

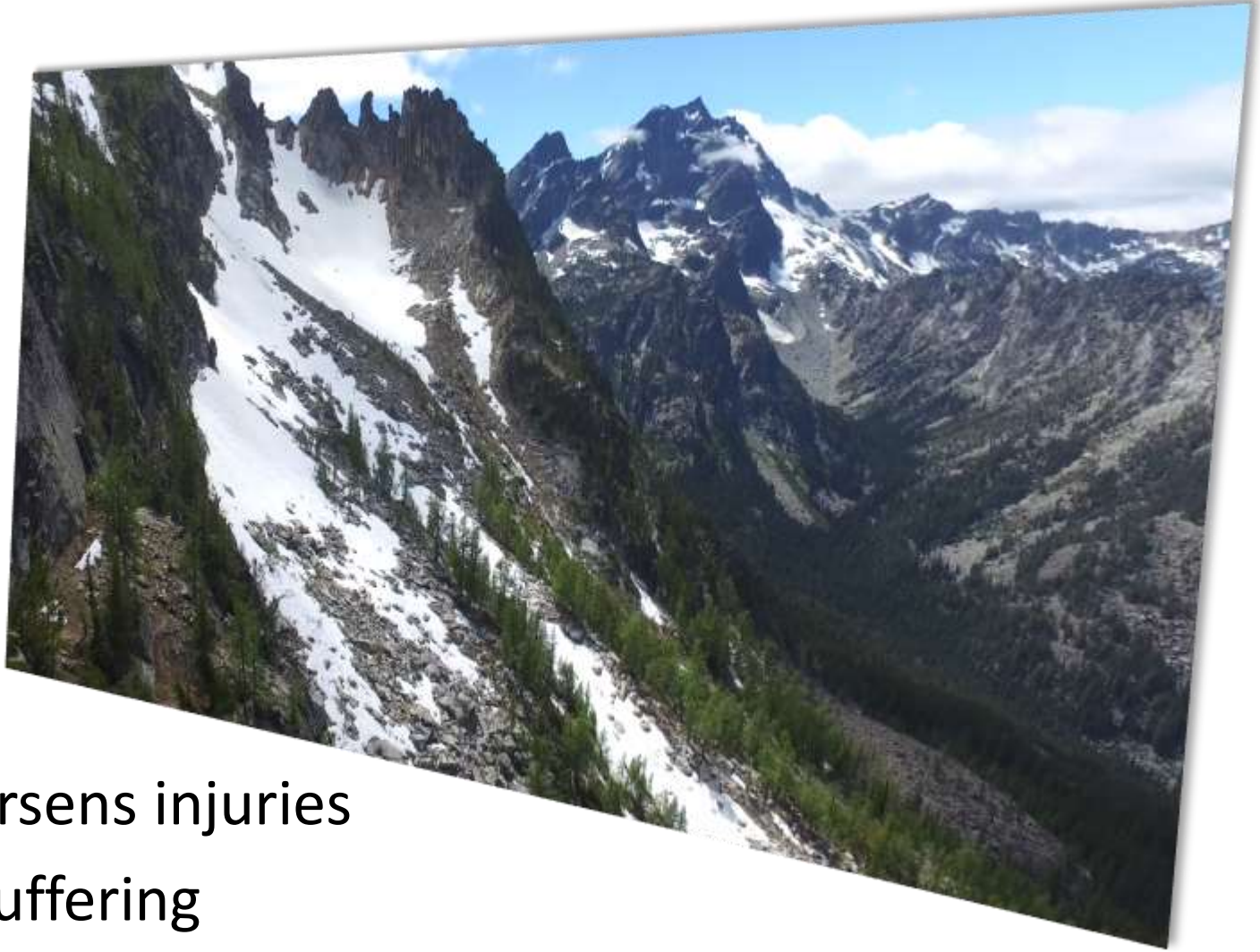


100% Found: Cell Phones as Backcountry Locator Beacons

Eliot Gillum, Founder

Searching is HARD

- Potentially insoluble mystery
 - Walk right past
 - Be in the wrong county
- Expensive
- Dangerous for SAR personnel
- Prolongs victim suffering, worsens injuries
- Prolongs friends and family suffering



Intractable search problem → technology & deployment

UAVs are Great...



- Cover ground
 - DJI Mavic: 8"x3", 1.6 lbs, 7km, 27 min
 - And more: up-to-date imagery, transport, comm
- But they're not everything
 - \$\$\$ and weight
 - Can't fly in all conditions, regulations, training, etc.
- Visual & Infrared = good
 - Obstructions & camouflage
- Radio is what's needed
 - ELTs/PLBs, Delorme, Spot, satellite phones, etc.
 - Turned on, sky view, \$\$\$, weight, carried



Mobile Phones!

Transmitter

- Cellular is good and bad
- WiFi
 - Battery \approx weeks
 - Range \approx soccer field
- Hikers, Hunters, Climbers
- Hardware already deployed
 - Already in the field, in fact!

Receiver

- Handheld
 - Size and weight = pack of cards
 - Inexpensive
 - No downsides, only benefits
- UAV
 - Reliable, miniaturized detector
 - Rapid, cheap, safe, complete coverage
 - **100% Found**

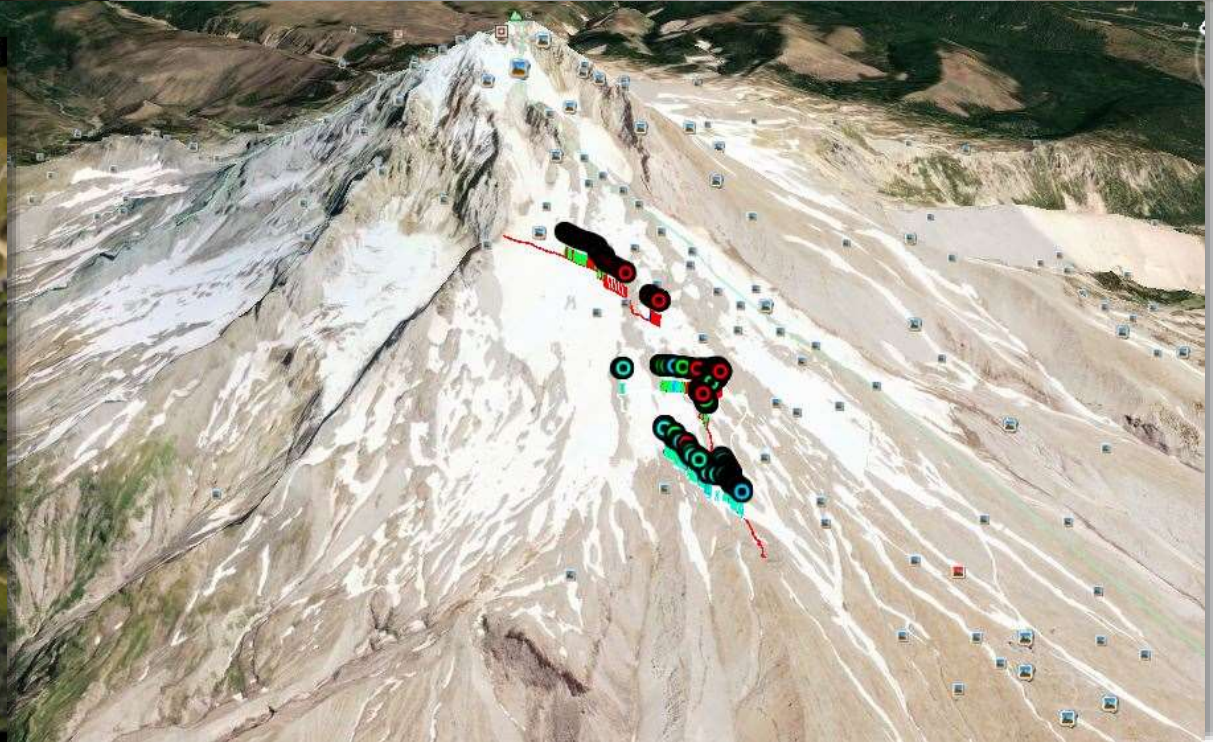
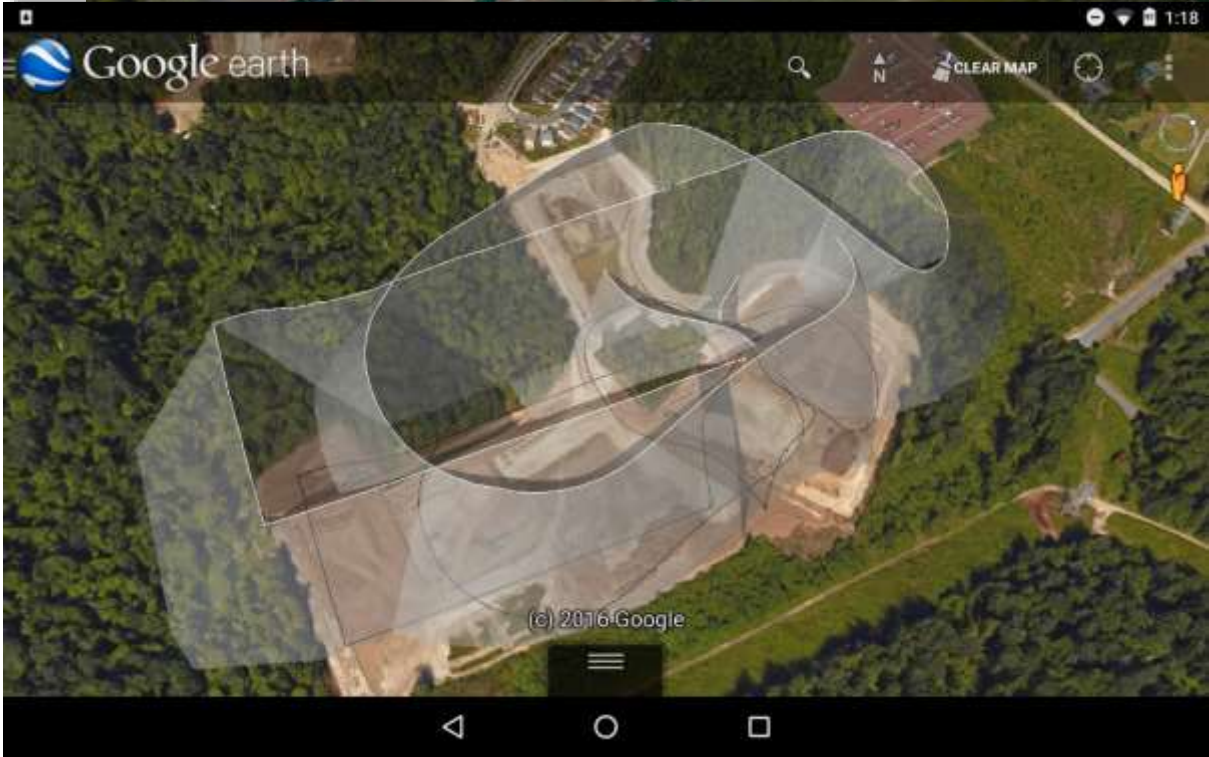
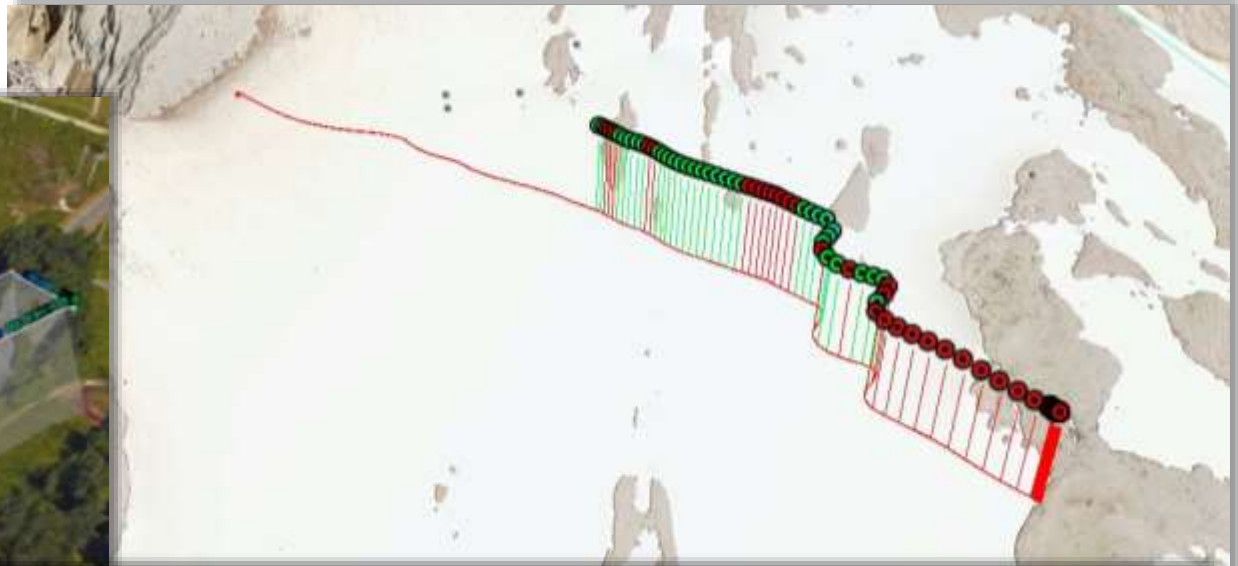
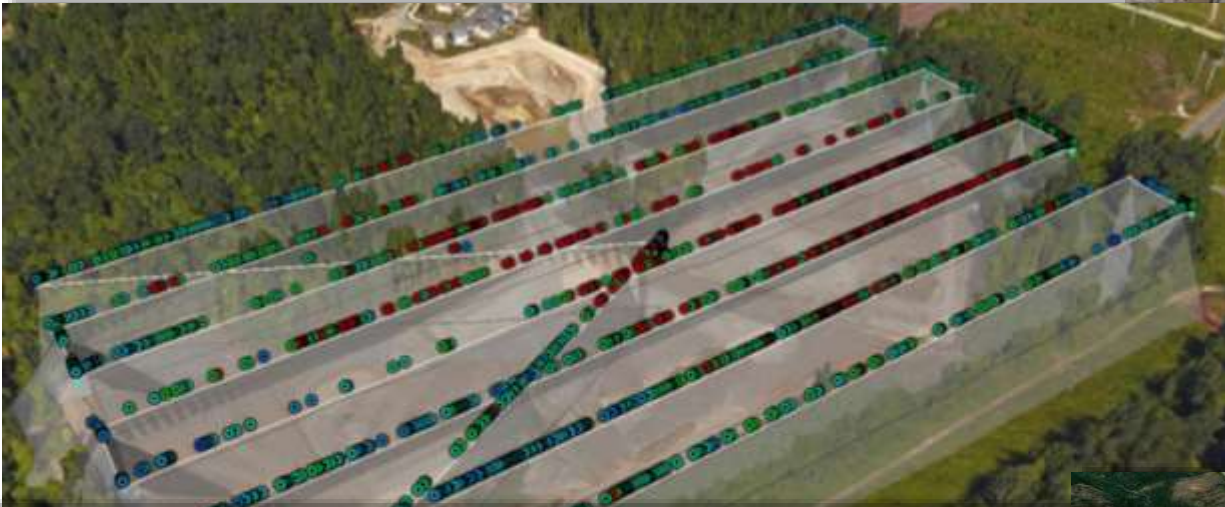


The App

- Configure phone
 - Works as long as WiFi is on
- Mass market product
 - Inviting and intuitive
 - Ensure reliable operation
 - Friction-free
 - Privacy
- Great potential within and beyond Search
 - Comm/checkins, maps, weather, tips, alerts
 - PSAR



Operator Visualization



Asks



- Feedback
- Collaboration
 - Field testing: synthetic and actual
 - Requirements, software and hardware design, process & toolset integration
 - Develop training
- Evangelism
 - SAR
 - General populace
- Contacts, partnerships, sponsorships, grants

Thanks!