

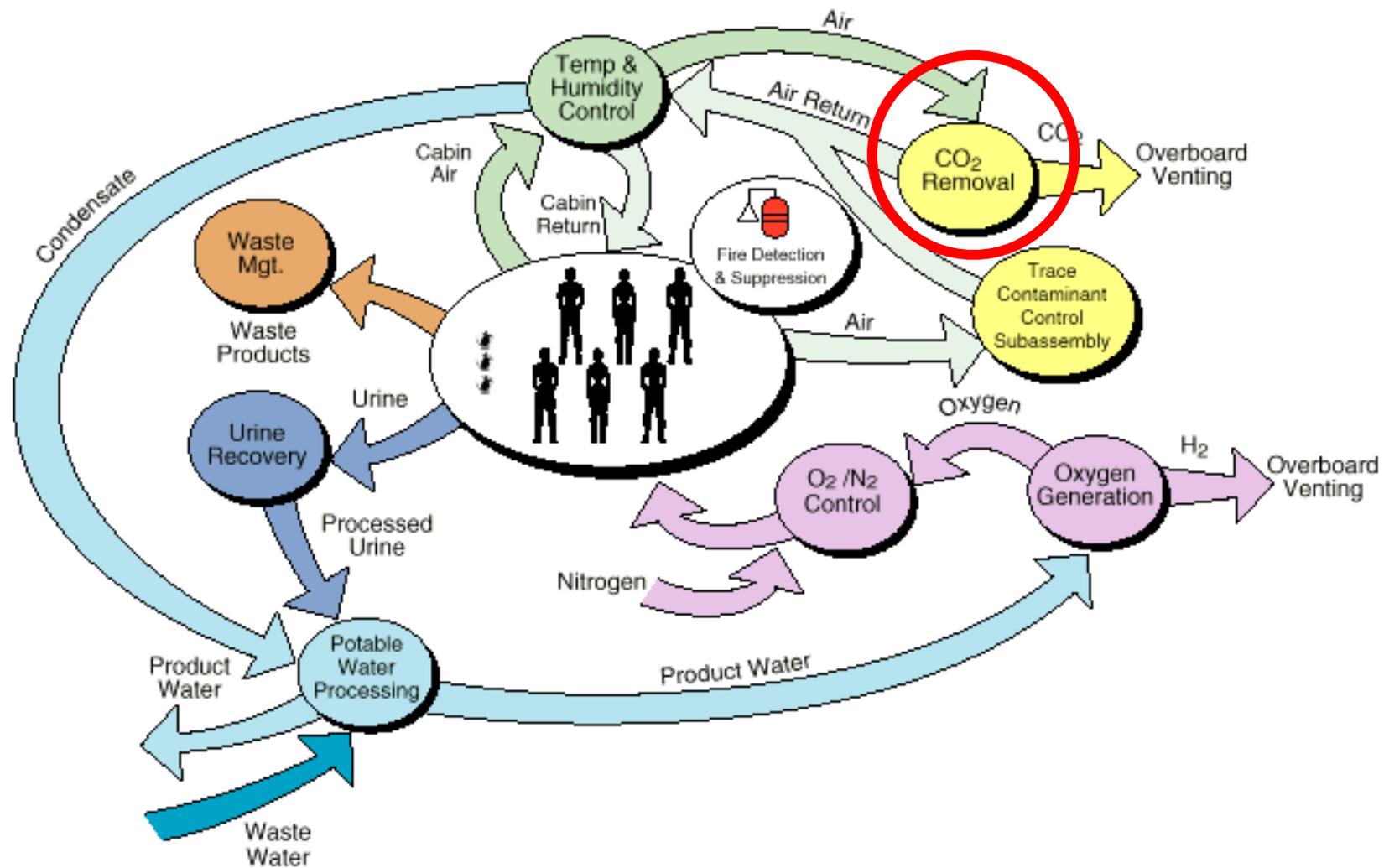
Carbon Dioxide Management on the International Space Station



Katie Burlingame

ISS ETHOS Flight Controller

Cimarron



Comparative Carbon Dioxide (CO₂) Levels

- Earth Atmosphere
 - CO₂: 0.04%
- ISS Atmosphere
 - CO₂: 0.4%



Impacts to High CO₂ Levels

- Headaches
- Lethargy
- Mental slowness
- Emotional irritation
- Sleep disruption

- Dizziness
- Unconsciousness



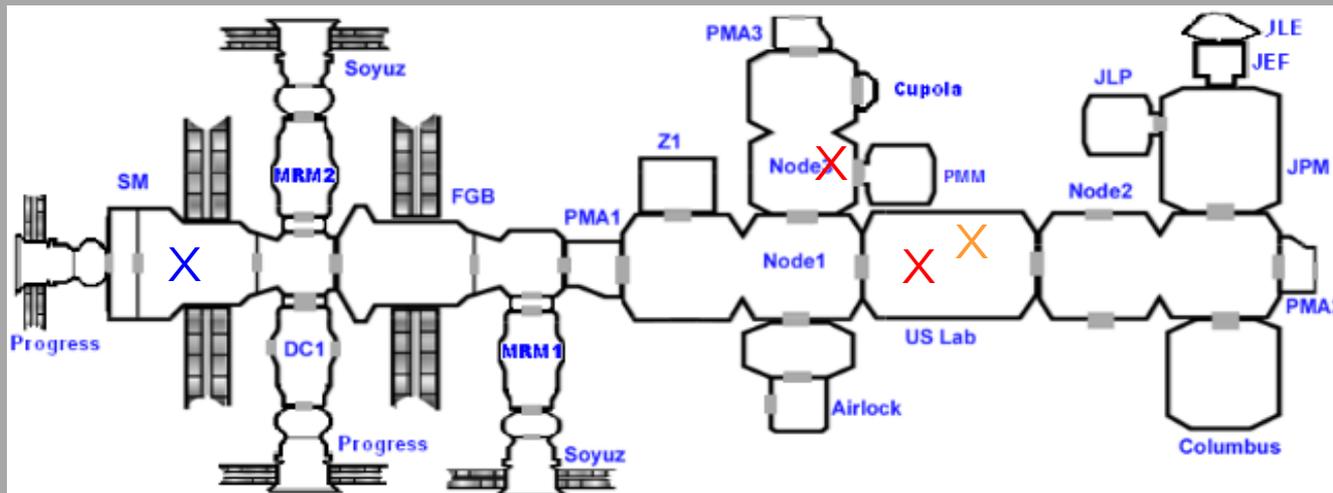
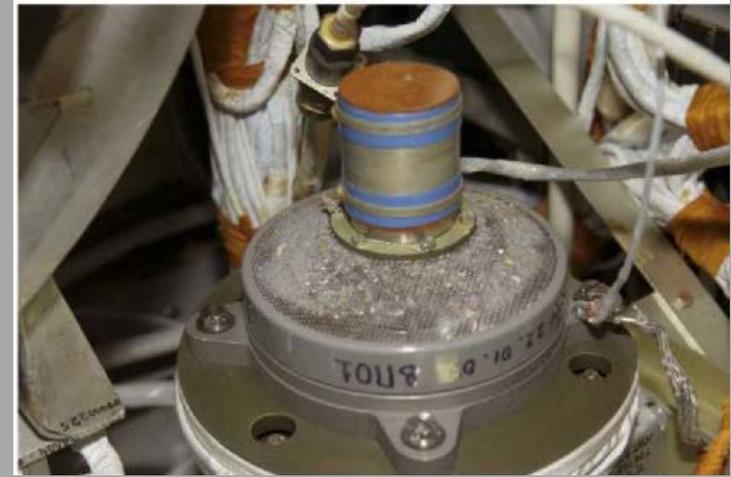
ISS CO₂ Removal



ISS021E04-3880

Complicating Factors

- Station airflow
- Activities that produce CO2
- Crew member variation
- Medical privacy
- System failures



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- Station airflow
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