

# WELCOME

## Medium Duty/ Heavy Duty Truck Technology Workshop

**H. E. Christian (Chris) Peeples**

Board of Directors

**UC Davis**

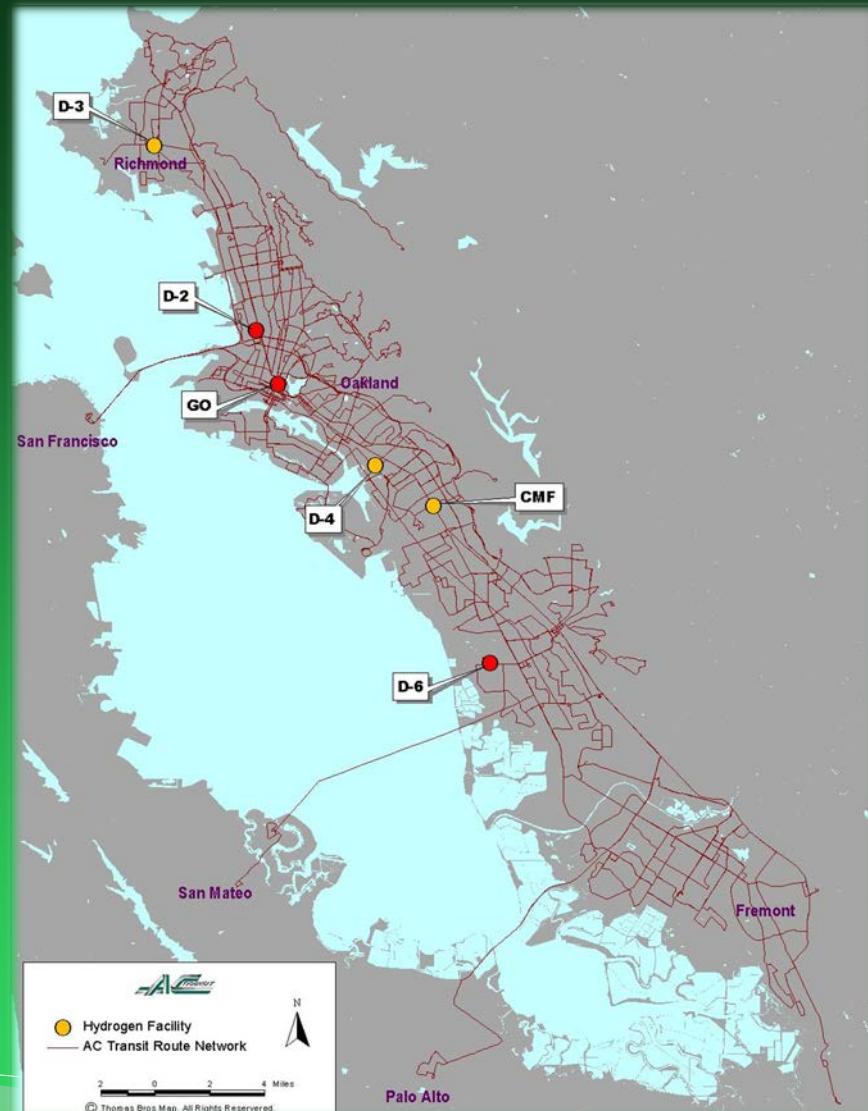
December 3, 2015



[actransit.org](http://actransit.org)

# AC Transit

- Serving 1.5 million people in 13 cities
- 67 million passengers
- 600 buses
- 2,200 employees
- \$390 million budget
- 151 lines (27 Transbay)



# Original 30 foot Thor



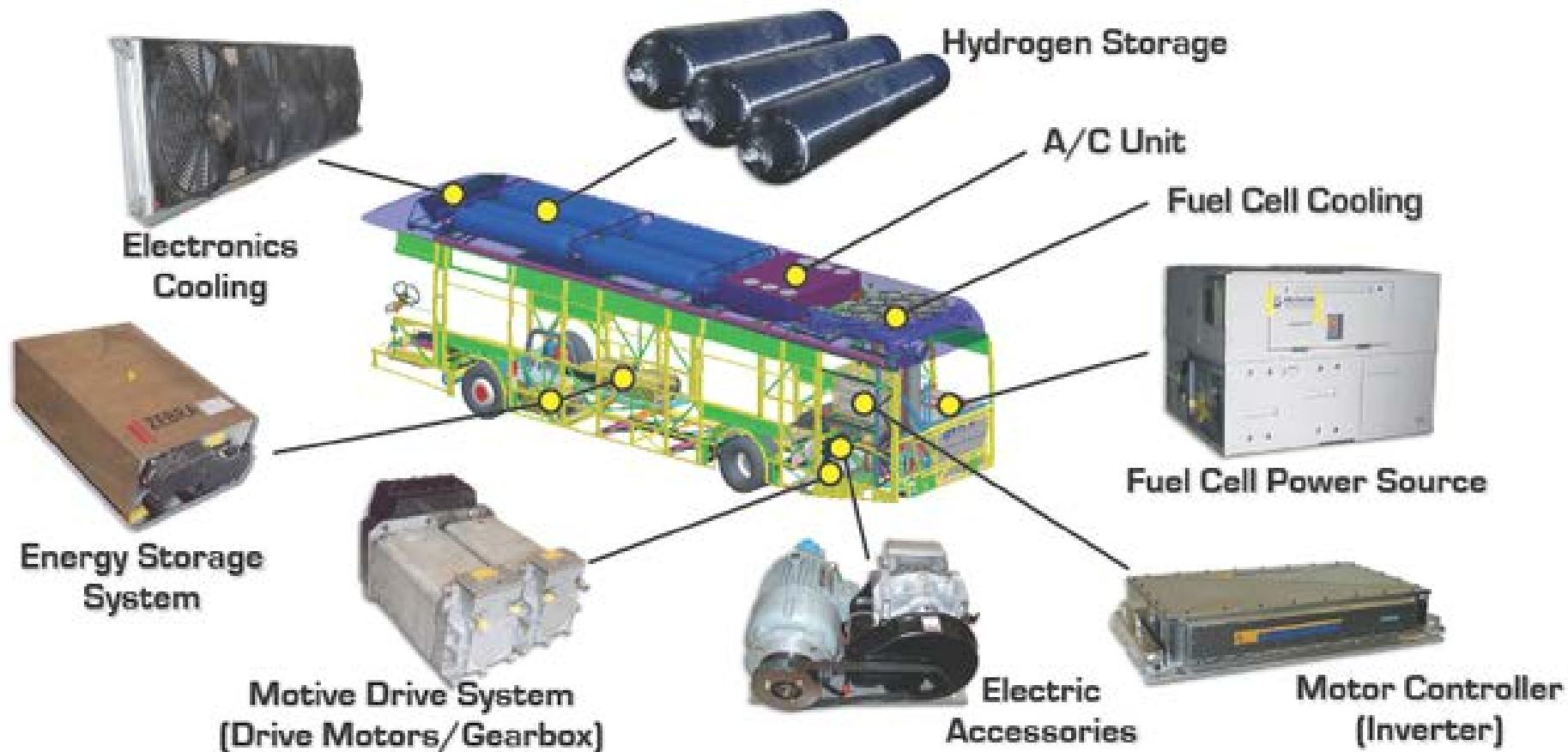
- 30 foot Thor inherited from Sunline industry
- 60kw UTC fuel cell with hybrid battery configuration

# A330 Fuel Cells



- UTC PureMotion120, 120 kw fuel cell
- Zebra Sodium Nickel Metal Chloride Battery
- 400 mile range

## COMPONENTS OF THE FUEL CELL HYBRID SYSTEM



# Division 4 - 2007



The fueling stations

Control room

High temperature steam  
reformation of PG&E  
natural gas provided by  
Chevron Technology  
Solutions

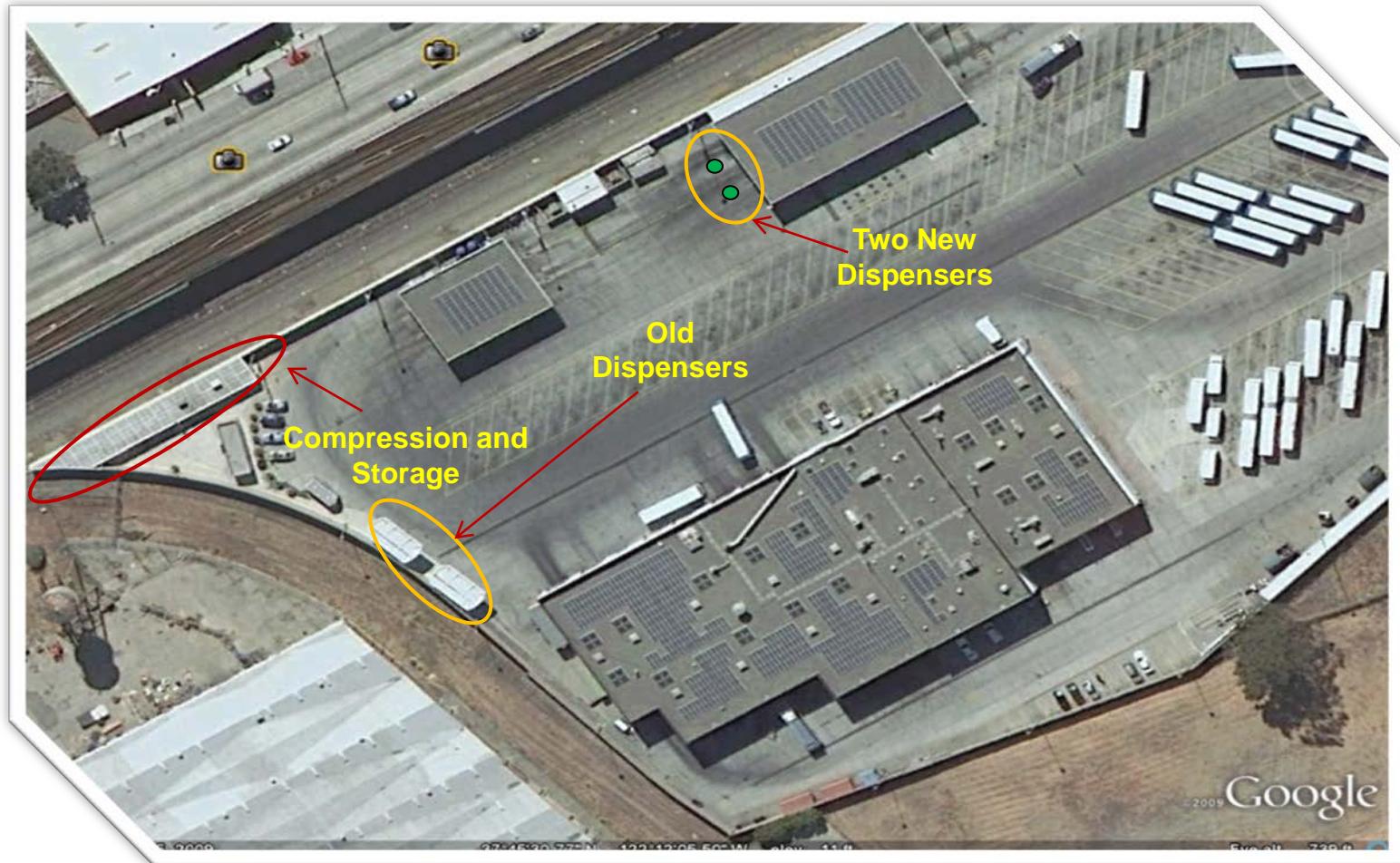
# 300L Running as a Golden Gate Transit #10

- 5,000 lbs. Lighter
- Better Batteries
- 162,652,000 Fuel Cell Hours
- 1,315,000 Miles – UTC Fuel Cell Fleet
- Over 5 million passengers in the Bay Area

**“Like Disneyland in The Real World!”**



# Division 4 - 2015



# Division 2 - Emeryville Station

- Solar Electrolysis (65 Kg/day)
- Liquid Hydrogen from Steam Methane Reforming
- AC Transit solar system will provide **2,000 MWh/Year** of renewable power to the Emeryville Hydrogen Station and our other facilities



Charging Station

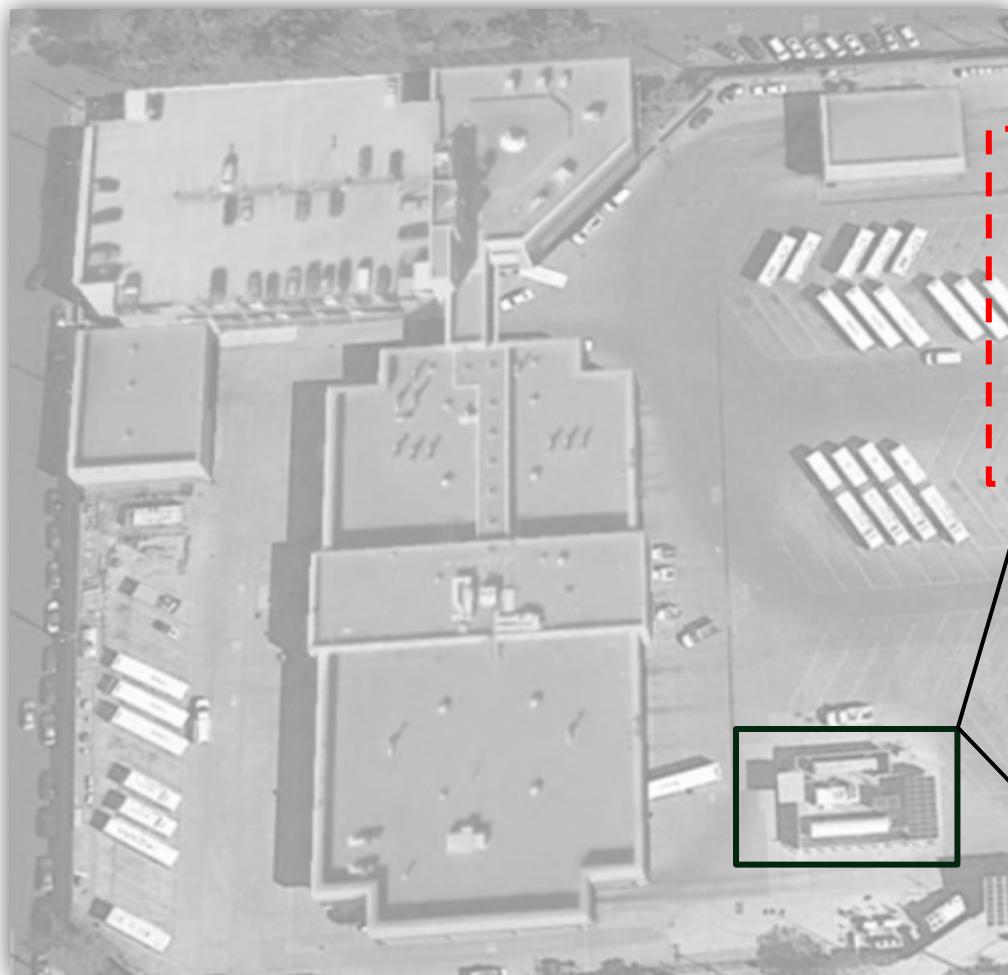


Solar Panel



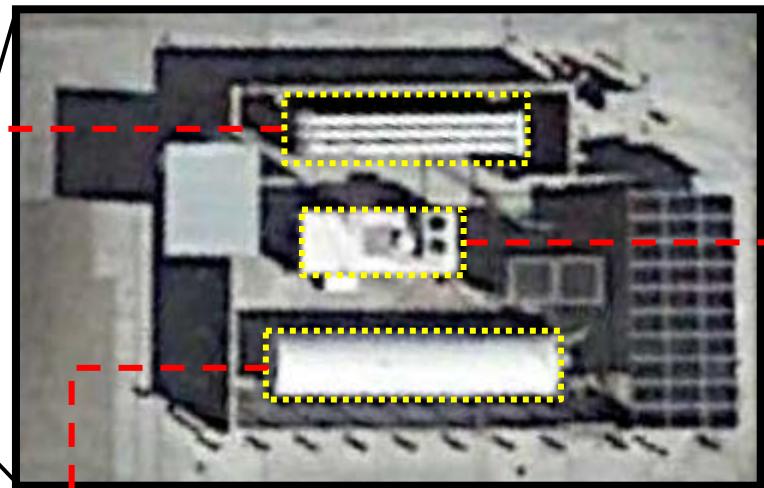
Emeryville Station

# Division 2



→ Linde 350 bar ionic compression

Gaseous H<sub>2</sub> tube storage ← - - -



- - - → 900 kg liquid H<sub>2</sub> tank

# Thank You!

For further Information:

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Board of Directors

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