

# ***Cognitive Wireless Technology Team Continues Its Winning Streak***

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**Alexander R. Young, student team captain**

**Charles W. Bostian, faculty advisor**

{alex.young, bostian}@vt.edu

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# ***VT Students and the Tradition of Success***



**2007**



**2007**



**2008**

# *Teamwork*





# ***VT Partners***

## **University of California – Irvine**



# ***Past Smart Radio Challenge Problems***

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- **Spectrum access for first responders**
  - **2007 San Diego County forest fires**



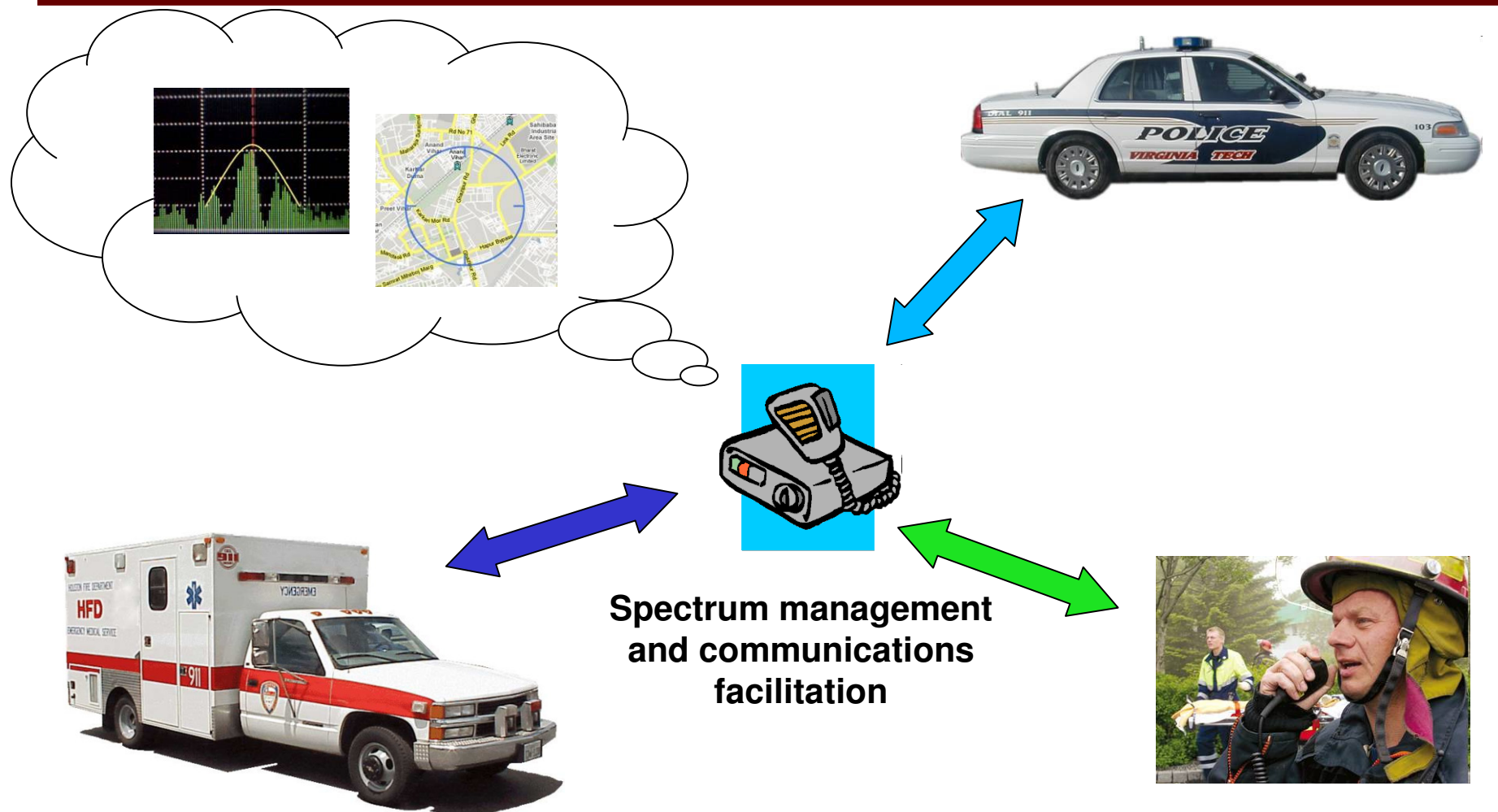
# ***Past Smart Radio Challenge Problems***

- **Communications from an infrastructure-damaged area**
  - **2005 Hurricane Katrina**



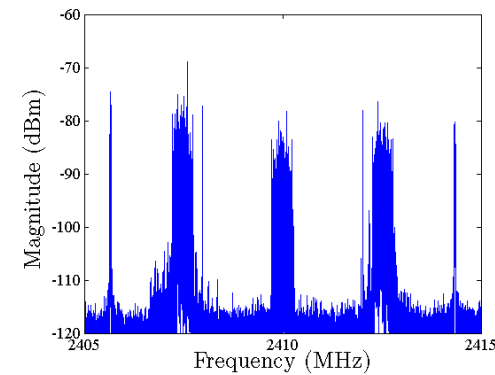
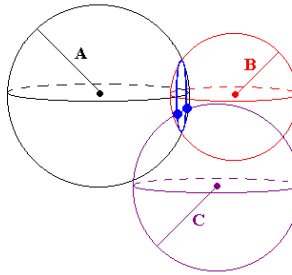


# The 2009 Challenge Problem



# ***Required Technology & Skills***

- **Advanced digital communications & networking**
- **Geolocation**
- **Policy & shared resource (spectrum) management**
- **Systems simulation**



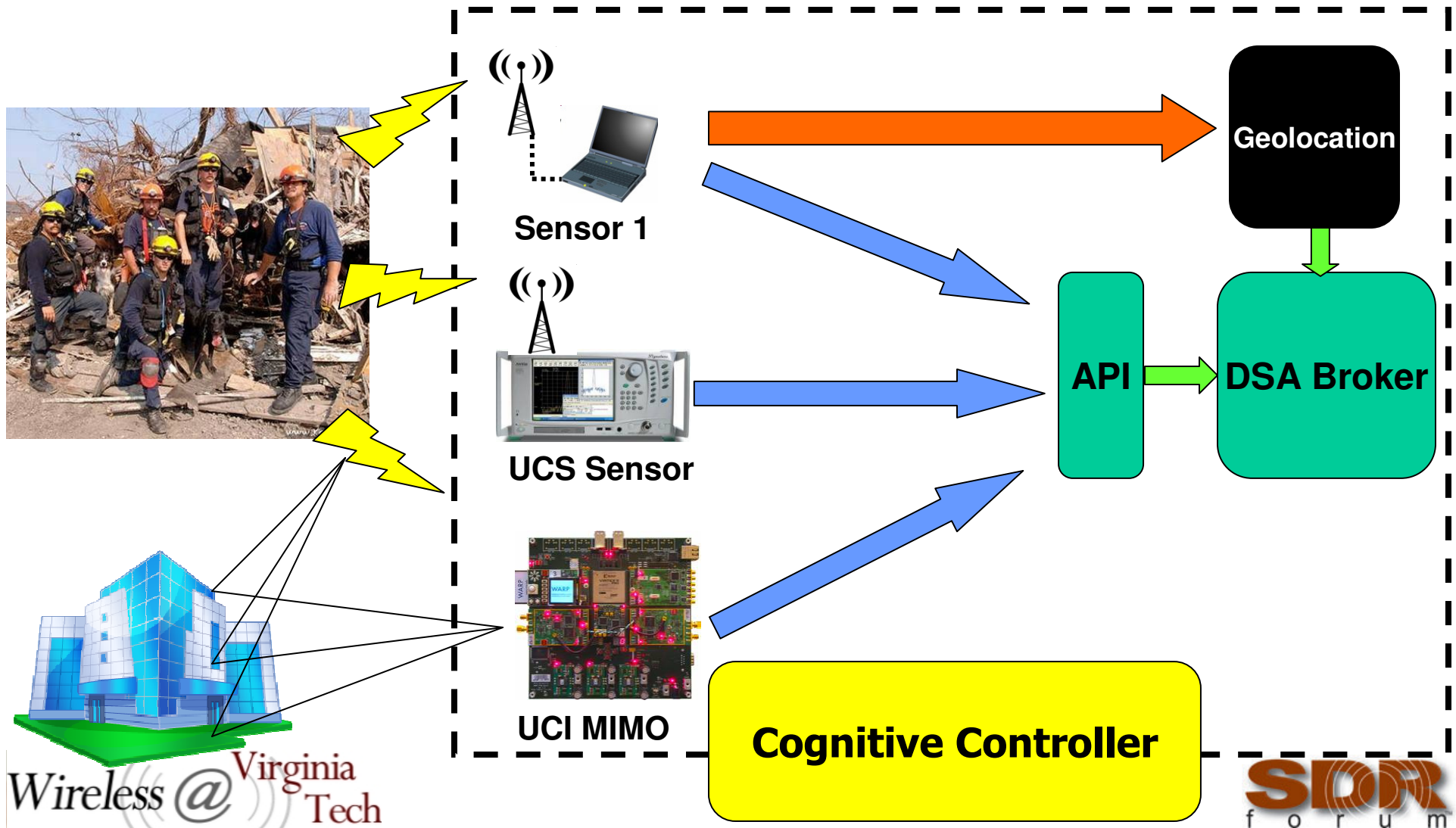


# ***Required Technology & Skills***

- **Public safety/emergency response operations**
- **Systems integration**
- **Real world implementation & testing**

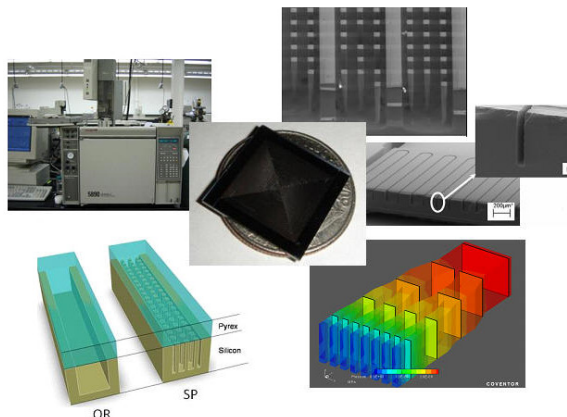
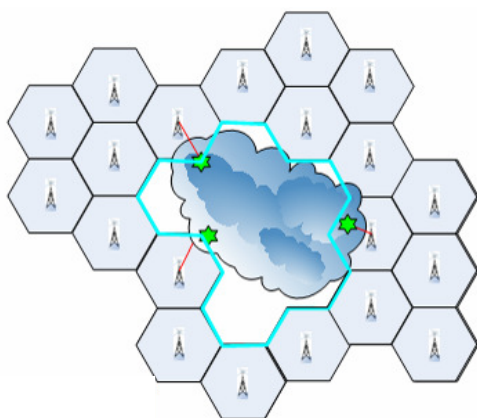


# System Diagram



# Benefits

- **Students**
  - **Exposure to advanced technology**
  - **Involvement in new research**
- **Current research**
  - **New and exciting directions**





# *Where Next?*

- **Team development and growth**
  - **Fully supported and integrated program**
  - **Department or college level**

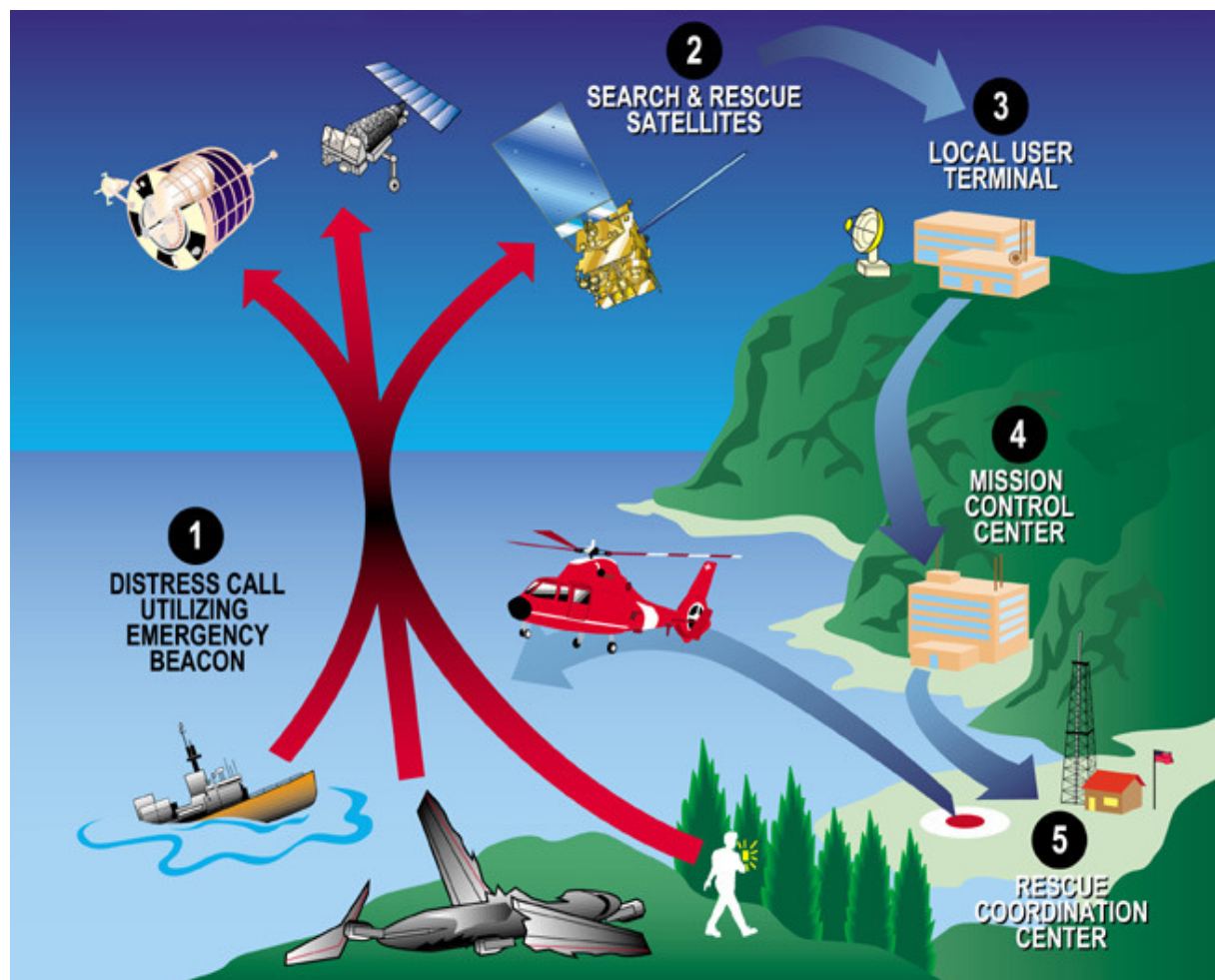


# ***VT's 2009 Smart Radio Team***

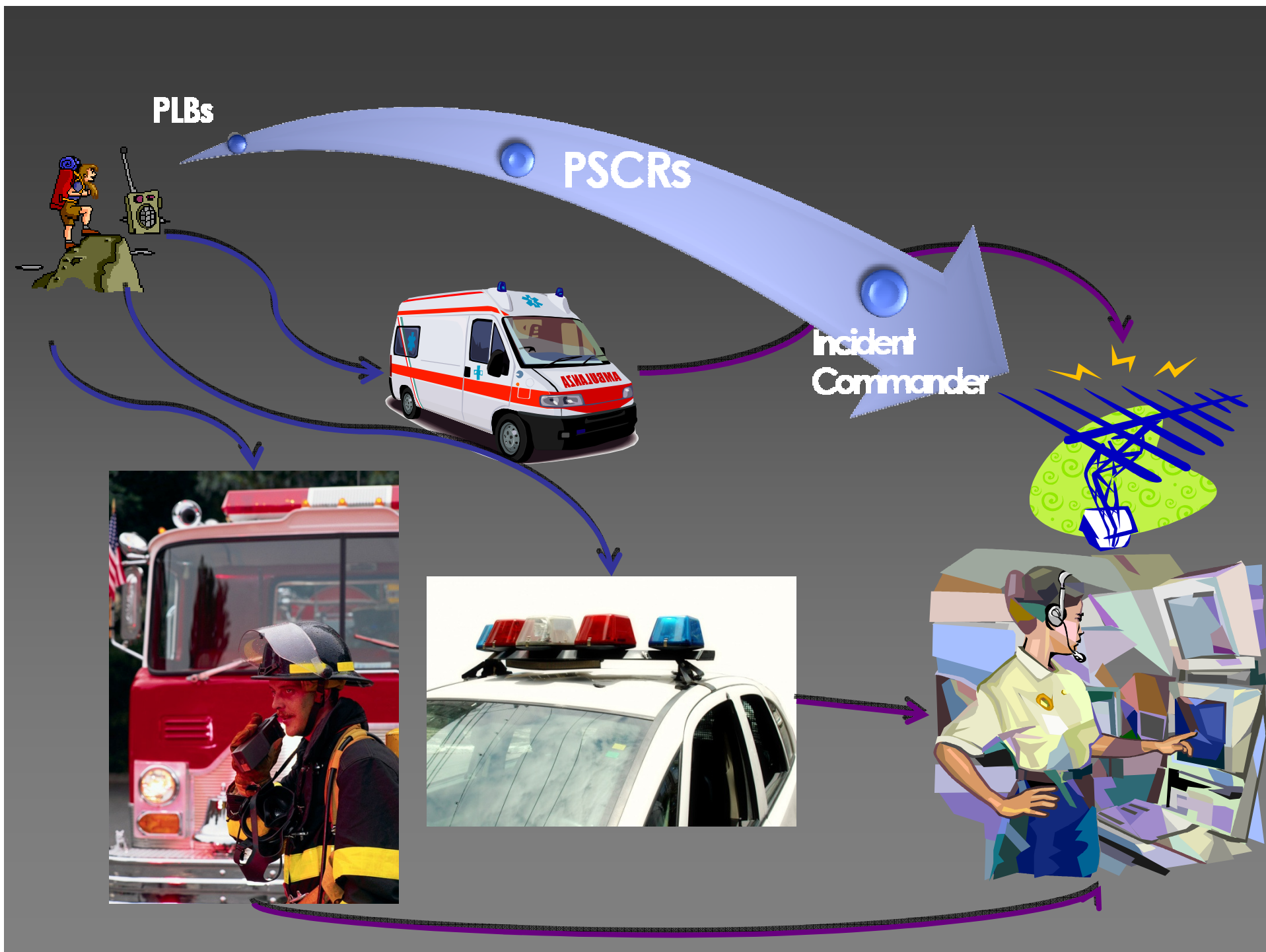
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# ***SARSAT System***







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# Thank you