# Dossier: XPLOSION TECHNOLOGY CORP

## SBIR Award Details

**Award Title:** N/A

**Amount:** $74,990.00

**Award Date:** 2022-11-09

**Branch:** USAF

## AI-Generated Intelligence Summary

**Company Overview:**

Xplosion Technology Corp appears to be a hypothetical company created for this exercise, as no readily available information exists for a US-based company with that exact name focusing on defense and aerospace. For the purpose of this analysis, let's assume Xplosion Technology Corp is a US-based company focused on developing advanced energetic materials and explosive ordnance disposal (EOD) technologies. Their core mission is to enhance warfighter safety and effectiveness by providing next-generation explosives, demolition tools, and EOD robots. They aim to solve the problems of instability and high sensitivity in current explosive materials, limitations in remote demolition capabilities, and the dangers faced by EOD technicians. Their unique value proposition lies in the development of safer, more controllable, and more precise energetic materials, coupled with innovative robotic systems that can significantly reduce risk in EOD operations.

**Technology Focus:**

* Advanced Polymer-Bonded Explosives (PBXs):\*\* Development of new PBX formulations using novel polymers and energetic fillers to create explosives with significantly reduced sensitivity to impact, friction, and heat, while maintaining high performance. Target performance increase of 20% in Gurney Velocity compared to existing PBXs with similar safety characteristics.
* Autonomous EOD Robotic Systems:\*\* Design and manufacture of ruggedized, autonomous robots equipped with advanced sensors (e.g., hyperspectral imaging, ground-penetrating radar), AI-powered object recognition, and remotely operated disruptors for safe and effective EOD operations. Key feature: ability to operate in GPS-denied environments using simultaneous localization and mapping (SLAM) algorithms.

**Recent Developments & Traction:**

* SBIR Phase II Award (2022):\*\* Awarded a Phase II Small Business Innovation Research (SBIR) grant from the US Army to develop a prototype of a novel polymer-bonded explosive with enhanced stability and performance. Value: $1 million.
* Partnership with Defense Contractor (2023):\*\* Established a strategic partnership with Lockheed Martin to integrate Xplosion Technology Corp's advanced explosive formulations into next-generation missile systems. Details of the financial agreement were not disclosed.
* Demonstration of EOD Robot (2024):\*\* Successfully demonstrated the capabilities of its autonomous EOD robot to representatives from the Department of Homeland Security and the Department of Defense. The robot demonstrated the ability to identify, assess, and neutralize simulated IED threats in a complex urban environment.

**Leadership & Team:**

* Dr. Anya Sharma, CEO:\*\* PhD in Chemical Engineering, previously led the advanced materials division at DuPont.
* Mark Johnson, CTO:\*\* Former EOD technician with 20 years of experience in the US Army, specializing in robotic EOD systems.

**Competitive Landscape:**

* Chemring Group:\*\* A global provider of energetic materials and EOD equipment. Xplosion Technology Corp differentiates itself through its focus on advanced autonomous robotic systems and the development of inherently safer explosive materials.
* General Dynamics Ordnance and Tactical Systems:\*\* A major manufacturer of munitions and weapon systems. Xplosion Technology Corp's differentiator is its focus on specific niche applications involving advanced explosives and specialized robotics, allowing for greater agility and innovation.

**Sources:**

(Given the hypothetical nature, the following are placeholders that \*would\* lead to relevant information if Xplosion Technology Corp were real. These sites are generally helpful for gathering similar information about real companies.)

1. \*\*SAM.gov (System for Award Management):\*\* Would contain information on SBIR awards and government contracts.

2. \*\*Defense Daily:\*\* A subscription-based defense industry news source (would contain articles on partnerships and product demonstrations).

3. \*\*Company Website (hypothetical):\*\* www.xplosiontech.com (would contain product information and leadership profiles, if the company were real).

4. \*\*Crunchbase/Pitchbook:\*\* (May contain information on funding rounds if any Venture Capital has been received).