EXPEDITIONARY FIGHTING VEHICLE

EFV Program Overview

ColPro 2005

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EFV Description

- The EFV is a self-deploying, high-water-speed, fully tracked, armored amphibious vehicle.
- 2 Variants

Personnel (P)

Command (C)

EFV Mission

Provide High Speed Transport of Embarked Marine Infantry From Ships Located Beyond the Horizon to Inland Objectives

Provide Armor Protected Land Mobility and Direct Fire Support During Combat Operations

EFV DEVELOPMENT

"Where We are Today"

FY95 - FY01
Program Development and Risk Reduction (PDRR)

Integrated Functionality, Full Up System

1st Gen Prototypes

FY01 - FY06
System Development and Demonstration (SDD)

Mature the Design, Prepare for Production

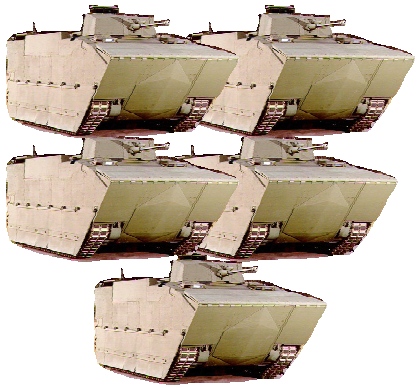
2nd Gen Prototypes

FY07 – FY10
Production Readiness and Low Rate Initial Production (LRIP)

FUSL
IOT&E

LRIP

FY10 – FY20
Full Rate Production



EFV

FRP

EFV Combat Essential Functions

Move (Land)

Move (Water)

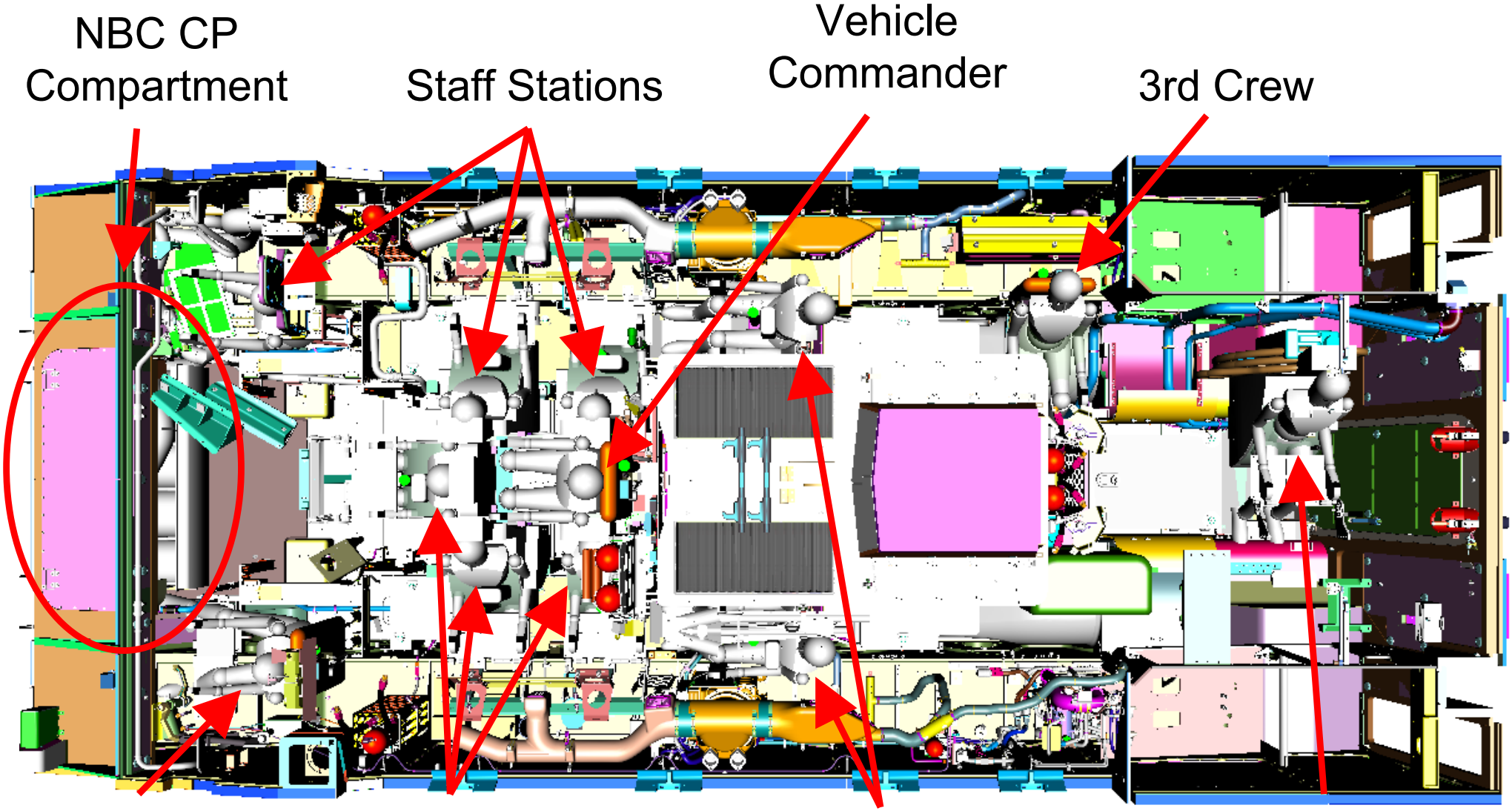
Shoot

Communicate

Carry

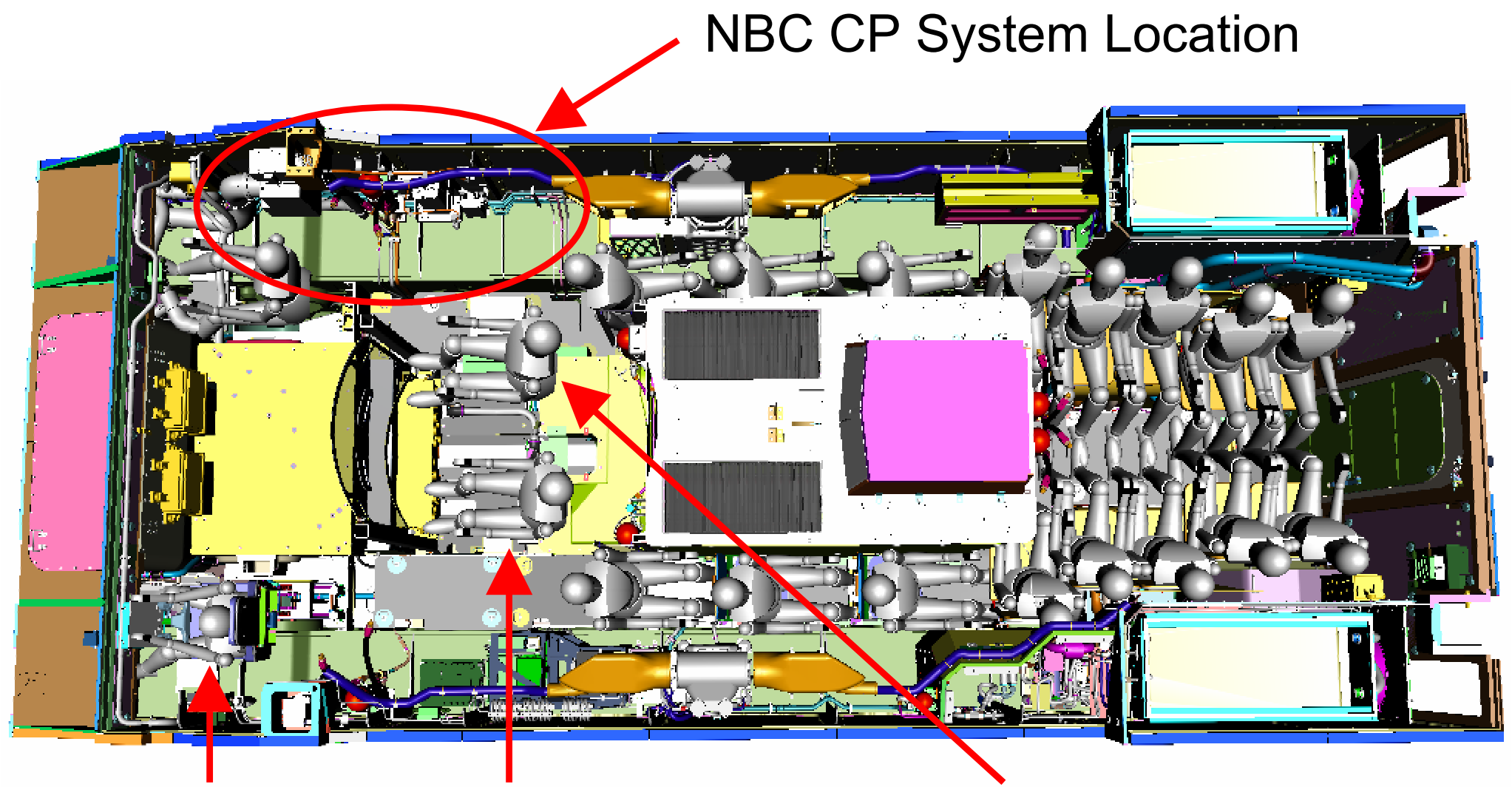
Protect

EFV(C) Internal Layout



7 Staff Stations, 3 Crew Stations, 2 Jump Seats

EFV(P) Internal Layout



3 Crew Stations, 17 Infantry

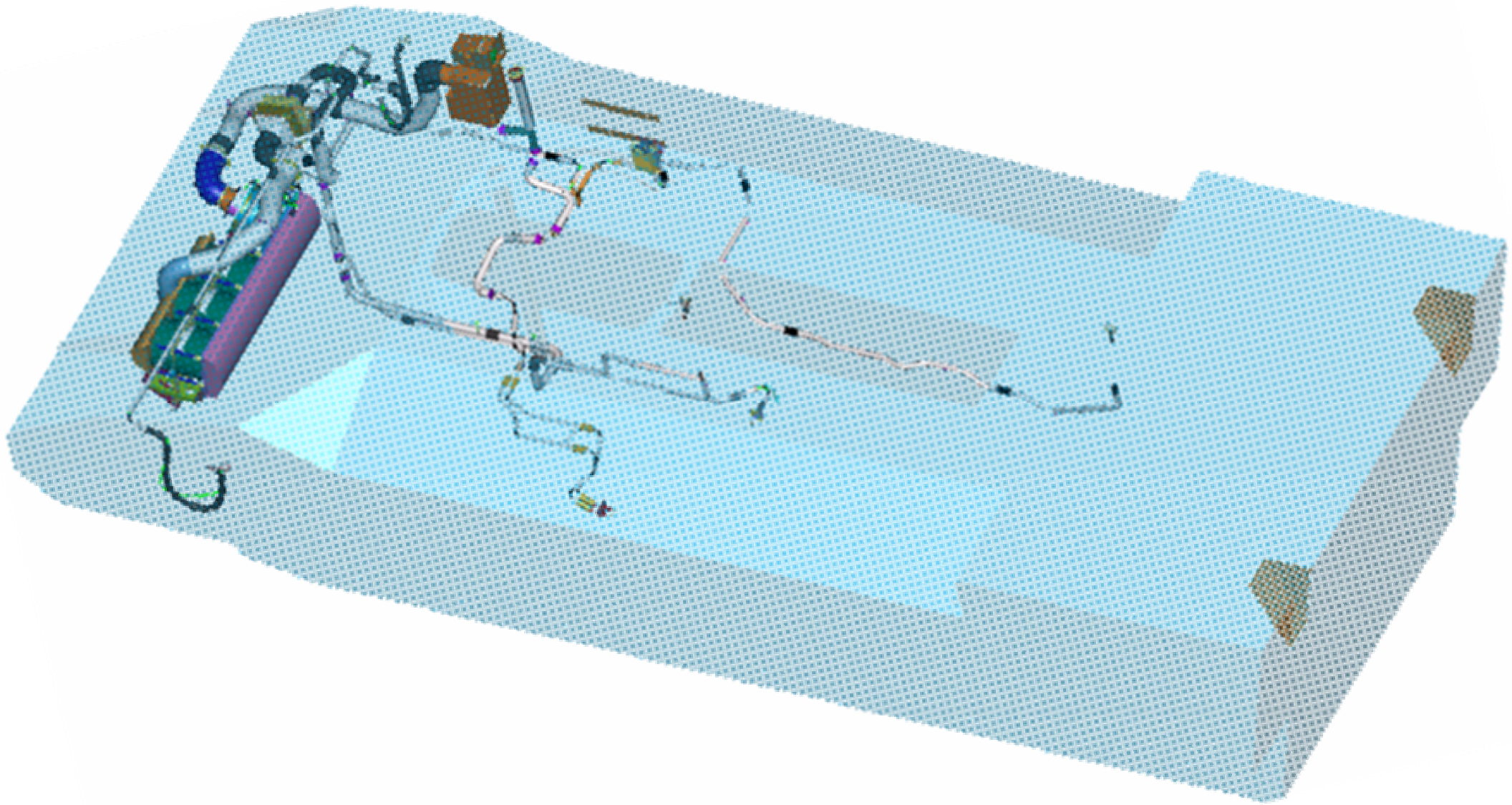
EFV NBC CP Requirements

- ORD Requirement
  - The EFV shall provide a collective protection system. The EFV crew and embarked personnel must survive and operate in an NBC Mission Oriented Protective Posture (MOPP) 4 environment
- System Performance Specification
  - Chemical Threat: 2 Attacks
  - Particulate Filtration
  - Fresh Air Ventilation: 15 SCFM/person
  - Overpressure: 3.9 inH2O
  - Interior Air Temp: 50 – 90 degrees F

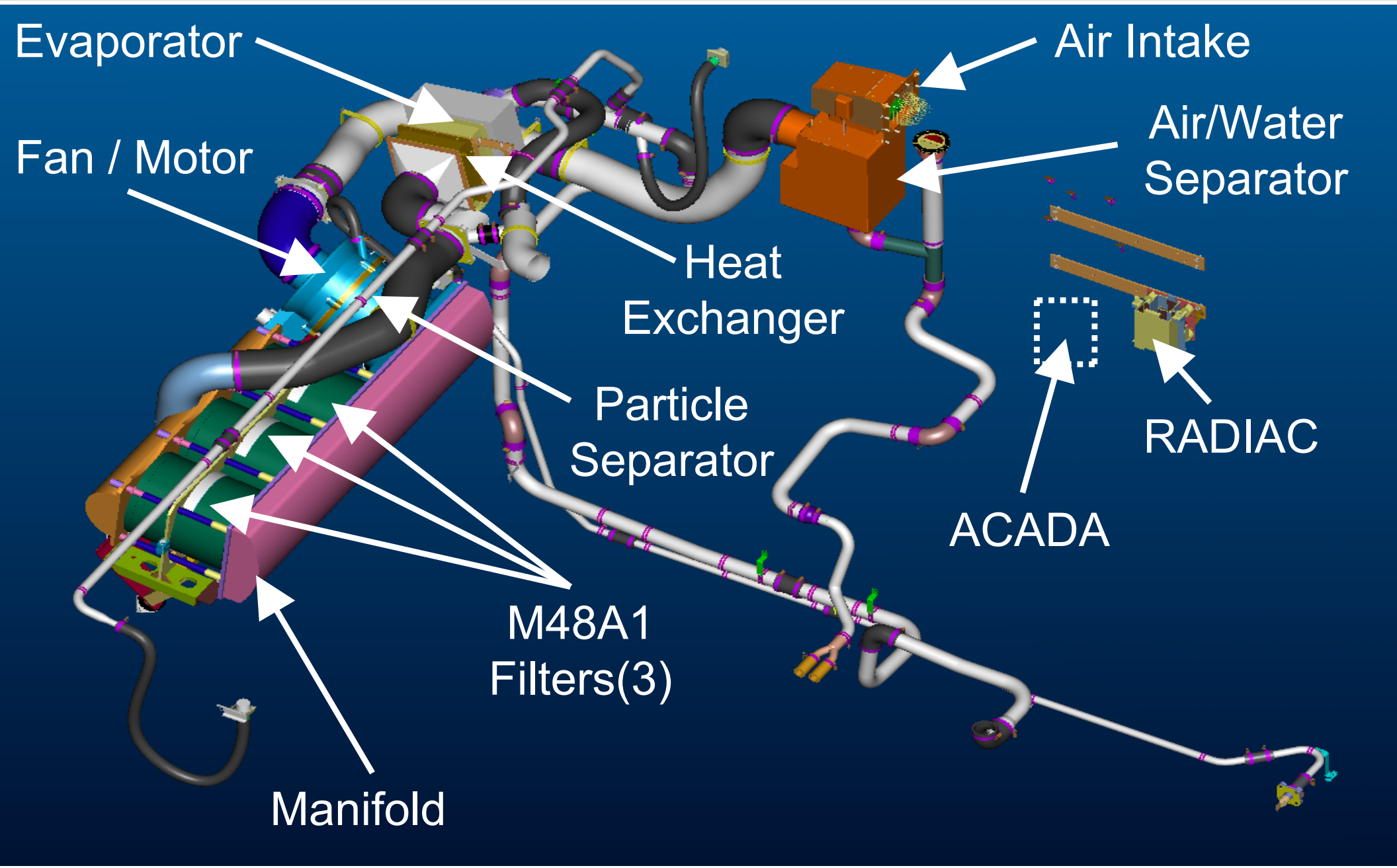
EFV NBC CP
Current System Design

- Air/Water Separator
- 300 SCFM Delivered
- Conditioned Air Distribution System
  - Particle Separator
  - Manifold with 3 M48A1 Filters
  - Ventilated Face Pieces for the crew
  - ECS system to heat/cool and circulate interior air
- Detector/Warning System
  - Chemical Detector (ACADA M22)
  - Radiation Detector (RADIAC AN/VDR-2)
  - Sample Transfer System (Sample Inside & Outside Vehicle)
  - Automatic and Manual Control of NBC System
- Delta Pressure Switch for Filter Loading
- Pressure Switch for Overpressure

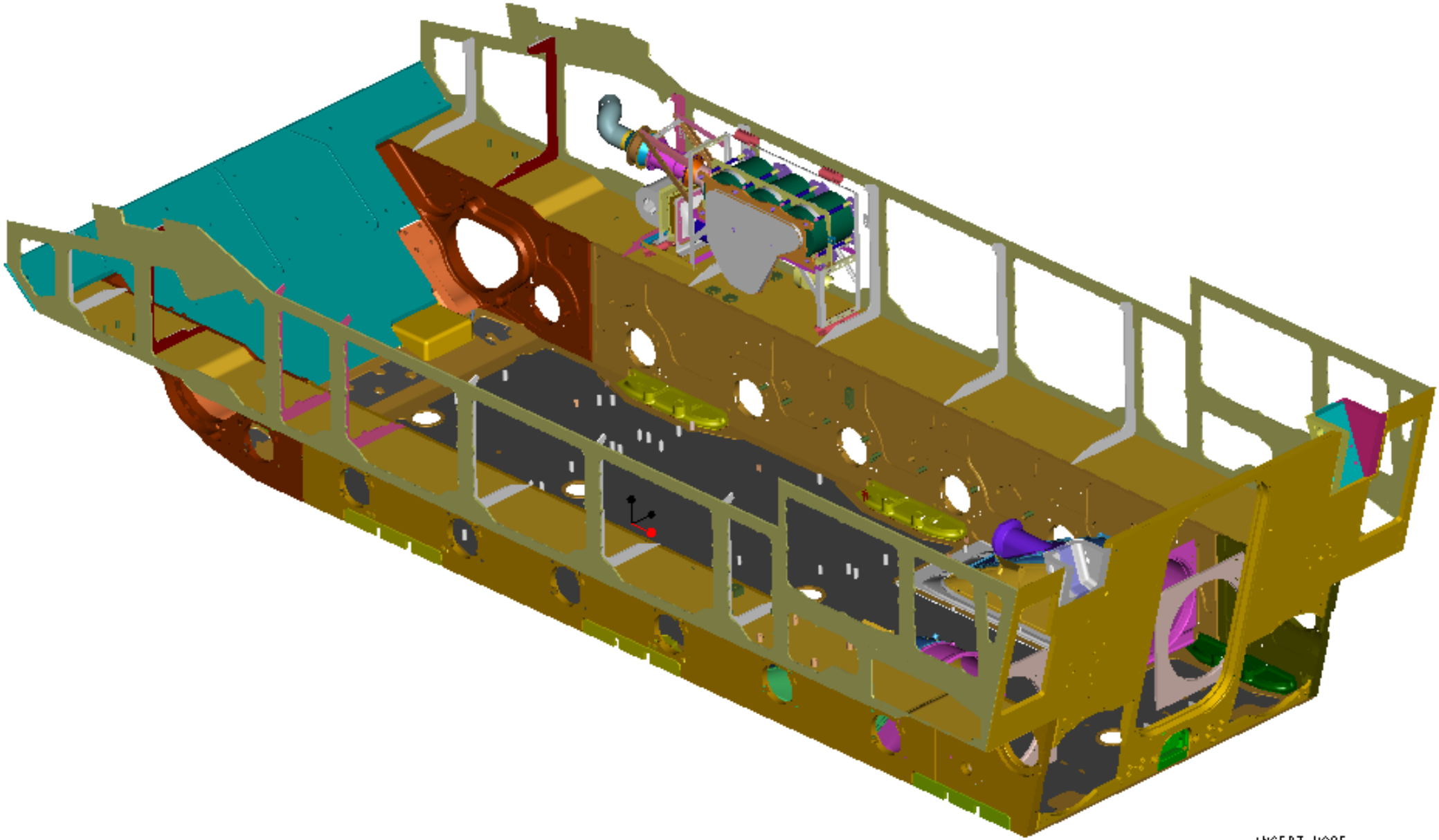
EFV(C) NBC CP Design



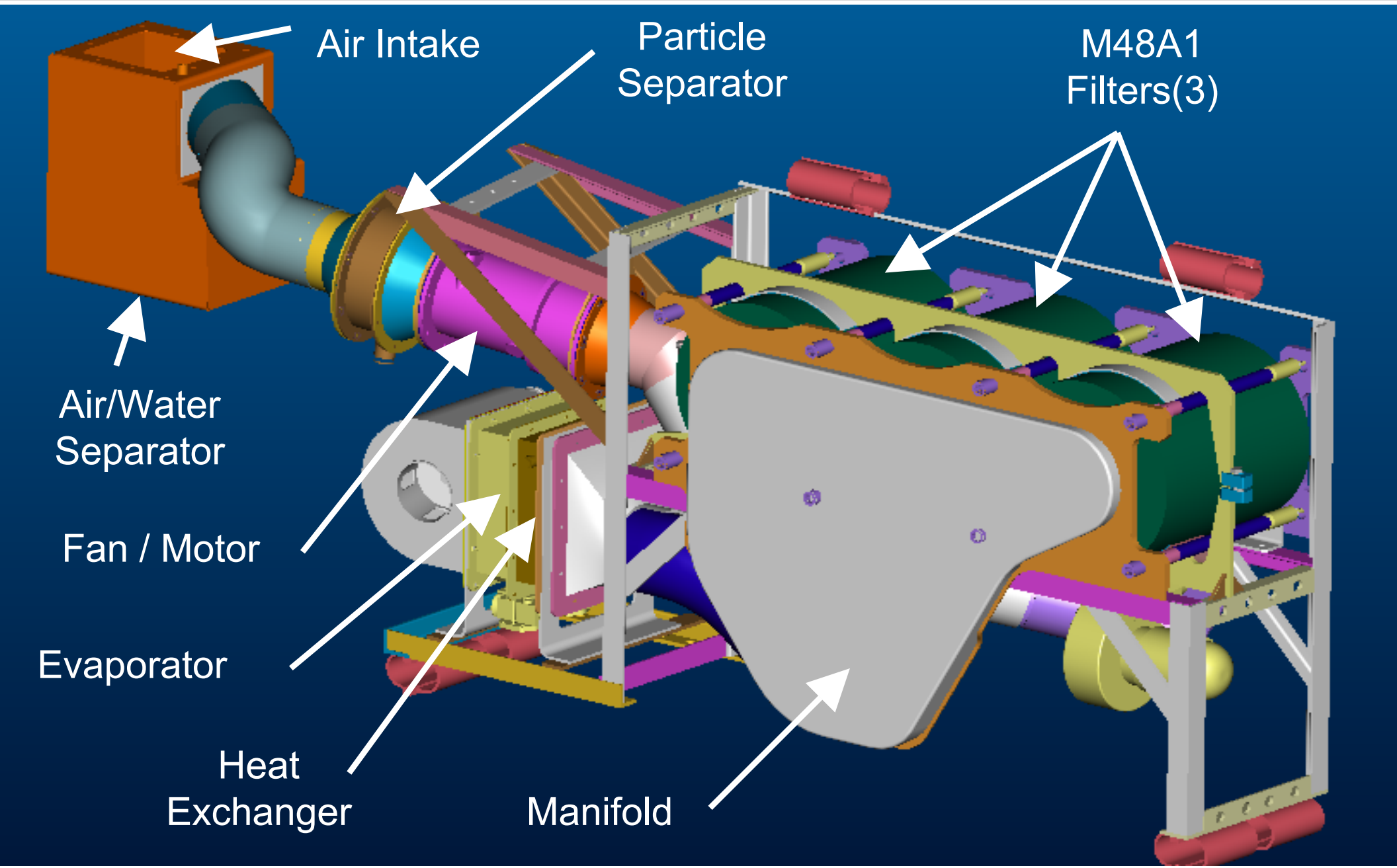
EFV(C) NBC CP Design



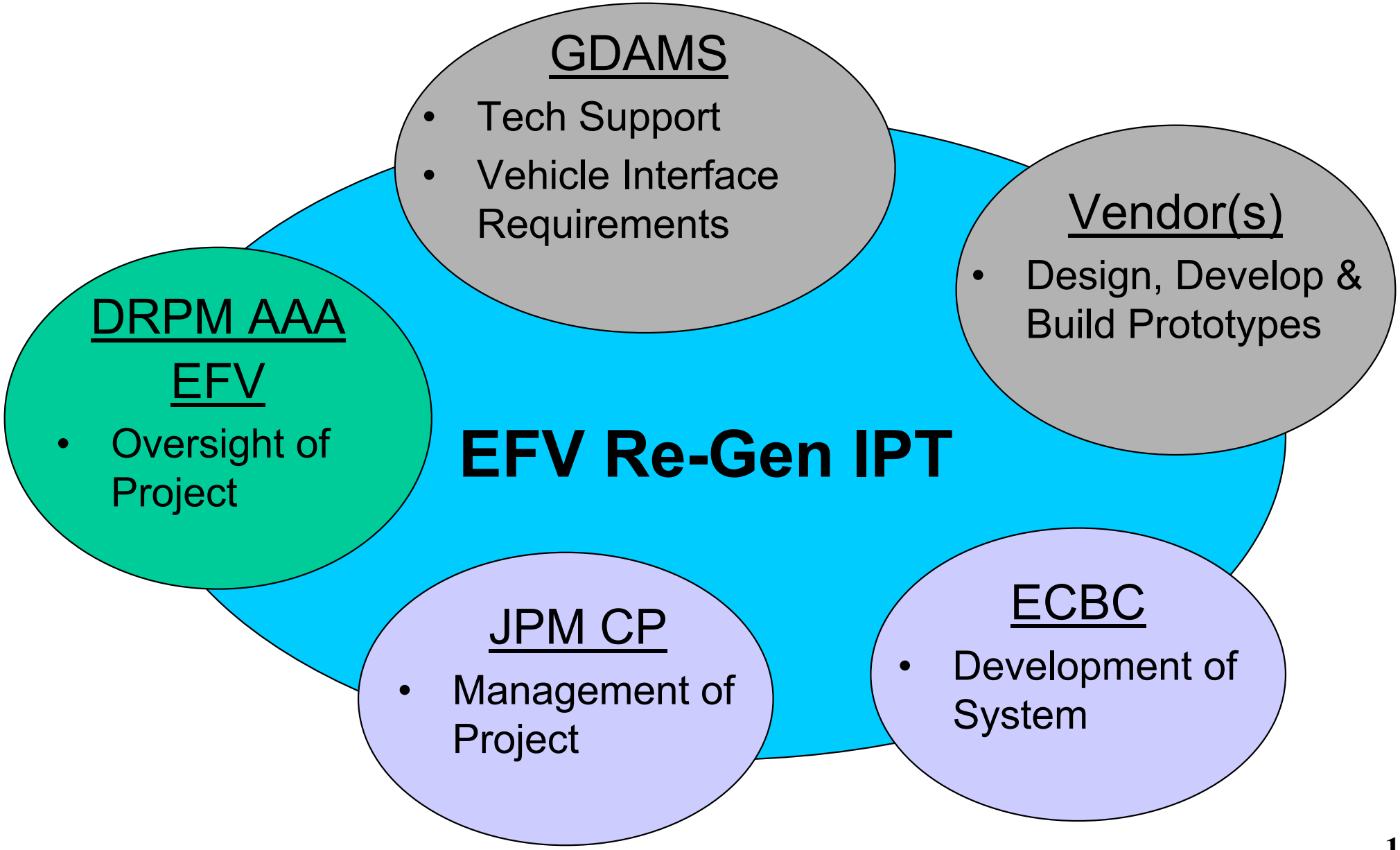
EFV(P) NBC CP Concept Design



EFV(P) NBC CP Concept Design



EFV NBC CP Future System Design – Re-Generative

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