STEReO

combining NASA technologies and partnerships to transform current-day emergency response operations



emergency response operations aren't easy:

- conducted under adverse conditions
- involve numerous organizations
- limited communication and infrastructure
- manual coordination to deconflict/use airspace
- challenges with timeliness of information

the result? safe procedures with minimal technological advances



use innovative communication approaches to enable new traffic management and autonomous vehicle capabilities, providing a data-rich common operating picture

the result? responders can do more, know more, safely

process





STEReO as a product





autonomy



- how can state-of-the-art vehicle autonomy help UAS vehicles become a valuable part of emergency response operations?
 - what is the state-of-the-art?
 - what hurdles do we need to consider?
 - what are the ripe opportunities?



- how can UTM services be leveraged to support scalability of operations, and to provide improved awareness via an enhanced common operating picture?
 - what capabilities do UTM services provide?
 - how do they relate to today's procedures for airspace coordination?
 - what new capabilities can be added to UTM services that address the unique needs of emergency responders?



- how can advanced communication/connectivity technologies enable new data exchanges and information sharing?
 - what data do we want to send?
 - what infrastructure/techniques can we employ to send that data?
 - how can we support resilient operations/communications in challenging environments?



- how can data be delivered to best support operator awareness and decision-making?
 - what types of collaborations occur today?
 - what interfaces are the most appropriate for data-supported tasks?
 - what information must be included to support effective teamwork between operators, between systems, and between operators and systems?



- how can new processes, products, and options be integrated into existing workflows that are critical to established operations?
 - what things are used today?
 - where are there flexibilities and constraints?
 - what are the needs for interoperability/sharing?

team



- Ames Research Center
 - yasmin arbab
 - josh baculi
 - anjan chakrabarty
 - lauren claudatos
 - corey ippolito
 - george lawton
 - joey mercer

- Glenn Research Center
 chuck sheehe
- Langley Research Center
 - dave bradley
 - lou glabb
 - robert mcswain
 - bryan petty



• agenda review...

networking session...

• access to guest wi-fi...

• social outing...

visitor badges...

• questions?

• lunch options...