Transportation Safety Board Safety Summit

SailSafe

Captain Jamie Marshall Vice President, Fleet Operations



BC Ferries

Diverse service

- 24 routes, 47 terminals
- 4,400 employees

Traffic

- 19.8 million passengers
- 7.7 million vehicles
- Daily average:
 - 55,000 passengers
 - 21,000 vehicles
 - 500 sailings
- 182,000 departures/year

35 vessels

- Vehicle capacities from 16 to 410 cars
- Passenger capacities from 133 to 2052
- Crew ranges from 4 to 48



Major Route

Other Route

Victoria

MAJOR ROUTES

NORTHERN ROUTES





BC Ferries

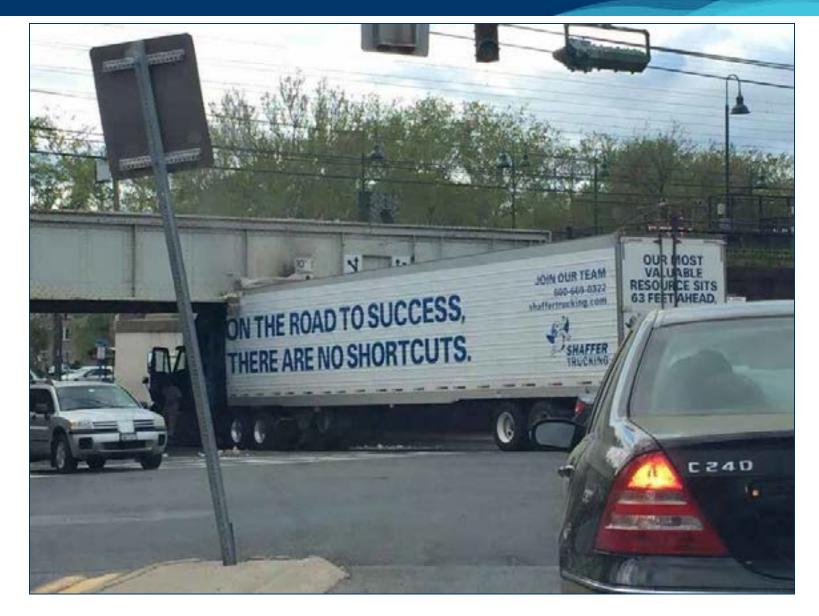






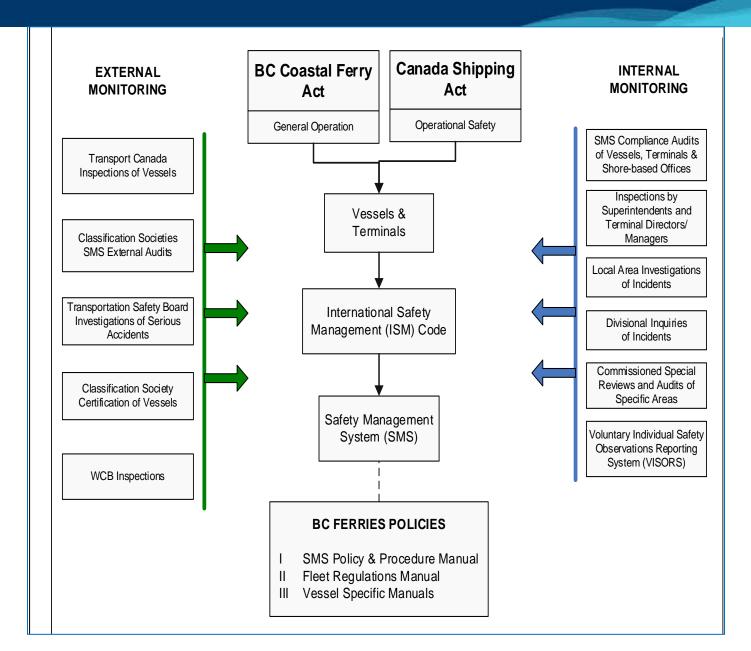


≈BCFerries



May-27-16

Safety Management System (SMS)



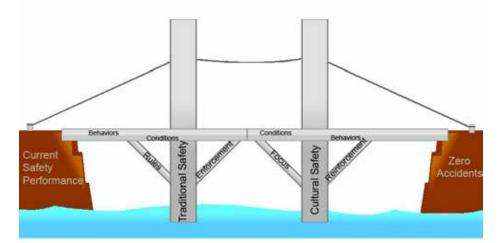
Learning from "The Queen of the North"

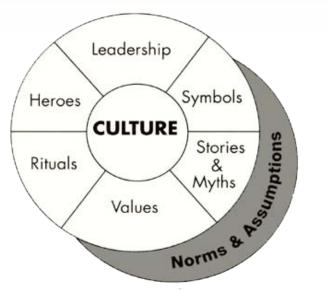
A profound event; triggered major renewal of safety culture

- Engage our people
- Engage the union
- Engage international expertise
- Integrate occupational and operational safety
- Focus on culture and risk
- Imbue the culture with understanding of human factors

Our Goals:

Transform our safety culture Embody the transformation in our SMS Be a world leader in safety management

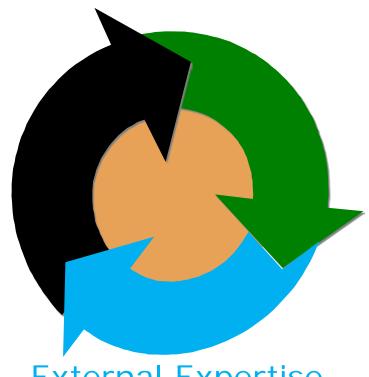






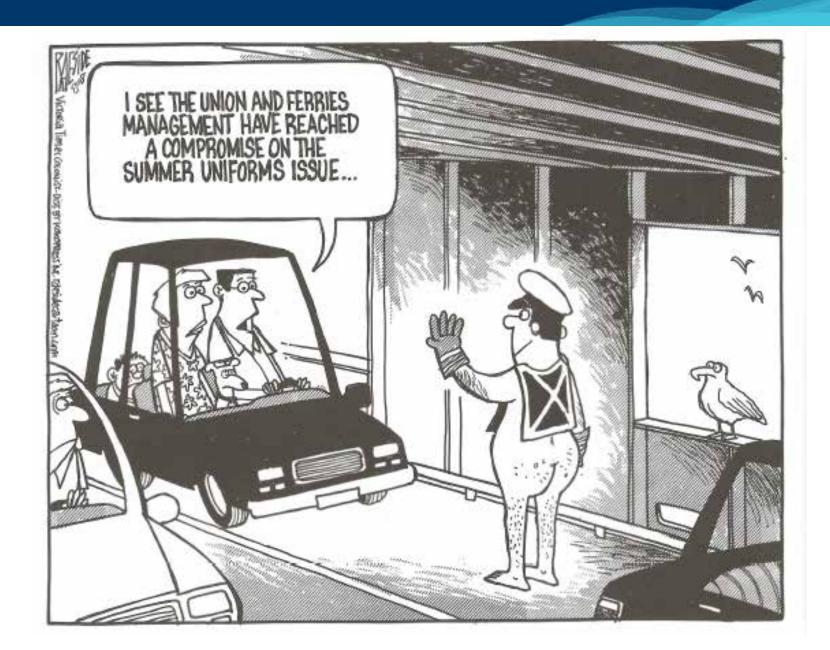
STEERING COMMITTEE

BCF Management Representation



BC Ferry & Marine Workers' Union Representation

External Expertise
WrightWay Training and Force Technologies



SailSafe

Joint initiative BC Ferry & Marine Workers' Union and BC Ferries

Close cooperation; open and transparent process

Recognizes the Union as a leading safety advocate

Bring employees into the cultural effort

Inclusive, non-judgemental, goal focused

Creation of a just culture

Methodologies:

Leave rank at the door
Labour relations stays out
Harness the creativity and concerns of the people
Broad based working groups
Gather "gold dust", make them nuggets
Develop actions plans for change

What came out of this?





Employee Engagement

4,500 bits of Gold Dust

Gathered from approximately 3000 employees

Organized under 4 safety "pillars":

- People
- Assets
- Procedures
- Communication

85 Action Plans:

- 44 for Immediate Implementation
- 41 Medium Term Implementation

Some of the biggest:

- Revitalise the SMS
- Risk assessment
- Employee Care
- Better communication







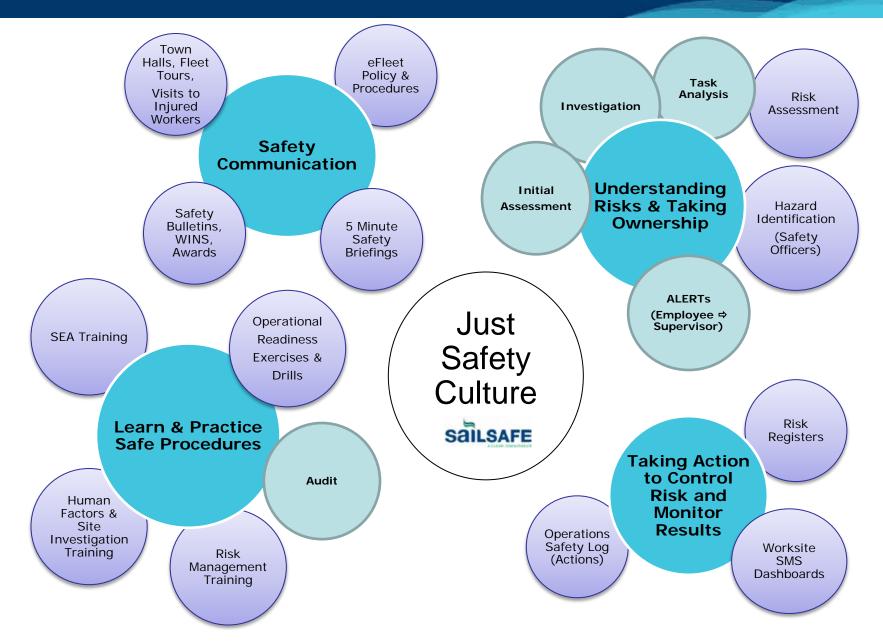


"Blame"



"No Blame"

SMS Elemental Components



Employee Care and Injury Reduction

Our people are the key to a safety culture

If we want our people to care for the Company (and our passengers), the Company must care for our people

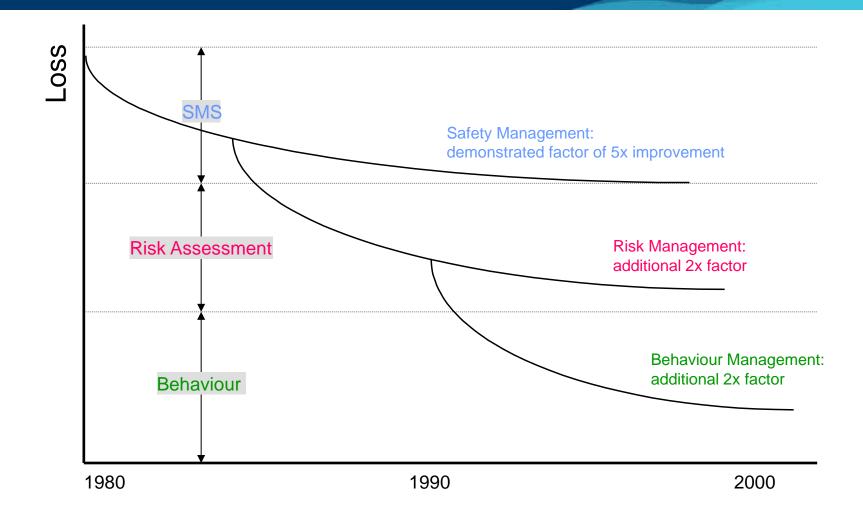
Reducing injuries is a real and compassionate way that shows "We Care"

An intensive effort to reduce injuries

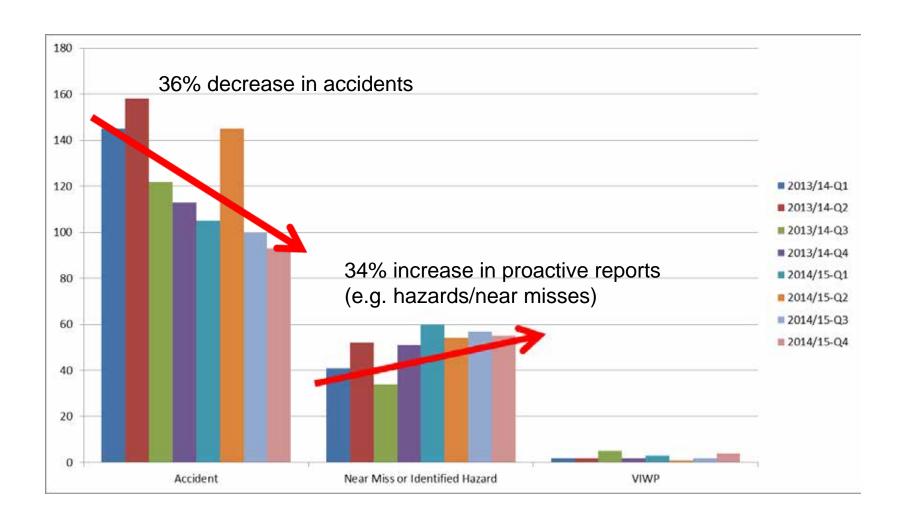
ALERT – All Learning Events Reported Today "You're important to us; We need you here" Customer Code of Conduct Employee Recognition



Evolution of Safety Performance



IAR Trending





Human Factors & Local Incident Investigation

Awareness of human factors but lacked a rigorous framework to manage them

Goal: Increase ability to recognize and manage human factors; and mitigate adverse impacts

- Engaged expertise from Europe
- Trained senior executive, union and safety department
- Rolled out training to senior officers and front line supervisory staff
- Integrated Crew Resource Management
- Simulators in-house and external institutions



What is SEA?



- Standardized Education and Assessment Program used to train all employees:
 - Replaces traditional system of familiarization/ job shadowing

SEA Process

- Ensures all Candidates receive the same level of instruction and interaction
- Clear and standardized process and documentation
- Best practices are captured
- Detached trainer so learning can be focused
- Objective measures of success
- Same approach is used across all lines of business
 - Deck, Engineering, Catering and Terminals
 - 36 positions
 - 400 SEA Trainers

Operations & Security Centre

Goal: Establish a coordination centre to improve communications and response to events

Centralized fleet and terminal communications

Staffed 24/7

Monitors fleet position, operations, traffic, near miss events and security



Internal Communication

BC Ferries has many small, local operations

Getting clear communication throughout the organization has been difficult



ALERT Flash communication of critical learning events
E mail for all employees who want it
"Five minute" daily briefings
Dedicated safety websites
President Information Sessions
"Town hall" meetings
Front line supervisory training
Operations & Security Centre

Field time, field time, field time





Revised Maintenance Management System

BC Ferries performs 22 refits per year on 35 vessels using internal and externals yards

Goal: Simplify processes, reduce time to correct defects, improve quality

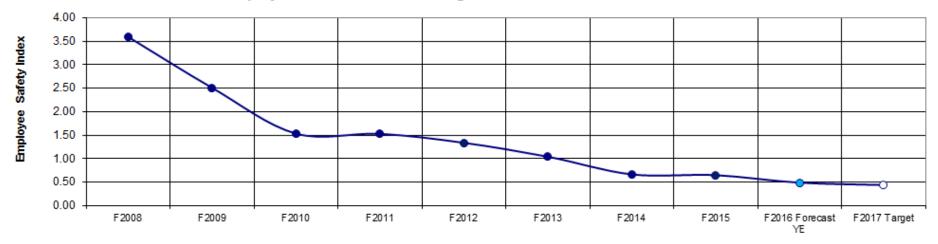
- Every ship has a specialized shore maintenance manager
- Establish critical spaces for each vessel
- QA certification for internal ship and project management office
- Renewed Computer Maintenance Management System (Maximo)
- Re-write procedures for our most hazardous ops: confined space entry, diving and live electrical work (arc flash)
- Established expert Project Management Office





Employee Safety Index

Employee Index Actuals and Target



Passenger Safety Index

Passenger Index Actuals and Target



Conclusions

- Serious workforce engagement
- 89.3% decrease in employee injury rate and severity
- 58.4% decrease in passenger injuries
- Fewer safety critical incidents
- Better reporting, at earlier stages of event
- Better labour relations
- Focus on Health & Wellness
- Lower costs:
 - Lower absenteeism
 - Lower workforce injury insurance rates
 - Less asset damage
 - Better maintenance
- WorkSafe BC in partner with British Columbia Maritime Employers Association - Certificate of Recognition
- Safety Awards:
 - Latitude Inspiring Safety 2013 International Winner
 - Lloyds North America Training Award 2014 Bridge Simulator Training Program







Questions?