Headquarters 55th Wing

Offutt Air Force Base
Flood Recovery

Mr. Gary D. Chesley, P.E., F. SAME
Director, 55th Civil Engineer Squadron
14 January 2020

This Briefing is:
UNCLASSIFIED
15 March Situation

- Offutt notified of rapidly rising Missouri River, Platte River, and Papio Creek; Papio-Missouri levy 616 south of Offutt overtopped
- Fly-away crews alerted, prepped for evac
- Critical infrastructure identified
- Crisis Action Team & Emergency Ops Center
- 130,000 sand bags filled by 700 personnel; more supplies ordered
Emergency Operations Center

- Isolate utilities, evacuate aircraft and personnel, protect and mitigate critical facilities, conduct personnel accountability
Emergency Operations Center

- Implemented electrical circuit shutdown plan
- Began building flood protection structures for highest priority facilities — MILSTAR/SATCOM, power plant, flight simulators
Emergency Operations Center

• 7,000 tons of sand delivered; 400,000 sand bags built
Pre- and Post-Flood
16 March 2019

- 720 million gallons of flood water enter base perimeter
16 March 2019

- 1.2 million square feet across 137 facilities flooded
- 3,200 personnel displaced from work centers
16 March 2019

Empty tank overturned
3,700’ boom deployed at POL
EPA Region VII observes
16 March 2019

2,800’ of runway and aircraft mass parking area flooded
17 Mar - Offutt AFB – POL facility, Bennie Davis
17 Mar - Offutt AFB – Runway & Southeast Ramp

Offutt AFB Runway

NAOC Alert Facility

Campisi Alert Facility

55th Security Forces Squadron

NAOC MX Facility
18 Mar - Offutt Emergency Operations Center (EOC) Transitioned to Recovery Operation Center (ROC)

Established Program Management Office (PMO) for Current Operations and Future Operations
Strategy: Recover the airfield and salvage major aircraft maintenance facilities as quickly as possible
Airfield Evaluated

Tested all flooded pavement sections

Verified post-flood structural capacity

Non-destructive, Heavy Weight Deflectometer (HWD) testing

- 45 sec test sequence simulates 50,000 lbf aircraft wheel loading
- Deflection data used in layered elastic model to compute AGLs and Pavement Classification Numbers (PCNs)

Returned to limited daytime flight operations 25 March

Flood waters weakened soils, but have structural capacity to operate aircraft; expect aircraft to damage pavement more quickly until soils drain; expect increased maintenance.
Air Force Contract Augmentation Program (AFCAP)

• Contingency contract tool teaming government and industry for urgent response to National Command Authority requirements

• Administered by the AF Civil Engineer Center (AFCEC)

• AFCAP IV began Oct ‘15 for 5 years with 8 vendors (DynCorp at Offutt)

• 55th Civil Engineer Squadron and 55th Contracting Squadron provided statements of work, funding, administrative contracting officer and contracting officer representatives
Smart Rebuild

• Guided by Offutt Installation Development Plan (IDP)

• Optimize mission effectiveness and efficiency

• Consolidate activities where possible to increase infrastructure resiliency, enhance mission assurance reliability, and decrease maintenance and security workload
Partners

- HQ USAF/engineers; AF Civil Engineer Center
- U.S. Army Corps of Engineers
- Navy Mobile Utilities Support Equipment (MUSE)
- Omaha Public Power District, DynCorp International
- Request For Forces (RFF)
Senior Leader Engagement

SECAF, CSAF, COMACC, federal, state, local elected officials pledge support.
Facilities to be Demolished

SATCOM / MILSTAR complex
E4-B Aircraft & Aircrew Alert campus
E-6 Aircraft & Aircrew Alert campus
Security Forces headquarters
Security Forces training areas
Combat Arms Training Facility
Veterinarian Clinic
Headquarters 55th Wing
Headquarters 55th Operations Group
343 Reconnaissance Squadron
Flight Simulator Facility
Drug Demand Reduction facility
Base Hazardous Waste Storage facility
Supply Warehouses and Equipment Depot

595th Command & Control Group
55th Intelligence Support Squadron
Petroleum Operations Facilities
Precision Measurement Laboratory
Defense Courier Station
Various Electrical Power substations
Tactical Air Navigation station
Instrument Landing System Glide Slope
Base Lake Recreation Facilities
Infrastructure Investment

**O&M funded repairs**
- Repair Barriers at STRATCOM Gate, F86
- Repair BDMF, B457
- Repair Aircraft Maintenance Dock, B565
- Repair Munitions Maintenance Bldg, B535
- Repair Munitions Maintenance Bldg, B536
- Repair Storage Munitions, B538
- Repair Storage Munitions, B537
- Repair Age Facility, B517
- Repair Utilidor, B430
- Repair Sanitary Sewage Pump Station, B592
- Repair Electrical Power Station, B495
- Repair Sanitary Sewage Pump Station, F503
- Repair AFSSO, B504, 97th IS
- Repair Hazardous Storage, B573
- Repair NC3 BG WG CP/CAT, B500
- Repair Nuclear C2 B524 st Floor
- B303 NC3 Command Post Back-Up Generator and UPS, basement modifications, entrapment area
- B301D HVAC repairs for 97 Intel Sqdn relocation

**MILCON masterplan areas**

1. Nuclear Command Control & Communication (NC3) / Alert Aircraft and Aircrews
2. Satellite Communications MILSTAR
3. Non-Kinetic Effects Center of Excellence (NKEOCE) / Multi-Domain Operations Center-- simulators, training, classrooms
4. Security Forces & Small Arms Weapons Training
5. Logistics Readiness / Petroleum Oil Lubricants (POL)
6. Flight Line Hangars and Aircraft Maintenance
7. Micro-grid Power Plant
8. Base Lake / MWR
Offutt Flood FSRM Projects Status

- Rpr B537 (13 Jan 20)
- Rpr B538 AMMO (Complete)
- Rpr B536 AMMO (7 Jan 20)
- Rpr B535 AMMO (3 Feb 20)
- Rpr B303 CMD POST ALT (21 Nov 20)
- Rpr B301 55 IS (21 Nov 20)
- Rpr B430 Utilidor (2 Oct 20)
- Rpr B565 E4 Hangar (7 Dec 20)
- Rpr B524 1 ACCS Alert (20 Jul 20)
- Rpr B504 Tenant Hall (4 Mar 20)
- Rpr B592 Pump Stat’n (16 Mar 20)

% Proj. Complete
Beneficial Occupancy w/ Punchlist
<table>
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<th>Charrette</th>
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<tr>
<td><strong>Kickoff</strong></td>
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<td>1 Nuclear C3/ Alert aircraft</td>
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<td>2 SATCOM / MILSTAR</td>
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<td>7 Emergency Power Microgrid</td>
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<td>8 Base Lake Campus</td>
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<td><strong>Out-brief</strong></td>
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Flood MILCON Projects (charrettes)

- Satellite Terminal Communications Facility (5-6 Nov 19)
- Emer. Pwr. Microgrid (10 Jan 20)
- Const. LOX Storage (6-7 Jan 20)
- Const. De-icing Liquid Storage (6-7 Jan 20)
- Const. Whse. Sup. & Equip. BSE (6-7 Jan 20)
- Const. Petroleum Operations Bldg. (6-7 Jan 2020)
- Consolidated Whse. (17-18 Dec 19)
- Const. MWD Kennel (3-5 Dec 19)
- Const. MDOC (18-22 Nov 19)
- Courier Station (18-22 Nov 19)
- B568 TACAN (6-7 Jan 20)
- B485 50KW Generator (6-7 Jan 20)
- B532 ILS Glide Slope (6-7 Jan 20)
- NC3 Alert Facility (15-18 Oct 19)
- NC3 MX Facility (15-18 Oct 19)
- Repair RV Pads (16-17 Jan 20)
- Consolidated Rec. Fac. (16-17 Jan 20)
- Family Visit Center (15-18 Oct 19)
- Small Arms/CATM (3-5 Dec 19)
- Security Ops. Ctrl. Ctr. (3-5 Dec 19)
- Softball Complex (16-17 Jan 20)

(Current scheduled charrette dates)
Challenges

Initial funding exhausted: but degradation of facilities continued
Short programming suspense: initial packages due 24 May
Challenges

Operate while still recovering facilities and utilities

2/3 of 458,000 sq ft Bennie Davis Consolidated Maintenance Complex returned to service within 50 days.
Challenges

29 flooded organizations crowded into 14 different facilities

301D Martin Bomber Building hosting many displaced units
Power and cooling challenges with 78 year old facility.
Headquarters 55th Wing

Offutt Air Force Base Planning, Design, and Construction Program

Mr. Gary D. Chesley, P.E., F. SAME
Director, 55th Civil Engineer Squadron
14 January 2020

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### Offutt AFB FY21-23 FSRM Projects

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Offutt AFB Airfield Repair Scope

- Full Runway Reconstruction from all concrete to concrete landing zones and asphalt center and shoulders
- Same length 11,702’, but reduce 75’ shoulders to 25’
- New lighting and drainage; significant cut and fill to address slope and grading
- 100% design completed by Jacobs
- Executed through the AF Civil Engineer Center Worldwide Engineering & Construction Contract and the 772d Enterprise Sourcing Squadron
- Minimum airfield closure time desired to minimize relocated flying operations
Offutt AFB Airfield Repair Project Scope

- Grading Groundwork
- Runway Surface Work
- Mass Parking Apron

- MPA Construction Limits
- Reconstruction Areas
- Slab Replacement

Concrete
Asphalt
Asphalt Shoulder (25')
Offutt AFB runway conditions