LESSONS LEARNED

BaBar SUMMER DOWN 2004
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LESSONS LEARNED 2004

• WHAT WE DID RIGHT
• AREAS FOR IMPROVEMENT
• WHAT SHOULD WE DO DIFFERENTLY NEXT TIME
Safety: ISM

Guiding Principles:

GP 1: Line Management Responsibility for Safety
GP 2: Clear Roles and Responsibilities
GP 3: Competence Commensurate with Responsibilities
GP 4: Balanced Priorities
GP 5: Identification of Safety Standards and Requirements
GP 6: Hazard Controls Tailored to Work Being Performed
GP 7: Operations Authorization

Figure 2: Core Functions
LESSONS LEARNED 2004

WHAT WE DID RIGHT

• SYSTEM SAFETY ENGINEERING CF 1,2,3,4,5
  – SYSTEMATIC APPROACH TO HAZARD ANALYSIS, RISK ASSESSMENT, AND RISK MANAGEMENT

• RECOGNIZED THE SAFETY RELATED CHALLENGES FOR THE SUMMER DOWN CF 1,2

• ORGANIZED A STRATEGY AND DEVELOPED A PLAN CF 3,4,
LESSONS LEARNED 2004

WHAT WE DID RIGHT

• SYSTEM SAFETY ENGINEERING
  INCORPORATED SAFETY INTO THE DESIGN
  – FLAMMABILITY ISSUE OF LST GAS MIXTURE
  – COMBUSTIBILITY OF LST MATERIALS
  – SAFETY REVIEWS OF THE TOOLING, FIXTURES, ELEVATOR PLATFORM, PROCIDURES
  – SECOND ADDENDUM OF THE FIRE HAZARD ANALYSIS
LESSONS LEARNED 2004

WHAT WE DID RIGHT

• RECOGNIZED THE SAFETY CHALLENGES
  – EXTREMELY AGGRESSIVE SCHEDULE
  – FATIGUE ISSUE
    • OLDER WORKFORCE
    • MULTISHIFTS
  – POTENTIAL FOR CHAOS
    • LARGE NUMBER OF PEOPLE IN A CONGESTED WORK SPACE
    • SIMULTANEOUSLY OPERATIONS BY DIFFERENT GROUPS
    • SIGNIFICANT NUMBER OF NEW AND COMPLEX RIGGING OPERATIONS
  – LACK OF EXPERIENCED WORKERS
LESSONS LEARNED 2004

WHAT WE DID RIGHT

• ORGANIZED A PROGRAM TO MEET THE SAFETY CHALLENGES
  – SAFETY PLAN
    • FORMAL, REVIEWED, APPROVED
  – SAFETY TEAM
    • OVERSIGHT PROVIDED FOR ALL SHIFT
  – BABAR SPECIFIC SAFETY TRAINING
    • ZERO TOLERANCE FOR PEOPLE IGNORING THE RULES
  – TAILGATE COORDINATION/SAFETY MEETINGS
  – JHA, PROCEDURES
  – SAFETY COORDINATION
  – RD MANAGEMENT WALKTHROUGH INSPECTIONS
LESSONS LEARNED 2004

CONCLUSION

• EXCELLENT COOPERATION FROM ALMOST ALL INVOLVED
• MANAGEMENT FULLY SUPPORTED THE APPROACH AND HELP SET THE TONE FOR THE INCREASED EXPECTATIONS
• COORDINATION/SAFETY TAILGATE MEETINGS ARE ESSENTIAL
• LOCAL SAFETY COMMITTEE (MGMT AND UNION) SENT A LETTER STATING “The management and union members of the Local Safety Committee concur that the safety process implemented and practiced at BaBar during the down time has served the purpose well. We think it generally represents a model worth refining for application around the site …”
• IT WAS EXHAUSTING
LESSONS LEARNED 2004

AREAS FOR IMPROVEMENT

• SLING INCIDENT
• FOUR PEOPLE DIRECTED TO LEAVE IR-2
• SUPERVISORS DID NOT TAKE SUFICIENT RESPONSIBILITY FOR SAFETY
• SAFETY TEAM MEMBERS WERE INCLINED TO TAKE ON EXCESSIVE RESPONSIBILITY
• OLDER WORKERS MENTORED YOUNGER - BAD HABITS WERE LEARNED
• ELEVATOR STAND LACKED LIFT POINTS AND CG AND WEIGHT MARKING
• INCORRECT LADDER USE WAS A CONTINUING PROBLEM
LESSONS LEARNED 2004

WHAT SHOULD WE DO DIFFERENTLY IN 2006?

• IS THE RISK IN 2006 DIFFERENT?
• SHOULD WE IMPLEMENT A SIMILAR PLAN?

• SUPERVISORS NEED TO TAKE OWNERSHIP OF THE SAFETY OF OPERATIONS IN THE HALL
• IMPROVE COORDINATION BETWEEN SUPERVISORS AND THE SAFETY TEAM MEMBERS
• DO NOT BRING BACK RETIRED WORKERS TO PERFORM HARD PHYSICAL LABOR
• ONLY EXPERT CRANE OPERATORS AND EXPERIENCED TECHNICAL SUPPORT STAFF SHOULD PERFORM CRITICAL LIFTS