

# Search and Rescue

Intelligent planning & task support for search and rescue



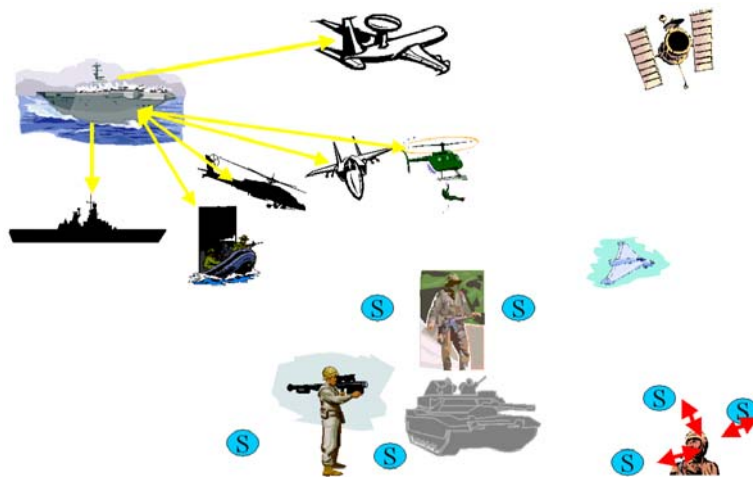
## Description:

- ◆ Knowledge-based tools for RAF Search and Rescue
  - ◆ Selecting plans.
  - ◆ Generating “To Do” lists.
  - ◆ Automating status information.
- ◆ CoSAR-TS to share plans and processes between collaborating software agents in a Search and Rescue scenario
  - ◆ Uses DAML ontologies to support matching of resources to needs.



## Technical approach:

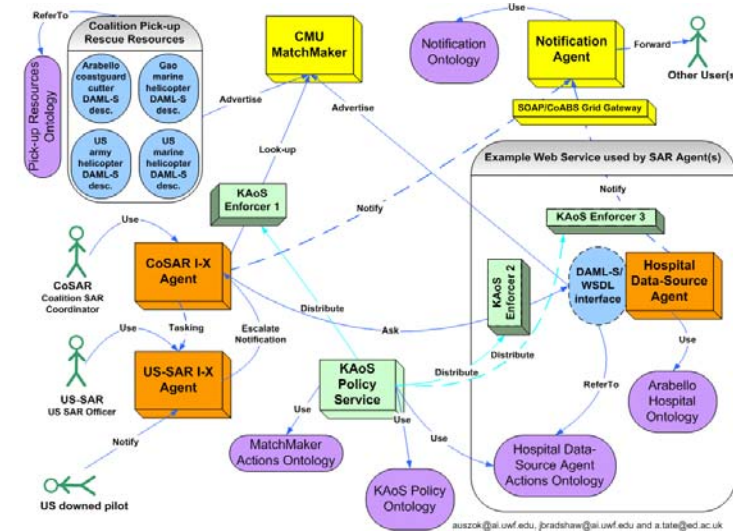
- ◆ RAF Search and Rescue: O-Plan style planning based on CommonKADS model.
  - ◆ Linked to multiple user interfaces.
- ◆ CoSAR-TS: Shared intelligible models
  - ◆ tasks, structures, agents, capabilities, ...
- ◆ I-X Process Panels for activity management.
- ◆ *Success through providing task support to human decision makers.*



CoSAR-TS “downed airman” scenario

## Benefits:

- ◆ RAF Search & Rescue was capable of
  - ◆ Automating administrative tasks.
  - ◆ Planning efficient use of helicopters & crew.
- ◆ Used to provide specification for fully developed system.
- ◆ CoSAR-TS
  - ◆ Enables cooperation between software and human agents.
  - ◆ Links models of coalition organizational structures, policies, and doctrines with intelligent task support software.



CoSAR-TS Demo Concept



RAF SAR: AIAI, DRA, Royal Air Force  
 CoSAR-TS: AIAI, IHMC, BBN Technologies  
<http://www.aiai.ed.ac.uk/project/cosar-ts/>

