An Eventful Year

- ACUASI's first year - UAS program 13th year
- Significant increase in work & inquiries
- FAA SIR released 14 Feb 2013
  - Proposal submitted over 2.5 months
  - Team built with 58 partners
- Ground-breaking accomplishments
- FAA awards Test Site to Alaska-led Team

ACUASI's First Year

- Events
  - Established initial underpinnings to support test site proposal
  - Reorganized & started formalizing procedures
  - Moved into our own building (former OEM site)
  - Hired professor shared with College of Engineering
  - Many successful missions
  - Successfully worked with Alaska legislature on UAS resolution (HCR 6) & subsequent task force
  - Became US co-chair of UAS Expert Group under AMAP (Arctic Council)
- Changes
  - Greg Walker stepped down to become Chief Technology Officer
  - Marty Rogers named new ACUASI Director

ACUASI Priorities for Next Year

- Stand up the test site
- Refocus energy on high latitude activities
  - Of benefit to Alaskans
  - In support of research
  - To attract technology businesses to Alaska
- Sharpen our technology focus on improving and advancing the state-of-the-art of sensors

FAA Test Site

- Jan 2012: FAA Reauthorization Act directed FAA to select 6 Test Sites
- Feb 14 2013: Solicitation was released
- UAF led team for states of Alaska, Oregon, and Hawaii, plus 56 additional team members
  - Includes state agencies (DOT, DPS, Forestry of DNR, DHS&EM, National Guard
  - Universities, EDCs, corporations
  - Associations like Medallion, AUVSI
- And, 30 Dec 2013, we were announced as a selectee
- Media attention exploded—at least 35 interviews to date, over 1200 media mentions of UAF

Pan-Pacific UAS Test Range Complex

- University of Alaska is “the operator” per FAA
  - Establishing Board of Directors, management team, procedures, policies, & how to fund
- Funding is a challenge
  - No FAA funding provided or contemplated
  -

What Alaska Offers

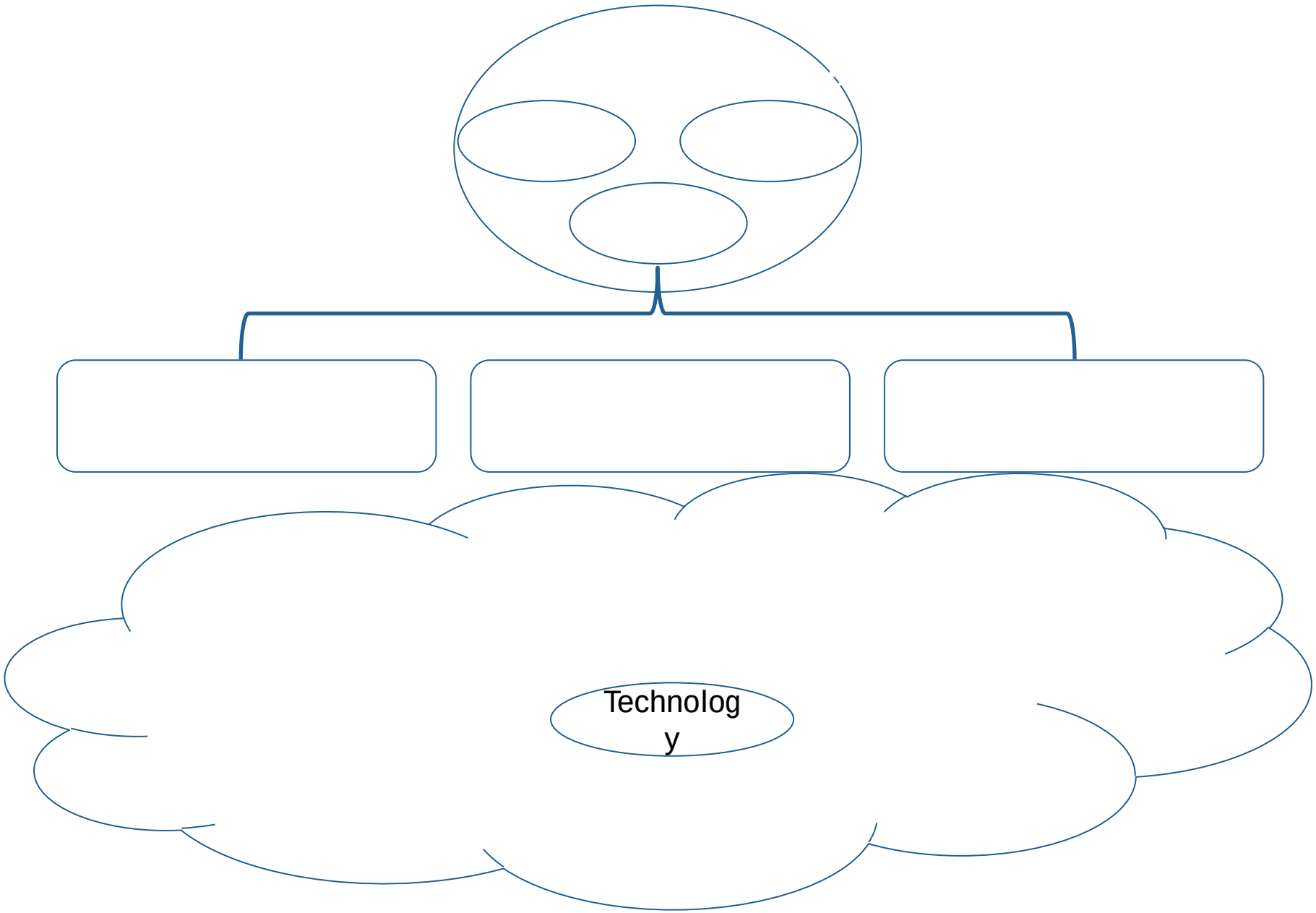
- Vast open airspace with little traffic
- Wild, extreme, unpopulated, diverse terrain
- Access to large military ranges with data gathering ability
- History of pioneering aviation technology
- Culture of innovative use of aviation
- Close relationship with regional FAA
- Perhaps most important, willingness to be thoughtful and methodical in potential policy decisions
- State government taking balanced approach
- Extensive experience pioneering UAS in new applications & gaining new levels of FAA approvals

What Oregon Offers

- Strong, well-established UAS industry
- UAS industry support of test sites
- Good maritime access, including being the 3rd launch/recovery point for High Altitude/High Speed tests
- High desert environment
- Small uncontrolled low use airports (Tillamook) with UAS & COA experience
- Link with native citizens (Warm Springs Confederated Tribes)
- Good research partnership with OSU

What about Privacy?

- We’re dedicated to protect privacy so beneficial uses can be obtained
- Current statutory/case law strongly protects privacy while defining legal airborne activities (manned)
  - Unmanned a new technology, but subject to same restrictions
  - FAA added initial guidelines to OTA which generally rely on existing law, require us to develop policy
  - AK legislative task force focusing on management & control of data rather than tool that collected it


Technolog
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Recent Missions (2013)

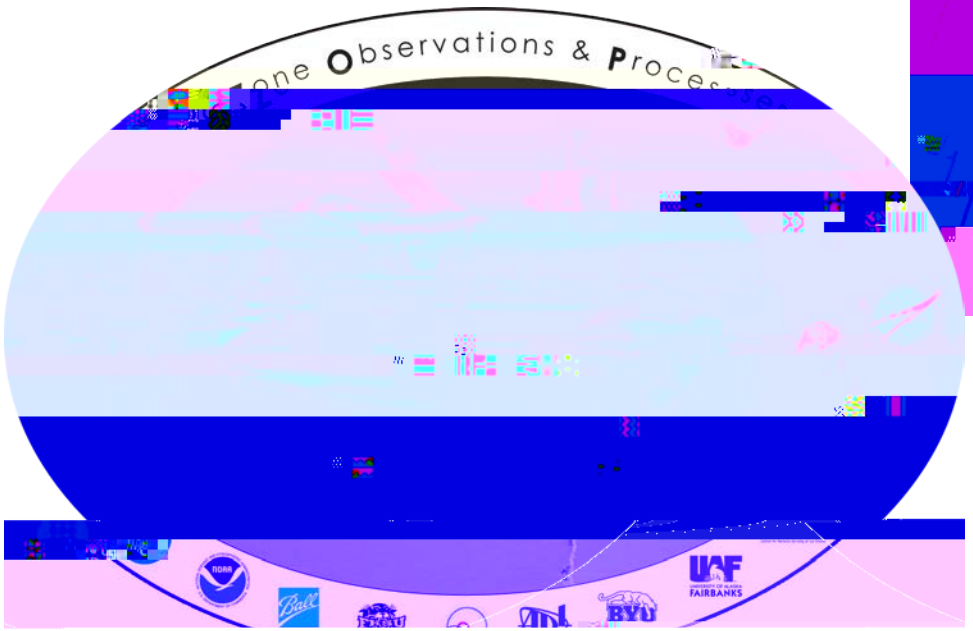
- MIZOPEX
- Idaho Power
- ENI Petroleum (multiple)
- BP (multiple)
- Coast Guard aboard the Healy
- Pilgrim Hot Springs
- Ugak Island
- NEX7 Payload Evaluation in California
- Iceland mapping flights

Recent **ACUASI Project**

Marginal Ice Zone Ocean and Ice Observations and Processes EXperiment (MIZOPEX)

UAF deployments

NASA Exercise July 2013



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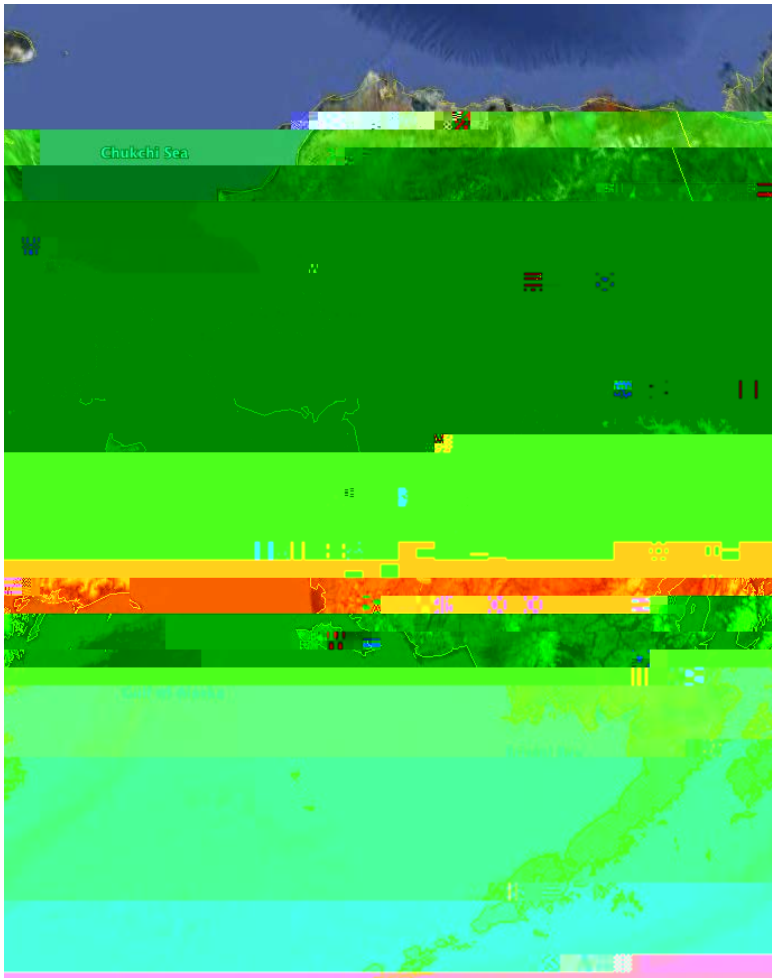
Bear Bite – SAREX

Mass Casualty Exercise 7-10 February 2013

"An aircraft crashed in the tundra roughly 20 miles outside Bethel Alaska many died with some survivors"

Deployed two unmanned aircraft systems with support team

Coordinated with manned aviation on the



Sample of Projected Missions for 2014-15

- Southern Company
- Oil Companies (Conoco, BP (continued), ENI (expanded)
- Idaho Power
- Test missions for PPUTRC (multiple inquiries)
- Sikuliaq Ice Trials
- Oden methane sensor test
- North Slope Borough demonstrations
- Oklahoma power & energy opportunities
- Possibly on retainer for FEMA – response to wildfires, etc

Increasing Support

- State Legislature funding plus resolutions, current submitted bill and resolution
- Lt Gov led Aviation States Association study on privacy
- Fairbanks North Star Borough stepped up to offer assistance to relocating businesses, lead effort for booth at AUVSI, assist with marketing outreach
- AK Dept of Commerce is funding the booth
- AIDEA exploring means to invest in possible industry/technology park
- USARAK commander pledged Army support for University of Alaska UAS work
- Alaska Command Lt Gen Handy also pledged support
- Alaska delegation continues to support

Thank you for your support

Questions?

How you could help us

- Continue to support the program
- Lend us your experience & expertise—have you suggestions for us?
- Support a funding request next year for continued infrastructure growth
- When we have operations near you, we'd love to have you come see us work