



One Team Warfare Center

Expanding the Advantage through Collaboration

Society of American Military Engineers

Hurricane Michael Recovery Project

CAPT David Back

NSWC Panama City Division



NAVAL SURFACE WARFARE CENTER – PANAMA CITY DIVISION



Vision: Ensuring Warfighting Dominance in the Littoral Battlespace

Mission: Conduct Research, Development, test and evaluation, and in-Service support in Mining & Mine Countermeasures, Diving & Life Support, Naval Special Warfare and Amphibious & Expeditionary Warfare.

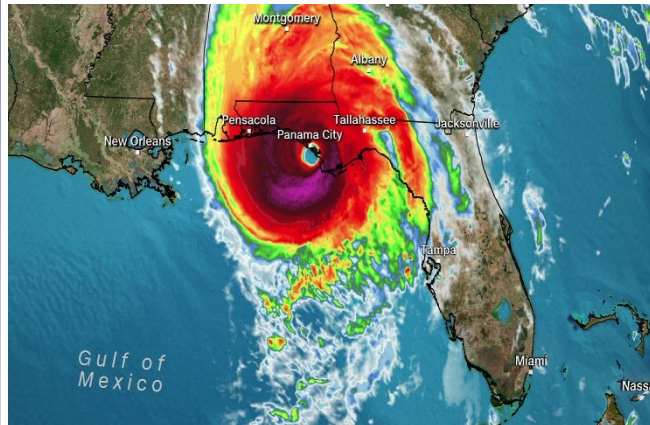
End state: Rapidly deliver Littoral Warfare and Coastal Defense capability to the Warfighter through technical rigor, accountable leadership, and stakeholder partnerships



Naval Surface Warfare Center Panama City Division – circa 2015



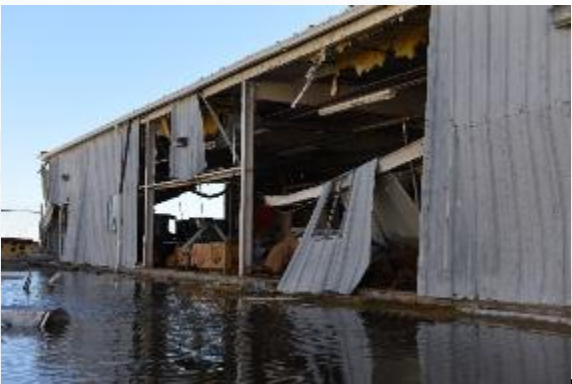
HURRICANE MICHAEL



- Rapid intensification from CAT 1 to CAT 5 in 2 days.
- Landfall 10 OCT 2018 with max sustained winds estimated at 160 mph (919mb).
- Est. \$25B economic loss



Hurricane Michael Destruction (10 October 2018)



- 82 buildings and structures damaged
- 657 employees displaced from workspace (40%)
- PCD closed for nearly 3 weeks

ADM John Richardson, USN (Ret.) Former Chief of Naval Operations



12 December 2018

“A lot of buildings got damaged, and there is this proposal; let’s take 20 buildings that are between 30-60 years’ old, that were damaged by the storm, and let’s just say it’s over for those 20 buildings. And we’ll build three new world-class buildings for people who want to work for you in technical areas. I’ll tell you what, that plan, the cost for the new buildings, that plan pays for itself in the order of 10 years, because it’s so much cheaper to take care of three new buildings that are Cat5 Hurricane Rated, than it is the 20-some super old buildings that are not. So these are the sorts of opportunities that we have to seize on and that type of plan, it sells itself almost.”

*-- ADM John Richardson, USN (Ret.),
Former Chief of Naval Operations*



Background

Hurricane Michael:
October 10, 2018

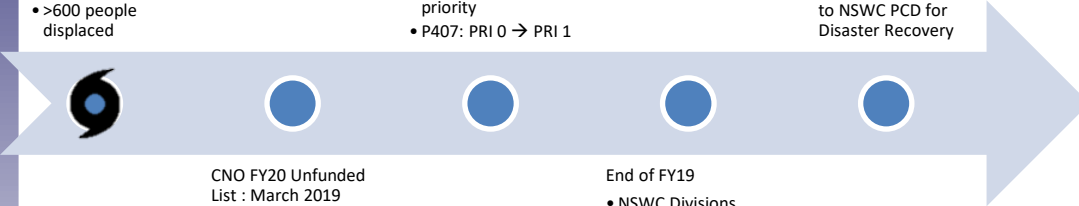
- 82 Buildings and structures Damaged
- Closed for nearly 3 weeks
- >600 people displaced

RMIG / SMIG: Spring 2019

- P407, P408, P411 submitted in POM22 with high priority
- P407: PRI 0 → PRI 1

H.R. 1158: January 3, 2020

- \$110.2 M allocated to NSWC PCD for Disaster Recovery



CNO FY20 Unfunded List : March 2019

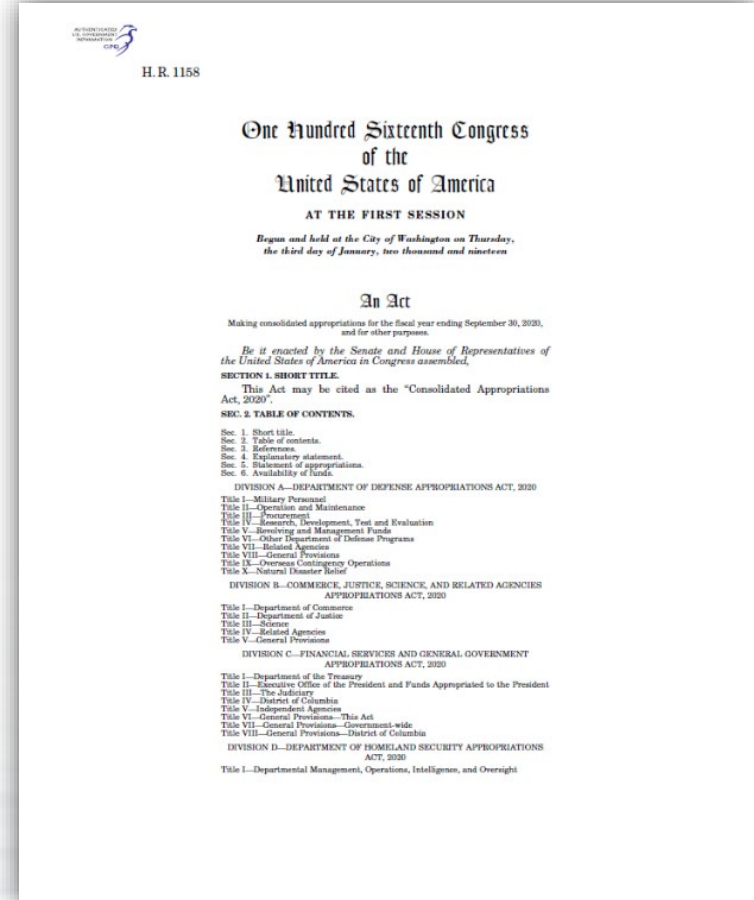
- \$105.3M was identified for NSWC PCD

End of FY19

- NSWC Divisions supporting recovery
- ~350 people displaced
- \$25M spent on personnel costs and repairs

Planning Considerations

- Reassess remaining requirements
- Optimize the plan with the infusion of disaster funds
 - Minimize timeline
 - Minimize impact to personnel
 - Maximize MILCON opportunities
- Formulate an execution strategy to obligate funds quickly
- Develop an acquisition strategy considering the economic climate





General Strategy

- **Global Contingency Contract (GCC) to stabilize structures.**
- **Reconstruction strategy will at a minimum be a combination of NAVFAC and USACE to achieve best value and schedule.**
- **Disaster Repair Work**
 - Send NAVFAC the amount they have the capacity to complete. To include regular SRM tasking and a portion of the remaining hurricane-related SRM
 - Send USACE disaster repair work and capitalize on the opportunity of significant staff-up in the local area. This will hopefully allow us to move faster and decrease timeline.
- **MILCONs Options**
 - Design/Build leveraging existing design
 - Design/Bid/Build (not traditional approach)
 - Tyndall is executing \$4.2 B, 42 MILCONs, 26 solicitations, and comprised of over 100 buildings
 - Tyndall AFB recommends this method as the best in our local economic environment



Risks and Planning Considerations



- **Planning cost burdens (Current experience from Tyndall Air Force Base)**
 - HM Aftermath Unknowns: 50%
 - Climatic: 2.5%
 - Smart technology: 5%
 - Cybersecurity: 2.5%
- **Logistics**
 - Contracting
 - Laydowns
 - Swing Space
 - Base Security Access
- **Local Skilled Workers / Mobile Workforce**
 - Tyndall has evaluated that of the 1800 skilled workers, only ~8% (160) of that workforce are local and able to get base access
 - On-base villages at Tyndall are being considered to house a mobile workforce
 - Contracts are being written such that the contractor must also provide housing

P-407



P-407 Littoral Innovation & Prototyping \$57,231,062

- ✓ Package w/ OPNAV N46, sent to EI&E 7/9
- ✓ 17 Jul 2020 – ASN EI&E notification to Congress
- ✓ 17-31 Jul 2020 – 14 days wait period
- ✓ 03 Dec 2020 – A/E Task Order CDW award
- ✓ 12-27 Jan 2021 – Concept Design Workshop (CDW)
- ✓ 25 Feb 2021 – Final CDW report
- ✓ 23-25 Mar 2021 – Value Engineering Workshop
- ✓ 25Mar - 26 Nov 2021 – 35%/65%/ Pre-final Design Submittals
- ☐ 17 Dec 2021 – P-407 Final Design Submittal
- ☐ Groundbreaking FY22Q3

- Modern laboratory (59,500 SF) and support facility to enable collaborative research to innovate, design, and deliver rapid prototypes to address Mine Warfare (MIW) and Expeditionary Warfare (EXW) Research, Development, Test, and Evaluation (RDT&E), acquisition support, and systems integration.
- Houses 130 scientists and engineers, providing laboratory and high bay space for classified/unclassified work, networking, modeling, technical innovation center, component building, cybersecurity, big data analytics, anechoic chamber, biotech lab, system integration facilities, and test tanks for acoustic/optical measurements as well as for prototype development.

Pre-Final Design Review complete 29 NOV 2021



P-407 65% Design Cost Estimate

P407 - Littoral Innovation & Prototyping Facility DD 1391 Comparison

DD 1391 - 07 APR 2020

PRIMARY FACILITY	Unit	Quantity	Unit Cost	(25,000,000)
Littoral Innovation & Prototyping Facility	SF	54,475	329.51	17,950,000
CyberSecurity Features	LS	-	-	180,000
Information Systems	LS	-	-	250,000
AT/FP	LS	-	-	210,000
Built-In Equipment	LS	-	-	4,980,000
Special Costs	LS	-	-	1,190,000
OMSI	LS	-	-	240,000
SUPPORTING FACILITIES				(19,170,000)
Site Preparations	LS	-	-	2,960,000
Paving & Site Improvements	LS	-	-	1,410,000
AT/FP	LS	-	-	110,000
Electrical Utilities	LS	-	-	10,050,000
Mechanical Utilities	LS	-	-	2,670,000
Environmental Mitigation	LS	-	-	110,000
Demolition	LS	-	-	1,860,000
ESTIMATED CONTRACT COST				(44,170,000)
CONTINGENCY (20.00 %)				(8,834,000)
SUBTOTAL				(53,004,000)
SIOH (5.70 %)				(3,021,228)
TOTAL REQUEST				(56,025,228)
INSTALLED EQT-OTHER APPROPRIATIONS				2,263,000

65% Estimate - 24 AUG 2021

PRIMARY FACILITY	Unit	Quantity	Unit Cost	(41,355,979)
Littoral Innovation & Prototyping Facility (Gross SF)	SF	59,549	634.13	37,761,725
CyberSecurity Features	LS	-	-	369,600
Information Systems (Included in Facility Cost)	LS	-	-	-
AT/FP (Included in Facility Cost)	LS	-	-	-
Built-In Equipment	LS	-	-	2,439,964
Special Costs	LS	-	-	290,405
OMSI	LS	-	-	494,285
SUPPORTING FACILITIES				(6,454,998)
Site Preparations	LS	-	-	521,607
Paving & Site Improvements	LS	-	-	889,975
AT/FP	LS	-	-	34,316
Electrical Utilities	LS	-	-	3,122,533
Mechanical Utilities	LS	-	-	1,606,058
Environmental Mitigation	LS	-	-	110,000
Demolition	LS	-	-	170,509
ESTIMATED CONTRACT COST				(47,810,977)
CONTINGENCY (5.00 %)				(2,390,549)
SUBTOTAL				(50,201,526)
SIOH (5.70 %)				(2,861,487)
TOTAL REQUEST				(53,063,013)
INSTALLED EQT-OTHER APPROPRIATIONS				2,263,000

* Estimated Contract Cost includes 10% design contingency & 12% project risk contingency

P-408 Status



- ✓ 15 Aug 2020 Complete Topographical & Geotechnical survey.
- ✓ 31 Oct 2020 Complete Development of Priority 1
- ✓ 1 Nov - 23 Aug 2021 Develop 1391 package with 2854 justification & route through CNIC, OPNAV, and ASN EI&E
- ✓ 23 Aug 2021 - ASN EI&E notification to Congress
- ✓ 24 Aug – 7 Sep 2021 - 14 days wait period
- ✓ 8 Sep 2021 - 31 Dec 2021 - NAVFAC A/E RFP award
- 01 Jan 2022 - 31 Dec 2022 – Design-Bid-Build
- 28 Feb 2023 - Receive and Evaluate Proposals
- May 2023 - Contract Award

P-408 Seabed Warfare RDT&E Facility

\$30,960,000

- 23,150 sf facility to consolidate RDT&E of autonomous, unmanned systems to propel emerging work in Seabed Warfare in support of the National Defense Strategy. Leverage close proximity to St. Andrews Bay to provide easy access for launch and recovery of unmanned systems in the Gulf of Mexico.
- Houses nearly 60 scientists and engineers for classified and unclassified work providing an infrastructure to accelerate technology development and fielding of advanced capabilities, including autonomy, artificial intelligence, counter-UAS, robotics, and advanced computing.



NSWC PCD Critical Projects

Project Title	Planned Award Date	Funding Source	Planned/Actual Obligation	Remarks
B304S Interior-FL2 & FL3 Construction (CIP Project)	9/30/2021	CIP	\$11,700,000.00	AECOM Design complete. Award 24 SEP 2021. On track for construction. Est Completion MAR 2023
B319 Interior Construction	12/31/2021	HMWC	\$4,000,000.00	Completing Design. Awaiting construction award. FY22
P-407 Littoral Innovation and Prototyping Facility	5/31/2022	DRF	\$60,000,000.00	65% design complete. Final planned for 30 NOV 2021
B147 UxS Design and Innovation Facility Construction (CIP Project)	9/30/2022	CIP	\$6,000,000.00	Design in progress.
B147 UxS Rapid Prototyping Facility Construction (CIP Project)	9/30/2022	CIP	\$6,000,000.00	Design in progress.
LCAC Support Facility Construction (CIP Project)	AWARDED	CIP	\$5,699,967.84	Project Awarded AUG2021. Est Comp DEC 2022
B544 Interior Repairs	AWARDED	HMWC	\$10,084,173.84	Awarded MAY2021. CDD Est MAY 2023. Construction not started.
B381 Roof Repair	AWARDED	HMWC	\$349,217.00	Complete
Restricted Area B371,B400, B490	AWARDED	HMWC	\$1,471,195.00	Awarded. B371/B490 CDD: DEC 2021
B49 Interior Repairs (2 Phases)	AWARDED	HMWC	\$3,373,653.47	Ph-1 CDD: NOV 2021 / Ph-2 CDD: JUL 2022
B100 Interior / Exterior Repairs	AWARDED	HMWC	\$2,159,283.39	CDD: JAN 2022
JEXC2 Site Construction	AWARDED	HMWC	\$1,164,840.00	Awarded. CCD AUG 2021

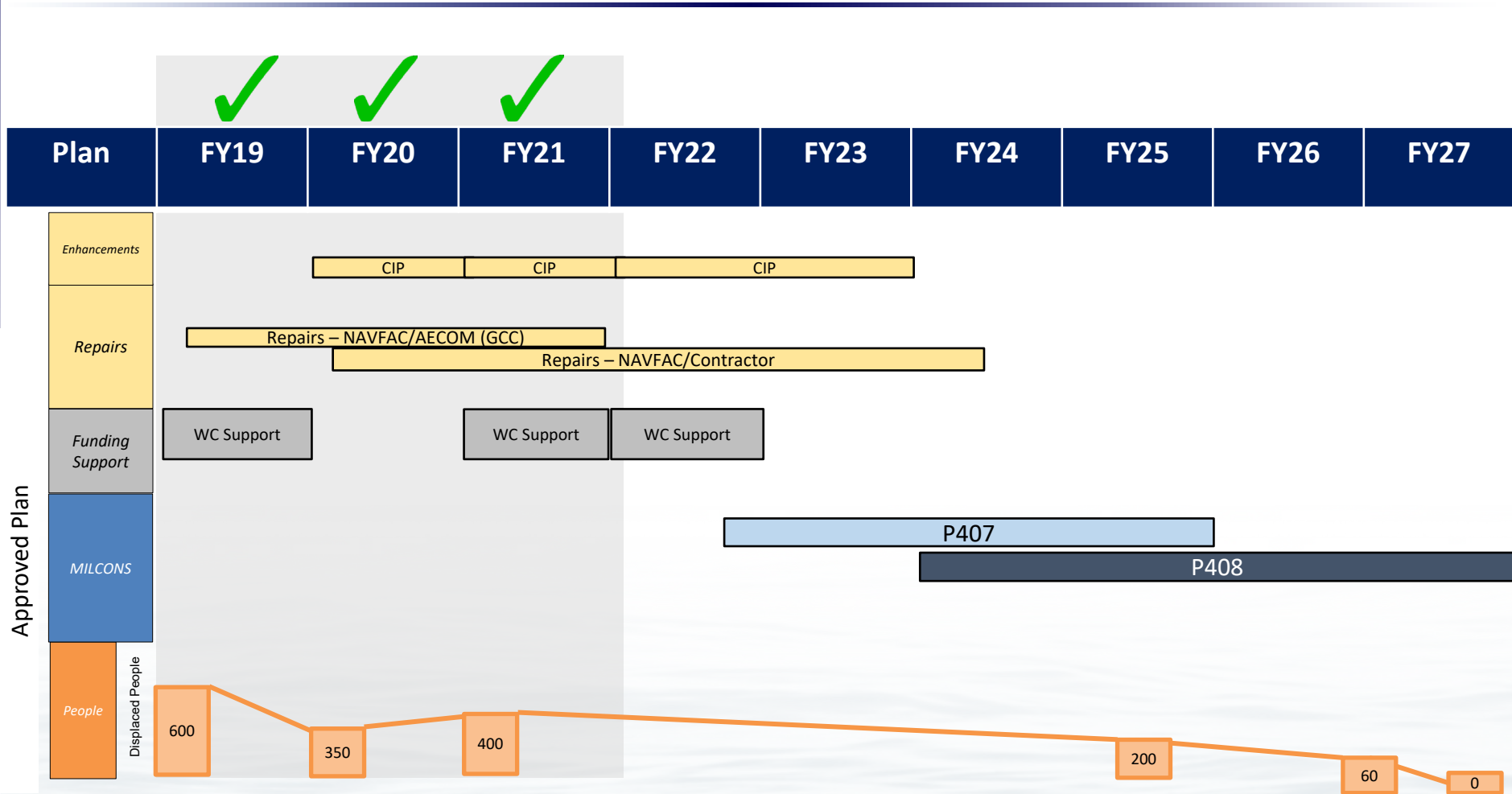
Risk to award: \$112,302,330.54

- Low
- Moderate
- High

Critical to the Division regarding mission, schedule, and cost



Schedule





Challenges

- Global Contingency Contract
- COVID-19
- Swing Space for Personnel
 - More people than seats – exacerbated by COVID physical distancing
 - Mitigation – telework, Mobile Community (MOCOM)
- Lack of climate controlled storage of internal furniture and equipment
- Limited classified laboratory and swing space
- Cost instability
- Stressing NAVFAC resources
- Competing with Tyndall AFB
 - Skilled worker shortage in area
 - \$4.8B in repairs to include 42 MILCONs



Questions?

