis

Benefits
- Contribute to leading edge research
- Complimentary executive summary
- Latest knowledge of Target Costing
References

• GAO Report
  www.gao.gov

• CAM-I
  www.cam-i.org

• Robyn Sindel
  (314) 233-7281
  robyn.l.sindel@boeing.com
Questions?
Interview Questions Set Around 4 Themes

• Supplier involvement & engagement
• Contractual issues
• Setting & accepting O&S targets
• Managing risk and uncertainty