Implementing Crew Endurance Management

What Worked
What Didn’t Work
and Why
Crew Endurance Defined

- Crew Endurance refers to the ability to maintain performance within safety limits while enduring job-related physiological and psychological challenges.

The Crew Endurance Management System (CEMS) is the roadmap for optimizing Crew performance.
More about CEMS

• Crew endurance is about more than just fatigue counter measures. Some of the physiological and psychological factors (risk factors) which affect employee endurance include:

  - Quality and duration of sleep
  - Sustained effort and hours of wakefulness
  - Stability of the person’s biological clock
  - The internal state of the person
  - Diet
  - Physical conditioning
Even More About CEMS

- OTC Medications awareness
- Prescription Medication awareness
- Caffeine management
- Work and sleep environment
- Hydration – Water! Accept no substitutes
- Work schedules
- Safety
- Individual informed choices
History of CEMS at ACBL

1999
- Safety Dept. Initial Research
- Circadian Technologies Proposal
- Incidents and time of day
- Enter Partnership

2001
- Initial Workshop Held
- Crew Alertness

2003
- Coaches Training
- AWO
- Birmingham Workshop
- Expansion of Program
- First Vessels Implemented

Awareness Campaign

AWO
Implementation Challenges

- Support Infrastructure
- Cultural Resistance to Change
- Misinformation
- Adequate Coaches
- Individual Buy-in
- Being Overly Critical
Components of an Endurance Program

• Management Commitment
• Employee Awareness and Education
• Development of a site specific plan
• Environmental improvements
• Light management
• Coaches
• Changing work schedules/times
The CEM Process

1. Development: Set Up Working Group
2. Deployment: Educate Working Group
3. Assessment: Analyze Current Situation
4. Create Crew Endurance Plan
5. Educate Entire Crew
6. Implement CEP
7. Coach Crew
8. Evaluate Results

Working Group Modifies Cycle
Recommendations

• Management Commitment
• Begin Awareness Campaign Now!
• Be Patient

This napping Policy is great!
“Is it worth the effort?”

• Increased ability of workers to perform job functions safely and efficiently
• Long term health benefits to employees, and a corresponding decrease in health care costs for the organization.
• Utilization of scientific knowledge to:
  – Improve the decision making abilities of your employees.
  – Enhance quality of life for your workers.
  – Increase safety and efficiency of your operations.
  – Set a new standard of operational excellence in the your industry.
Conclusions

- It is not easy to implement an Endurance Management Program. There will be resistance from both management and workers. But, if you are patient, the results can far outweigh the challenges. The net result will be a safer, more efficient workforce.
Thank You