



# SLAMR

*The Sea Land Air Military Research initiative*

***Building a culture of innovation for the war fighter!***

**17 June 2019**



# Disclaimers

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# Executive Summary

The **Sea Land Air Military Research** initiative (**SLAMR**) is intended to address the “whole of country” challenges that face our Nation in a time of renewed great power competition by breaking down the barriers between government and citizen innovators.

The SLAMR Initiative leverages existing capabilities and authorities of the Naval Postgraduate School, augmented by new authorities as needed;

- to **create a unique facility** to support research in autonomous systems, AI, ML, etc. and,
- **to engage industry and academia in new ways** in search of innovative solutions to the Nation’s defense challenges.

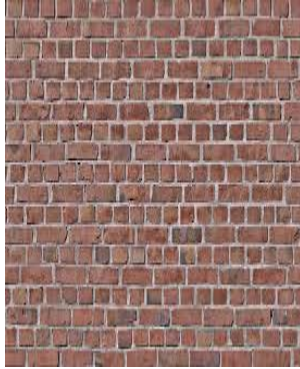
We are executing a **rolling start with capital from existing NPS programs**, other Department of Defense/Department of the Navy programs, and **the Naval Postgraduate School Foundation**.



# Problem



Law  
Enforcement  
Agencies



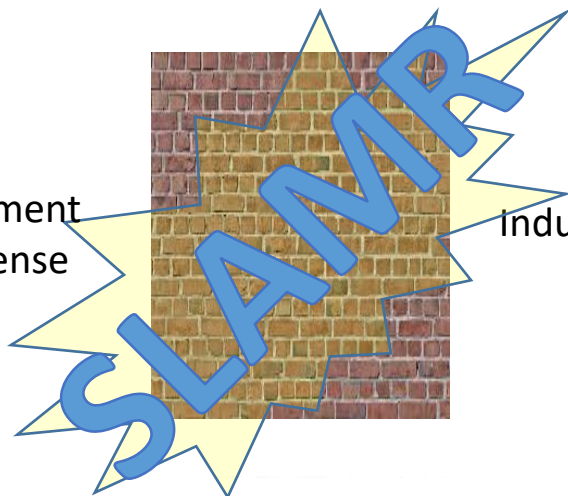
Intelligence  
Agencies



Nearly 3000  
were killed

## Never again!

Department  
of Defense

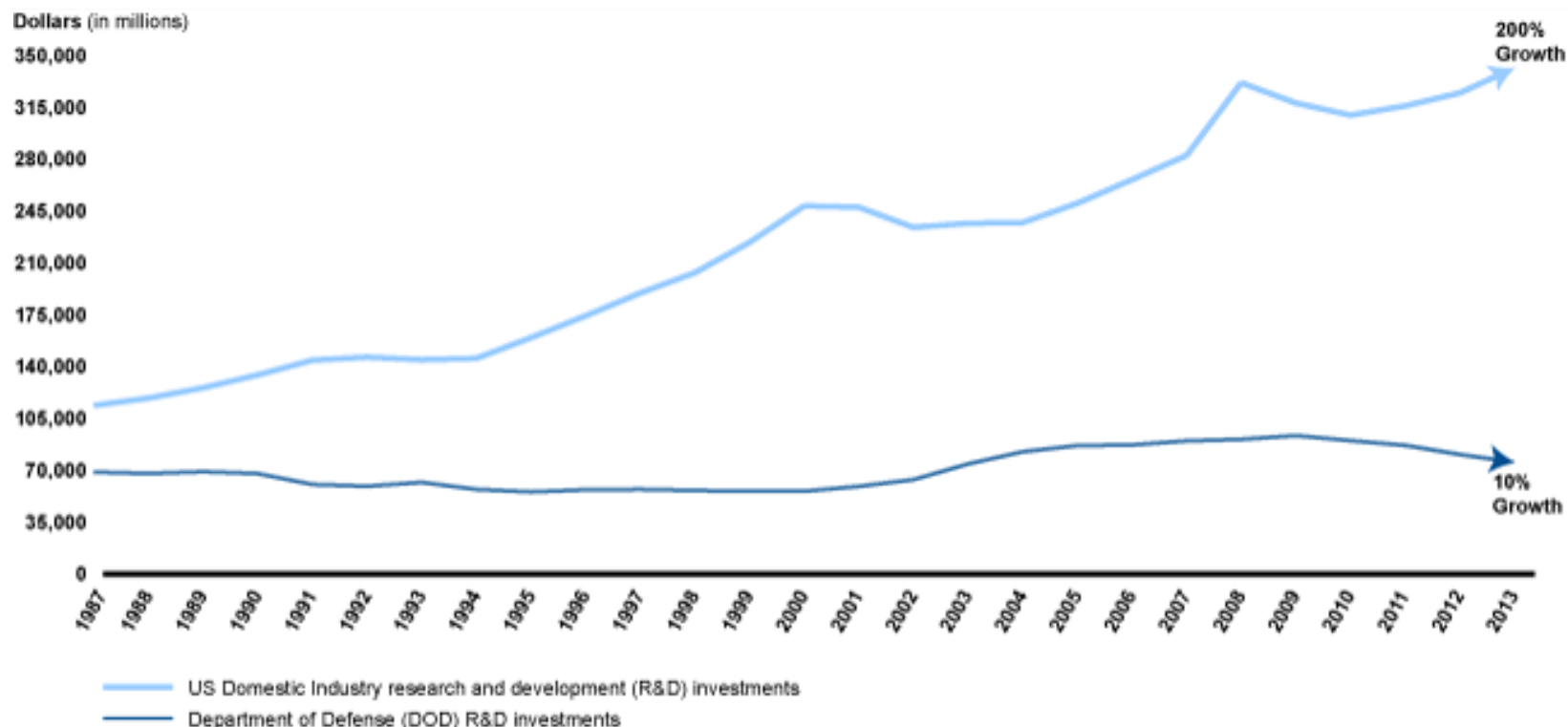


Industry



4000 on a  
single  
warship

# Changing Reality

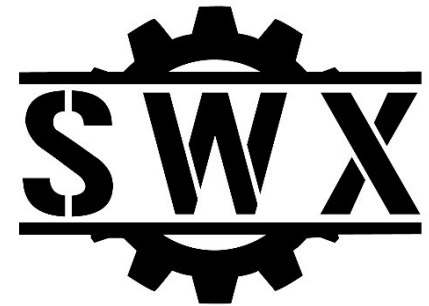


Source: GAO presentation of National Science Foundation and Office of Management and Budget data. | GAO-17-644

Note: Expenditures have been adjusted for inflation in accordance with DOD National Defense Budget Estimates for Fiscal Year 2017. Industry research and development spending may include funding provided by DOD for research performed by industry.



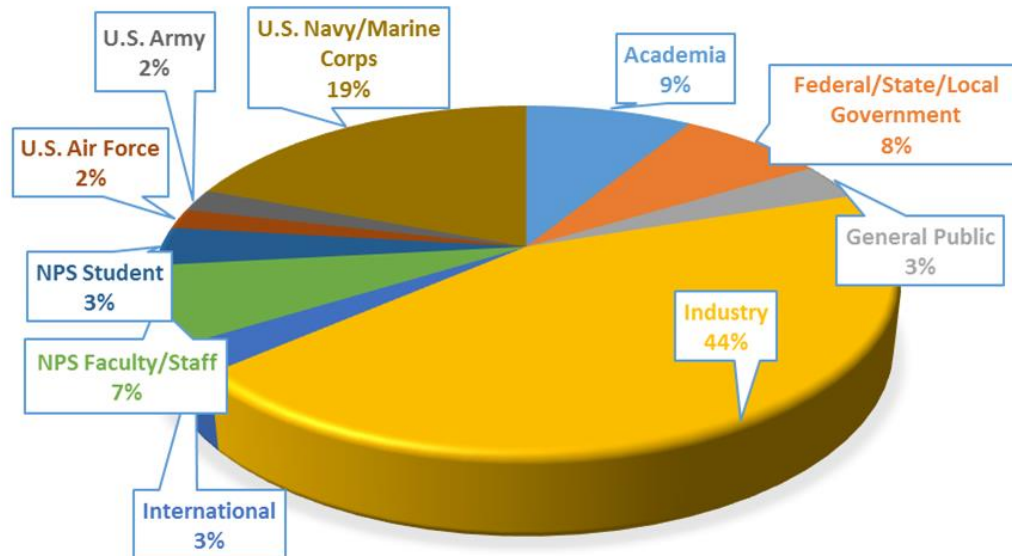
# Alternatives?



# Solution



Leverage an institution that is far removed from the acquisition process that has developed ways to interact with industry and academia, to bridge this gap and to catalyze a “whole of country” approach to national security.



**CRUSER Community  
of Interest  
2915 Members  
SEP 2018**





# SLAMR Facilities





# Novel Processes



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# SLAMR COI



12th Flying Training Wing  
12th Operations Support Squadron  
**Aerospace Development Corporation**  
**AeroVironment**  
Army Cyber Institute  
ASV Unmanned Marine Systems  
Asymmetric Warfare Group  
**AT&T**  
**Battelle**  
City of Monterey City Manager's Office  
Cyber Warfare Detachment  
**InTechSys**  
**John Hopkins University**  
Joint Special Operations Command  
Joint Special Operations University  
**Kaman Corporation**  
**L3 Technologies**  
Laboratory for Autonomous Systems Research  
Lawrence Livermore National Laboratory  
**Liquid Robotics**  
**Lockheed Martin Corporation**  
**Mechatronics**  
Monterey Bay Defense Alliance  
National Aeronautics and Space Administration Ames  
Naval Air Systems Command  
Naval Information Warfare Command - Pacific  
Naval Postgraduate School Foundation  
Naval Sea Systems Command

Naval Special Warfare Command  
Naval Surface Warfare Center Carderock Division  
Naval War College  
Navy Surface Warfare Center Panama City Division  
Navy Undersea Warfare Center, Division Keyport  
Navy Undersea Warfare Center, Division Newport  
**Norwegian Defense Research**  
**Ocean Power Technologies**  
Office of Naval Research  
Office of Rep. Panetta, CA-20  
Office of the Chief of Naval Operations  
Office of the Undersecretary of Defense for Policy  
PMA-281 Strike Planning and Execution Systems  
**Royal Australian Navy**  
**Royal New Zealand Navy**  
Special Warfare Education Group  
**Trans Universal Energy**  
**University of Maryland UAS Test Site**  
US Army Futures Command  
US Army Special Operations Command  
US Fleet Forces Command  
US Northern Command  
US Special Operations Command  
US Strategic Command  
US Transportation Command  
USAF Special Operations Command  
USMC Special Operations Command

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# Lines of Effort

1.Site preparation	Green
2.Robotic Sea Ranges	Green
3.Robotic Land Ranges	Green
4.Robotic Aerial Ranges	Yellow
5.Collaboration Center	Yellow
6.CRADA – CMU	Green
7.CRADA – Elroy Air	Green
8.CRADA – Ocean Power Technologies	Green
9.CRADA – AT&T	Green
10.DTIC TAT	Green
8.Monterey Cyber Institute	Yellow
9.SEED 4 Defense	Yellow

Green

- Lower risk

Yellow

- Higher Risk





# Financial Highlights

- Funding received
  - Aligned projects 100,000
  - NPS Foundation Seed 10,000
  - NPS Foundation Seedling 250,000
  
- Funding requested, not approved
  - Navy POM Request 6,000,000
  - DOD Request 19,000,000
  
- Anticipated Funding requested, FY-19-20
  - NPS Foundation 2,000,000
  - Navy POM Request 6,000,000
  - 10 USC 2805 Request 6,000,000





# Events

- 11 June 2019 Monterey City Officials
- 13 June 2019 CNO Tour of SLAMR
- 13 June 2019 New SLAMR Virtual Presence
- 17 June 2019 Governor's Military Council
- 21 June 2019 Drone, Automation & Robotics Technology Symposium

[www.nps.edu/slamr](http://www.nps.edu/slamr)







# SLAMR

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# *Connect and Collaborate*

