

# National Harbor Safety Committee Conference Portland, Oregon

## Alternative Fuels & Maritime Transportation



# Jacksonville Port Authority JAXPORT

Charles (Chuck) White Director of Public Safety

Charles.white@jaxport.com

(904) 357-3351

9530 New Berlin Ct, Jacksonville FL 32226



#### **JAXPORT**

- International trade seaport in Southeast U.S.
- Three cargo facilities, plus cruise terminal
- Top Florida container port complex
- One of the largest vehicle handling ports in U.S.
- Worldwide cargo services
- Designated Strategic Port



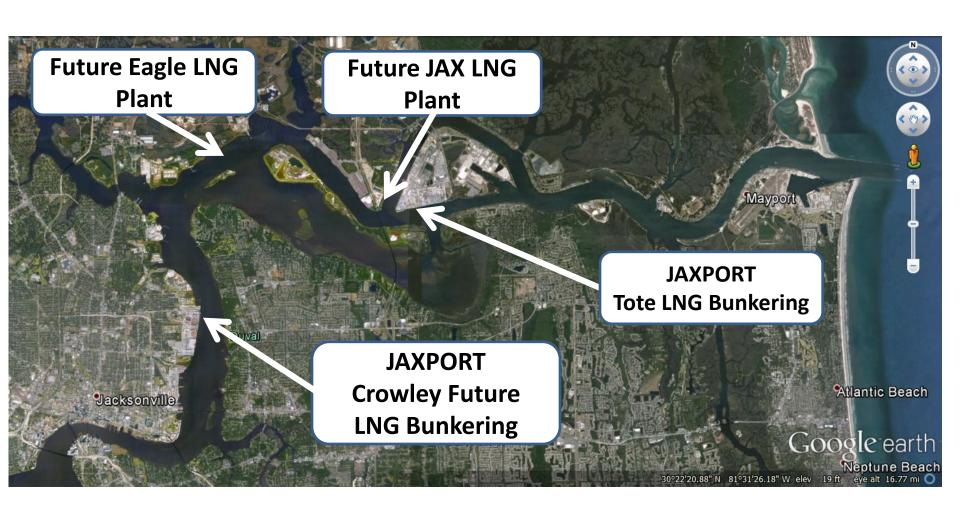
# JAXPORT "Embracing Safe LNG"

- Recognize significant capital investment on the part of our customers
- Commitment of land/services to accomplish both temporary and long-term LNG bunkering from shore-side to vessel
- Encourage and assist liquefaction plant development in local market to ensure availability and continuity of supply
- Understanding the risk, and working in partnership to mitigate
- Public and elected official outreach



#### **JAX Natural Gas Renaissance**



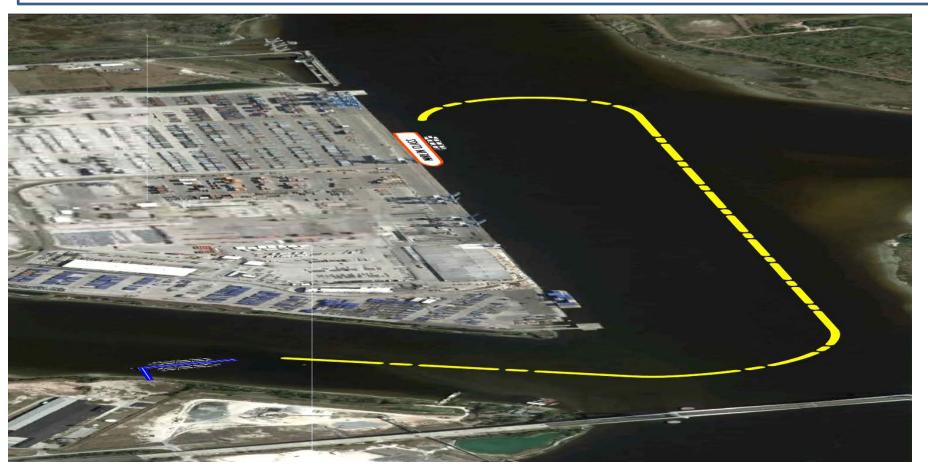


- LNG liquefaction plant and marine berth situated on 37 acre industrial water front property on the St. Johns River
- Building a new bunker barge
- Serve TOTE and other marine customers situated in the Jacksonville area
- Actively targeting other markets, including power, trucking and rail
- Anticipated in-service date of Q4 2017





## **Bunker Barge Route Supporting Tote Vessels**







- Flex Membrane
- unloading arm (not shown)
- 2 submerged cryogenic pumps
- Radar tank gauging
- High and high-high level alarms
- Pressure and temperature sensors
- Emergency Shutdown System (ESD) manual and remote
- Boiloff gas re-liquefiers 6 cryocoolers





#### JAXPORT "Best Practices, Lessons Learned & Challenges"

- USCG leadership is critical to overall success
- Engage early, develop and build on partnerships
  - Local, State, Federal (Team Concept)
- Develop and adhere to unified messaging at all levels
- Continuous process of improvement supported by after-action and plan adjustments
- Gas Industry
  - SMEs
  - First Responder Investment





#### JAXPORT "Best Practices, Lessons Learned & Challenges"

- LNG Policy letter versus big regulations
- Local supply of LNG not yet available in Jacksonville.
  - Requires interim solutions (think out of the box)
    - More complicated when approaching from a mobilize/demobilize perspective due to setup of disparate equipment
- Impact and balance w/other terminal operations
- Ensuring effective communication and training to overcome negative public perception



#### **Tote Vessel Isla Bella**





#### **Pivotal LNG Fueling for Tote Maritime**



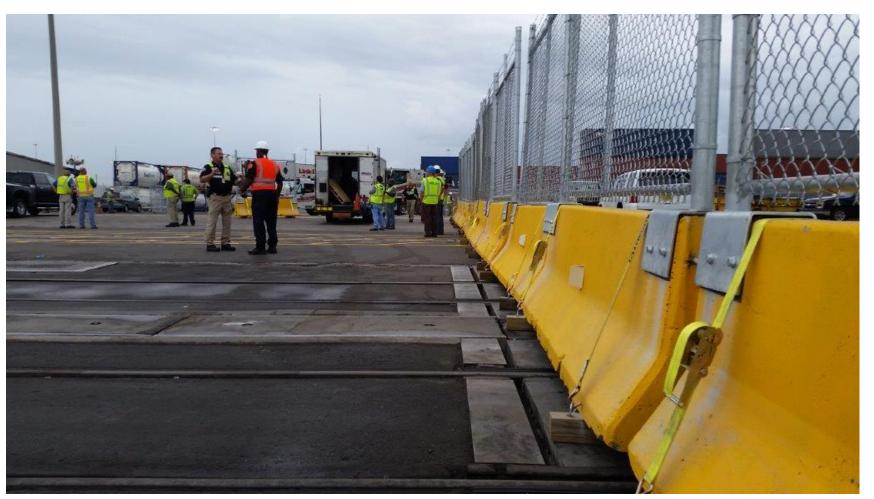


**Interim Bunkering Facility** 





**LNG Bunkering Exercise** 



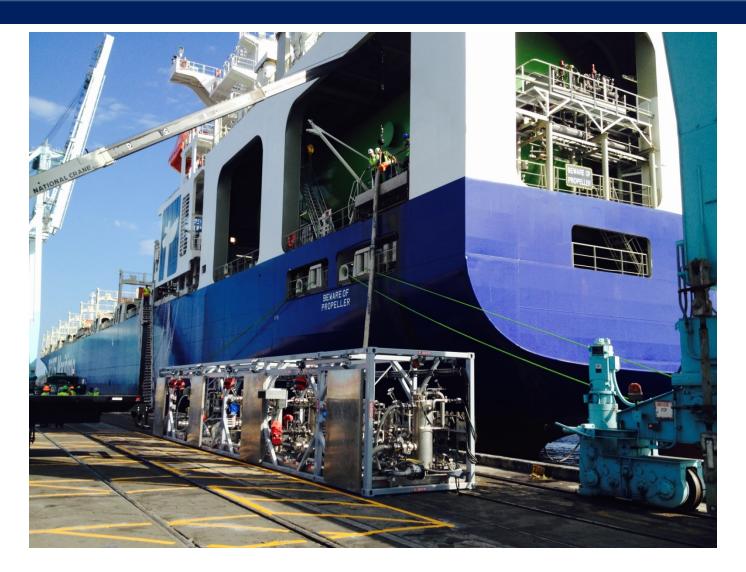
**Safety Zone** 





**Interim Bunkering Facility W/Truck** 





**Vessel With IBF Test Evaluation** 





