

CYBERSECURITY AND RESILIENCE SYMPOSIUM

PROTECTING AVIATION
FROM CYBER ATTACKS

DOHA, QATAR | 6 - 8 NOVEMBER 2023



ICAO MID



Mitigating Cyber Attack Impacts

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UK Cabinet Office

Getting ahead of risk and impacts

- Your attackers are **diverse**
- Your technology is complex
- Gaining appropriate insight is hard
- Sources of vulnerability insight must be equally **diverse** and welcome
- “All source intelligence” value that is actionable
- Potential Sources
 - Internal / External Industry / Government / Other Sector / Hacker Communities

Realistic Objectives?

- Defending against ZeroDays?
- Stopping what is known?

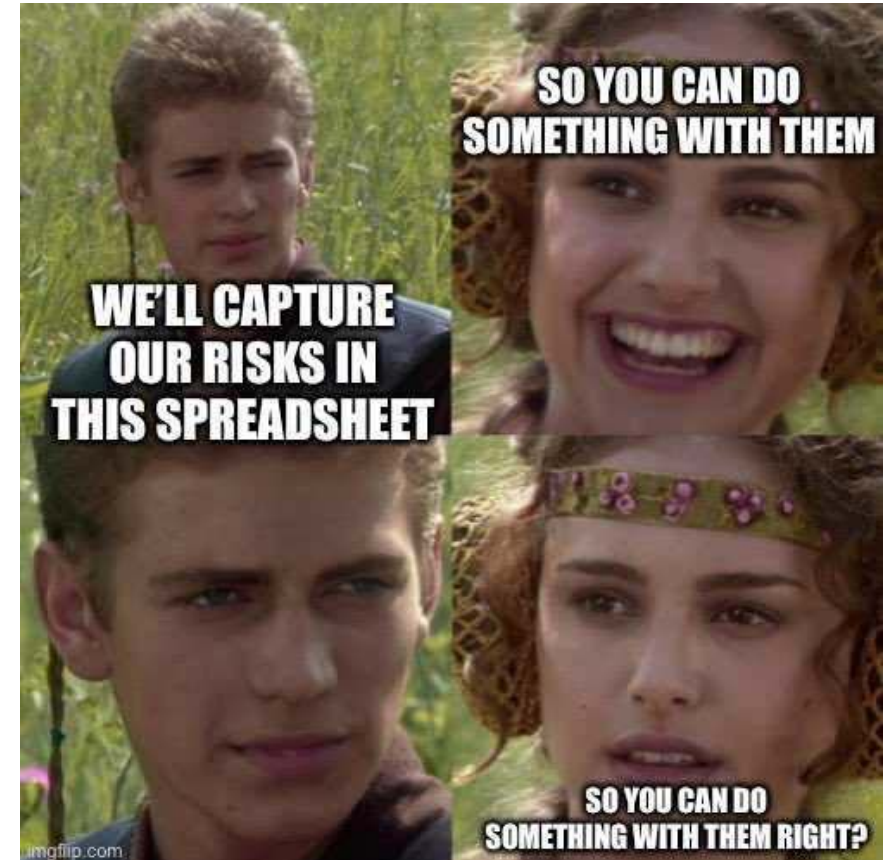
- You can't stop everything
- Must build the teams, processes and connections

UK Government Cyber Security Strategy

“For government’s critical functions to be significantly hardened to cyber attack by 2025, with all government organisations across the whole public sector being resilient to known vulnerabilities and attack methods no later than 2030.”

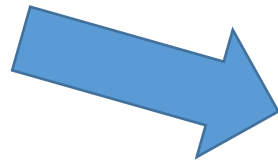
Vulnerability and Threat Management

- National
 - Sectoral
 - Organisational
 - Discovering our vulnerabilities
 - Passive
 - Active
 - Reactive
 - Reporting our vulnerabilities...
- Is it our risk that changes or our appetite for risk?



Impacts - Layers and language

- What's happened?
 - “Our entire engineering tenant has gone down due to a ransomware attack”
 - “We can't process any maintenance paperwork”
 - “Flight ops are disrupted for at least 72hs”
- What are the organizational impacts?
- Who are the stakeholders?
- How are they involved?
- What do they need?



Balance the need for information flow and management, without it turning into a circus...

People, Process, Culture

- Look after your people during any incident
 - Incident Rhythm and duration
 - Burnout / Overwhelm > Support
- Your processes, teams and orgs should have been exercised...
 - Table-Top Ex / Pen Tests / Multi-Org / CIR?
- The culture and capability you start with is critical...
- Learn from failure, it's the aviation way...



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THANK YOU

