

SF-BREEZE

MIDN David Kramer, USNA



Overview

- ◆ About Myself
- ◆ My Experiences at Sandia
- ◆ SF-BREEZE Project
- ◆ Lessons Learned

About Myself

- ◆ Senior at USNA
- ◆ Ocean Engineering Major
- ◆ Love to Travel



My Free Time at Sandia

- ◆ Spent time with family
- ◆ Donner Lake
- ◆ Monterey
- ◆ Yosemite



SF-BREEZE

- ◆ Hydrogen Powered Ferry on the SF Bay
- ◆ Goal of Zero Onboard Emissions
- ◆ Serve as Demonstration of the Commercial Potential of Hydrogen Power

Feasibility Study

- ◆ Power Needs...Does it Fit?
- ◆ Compare Hydrogen Propulsion to Existing Methods
 - ◆ Diesel, Natural Gas, Battery
- ◆ How to Store the Hydrogen
 - ◆ Compressed at 5,000 psi, 10,000 psi or liquefied

Partners

- ◆ Department of Transportation's MARAD
- ◆ Red and White Fleet
- ◆ Elliot Bay Design Group
- ◆ American Bureau of Shipping
- ◆ United States Coast Guard

Results

- ◆ Feasibility Study to continue through February, 2016
- ◆ Red and White Fleet executives are looking forward to “drinking their exhaust”

Lessons Learned

- ◆ Working with willing partners makes a huge difference in novel projects
- ◆ Taking risk is needed to push technology forward

Special Thanks

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