

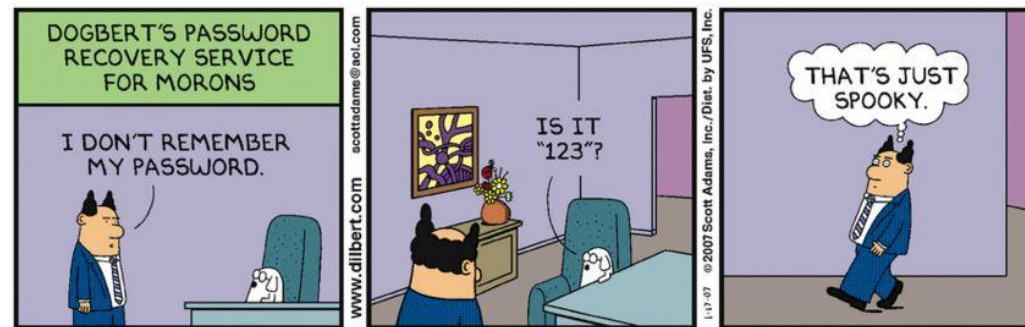
**NDIA MANUFACTURING DIVISION MEETING FEB 2020**

# **Cybersecurity Compliance: A view from the trenches**

**Sam Morthland  
February 26, 2020**

## Overview

- A bit of history
- Notes from the Field
- CMMC 1.0 Released – Now What
- Recommendations for Businesses



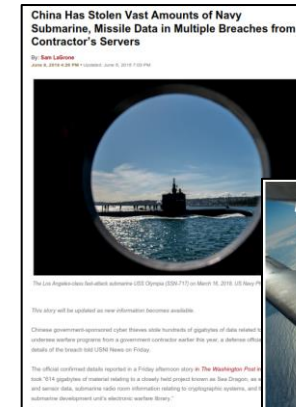
## *A bit about us...*

- Veteran Owned Small Business, established in 2011, previous DOD cybersecurity and intelligence members
- Payment Card Industry (PCI) - Qualified Security Assessor (QSA)
  - 1 of 147 US-based Assessors
- Federal Risk and Authorization Management Program (FedRAMP) accredited Third Party Assessment Organizations (3PAO)
  - Accredited by American Association for Laboratory Accreditation (A2LA) to ISO/IEC 17020:2012, Requirements for bodies performing inspection
  - 1 of 38 Federally approved FedRamp 3PAOs
- 8 years of serving the financial, commercial and Federal markets



## A bit of History...

- DFARS 252.204-7012 (Final Rule Oct 2016)
  - All DOD contractors to be compliant to NIST 800-171; **NLT 31 Dec 2017**
  - Self Attestation of compliance - Required documents: SSP and POAM
- US Navy Sea Dragon Breach – Jul 2018
- MITRE's "Deliver Uncompromised" - Aug 2018
- Geurts Memo– Sep 2018
  - Imposing enhanced security controls on "critical" Navy programs
- Mar 2019 - The Office of the Assistant Secretary of Defense for Acquisition began the process of creating the Cybersecurity Maturity Model Certification (CMMC)
- Jul 2019 - Defense Contract Management Agency (DCMA) assessing contractor compliance with DFARS Clause 252.204-7012 and NIST SP 800-171 as part of review of contractor purchase systems
- Sep 2019 - Navy Marine Corps Acquisition Regulation Supplement (NMCARS) changes to make cybersecurity compliance as a "material requirement"
  - KOs consider the **right to reduce or suspend progress payments** for contractor noncompliance
  - Reinforces, that "A contractor **MUST** make their SSP available to the contracting officer within 30 days of contract award and be ready to host the contracting officer for a review of the SSP at the contractor's facility."
- Jan 2020 – CMMC 1.0 released, to be implemented thru 2025



## *Reality Check Report*

- Developed May 2019 report from incident response and assessment data from the previous 2 years
  - Provided an assessor's view of compliance in the DIB
- Provided a snapshot of compliance and identified areas for DIB companies to focus efforts and resources
- No companies were 100% compliant

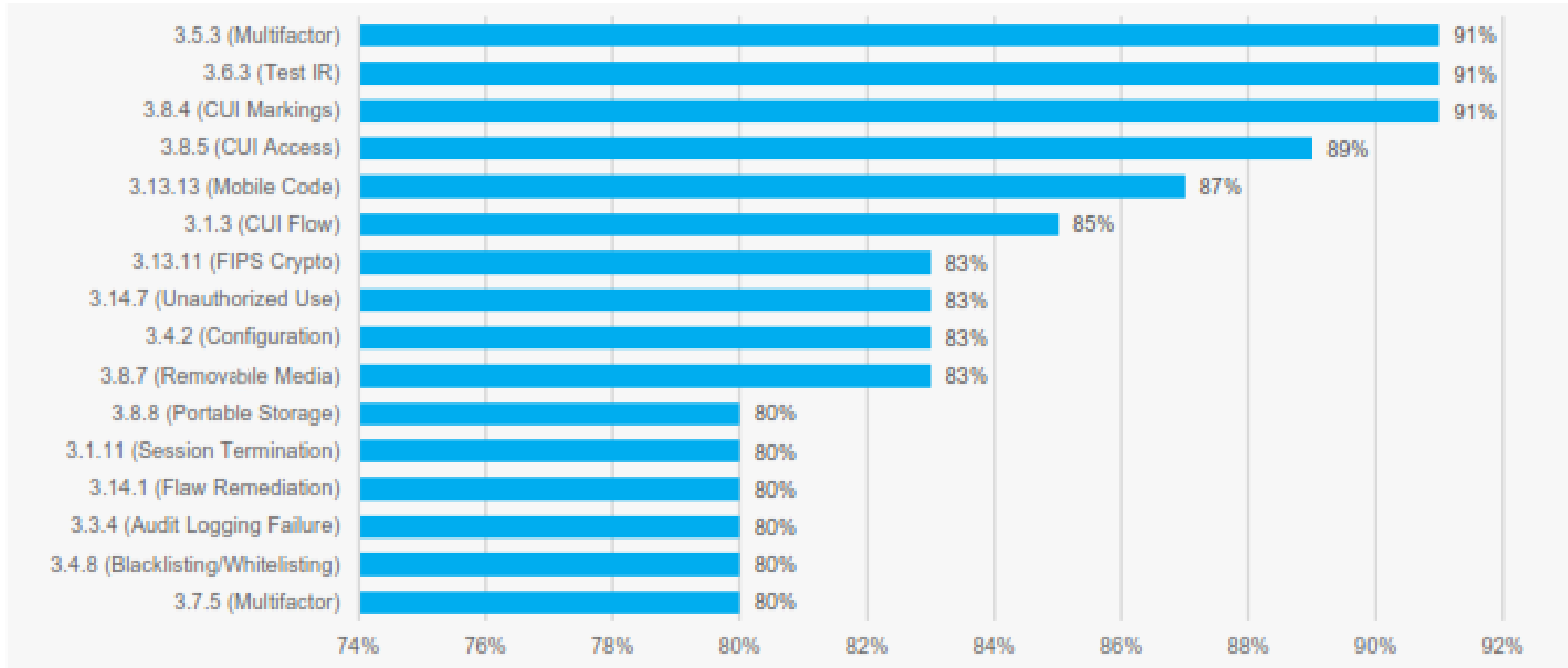




**UNFORTUNATELY IN A YEAR  
VERY LITTLE HAS CHANGED!**



## *Most Companies still fail to implement 16 controls*



## *Larger issues with implementing NIST SP 800-171*

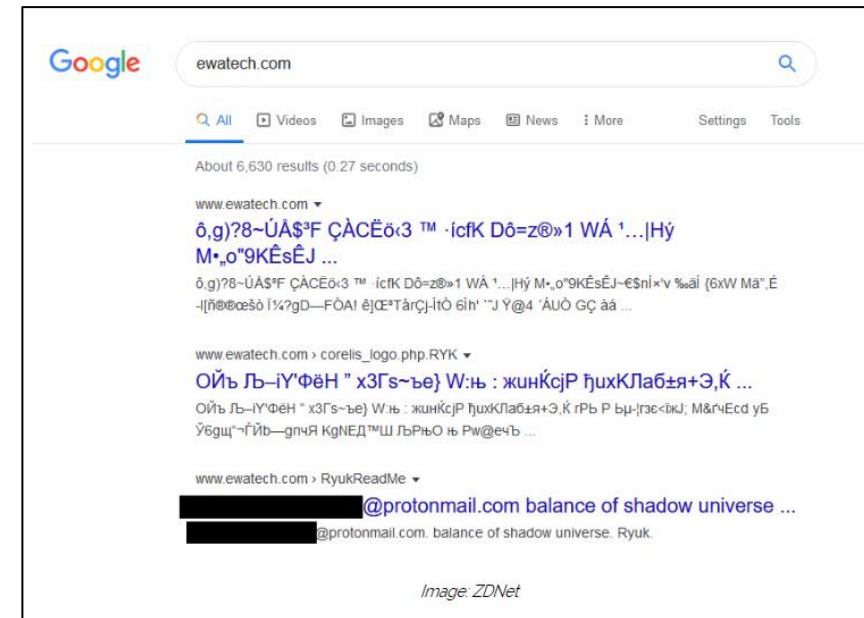
- Misunderstanding the controls
  - Many IT personnel are fully engaged in support of the availability of the network. Seeking to discern meanings from government policies tends to be low on their list of priorities
- Cultural issues
  - Security is not seen as a profit driver – significant additional costs
  - Security requires change – changing people's access levels
- Cloud Services
  - Enable centralized storage of documents in a secure environment – BUT minimally secure regarding outside access, requires additional controls
  - Many cloud services in use are not FedRAMP Moderate baseline compliant





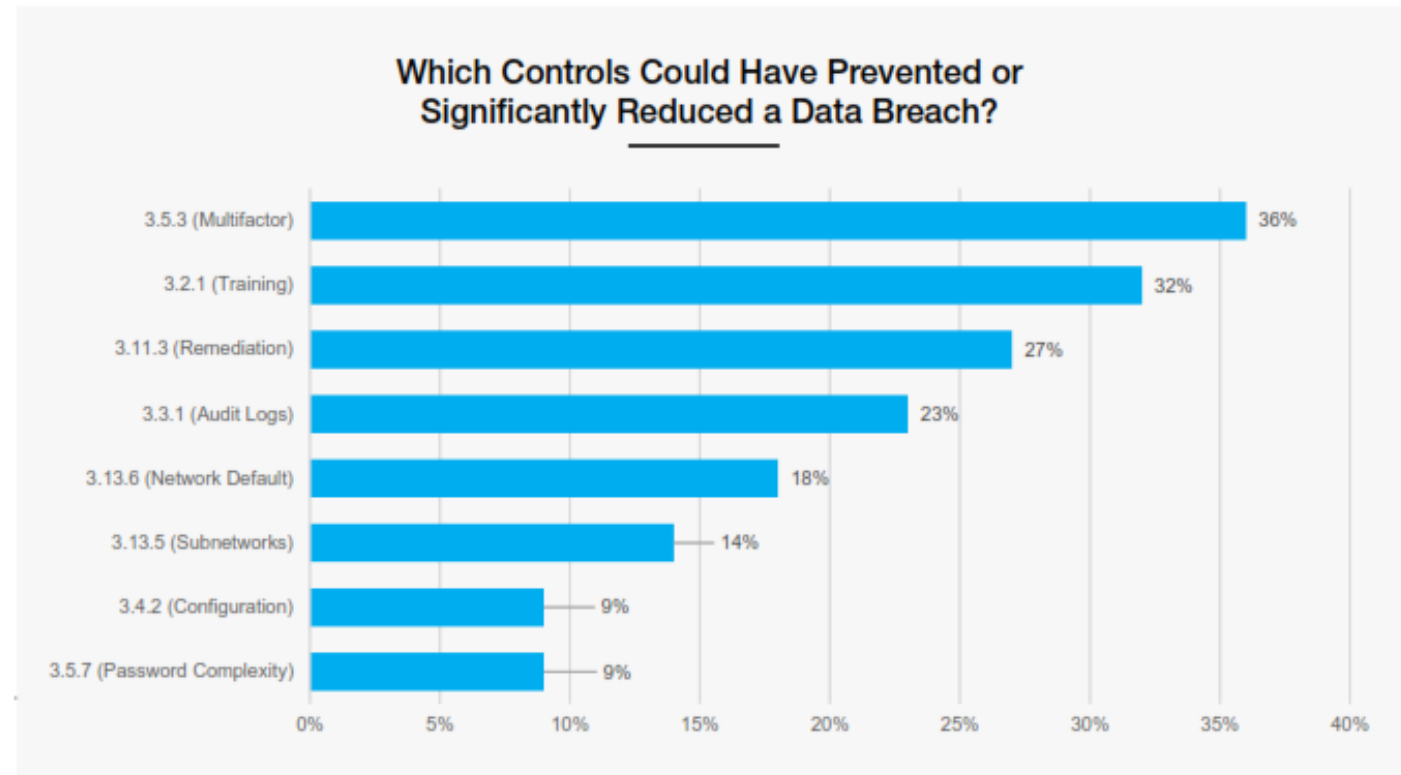
## *Any Company Vulnerable to Attack*

- Electronic Warfare Associates (EWA) suffered a ransomware infection in Jan 2020
  - a 40-year-old a well-known US government contractor
  - Among the systems that had data encrypted during the incident were the company's web servers.
  - Signs of the incident are still visible online
    - Encrypted files and ransom notes were still cached in Google search results, even a week after the company took down the impacted web servers



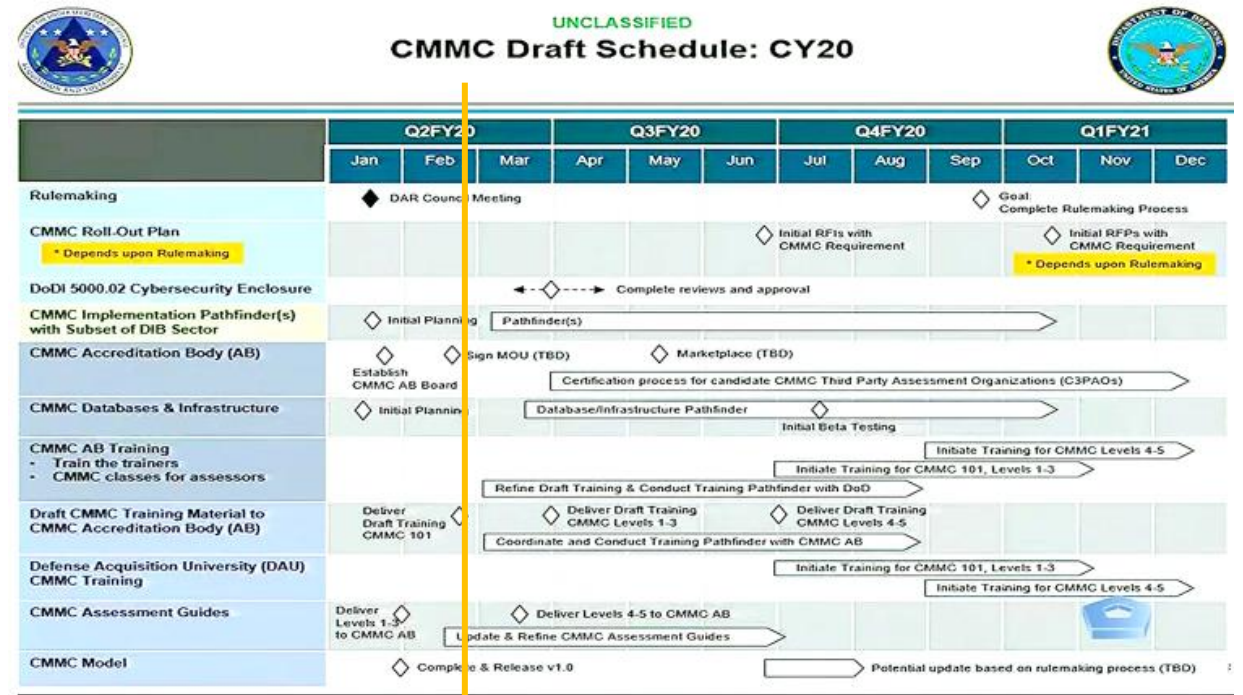
## *Incident Response Findings*

- In most cases, 800-171 controls would have prevented a breach or significantly reduced the impact
- In particular,
  - Lack of MFA (3.5.3)
  - Untrained users (3.2.1)
  - Poor patch management (3.11.3)
  - Lack of Audit Logs (3.3.1)



## CMMC 1.0 Released – Now What?

- Standard out, more to follow
- Companies clamoring to get certified – waiting on auditors
- Companies want to be auditors – waiting on certification program
- Some companies just now understanding existing requirements of FAR 52.204-21 or DFARS 252.204-7012
- Some companies still unaware of need for compliance
  - “We don’t have any CUI...whatever that is”
  - Disconnect from Privacy Act and other PII protection regulations



We are here

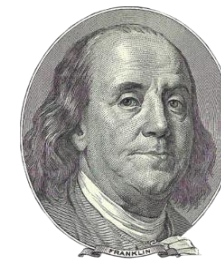
## *Why is this important to Small/Medium Businesses*

- Protect what you have built
- Comply with existing contracts - DFARS 252.204-7012, etc.
  - Avoid violation of False Claims Act
- Prevent catastrophic losses due to:
  - Theft of data (IP, CUI) or encryption of all company data due to ransomware
  - Loss of reputation with customer (1 to 6 rule, amplified with social media)
  - Financial loss (reimbursement, remediation, lost revenue, additional security)
  - Operational disruption (loss of data, stand-down during remediation)
  - Legal ramifications (FCA claims, PII claims, etc.)
- **Average Cost of a Breach in 2019, company >500: \$2.74 million\***

(\*Cost of a Data Breach Report, IBM Security, Jan 2020)

## *Recommendations for Businesses*

- Find your SSP and complete actions in POAMs to comply with [800-171r2](tel:800-171r2)
  - Best preparation for CMMC in Oct 2020
- Budget for cybersecurity
  - Labor, Vulnerability Scans, Pen Tests, internal/external audits
- Ensure cybersecurity is a team effort – Admin, Intel, Ops, and IT
  - Put your Cybersecurity Support POC on speed dial
- Run your Incident Response Plan w/Key Players – desktop exercise
- Treat Cybersecurity like you do ISO – C-Suite led, monthly metric reviews, documentation reviews, internal audits



"An ounce of prevention is worth a pound of cure."  
Benjamin Franklin

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