Autonomous Ground Transportation

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Edmonton

Current Security Profile

- \$250k plus per year to patrol fences
- Still have risks associated with the fence line
- Safety an issue with animals accessing the airfield
- Roving patrols, cameras and sensors
- Installation of ground intrusion radar currently underway



Fence Line

- Inspections done manually
- Visual inspections for openings occur due to intrusion or holes underneath created by animals





- Use of technology to see things we aren't able to easily detect with our eyes
- Using analytics to show changes from the norm
- Using technology to free up people to do the important tasks vs routine inspections
- Cost airports are expensive and need to find efficiencies

Why did we invest and explore this opportunity

- We are interested in autonomous technology for a variety of uses
- Edmonton has a large technology sector and a local company is invested in this technology
- Wanted to explore a partnership to test and develop
- Exploring opportunities beyond the fence inspections



Autonomous vehicle at EIA



Technology on the autonomous vehicle – Vision Based Systems

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Pan and tilt cameras

- General security

checks

Front facing camera for human and animal detection (using artificial intelligence)



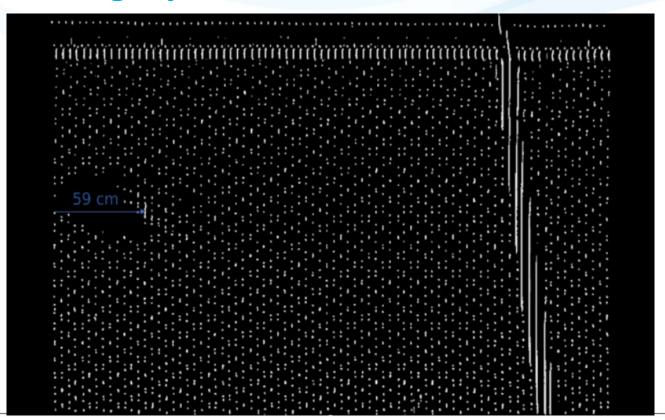
Side cameras for fence integrity check (using artificial intelligence)

Technology on the autonomous vehicle - Vision Based Systems

LiDAR for obstacle detection and path planning



Fence Integrity Checks – fence hole detected



Questions