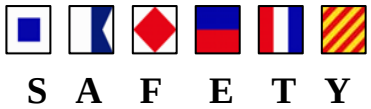


NAVSEA SAFETY JOURNEY

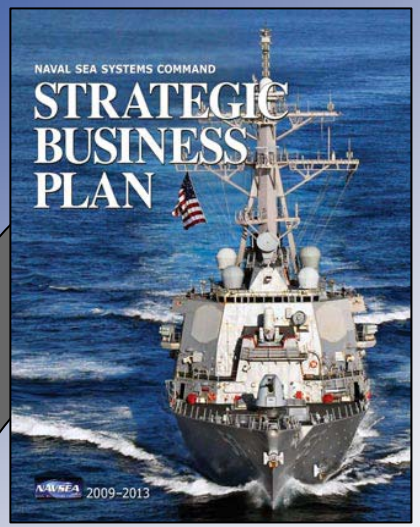
Mr. Jim Brice
NAVSEA SEA 04R

30 Jun 2010

Objectives

- Improve Safety across all NAVSEA Industrial Activities – Public and Private
- Reduce Safety hazards and mishaps to As Low As Reasonably Achievable – ALARA
- Mainstream Safety
- Implement Safety Pyramid and VPP+ Model
- Achieve Alignment
- Raise Standards – Achieve Excellence

NAVSEA Strategic Business Plan



- Mission
  - We develop, deliver and maintain ships and systems on time, on cost for the United States Navy.
- Vision
  - We are the Nation's team accountable for achieving the 313 ship Navy
- Goals
  - Build an Affordable Future Fleet
  - Sustain Today's Fleet Efficiently & Effectively
  - Enable Our People

Navy Alignment

DON

Secretary of the Navy
- Provide Total Naval Workforce
- Prosecute Global War on Terrorism
- Build the Force For Tomorrow
- Safeguard People
- Strengthen Ethics
- Provide First-Rate Facilities

OPNAV

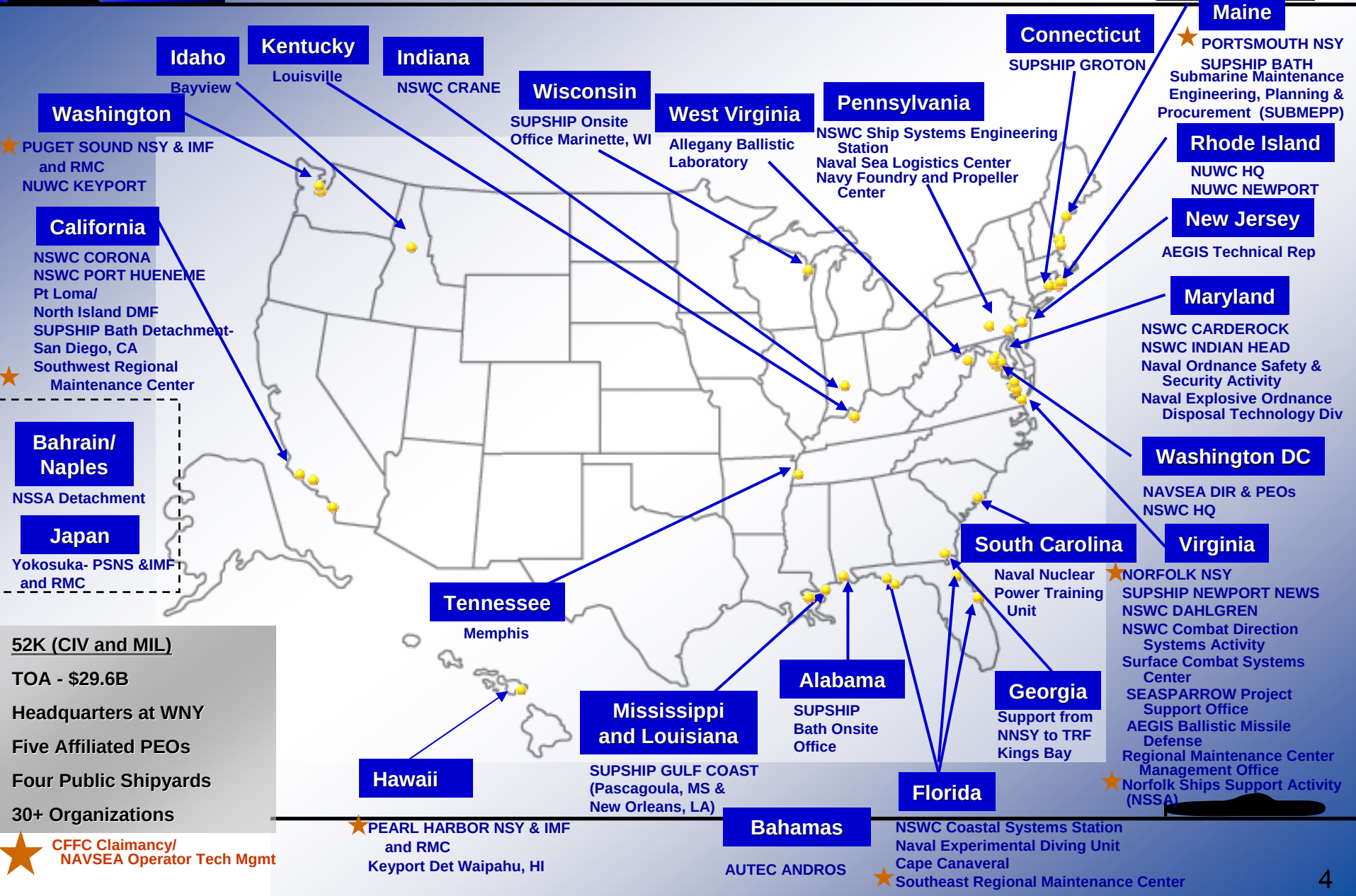
Chief of Naval Operations
- Build a Navy for Tomorrow
- Maintain Current Warfighting Readiness
- Provide for Our People

NAVSEA

Naval Sea Systems Command
- Build an Affordable Future Fleet
- Sustain Today's Fleet Efficiently and Effectively
- Enable Our People

NAVSEA annually executes a $30B budget, approximately 25% of the DON budget

Organizational Reach



52K (CIV and MIL)

TOA - $29.6B

Headquarters at WNY

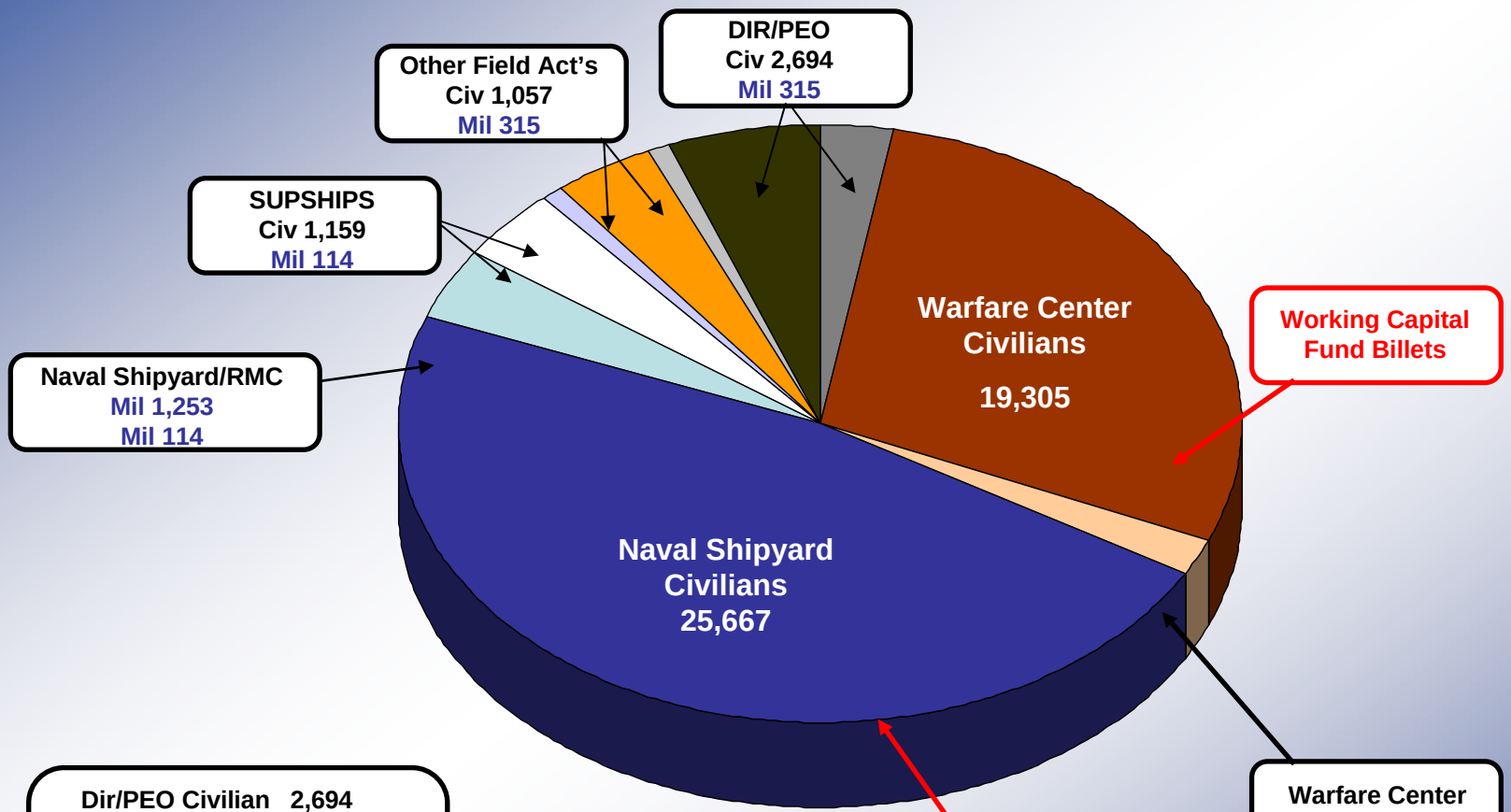
Five Affiliated PEOs

Four Public Shipyards

30+ Organizations

★ CFFC Claimancy/ NAVSEA Operator Tech Mgmt

NAVSEA Personnel



Dir/PEO Civilian	2,694
Dir/PEO Military	315
Field Civilian	47,188
Field Military	2,704
	52,901

Mil and CIV-FY09 CERTIFIED ACTUALS

Naval Shipyard Totals

S A F E T Y

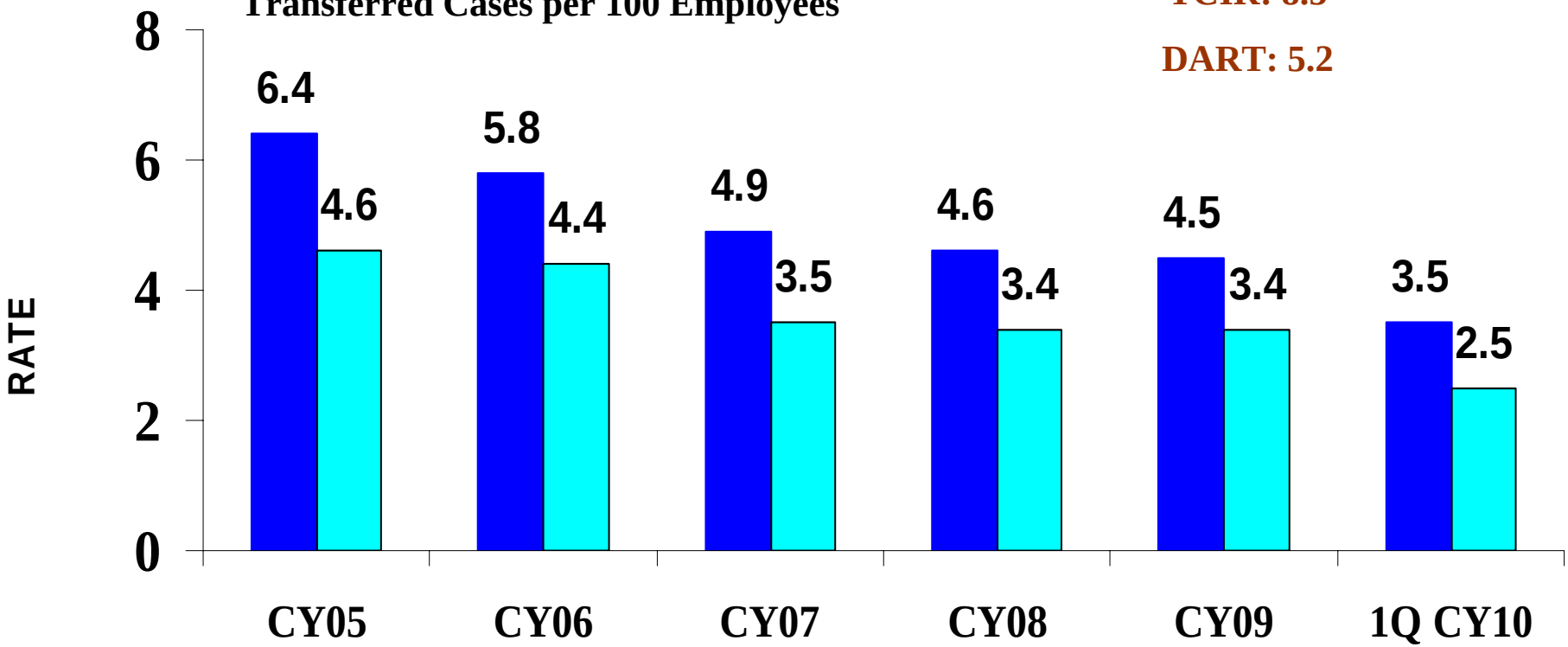
TCIR = Total Cases per 100 Employees

DART = Days Away, Restricted or Transferred Cases per 100 Employees

BLS Ship Building and Repairing Private Industry 2008 Rate

TCIR: 8.5

DART: 5.2



CUMULATIVE DATA

POC: Mr. Brian McCaffrey SEA 04RS

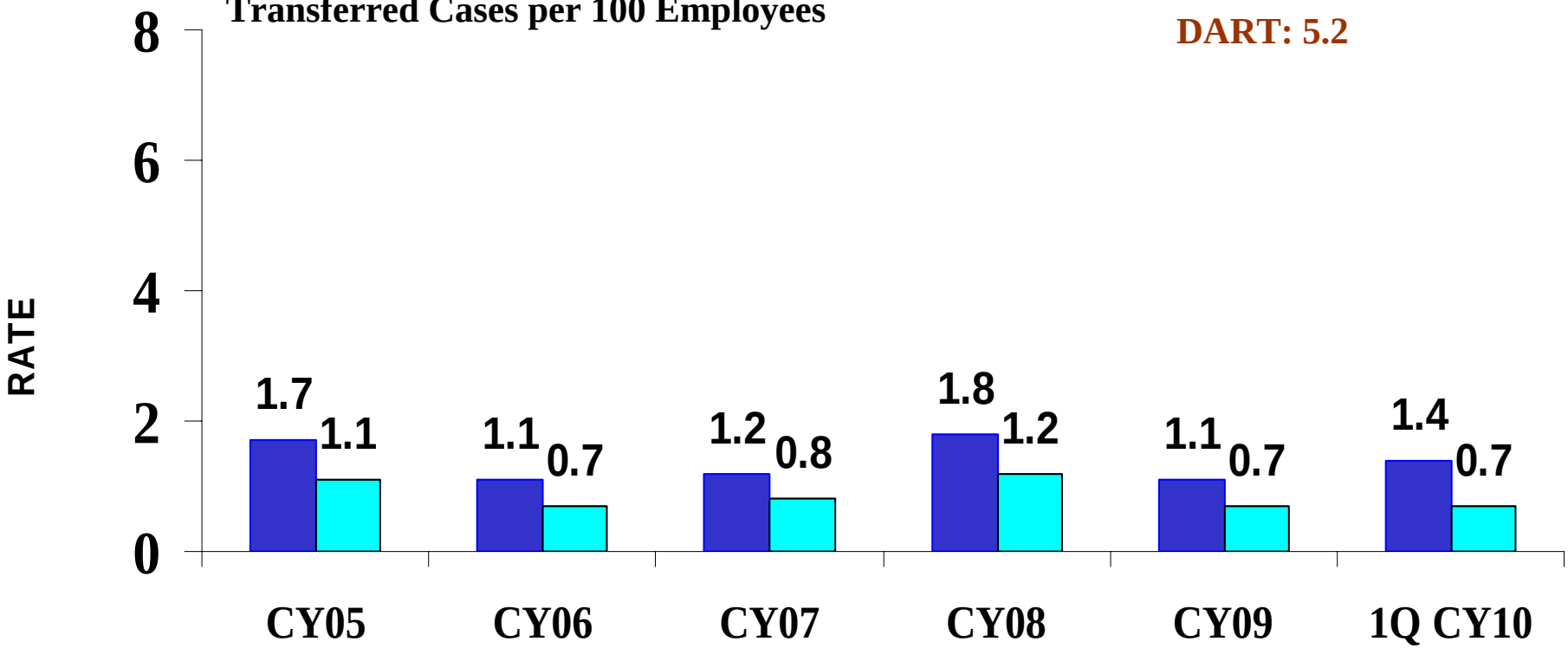
SUPSHIP Totals

S A F E T Y

TCIR = Total Cases per 100 Employees

DART = Days Away, Restricted or Transferred Cases per 100 Employees

BLS Ship Building and Repairing
Private Industry 2008 Rate
TCIR: 8.5
DART: 5.2



CUMULATIVE DATA

POC: Mr. Brian McCaffrey SEA 04RS

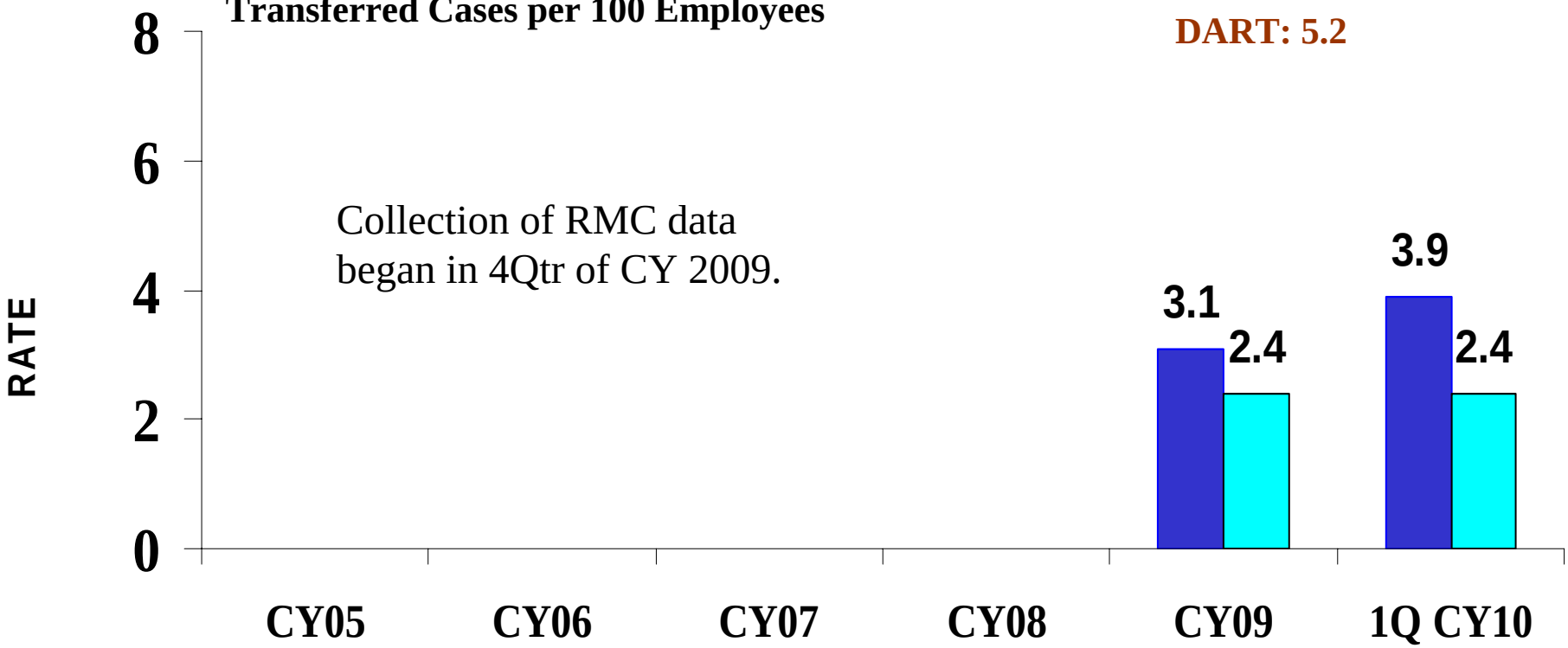
RMC Totals

S A F E T Y

TCIR = Total Cases per 100 Employees

DART = Days Away, Restricted or Transferred Cases per 100 Employees

BLS Ship Building and Repairing Private Industry 2008 Rate
TCIR: 8.5
DART: 5.2



CUMULATIVE DATA

POC: Mr. Brian McCaffrey SEA 04RS

Safety Incidents

- Dec 09 – Fall Fatality at a SY
  - P4 from 00 Directing Action and Assessments
- Feb 10 – Electrical Fatality on a CVN
  - 00 Fleet Advisory on Electrical Safety Practices
  - 04 Message to Industrial Activities on Electrical Safety Practices
- Mar 10 – Arc Flash Incident on a Sub
  - 04 Letter on Electrical Safety – Fundamentals, Supervision, Trouble Reports
- Requested Assessments of Risks/Hazards

Additional Concerns

- Other Industrial Safety Incidents
  - Washington Metro Fatalities
  - Toyota Safety Issues
  - West Virginia Mine Accident
- NAVSEA visits to NSYs finding fundamental safety violations not being identified by the SYs.
- While injury rates appear good, total number of injuries is high. Over 1200 people a year injured with most involving lost time of greater than a day.

Feedback

- Command leadership needs to be visibly committed to Safety as #1 Priority
- Ownership of Safety - Mainstream
- Accountability for Adherence to Standards must be horizontal and vertical
- Inadequate understanding of Level 3 issues and leading indicators
- Need to improve the Level of Knowledge – Safety training needs to be more effective
- Need to improve Operational Risk Management and Engineering Controls

Safety Summit

- 11-13 May 2010
- For Industrial Activities
  - NSYs, RMCs, SUPSHIPs
- Codes well represented
  - 106, 900, 300N, 200
- Action Oriented
  - Define the Problem
  - Develop POAM

Case for Change

- Fatalities and Serious Injuries Unacceptable.
- Need to Increase Margin to Failure:
  - Raise Standards.
  - Work on Problems While Small.
- Improve Hazard Focus:
  - Prevent switches lining up.
- Learn to See.
- It is Personal.
- Understand How Work is Being Executed.

Problem Statement

- NAVSEA needs to raise the standards for planning and executing work in Industrial Activities that minimizes exposure to hazards, particularly in the high risk evolutions. Our workers and supervisors:
  - Are not recognizing hazards associated with high risk work,
  - Are routinely accepting dangerous working conditions because "it's always been that way,“
  - Have become accustomed to living with problems in the press to get things done.

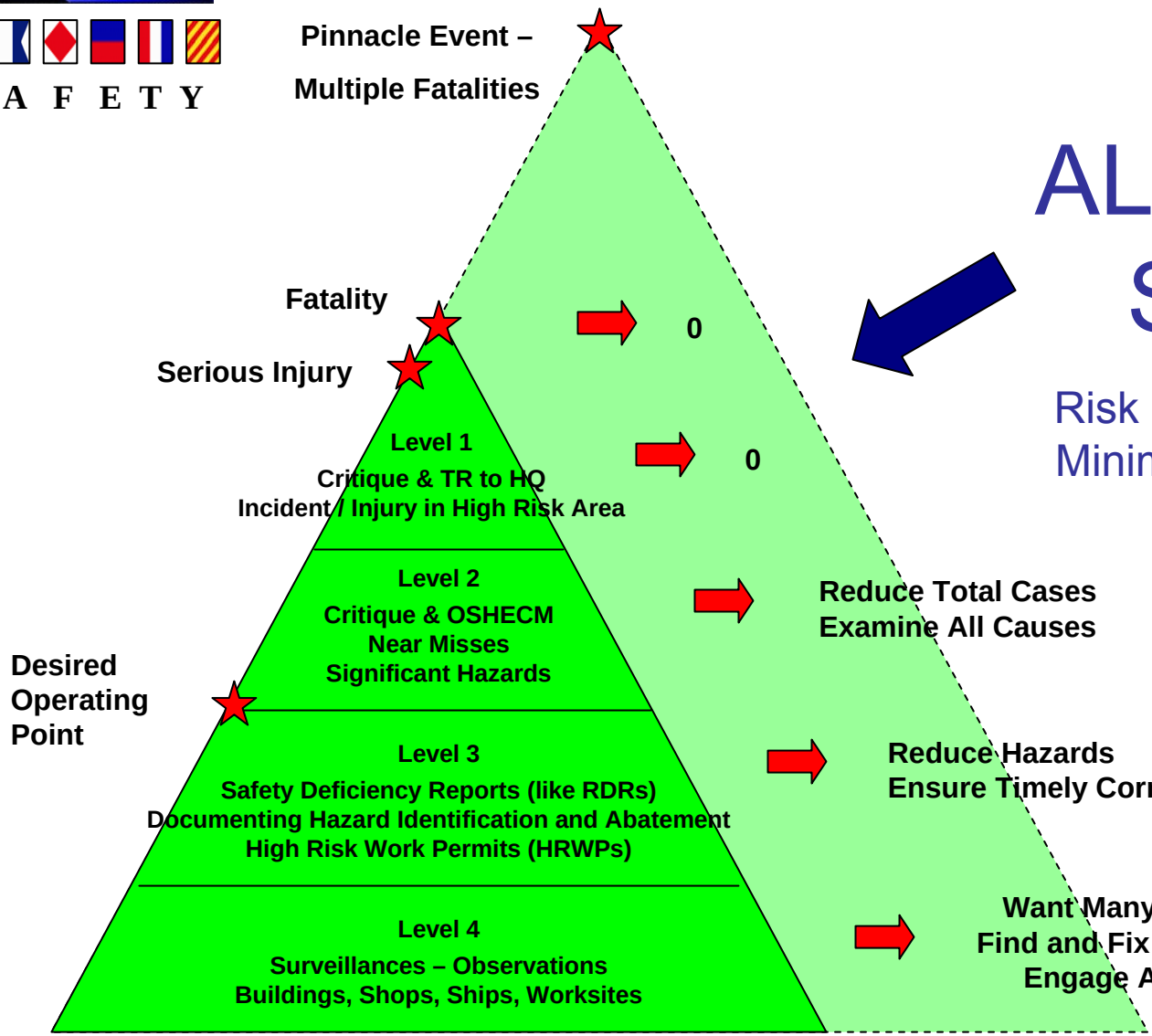
Root Causes

- Managers do not give safety same level of attention as cost and schedule.
- Managers do not understand how the work is actually being accomplished (e.g., what high hazard work is being performed).
- Managers do not expend effort to engineer risk and hazards out of the work.
- Work environment is poor (e.g., too many safety deficiencies, managers not correcting deficiencies, lack of consequences leads to accepting the conditions).
- Supervisors are inexperienced, lack training in hazards their workers face, and do not provide good briefs – one way instead of interactive.
- Workers do not recognize hazards (i.e., weak training, not experienced in surveillances, poor operational risk management (ORM) skills).
- Critiques have not been focused on safety issues and too often end with the cause being personnel error.
- Surveillances and self assessments need broader involvement across the organization to improve effectiveness and consistency.

Conclusions

- Need more of a risk based approach focused on reducing hazards and potential for serious injuries.
- Need to find and fix safety problems instead of them finding us.
- Need a long range vision of zero injuries.
- Need to embrace and adopt proven models – Nuclear Safety, Radiological Safety, Crane Safety, etc.

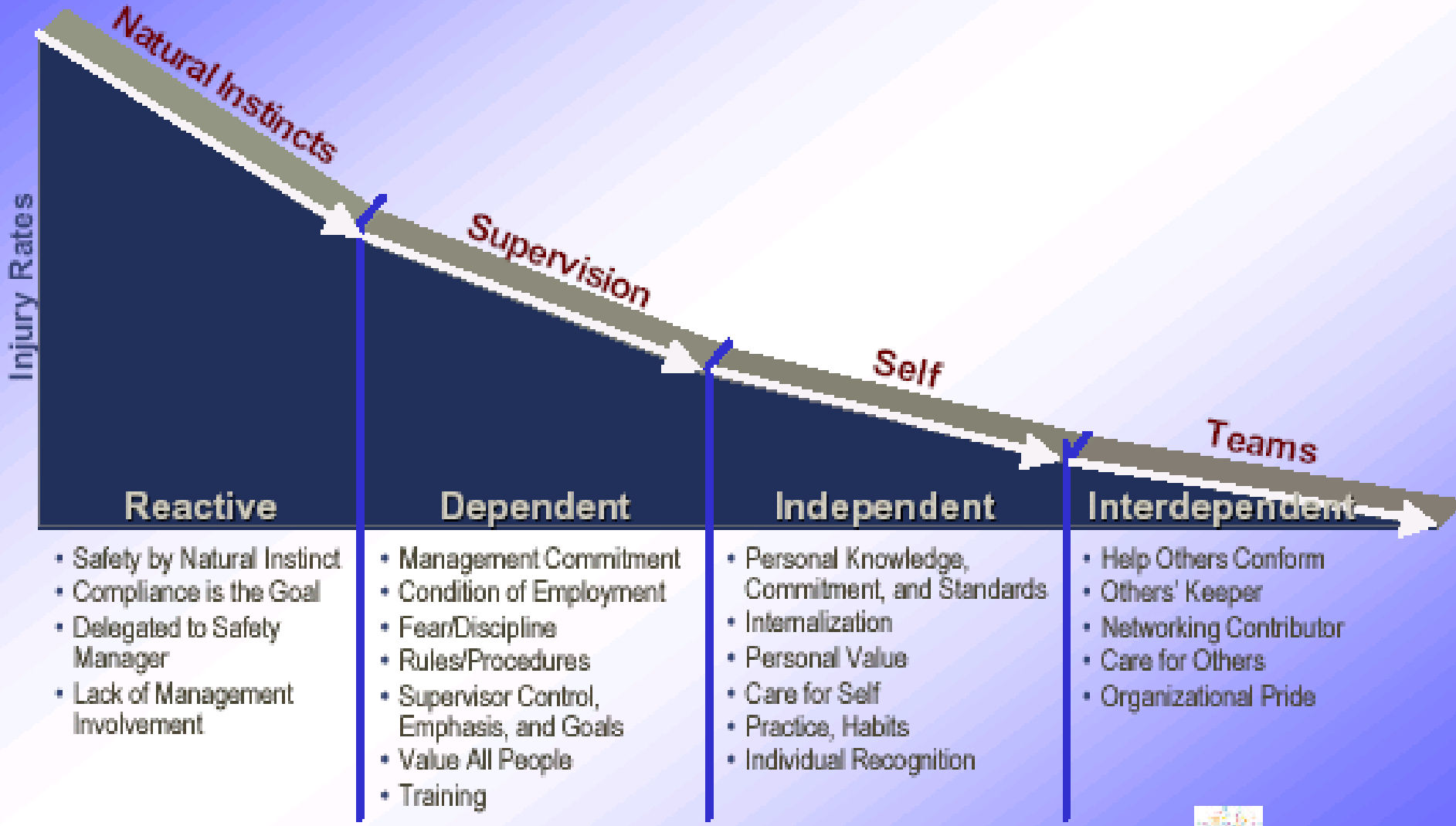
Safety Pyramid



ALARA for Safety

Risk Based Approach
Minimize Exposure to
All Hazards

The Route To ZERO



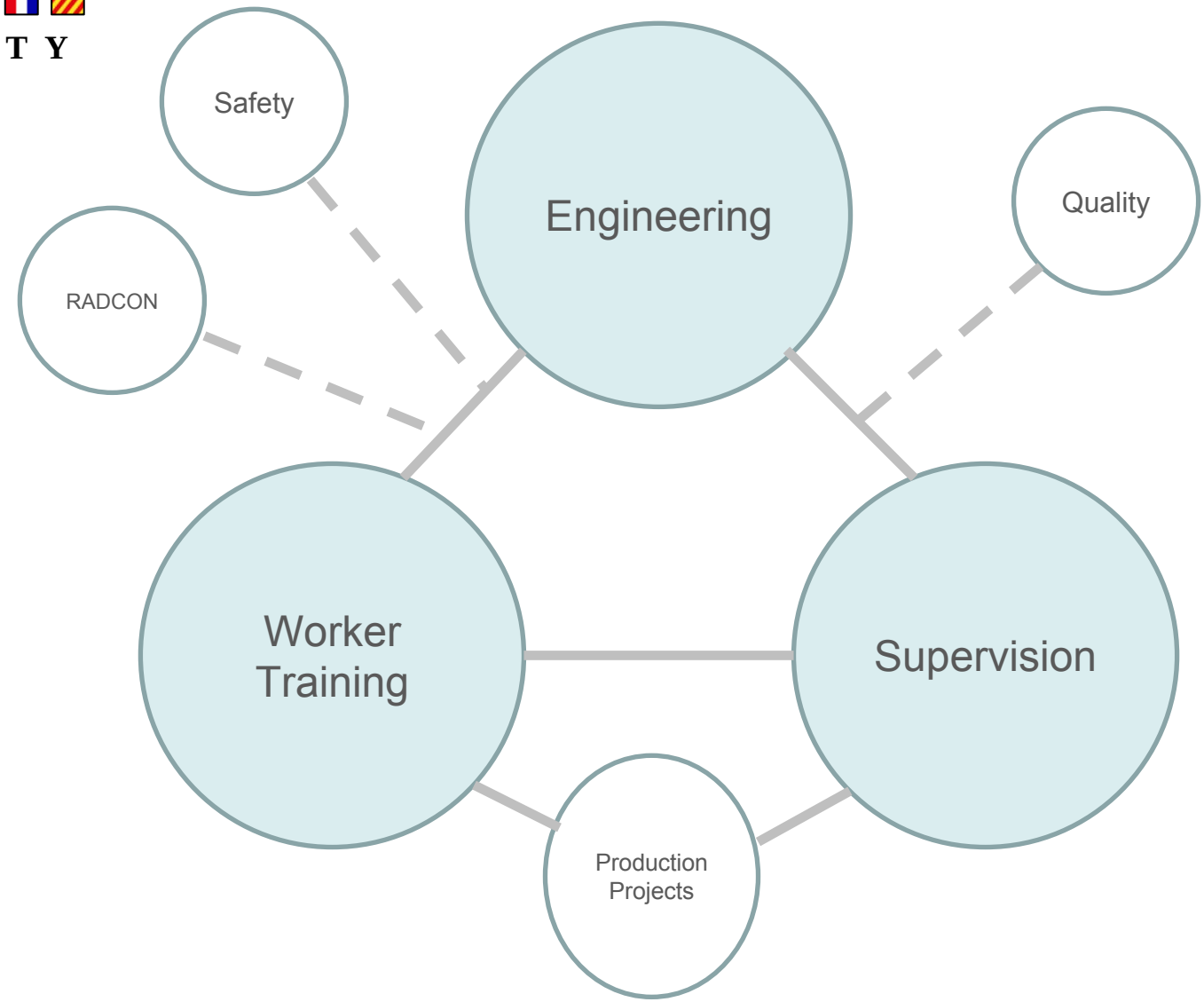
VPP+

Industrial Safety Improvement Plan (24 May 2010)				
VPP+				
Safety Mgt System Area		**Current Perceived State**		**Future Desired State**
Management/Leadership		Turn to ESH Director (Code 106)		Mainstream Safety
		Tend to Blame Workers		Ownership Mind Set - Responsible and Accountable
		Marginal Goals		Critique Problems
		Track Lagging Metrics		Set Higher Expectation - Zero Injuries in High Risk Areas
				Code 106 is Oversight
				Better Safety Metrics - Safety Metrics for each Project/Avail
Employee Involvement		Compliance		Commitment
				Operational Risk Management (ORM)
SF/Contractors		Aware of Safety Performance		Proper Technical Control of Work
				Same Standards as SY (i.e., do not work energized)
Hazard Awareness		ORM		ALARA
Hazard Abatement		ODRs		SDRs (like RDRs)
				High Risk Work Permits
				Broader Surveillances - More Areas
				Better Assessments
Safety Training		Too Routine		More Interactive - More Tests - More Frequent in High Risk Areas
		One Time		Incorporate Practicals
				Improve Hazard Recognition and Risk Management

Mainstreaming Safety

- Shared Ownership:
  - Engineering, Production, and Projects (Training & Supervision).
  - 105,106,130 Oversight.
- Leadership Sets the Example:
  - Right Standards.
  - Union Involvement.
  - ALARA
- Worker Training Essential.
- Reporting Culture.
- Safety Included in Drills.
- Customer Support.

Mainstreaming Diagram

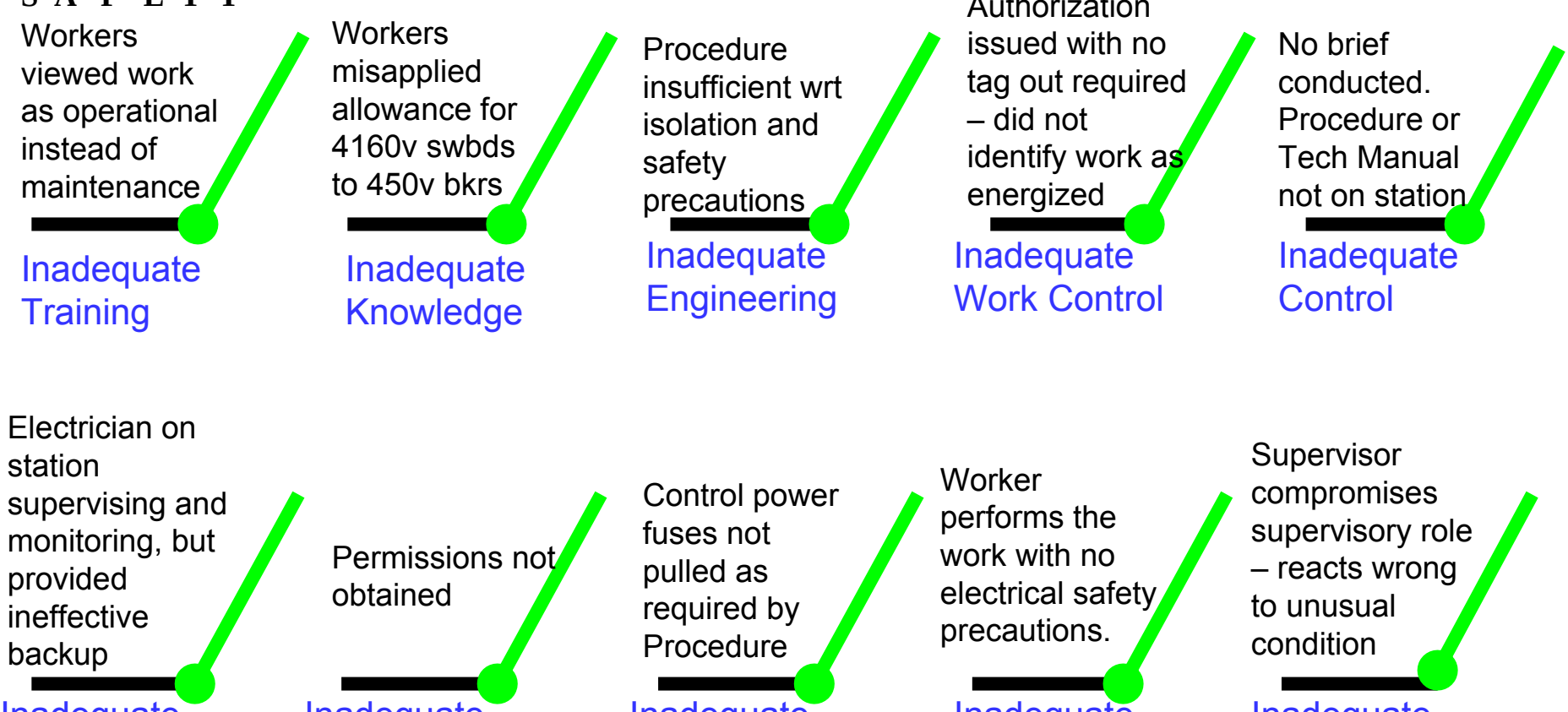


Trouble Reports and Critiques

- Reporting / Just Culture.
- Clearly Identify the Problems.
- Analyze Causes – Switches.
- Complete Corrective Actions.
- Write Clearly.
- Understand How Work is Done.

Electrocution Switch Theory

S A F E T Y



Engineering for Reduced Risk

- Define high risk work items:
  - SYs, RMCs, SUPSHIP Reps.
  - Start with 08 List.
  - Compare to NAVSEA / OSHA / NAVFAC requirements.
- Assess Current Processes:
  - WAFs, Briefs, JHAs, etc.
- Define Problems:
  - Lack of management visibility.
  - Worker knowledge and commitment.
  - Larger gap with facilities.
- Recommend High Risk Work Permit (HRWP) or how to integrate into existing process (WAF).
- Recommend how to improve engineered controls for safety:
  - Recommend interim actions.
- Lead is PNSY engineering. Six Month Time Frame.

Risk Management and Worker Commitment - Plan

- Form corporate cross-functional teams among the SYs and RMCs initially, merge with SUPSHIPs and private SYs at a later time. Address four high risk areas.
  - Led by Production and Engineering with Safety Support.
  - Electrical Group at Portsmouth lead Electrical Safety.
  - Service Group at Norfolk lead Fall Protection.
  - Structural Group at Puget lead Confined Space Entry.
  - Piping Group at Pearl lead Energy Control (LOTO) in Facilities.
- Evaluate the ideas and develop concrete plans to improve performance and reduce risks and hazards in these areas.
- Three to six month time frame.

Risk Management and Worker Commitment - Problems

- Workers ability to recognize hazards:
  - Weak training.
  - Not surveilling.
- Environment needs improvement:
  - Too many safety deficiencies.
  - Management not always correcting / standards issue.
  - Lack of consequences***?***
- Briefs – perceived to be one-way, not interactive.
- Critiques:
  - Need safety focus.
  - Too much employee error.
- Not backing each other up.
- Safety needs same emphasis as schedule/cost.
- Resources.

Risk Management and Worker Commitment - Ideas

- Improve training – OSHA 10 hr / 30 hr:
  - Safety training specific.
  - Skill – apprentice training.
  - High risk areas.
- Worker surveillances – employee-based.
- Interactive briefs – worker-led.
- Improve environment. Fix deficiencies.
- Management surveillances.
- Union leadership too.
- Recognition of good behavior – rewarding, proactive, and self-reporting.
- Safety observer.
- Focus on human factors.
- Critiques = Safe Working Environment.

Corporate Safety Metrics

- Continue OSHA TCIR and DART:
  - Organization level quarterly.
  - Project level monthly.
- Add Level 1 and 2 Problems – Number:
  - Organization level quarterly.
  - Project level monthly.
- Do not report injury-free days:
  - May discourage reporting.

Deficiency Documentation and Reporting

- Better focus of finding and elevating Level 1, 2, and 3 deficiencies.
- Consider RDR-like process.
- Integrate safety issues associated with work and tie to production function areas (confined space entry, fall protection, LOTO, electrical safety).
- Standard attributes (high risk) and training.
- High risk analysis, trending, and self-assessment.
- Lead is PSNS&IMF C106. One Year Time Frame.

Self Assessments

- Need to improve – find the problems.
- Incorporate Safety Pyramid concept and ALARA.
- Focus more on high risk areas – deep dives.
- Include more Departments, not just C106.
- Elevate significant findings immediately.
- Foundation is frequent in process surveillances.
- Identify and act on trends.
- Annual report should be simple and straight-forward based on continuous review all year long.
- Drives continuous and lasting improvement.
- Each organization take for action.

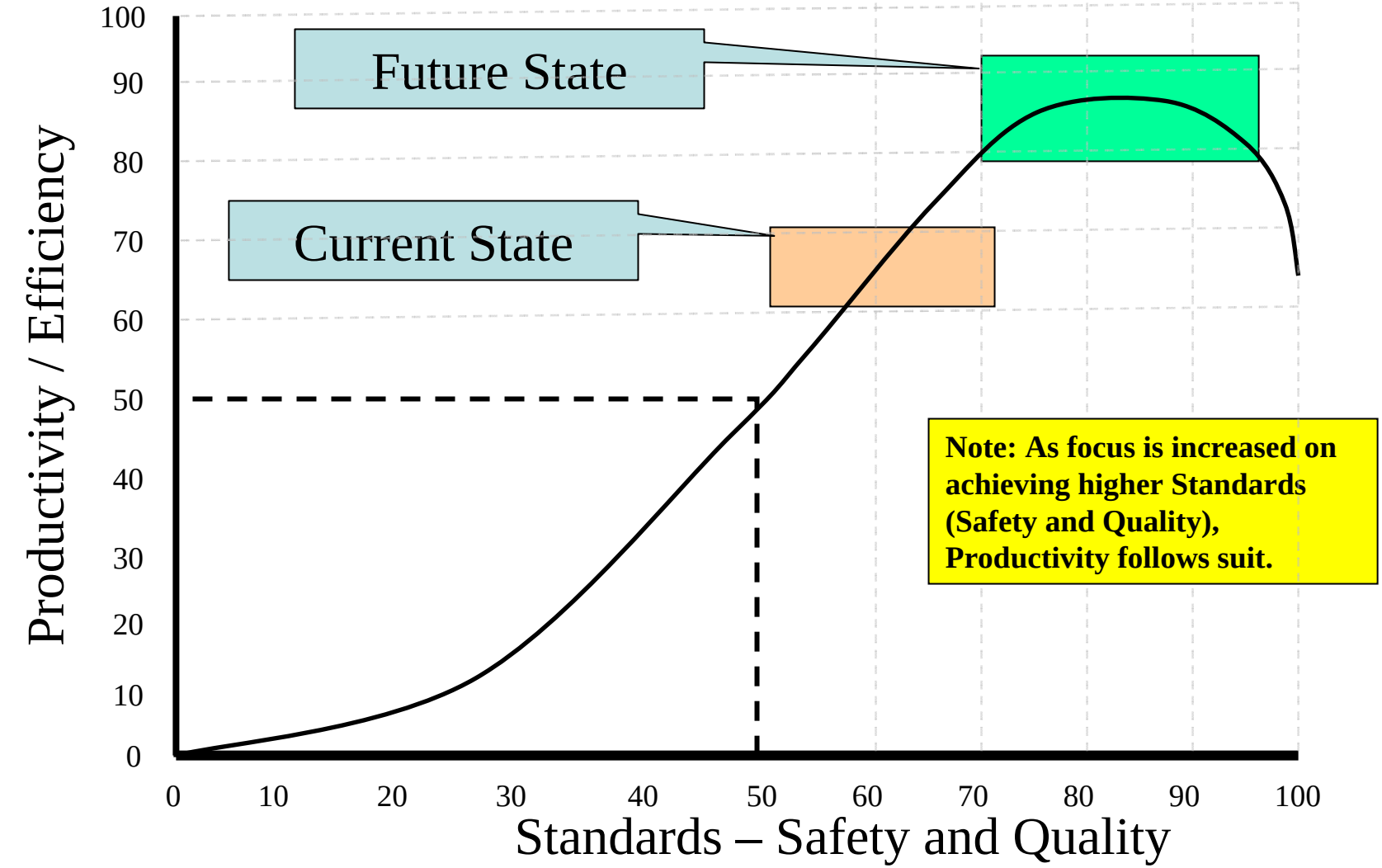
Ship's Force

- For SY Availabilities:
  - SY is the maintenance expert.
  - Must provide proper technical control and oversight of assigned work regardless of who performs.
  - SY and SF must have same standards.
- Need to examine who performs the work:
  - Not right to assign energized work to SF because they have different practices.
  - NO MORE!

Contractors

- Same Standards apply to contractors:
  - They follow OSHA.
  - Follow our rules for high risk work.
- MSMO contractors need to lead:
  - In charge of their subs.
  - Apply proper work control and safety requirements.
  - Ensure compliance.

Focus on Standards



Summary

- Good Alignment within NAVSEA.
- Start with NSYs, RMCs, and SUPSHIPs.
- Figure out how to grow to Private Sector.
- Assess idea of NAVSEA Corporate Safety Manual comparable to SEA 08 ESH Manual.
- Develop Communication Strategy.
- Formal Meeting Minutes to be Issued with Plan of Action.
- 04R will Follow and Track Actions.
- Resources will have to be addressed.