

**Research Title:** Situational Awareness for Emergency Response

1. **Individual Sponsor:** Tamara Chelette  
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2. **Academic Area/Field and Education Level:** Multidisciplinary Engineering and Computer Science / Automatic Target Recognition (BA/BS, MS or Ph.D. level)
3. **Objectives:** Advance the state of the art in aerial survey of natural disaster sites needing high level triage for command and control.
4. **Description:** This research topic will explore current military sensing technology to potentially transfer to an application for first response survey of a natural disaster site. Doctorate level original research would consist of discovering the appropriate mix of low cost airborne sensing devices, innovative algorithms, and situational visualization techniques that would deliver revolutionary triage capability from a standoff distance.
5. **Research Classification/Restrictions:** No restrictions.
6. 7. **Interest in Summer USAFA Cadet (Avg Cost for USAF Cadet for 33 days was \$4000):**

Yes, there is interest and probably funding.

**Eligible Research Institutions:**

- Universities (DAGSI)       AFIT (only)       USAFA