How Hard Can It Be?



Who's The Hairy Thing?











Boom Supersonic

Researcher

Dad

Geek/Tinkerer

Hacker

Chris.Roberts@boomsupersonic.com @Sidragon1 (LinkedIn)

A Human Challenge?



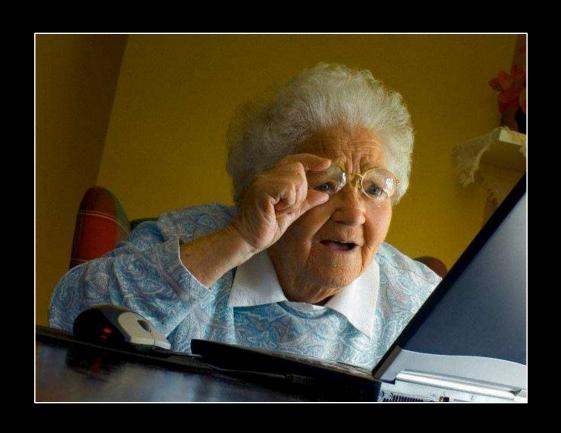
The Hooman Problem







The Attribution Problem







So, yea, we be...







A Technology Problem?







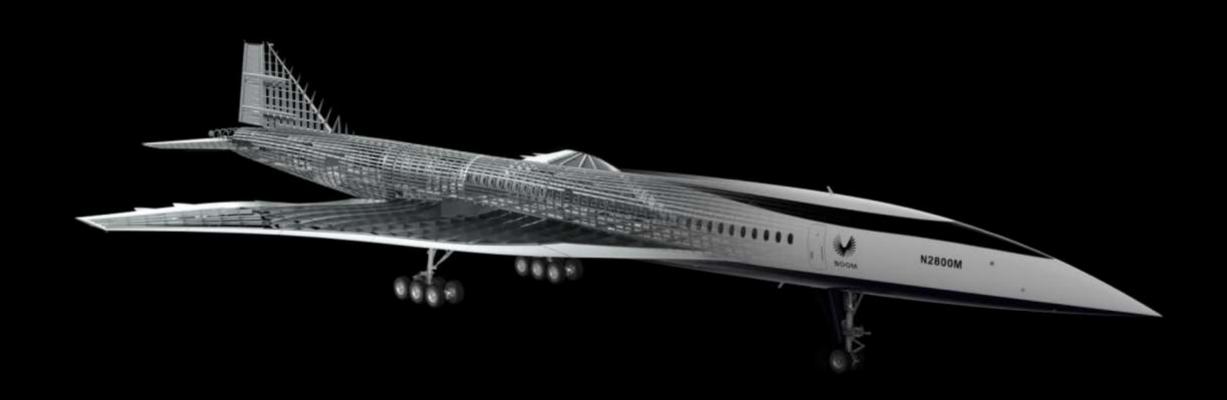


Who CAN We Blame?





Let's Pause, Breath, AND Look At Things Differently...







Supersonic Lawn Darts...

Come for the tech, stay for the mission and the people...

Different Approach

Observe, Orient, Decide, THEN act...



- We're mostly good at passengers
- We're getting there on bits of digital twins
- We're kinda good at Audio/Visual surveillance
- Got the greasy bits sorted
- Getting the safety sorted
- Lacking on security



AND REALLY good at excuses...



What Are We Planning For Tomorrow?





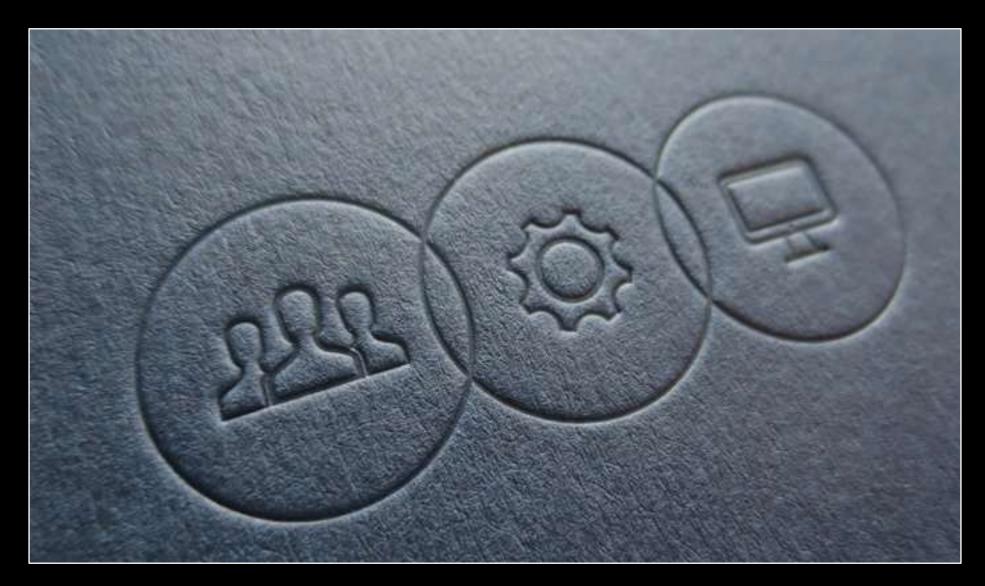
- Threat intelligence
- Adaptive/situational awareness
- Cross platform orchestration (SOAR for Aviation)
- Better data in Better results out (lakes NOT swamps)
- More effective safety AND security
- Our passengers ARE our lifeblood
- Time to treat them that way

How DO We Get There?









People, Process, and THEN maybe Technology...





























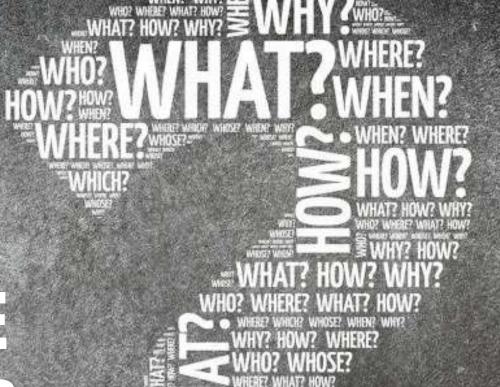












ASK MORE questions





Hoomans...

By The Numbers...

- 5.3 Billion connected people... (in 2023 ish)
- Take a standard bell curve mix for tech/human/intel etc.
 - 15% understand or "get" security
 - 70% sheeple
 - 15% can't even spell security or use 123456 as a password
- Americal and has about 330 million folks (4.25% of world)
 - 49.5 million can spell security (or InfoSec, or Cyber, OR)
 - 231 million assume antivirus works, and that adding 789 to their password is safe
 - 49.5 million folks use 1111 on their phone and qwerty on their computer
- In context: 754 million people across the globe can be outwitted by a talking toaster...





Choice...

I will fail, WE will succeed





Language Counts...

Pick one OTHERS understand...

Use language OTHERS understand



Collaboration

We CAN do it, build together a better future, Physical and digital

Cooperation

Efficient analytics benefits ALL of us

Coordination

Open dialog with everyone, including researchers

Communication

In THEIR languages, stop hiding behind acronyms/red tape Legislation NEVER stopped an adversary

Community

Researchers, Hackers, Aviation Village, Etc.

Embrace, don't persecute

Predictive, Proactive, Preventative

NOT Blind, reactive, band-aids. THIS IS people's lives.



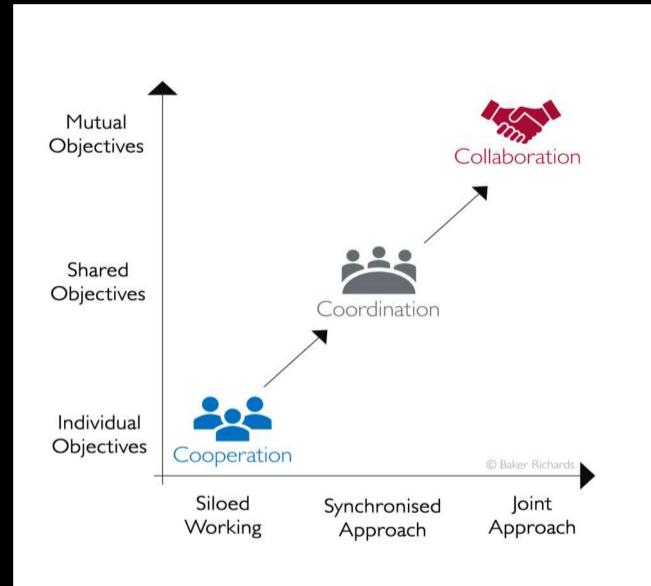
Process



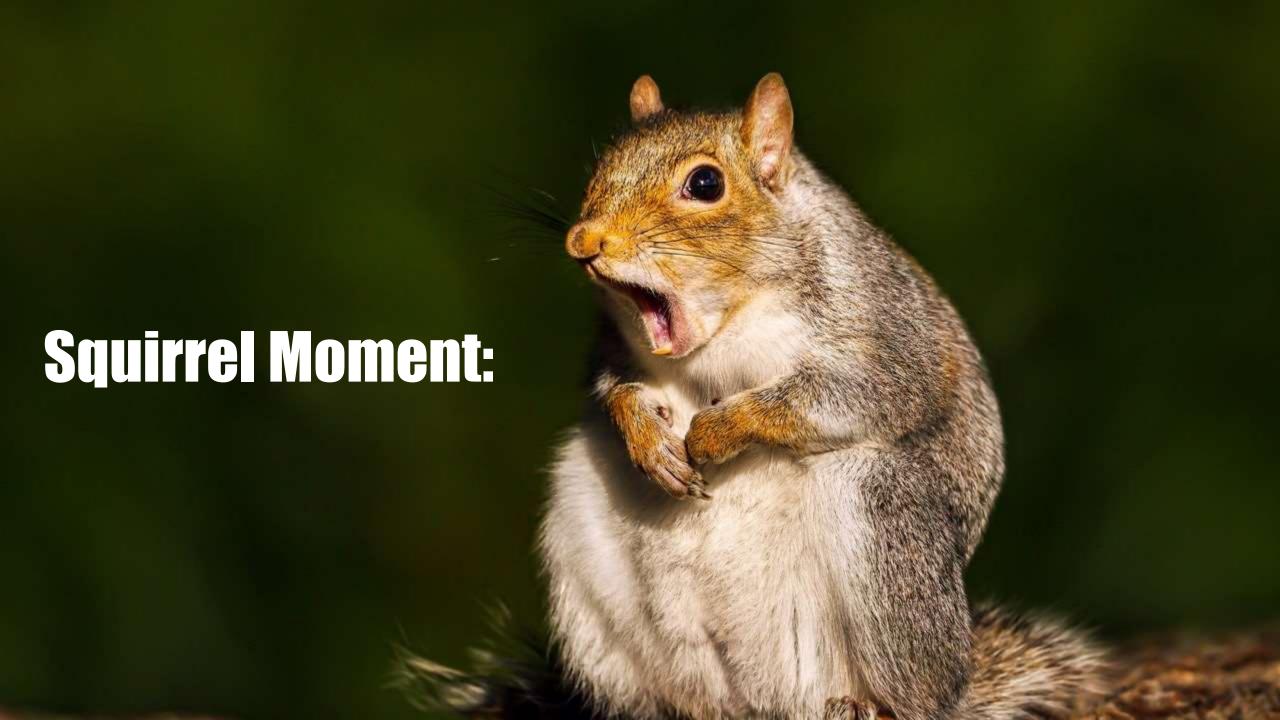


So Far...

Some lessons so far...



communication cooperation coordination collaboration



Technology

Narrow AI models, target and learns from individual systems

General AI modeling builds a neural decision matrix

Baselines with narrow AI data

Relationship cross platform

Probability/chance analysis (along with re-tries)

Adaptive based on near real-time information flow

What am I looking at,

Why

What can it do autonomously



Not just a digital twin of the engine, but the entire plane From first spar to end-of-life

Not just from aviation surfaces, but PX, external, GEO, etc. Folks are doing SOME of this, lets ALL collaborate?

Mean deviation analytics based on all inputs, and probability Per flight, per location, per situation, decision based

Hybrid AI model with continual human analyst input Love the machines, don't trust them just yet



Partners Make THIS Happen...



In Closing





"We may have all come on different ships, but we're in the same boat now"

Martin Luther King, Jr.



Regulation's great, REAL life moves faster

- We're ALL in this together
- How do we bring fresh eyes to this?
- Will the industry listen AND act before an issue?
- We're leading from the front.
- WE want to collaborate, y'all up for it?





Thank You ALL For Listening Now, Let's Actually DO Something...