

«external_system»
Mission Planner
Operator UI / mission editor

User edits & actions

VITALS SAR System
[system]

«container»
Agent A - Vision
[YOLOv11 + LLaVA]

Detects objects and produces MCP scene facts

«container»
GUI Adapter
[Flask/WebSocket]

Bridges Mission Planner UI events to agents (MCP facts, ACP intents)

«container»
Agent C - Coordinator
[LLM runtime]

Turns detections+memory into intents & tasking (ACP)

«container»
Agent B - Retrieval
[ChromaDB + RAG svc]

Stores embeddings, retrieves prior mission context

«container»
Agent D - Mapping & Planning
[C++/Py planners]

Maps, costmaps, A*/D*/coverage, deconfliction

«container»
Vector DB
[ChromaDB]

Embeddings for mission facts, terrain tags, operator notes

«container»
MAVLink Router
[mavlink-routerd]

Multiplex MAVLink between agents and drones

«external_system»
UAV/Drone Fleet (ArduPilot)

