



**Office of Naval Research Global
TechSolutions**

Marines Ask, TechSolutions Builds!

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What is TechSolutions?



Tech requests from Sailors/Marines



turned into prototype solutions



within 12 months





What is TechSolutions?



- Office of Naval Research Global initiative for turning **requests from Sailors/Marines** into **prototype solutions**
 - S&T solutions for high-impact, near-term needs from the deckplates
 - Development leveraging emerging/existing technologies, not off-the-shelf
- Prototype delivery & operational demo **within 12 months**
 - Submitter, command, and Science Advisors provide guidance and direction throughout the project
 - Final demonstration coordinated by, and with, end-users in an operational context, with leave-behind tech as deliverable

**Rapid-response S&T solutions to current Fleet/Force needs
identified by Sailors and Marines**



Project Profile

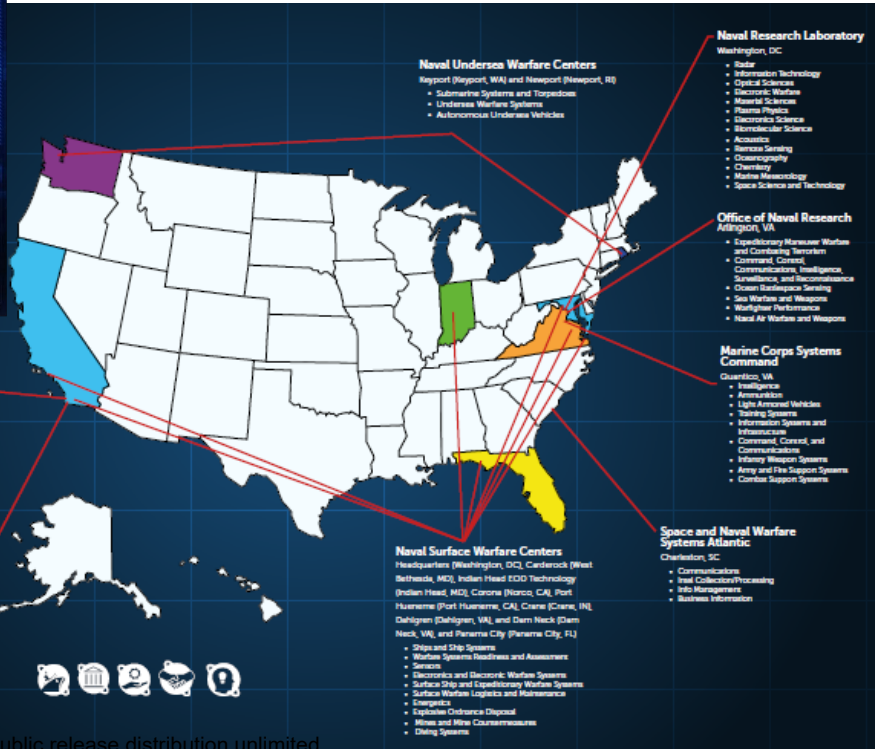


- Project avg. = \$750K
- Must be scoped to complete in 12 months
- S&T component to development - we don't just buy stuff
- No focus on particular technology or mission area
 - Wide variety of technologies, for any mission, that changes annually based on warfighter requests



NR&DE Developers

- TechSolutions solicits and awards direct to NR&DE only



NR&DE = Naval Research and Development Establishment (Naval Labs / Warfare Centers/ UARC's)

- Gov.-to-Gov. financial transactions
- Government data rights to solutions
- NR&DE performers may contract with industry/academic partners as needed

Sample Projects

Surf Observation Tool

**US Naval Research Laboratory (NRL) and
US Army Engineer Research and Development Center (ERDC) Partnership**

Operational Need:

Marines need a better understanding of the dynamic surf conditions. It allows Commanders to make better risk decisions for littoral expeditionary access, leading to safer surf zone operations and mission execution.

Solution:

The Surf Observation (SUROB) Tool is a tactical decision support tool that gives Marines a comprehensive awareness of their operational environment by providing precise, accurate, and up-to-date surf zone conditions and effects on vehicle performance.



2-Person Hide Sites

Operational Need:

Rucksack sized 2-person hide site that is lightweight and durable with protection from thermal IR detection for Marines both day and night

Solution:

IR-reflective hide site fabrics supported by NRL instant pop-up system with shaping to blend with background.



Expeditionary Littoral Enabler (ELE)

Operational Need:

Marines need a fast, light, easily-deployable temporary pier reaching from shore to sea to load/offload logistical supplies in the littorals.

Solution:

A multi-panel assembly consisting of continuously-inflated drop-stitch panels with inflatable hinges to create a 'soft-robotic', articulating mechanism that folds out into a floating pier.



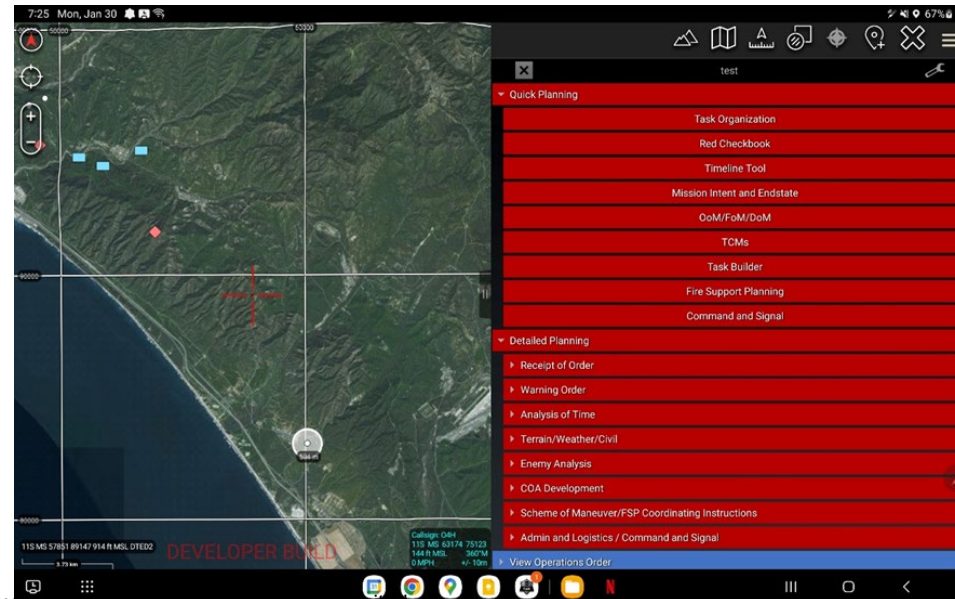
Small Unit Mission Planning (SUMP)

Operational Need:

Effective small unit planning at the company, platoon, and squad levels in time-compressed environments, at the tactical edge, with a doctrinally accurate digital planning tool based on the troop leading steps (B-A-M-C-I-S) to effectively plan and execute infantry missions.

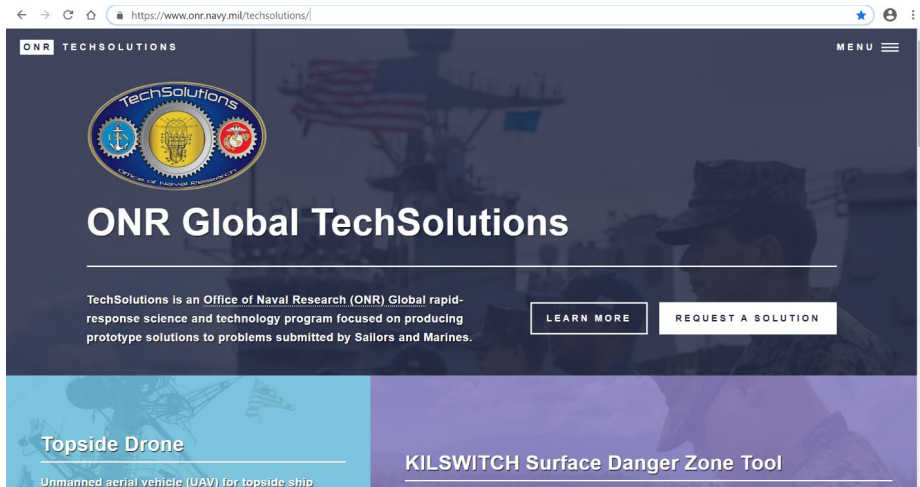
Solution:

A hand-held Android Tactical Assault Kit (ATAK) planning tool with a user interface that will read in digital order data to create specific queries for a master database (DB) to populate the ATAK geographic display with red & blue unit data, available weapons systems and control measures.



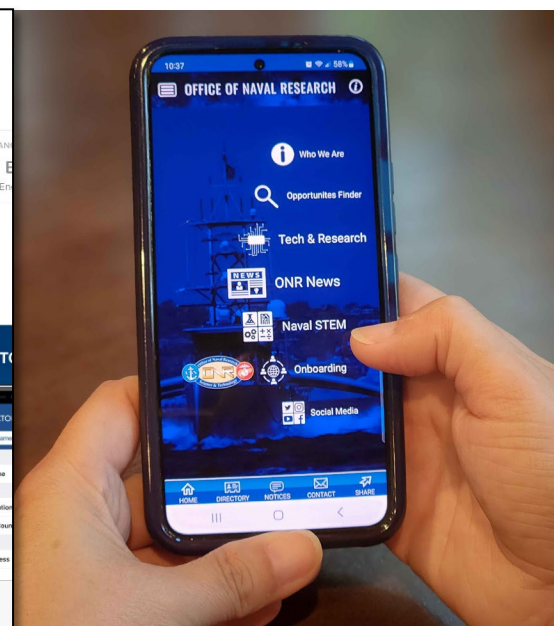
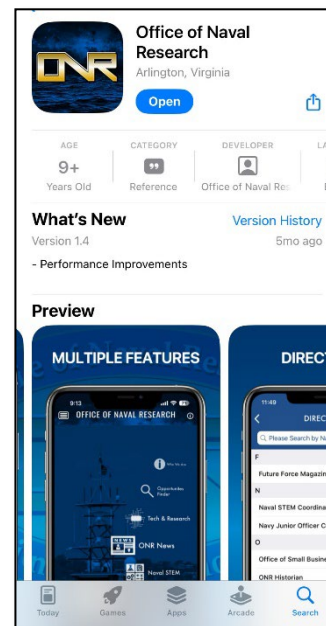


Find us Online or Download ONR App



<https://www.onr.navy.mil/techsolutions/>

Through the “ONR” app, Sailors and Marines, often the first to identify issues that may be helped by new technology, now have an easier way to communicate directly with TechSolutions – ONR Global’s development program that quickly responds and produces prototype solutions to warfighter challenges. Sailors and Marines can email TechSolutions directly through a link available on the app





CONTACT INFORMATION



Public Website: <https://www.onr.navy.mil/techsolutions>

Sample project videos: <https://www.youtube.com/usnavyresearch>

Team members:

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