

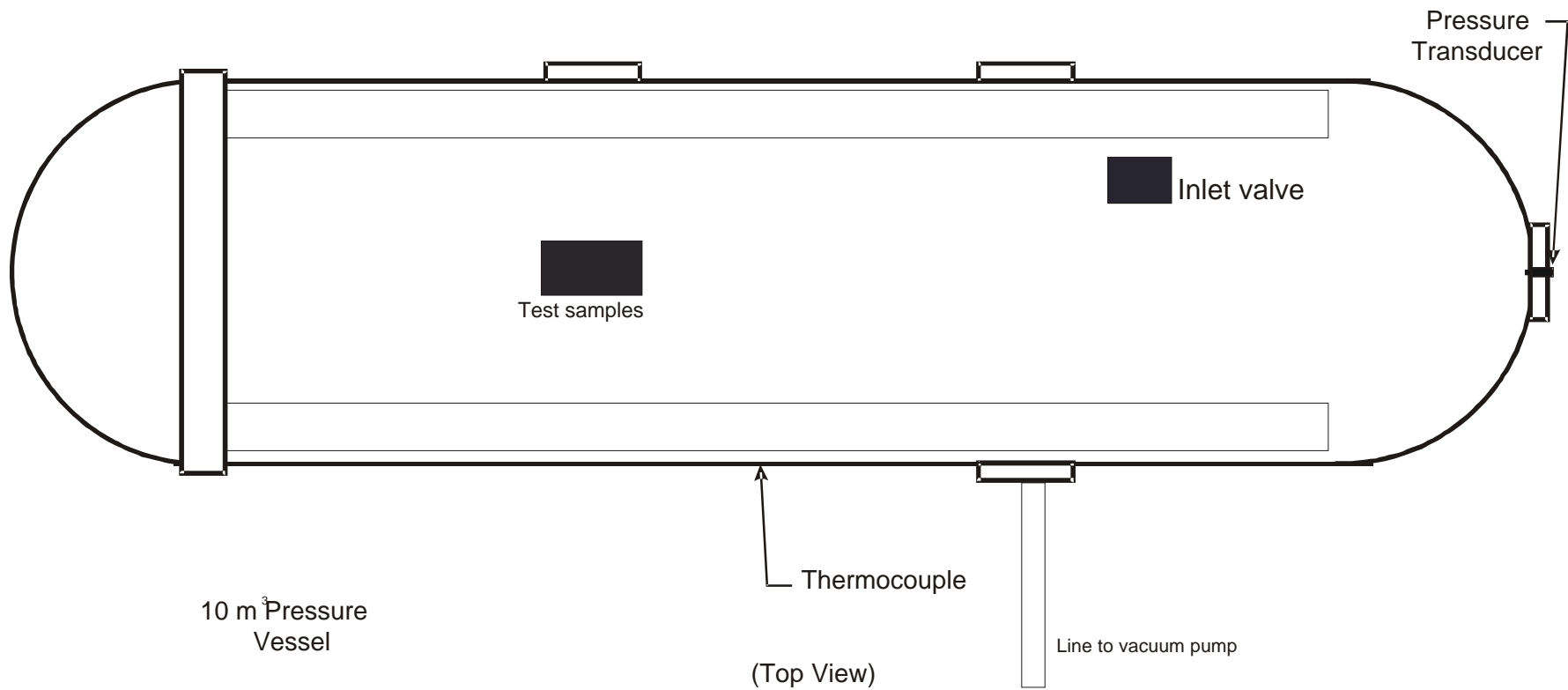
Cargo Fire Suppression by Depressurization Tests

Dick Hill
AJP-632; Fire Safety Team
Wm. J. Hughes Technical Center
Federal Aviation Administration

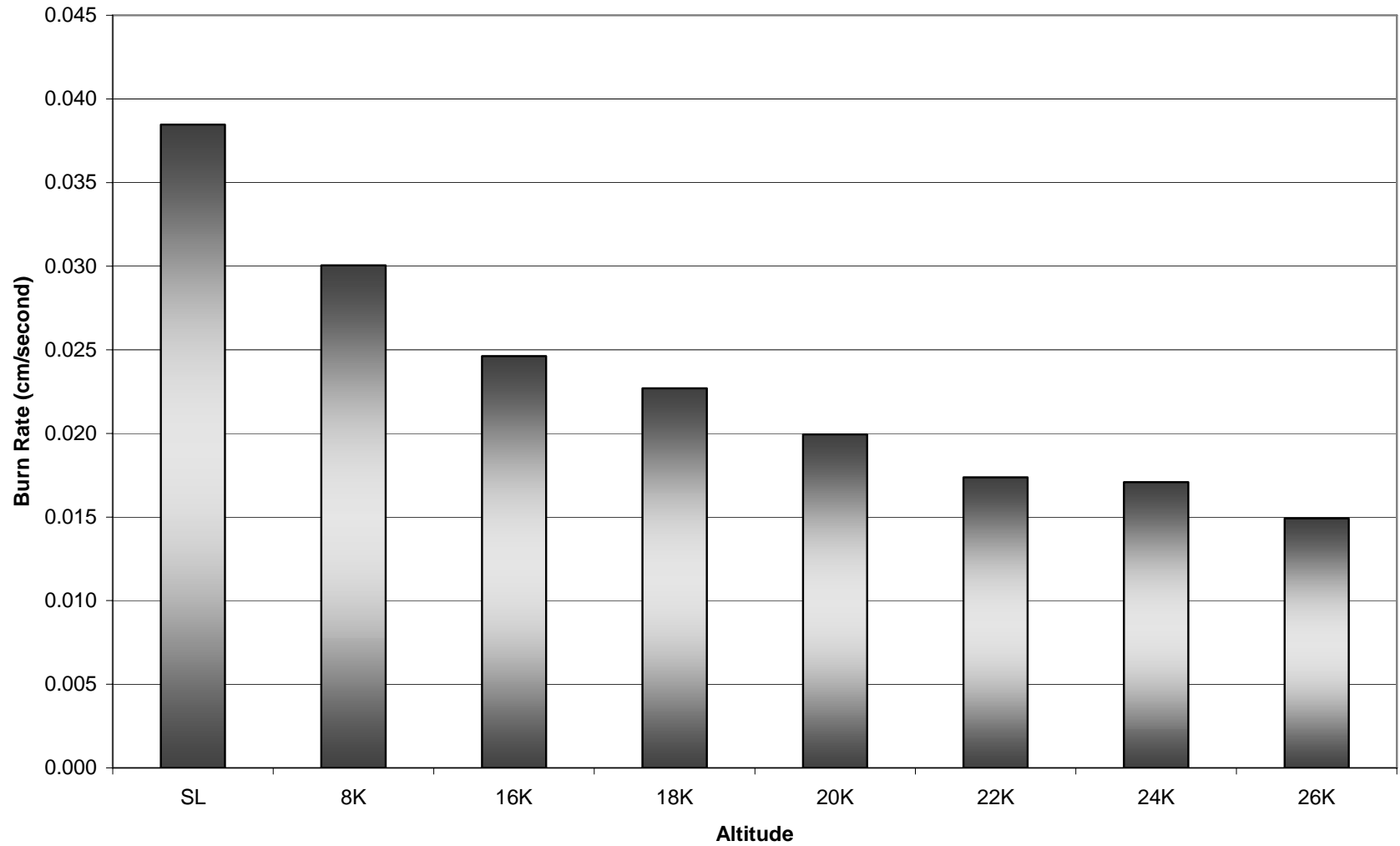


Federal Aviation
Administration

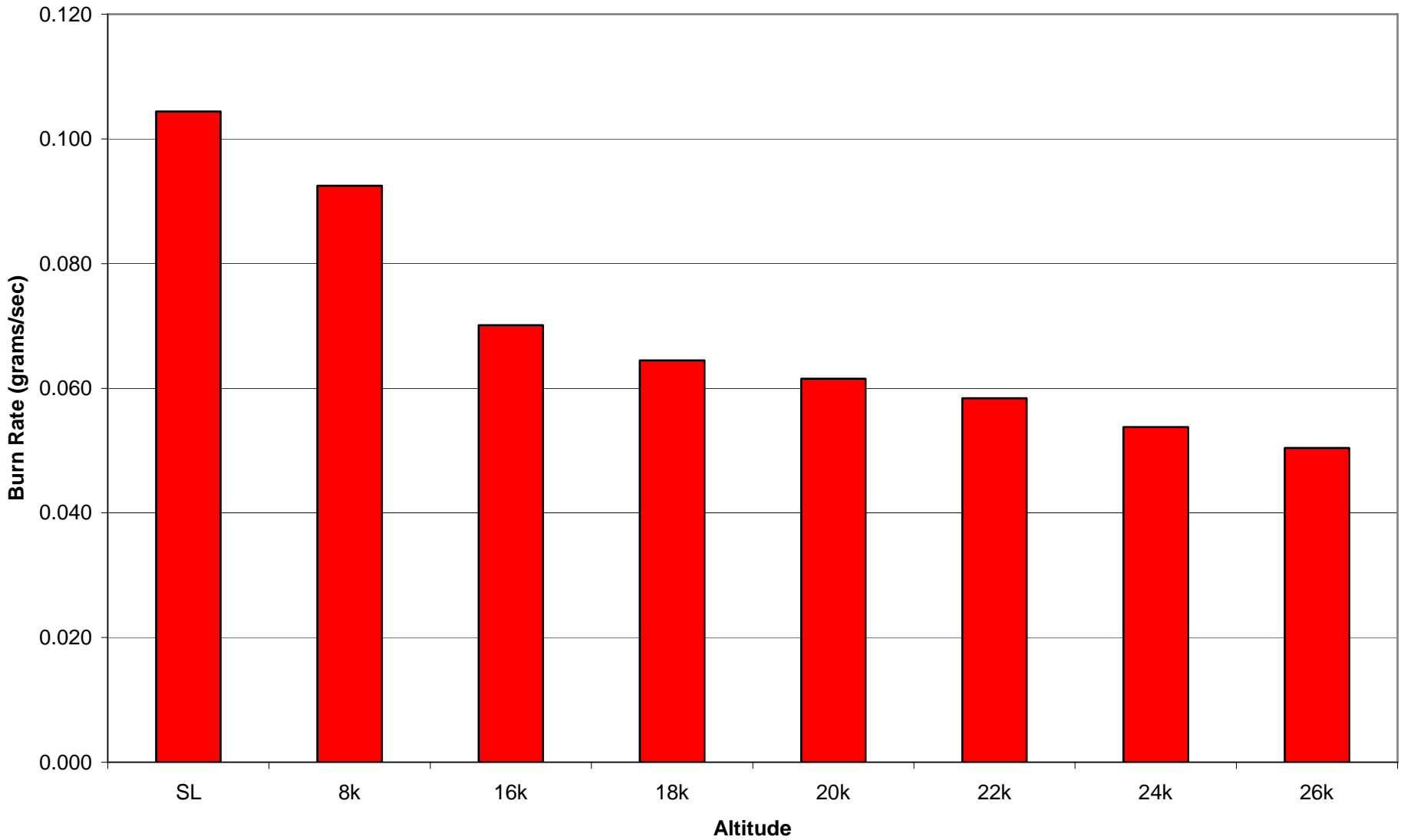




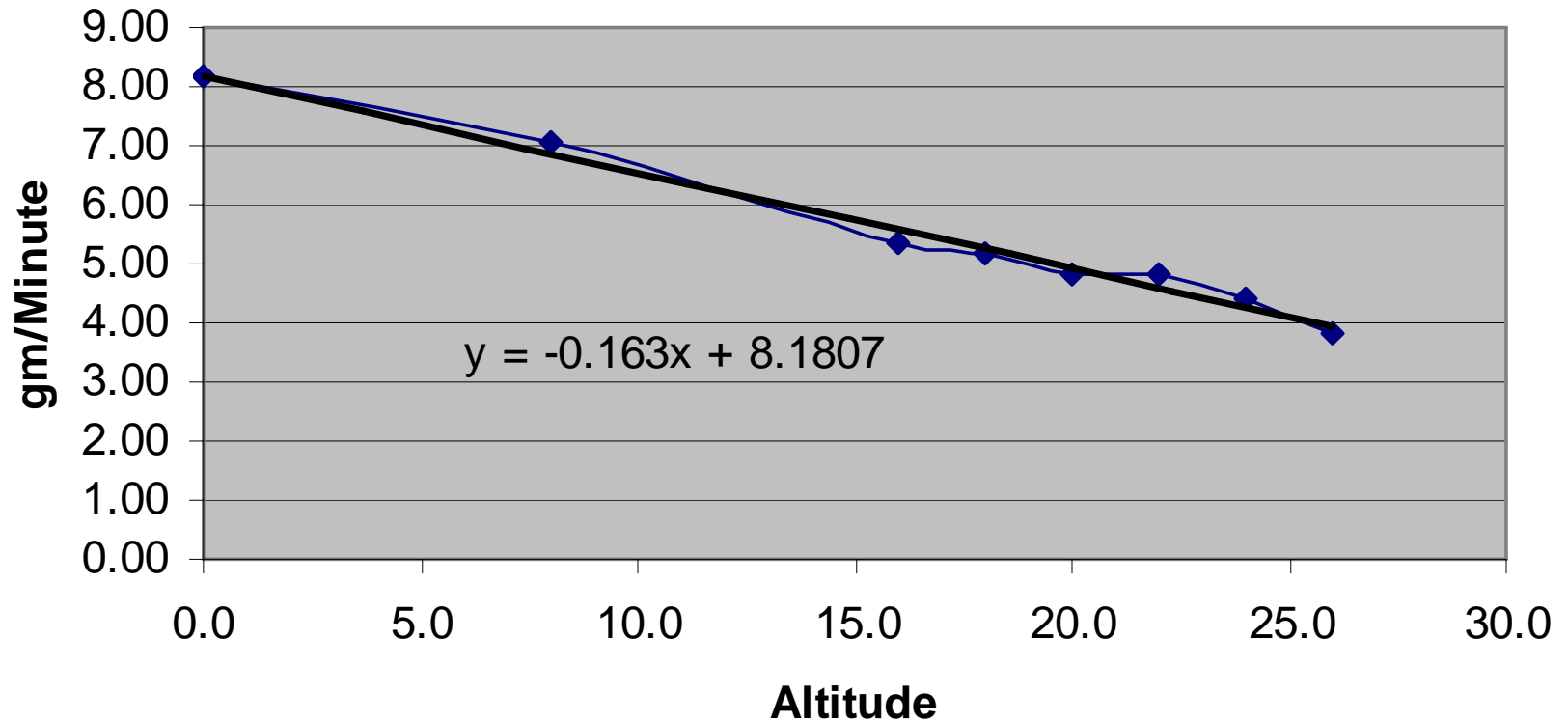
Acrylic Burn Rate vs Altitude



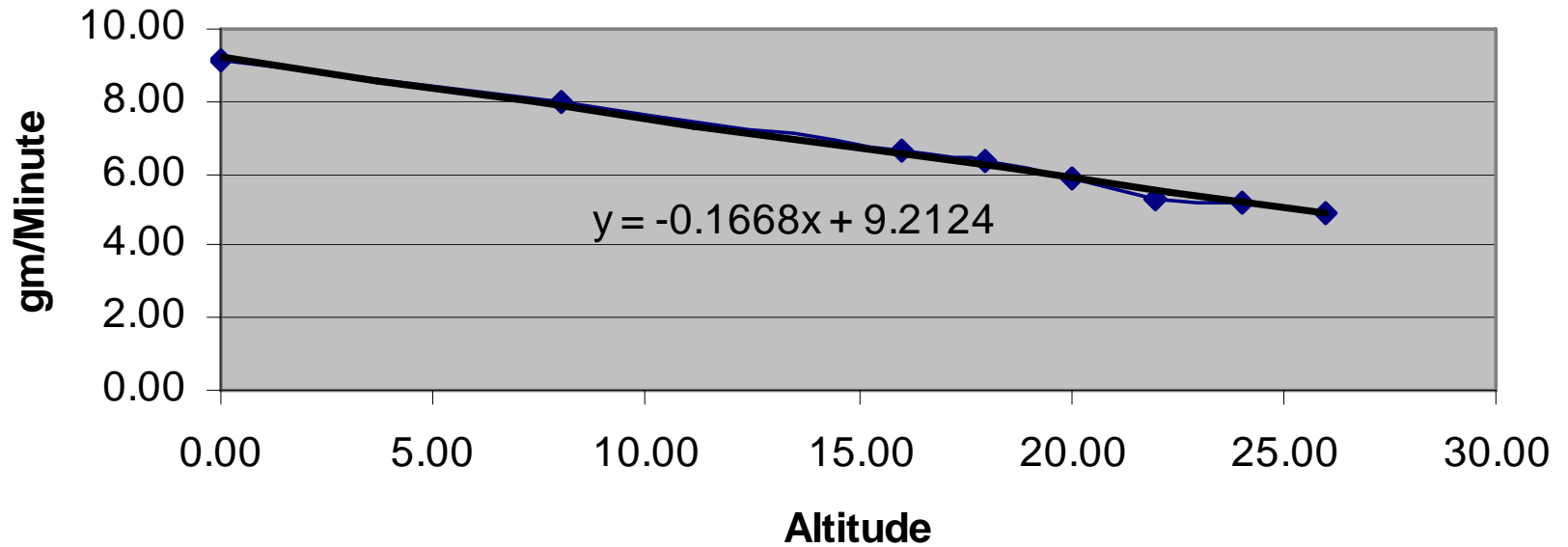
JetA Burn Rate vs Altitude



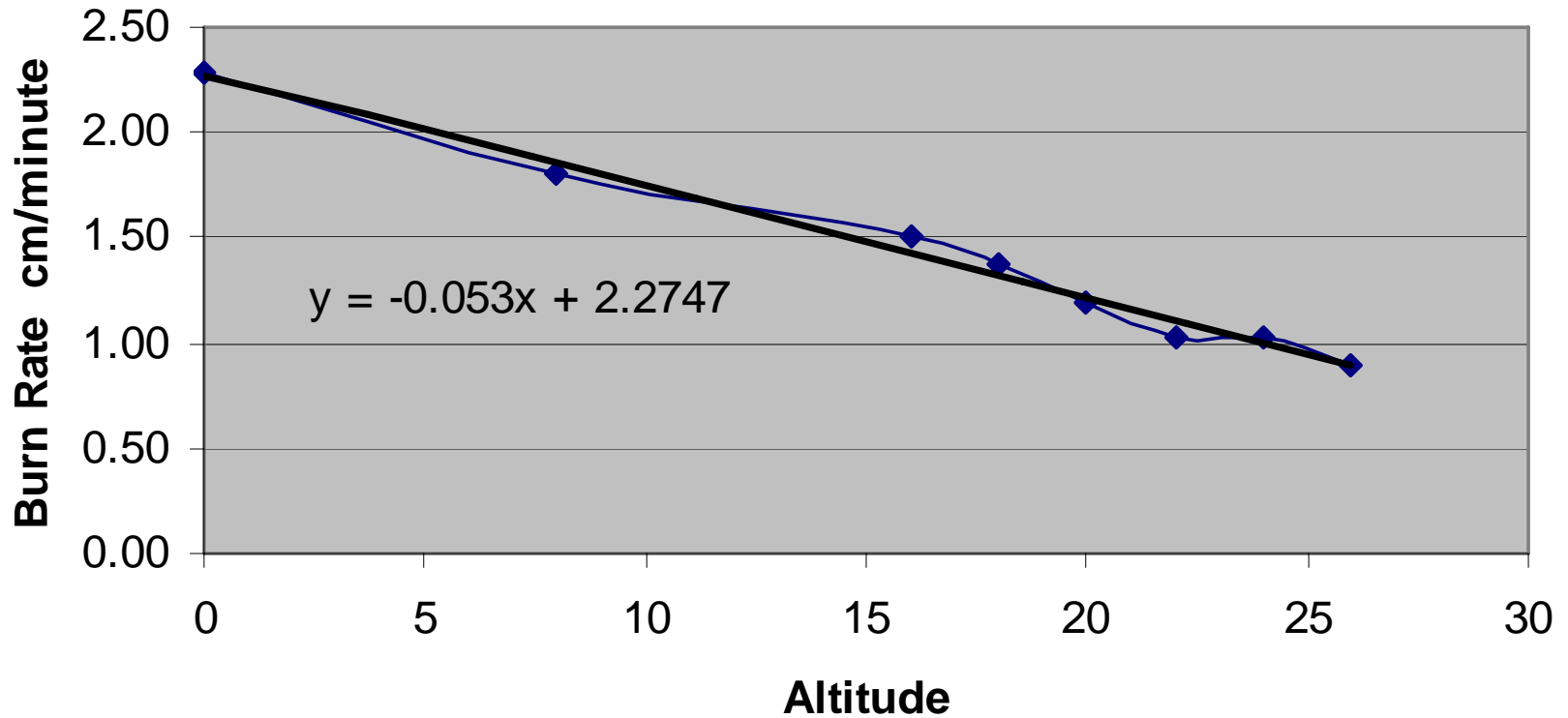
Jet A Mass Loss vs. Altitude



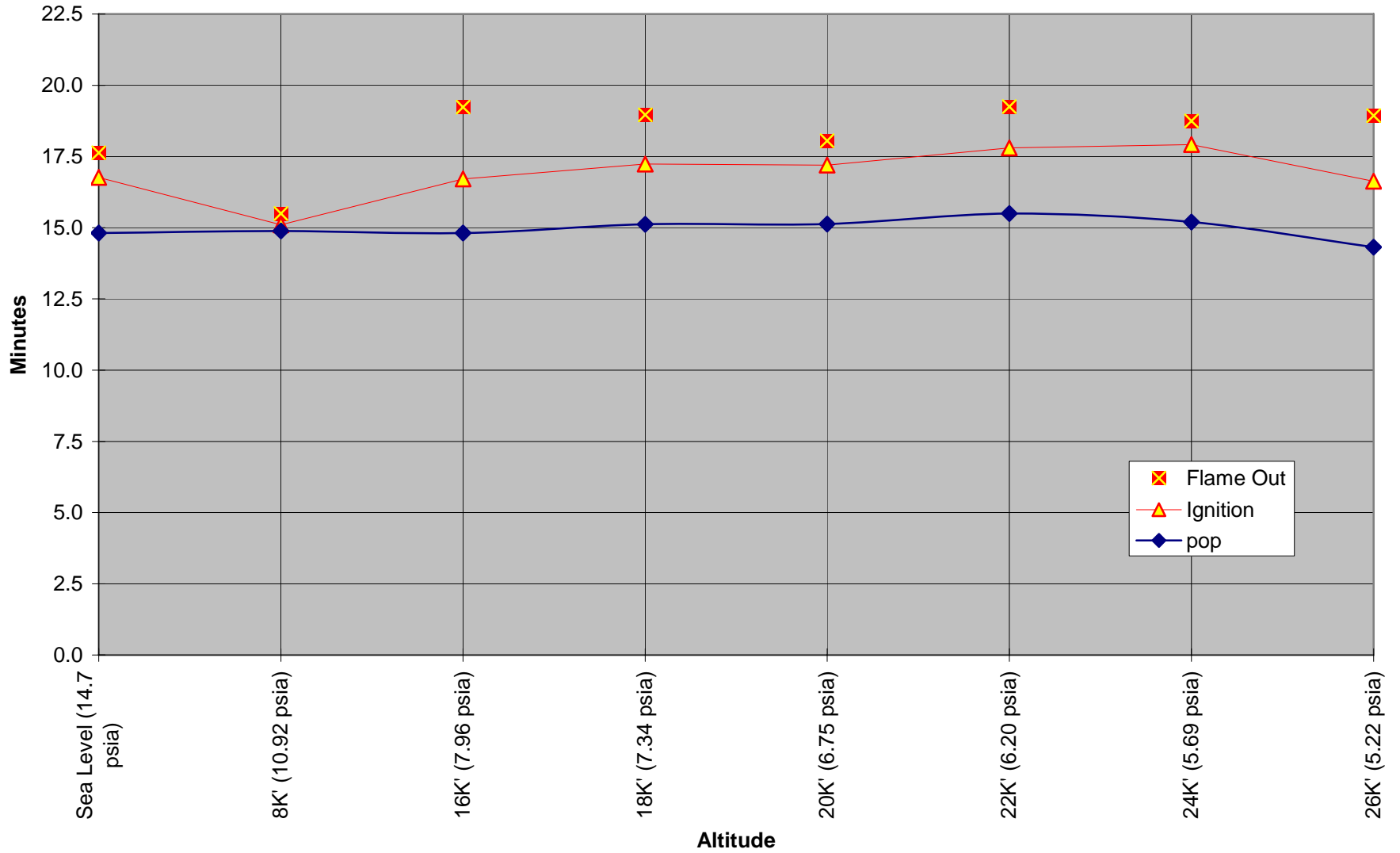
Propanol mass loss Vs Altitude



Acrylic Burn Rate vs. Altitude

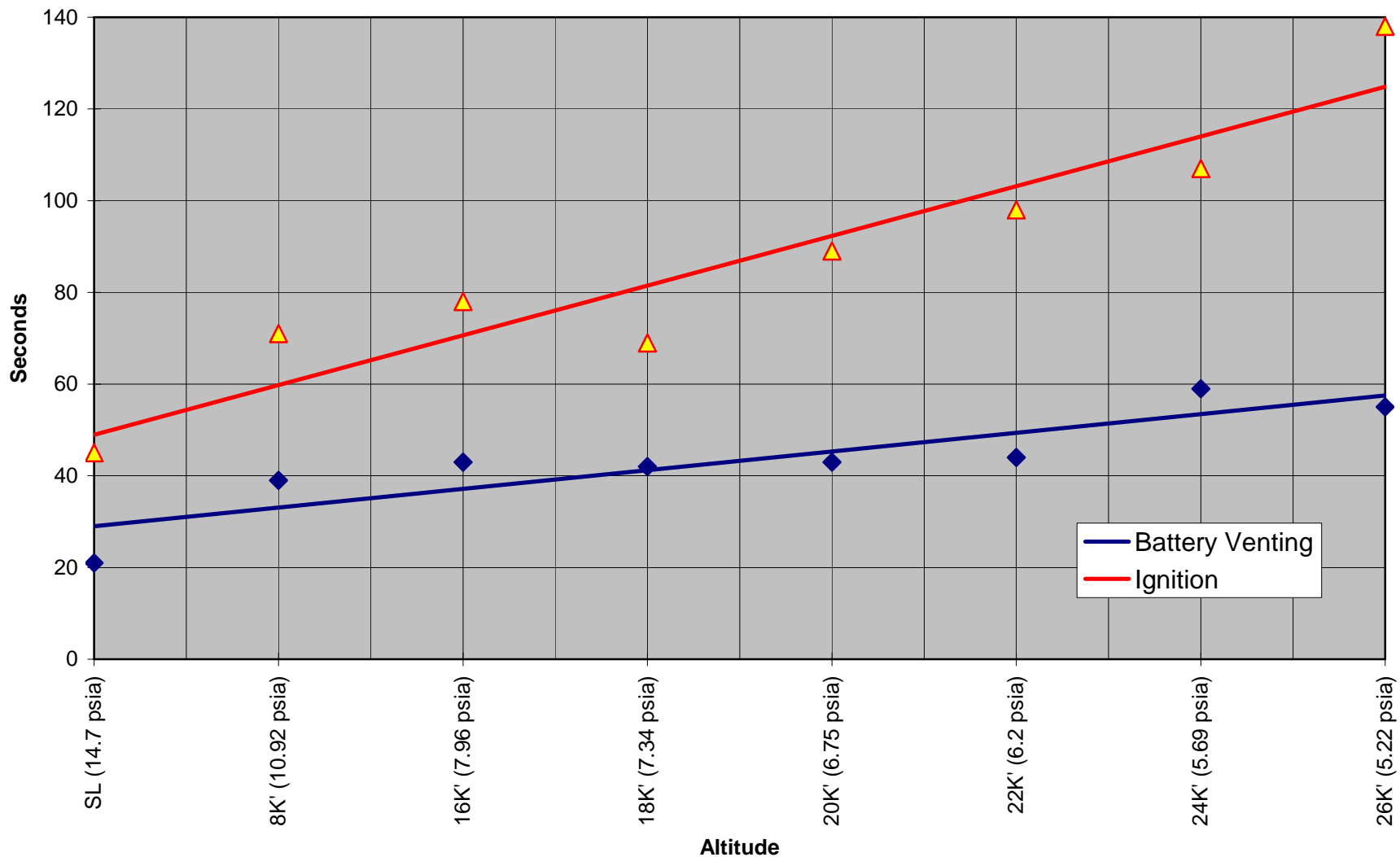


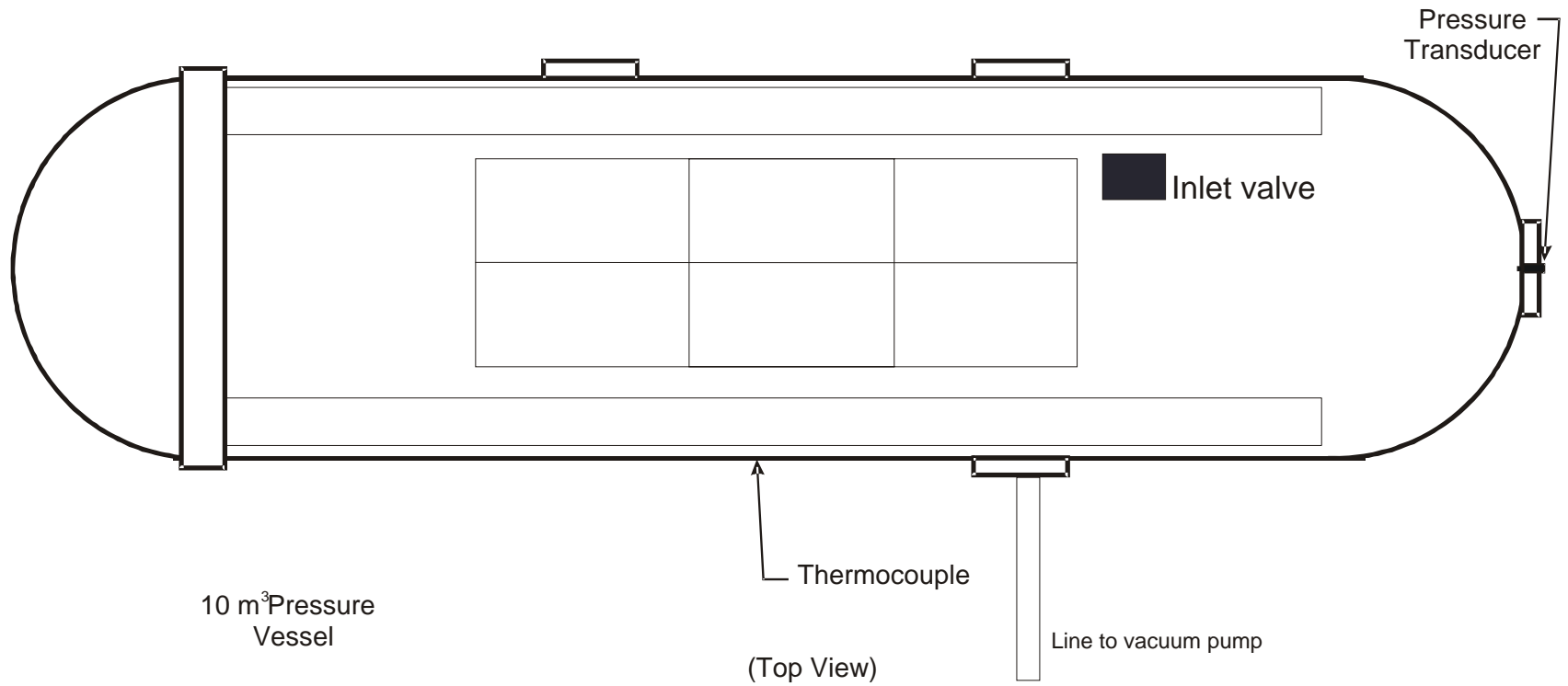
Heated Lithium Ion Battery vs Altitude



Altitude vs Time to Battery Venting & Ignition

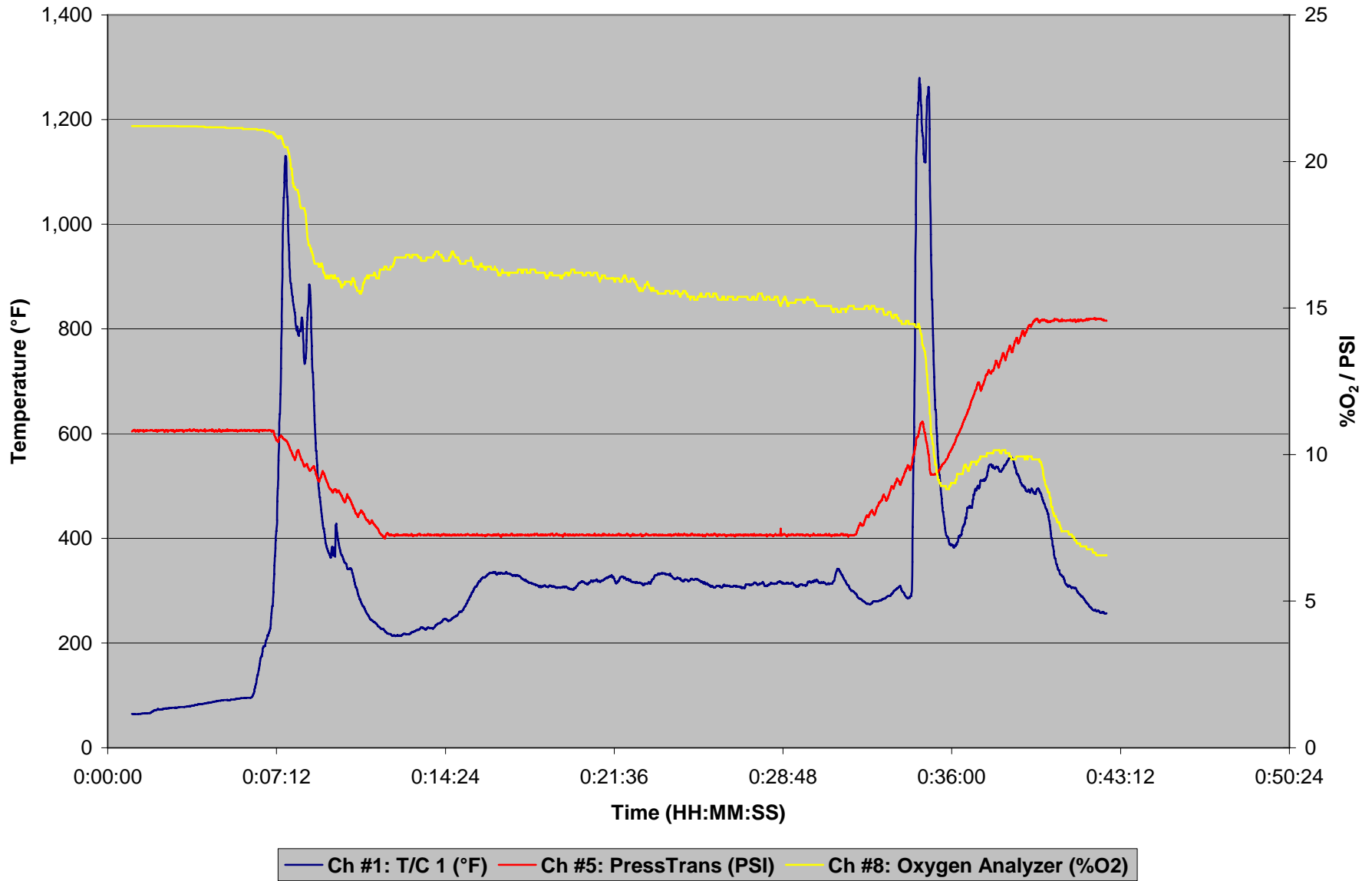
1.6 L/min Propane Flame - 10g Single Lithium Primary Battery



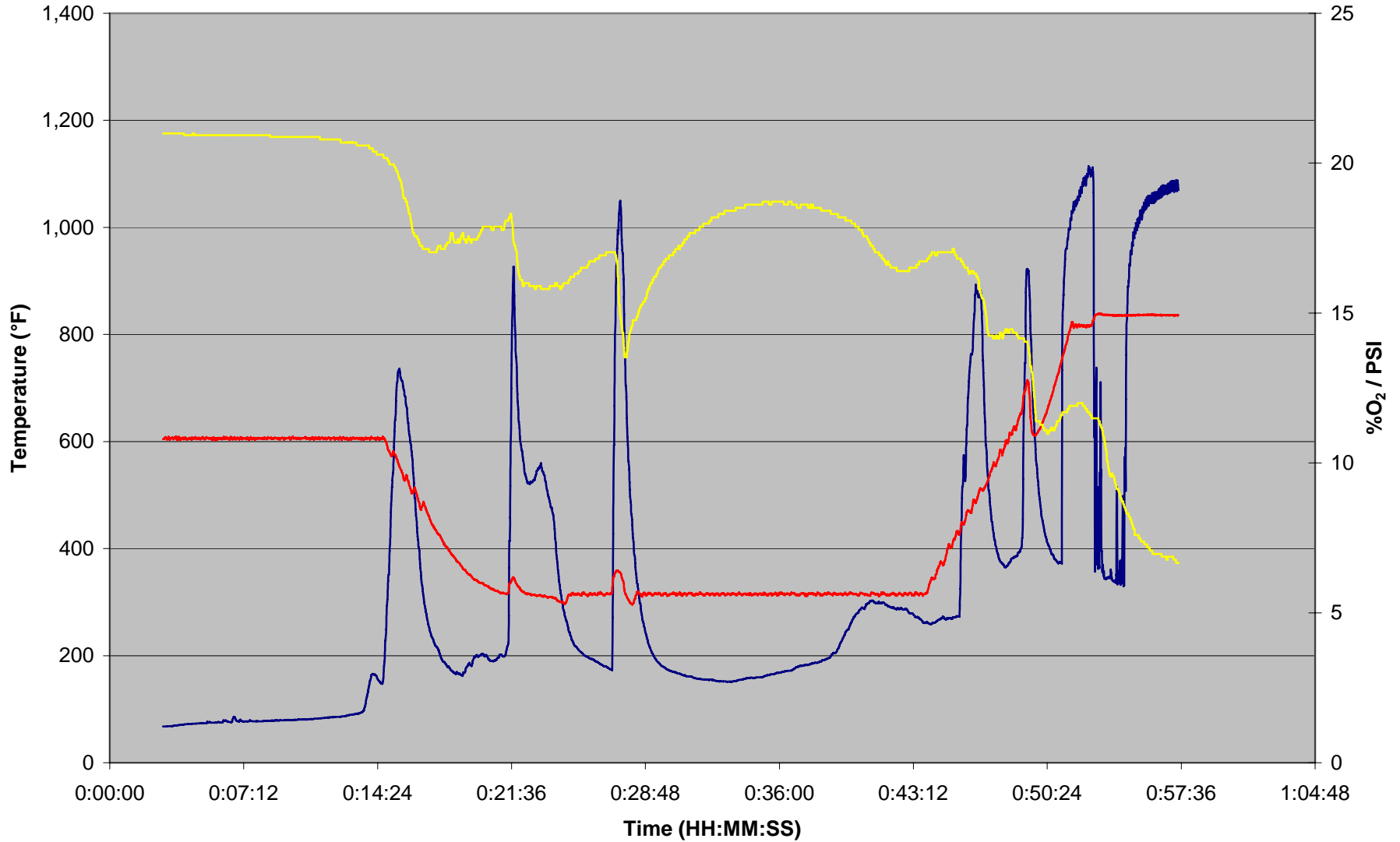




8,000 Feet to 18,000 Feet



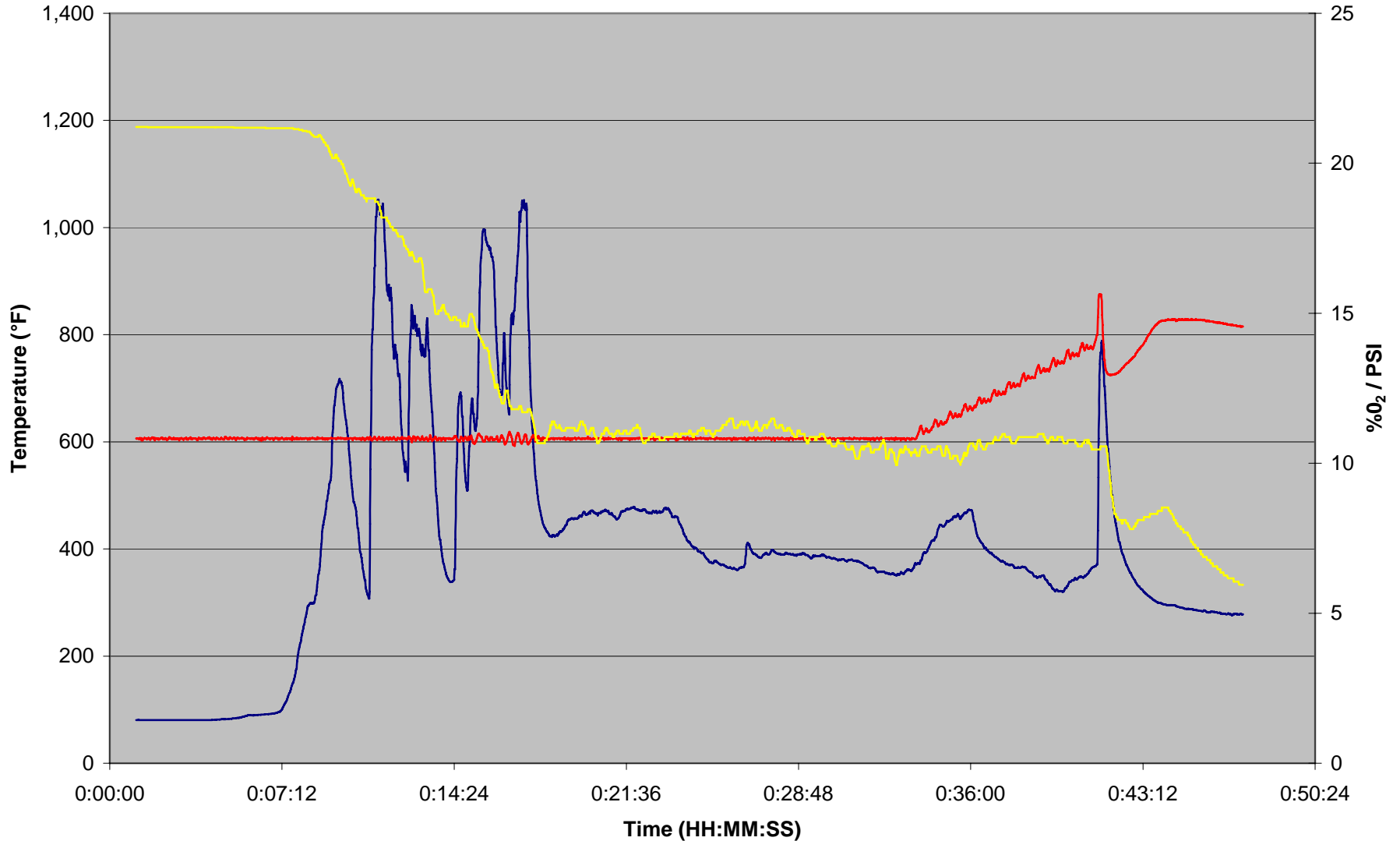
8,000 Feet to 24,000 Feet



— Ch #1: T/C 1 (°F) — Ch #5: PressTrans (PSI) — Ch #8: Oxygen Analyzer (%O₂)



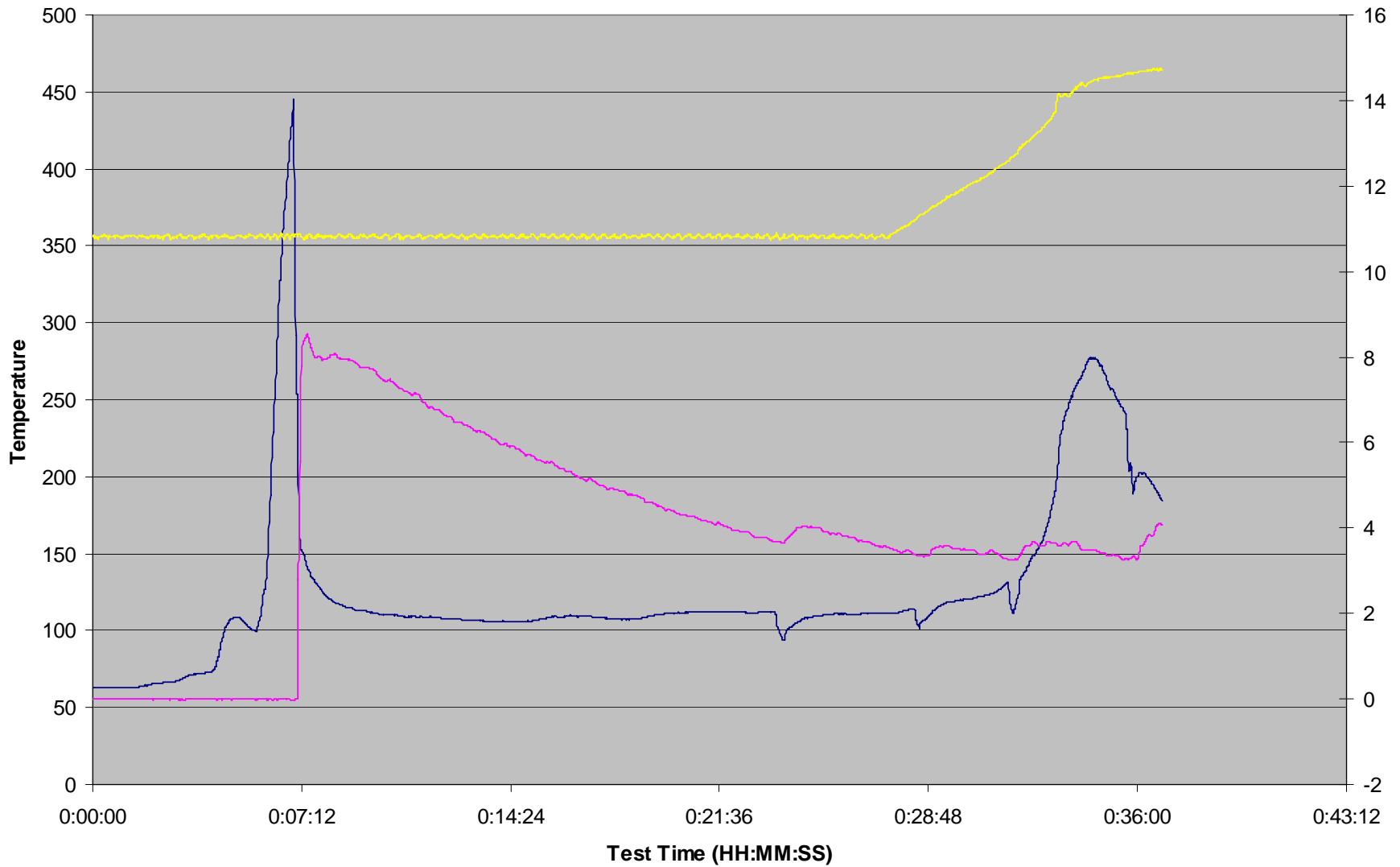
Cruise @ 8,000 Feet



— Ch #1: T/C 1 (°F) — Ch #5: PressTrans (PSI) — Ch #8: Oxygen Analyzer (%O₂)



Cruise @ 8,000 feet with Halon



— Ch #1: T/C 1 (°F) — Ch #3: Analyzer (%) — Ch #5: PressTrans (PSI)

