How Hard Can It Be?

InfoSec at Supersonic Speed
Who's The Hairy Thing?

Boom Supersonic
Researcher
Dad
Geek/Tinkerer
Hacker

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A Human Challenge?
The Hooman Problem

= ANY KEY
The Attribution Problem

Cats: All your base are belong to us.
So, yea, we be...
A Technology Problem?
Picturesque cabin in the woods!
10 minutes from the highway!
Fiber run to the end of the gravel road
Line of sight to the nearest tower, never be without signal!
Already set with Star link!
And Verizon 5G enabled to allow your Arlo’s to work
Fridge online for groceries
Remote control fireplace connected to Nest
AND!
Alexa built into the office and main rooms for peace of mind and music!

Welcome to your cabin away from it all!*

*Buyer aware you ARE responsible for connectivity charges.
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…
STOP LYING
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

• AmericaLand 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...
And we’re gullible
Remember!

This IS YOU, and YOUR computer on the Internet...
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...
Squirrel Moment:
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
Data Swamp: Be careful what you ask for...
“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?
We have ONE job
Protect those around us.
Let’s do it right

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