Working Group
For
Centralized Communications Management

WG/CCM
COPC Status Updates and Recommendations

May 3, 2017
LCDR Tristan Borne
WG/CCM Chairperson

Agenda

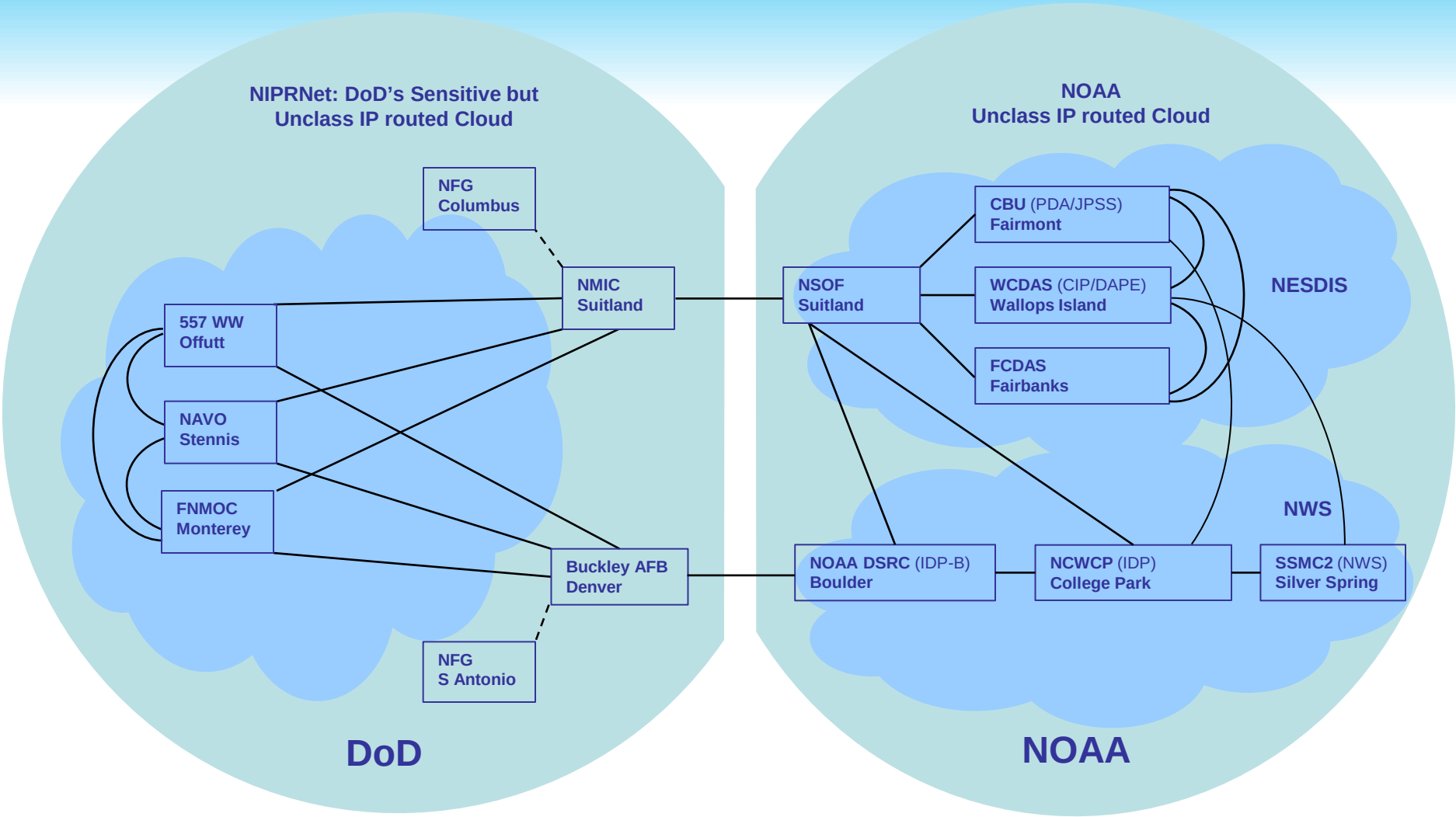
- CCM Team Membership
- Network Operational View
- The End Goal
- Alternate COPC Network Connection
- COPC Action Items

WG/CCM Team

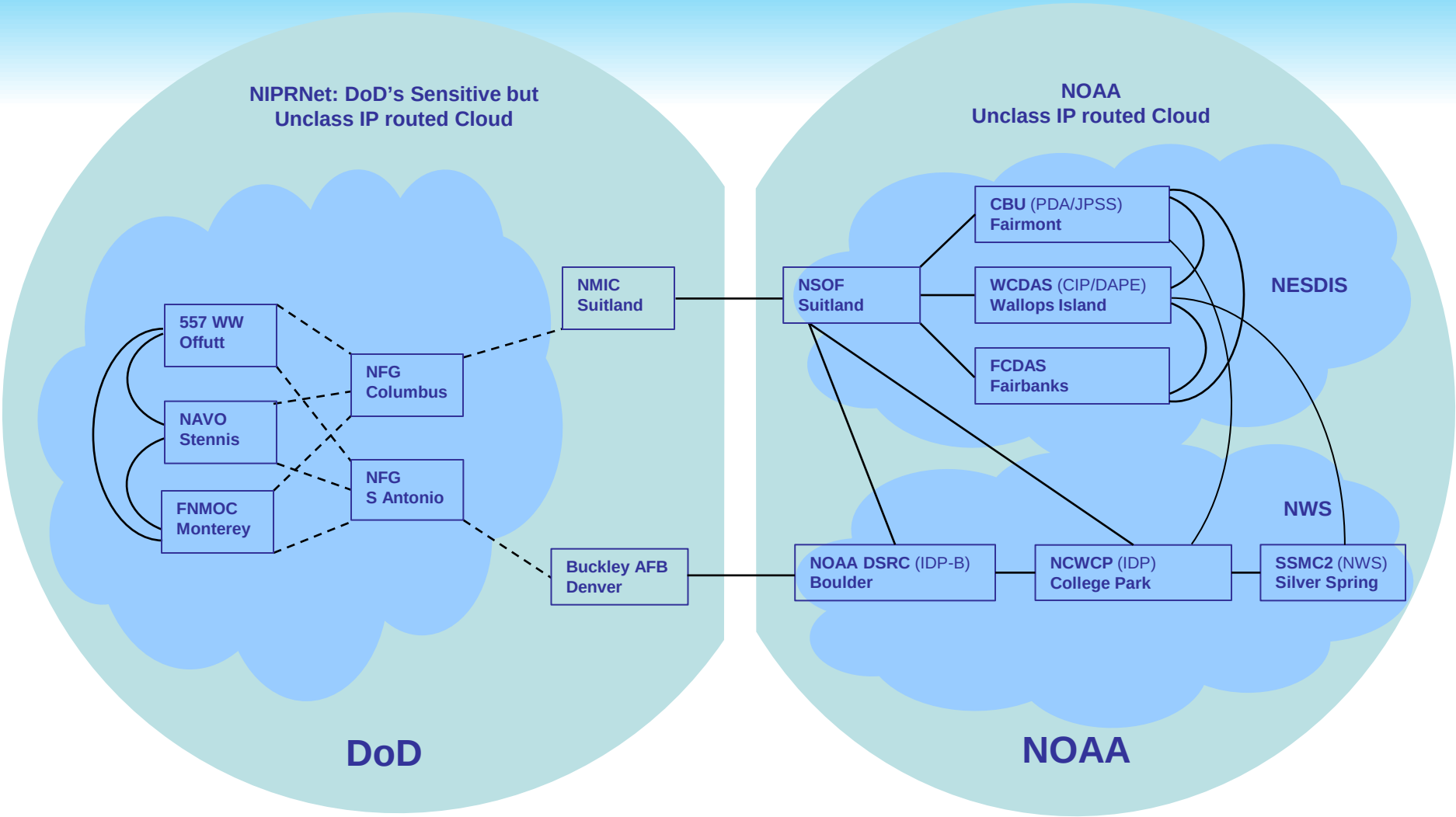
Member	Organization
Jason Rance Billy Cowgill Marvin Cunningham TSgt Michael Dent	Air Force/557th WW
Steven Deputy*	NOAA/NWS/NCEP/NCO
Craig Wade OSGS Russell Dyson OSPO	NOAA/NESDIS
Tracy LePire	Navy/NAVO
LCDR Tristan Borne (CCM Chair) Trent Hancock Derek Eddington	Navy/FNMOC
Kevin Greenlee	Navy/NAVIFOR/CIO-2
Ken Barnett	OFCM
Technical Advisor/SME/Alternate	**Organization**
MAJ Rubin Neypes Bruce Kenison (alternate)	DISA Field Office USSTRATCOM
Jagdish Rai	DISA

*** New to the role or group**

Current Simple Diagram



End Goal: What CCM is working towards



Alternate COPC Network Connection

Since the last COPC meeting in Nov 2016, the OPCs continue to benefit from the primary and alternate operational circuit.

- The primary path (Suitland, MD) and alternate path (Boulder, CO) allowed for no significant data loss due to robustness of the network architecture between the OPCs.

- FNMOC and NAVO configured for automatic failover to alternate connection. 557 WW has a plan to implement automatic failover (new equipment install).

  - Prioritized low given 557 WW preparation for upcoming DISA Command Cyber Readiness Inspection (CCRI).
  - 557 WW streamlined the manual failover process to speed up unexpected cutover.
  - Unfunded request (UFR) submitted to purchase CISCO hardware (required for auto failover).

- The CCM group needs to finalize the draft concept of operations (CONOPS) for the COPC network operations (NETOPS).

  - Purpose: To inform and mitigate planned and unplanned network outages that impact the OPC data exchange, with the goal to reduce recover time and use resources efficiently.

MPG/NFG Connectivity

MPG/NFG: CCM continues to work toward successful network testing. Momentum has slowed on the project but we are working parallel efforts.

- 557 WW submitted the TSR for a 10Gbps trunk from NOAA Boulder to the DISA Node site at Buckley for connection to the San Antonio MPG/NFG site for testing.
  - DISA rejected the submission. Unfortunately, DISA HQ does not have any 10Gbps interface cards in stock and this impedes their ability to supply a 10Gbps circuit.
  - 557 WW resubmitted the TSR, confirming that a 1.0Gbps Ethernet interface will suffice at San Antonio. Initial testing will require 400mbps.
  - In the future when CCM projects a requirement exceeding the 1 Gig limit, an upgraded TR will be submitted to move to a 10Gbps port with enough lead time for DISA to acquire parts.
- Pursue testing to Columbus MPG/NFG site.
  - No additional fiber exist between NSOF and NMIC (Suitland, MD).
  - NAVO took action to fund an additional fiber run to NMIC for testing. Navy interested in potentially funding this fiber run to allow non-operational impact testing to NFG and extra direct fiber runs as spares for all 3 DOD OPCs.
  - NESDIS pursued getting a quote for a new 24 strand fiber run by a company already cleared (ran DMSP fiber).

DISA will also be upgrading there equipment to allow full COPC bandwidth at 4GBs

- DISA is estimating FY18 readiness.

COPC Network Action Items

COPC Action Item 2013-1.5: Implement an end-to-end latency test exchange using representative proxy data from NOAA (NESDIS, TOC, and NCEP) through NFG to each DoD OPC].

- No new information on this action from CCM.
  - Related: WG/OD and CSAB working to get a baseline time transfer between NAVO/NESDIS and NAVO/FNMOC. [Reviewed in another briefing at CSAB]
  - Same process would be used to evaluate through JRSS and MPG/NFG.
- CCM recommends keeping this action item open.

COPC Action Item 2016-2.4: OPCs to determine how best to route data to both College Park and Boulder IDPs.

- Data routing to IDPs was achieved.
  - 557 determined is using top level DNS for getting the data to both IDPs.
  - FNMOC is also using top level DNS because the IDP is not yet using SFTP.
  - NAVO is dual routing for in situ and wave flow data but still needs to work on SST and sea surface anomaly data.
- CCM recommends closing this action.

COPC Action Item 2016-2.5: Have a lessons learned briefing at the next COPC to review the OPCs' ATO (CCRI) and C&A process.

Purpose: To share lessons learned from security practices from the other OPCs.

- 557 WW and FNMOC personnel held a numerous Telcons.
- 557 WW traveled to FNMOC to discuss this in detail.
- CCM recommends closing this action.

Questions