# **JOHN CHILDS**

*john.childs@terrainmap.com* 

•

See LinkedIn for additional information: www.linkedin.com/in/john-childs-energetics

#### EXECUTIVE PROFILE —

\_\_\_\_

• <u>Engineering Leader</u> with broad energetic product development, safety, acquisition, teaming, supply chain, and manufacturing experience in the United States and globally.

#### **RECENT PROFESSIONAL EXPERIENCE** -

#### GENERAL DYNAMICS-OTS

Huntsville AL, Williston VT USA

(\$2.2 billion defense division supplying products to US DOD and international customers)

SENIOR STAFF ENGINEER/ACTING ENGINEERING MANAGER 2019 - Present

Technical lead developing composite rocket motor capability for tactical rocket motors at GD-OTS Camden AR manufacturing facility. Led negotiations with foreign and domestic technology partners. Authored many proposals, example: HSAAP GOCO (Sub factor 1) technical volume.

• Overall Results: Leveraged existing warhead infrastructure into composite rocket motor capability. Identified target opportunities. Developed technologies for propellant formulation; interior/exterior ballistics; insulation; nozzles; structures; igniters; prototype fabrication; testing and manufacturing processes. Efforts resulted in creation of rocket motor design group across four GD sites, demonstrated by successful testing of motors and the award of development contracts from missile primes. Shoulder fired weapons technical lead.

# DAY & ZIMMERMANN

Texarkana, TX USA (\$2.4 billion privately held defense and A/E construction contractor)

#### DIRECTOR OF ENGINEERING

2017 - 2019

Engineering lead for D&Z division with operations in Texas and Kansas producing grenades, mortar ammunition, artillery primers, boosters, detonators, and other ordnance items.

• Overall Results: Developed manufacturing process for M1061 preformed fragment mortar round, including assembly and PBXN-110 process development. Efforts resulted in line qualification, enabling production of a \$35MM base contract and a \$92.5MM contract extension. Authored proposal technical volumes resulting in award of M889A2/M879A1 mortar contract. Completed M67 grenade line automation project eliminating operators, reducing cost and improving quality.

# BAE SYSTEMS, INC.

Kingsport TN USA

(\$4.9 billion defense contractor supplying explosives for US DOD and international customers)

2016 - 2017

Technical lead for RDX and HMX modernization programs at BAE Holston Army Ammunition Plant. Responsible for new Holston manufacturing facilities.

• Overall Results: Led engineering teams of 45 total professionals. Wrote proposals and completed designs for new HMX/RDX recrystallization and fluid energy mill units, valued at >\$200MM that are currently in production. Efforts led to increase in overall RDX, IMX and PBX capacity and decreased lead times. Completed conceptual design for new HMX/RDX nitration facility.

# - OTHER PROFESSIONAL EXPERIENCE -------

- Principal Engineer, GD-OTS Niceville, FL
- Engineering Director /Business Development Director GD-OTS, Williston, VT
- Vice President Global Research and Engineering, Dyno Nobel, Inc. Simsbury, CT
- Research Director, Ensign Bickford Company, Simsbury CT
- Plant Manager, Ensign Bickford Aerospace and Defense (EBAD), Graham, KY
- Research Manager, Ensign Bickford Company, Simsbury, CT
- Engineering/Regulatory Compliance Manager, Trojan Explosives, Spanish Fork, UT
- President/Owner, Structural Engineering Services, Tariffville, CT
- Chemical Engineering Manager, Ensign Bickford Company, Simsbury, CT
- Plant Superintendent, Ensign Bickford Company, Graham, KY
- Startup Engineer, Ensign Bickford Company, Graham, KY
- Project Engineer, Ensign Bickford Company, Simsbury, CT
- Test Engineer, Bureau of Explosives, Edison, NJ

# - EDUCATION AND CREDENTIALS

MS Finance	Rensselaer Polytechnic Institute
MS Computer Science	Rensselaer Polytechnic Institute
BS Civil Engineering	University of Hartford
BS Chemistry	State University of New York at Stony Brook

- Ordnance Engineering I and II, Picatinny Arsenal, Dover, NJ
- Solid Rocket Motor Design, Wickman Spacecraft and Propulsion, Casper WY
- Author of MultiPerf (transient multiple single perforated grains) interior ballistics application
- Author of PANCROMA satellite image processing software <u>www.PANCROMA.com</u>
- Shingo Prize team member and above-shop-floor Kaizen facilitator
- CT State PE License (inactive)
- US Patents 7,650,840; 8,033,222; 8,245,643 and 8,794,152