

# MIKE FISHER

## Engineering & Business Development Consultant

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### SUMMARY

Engineering professional with 40 years of experience in the management and leadership of technology projects, development of new business, supervision of technologists in a research & development organization, and management of technical information. Experienced in planning and execution of technology projects with DoD, industry, and international partners. Four years' experience in an international organization. Technical expertise includes solid rocket motor design, internal ballistics analysis, energetic materials, and insensitive munitions. Excellent written and oral communication skills. More than 80 technical publications; multiple patent awards in insensitive munitions and composite materials.

### EXPERIENCE

- 2013 - Ongoing

  - Owner, Consultant  
**Impulse Consulting LLC**  
Operate consulting business providing engineering and business development expertise to small businesses in advanced technology industries, and large aerospace firms. Capture SBIR and OTA funded technology development projects. Execute R&D projects. Provide SME services to clients in areas of solid propulsion, energetic materials, insensitive munitions and weapons development.
  
- 2017 - 2022

  - Vice President  
**Helicon Chemical Company**  
Assisted CEO in the operation of a startup materials development company in aerospace sector.  
Responsible for development of new business and new application spaces, development of collaborative relationships, capture of technical projects in defense sector, execution of technical projects, socialization of technology to propulsion and energetics communities, reporting to government sponsors.
  
- 2007 - 2012

  - Business Area Manager and Division Head  
**Cornerstone Research Group**  
Responsible for development and management of a new corporate business area in Propulsion and Munitions Technology. Line supervisor of Aerospace Division.
    - Generated and maintained technology development plans and roadmaps
    - Developed external teaming relationships and partnerships
    - Developed new markets for existing technology
    - Served as Principal Investigator on SBIR projects
  
- 2003 - 2007

  - Senior Research Engineer  
**Johns Hopkins University - Chemical Propulsion Information Analysis Center**  
Conducted research and responded to technical inquiries from the DoD and NASA propulsion, munition safety and energetic materials communities in personal areas of expertise and experience, including solid rocket motor design, test, analysis, safety, and hazards; insensitive munitions and reduced-sensitivity energetic materials; tactical missile development; composite rocket motor cases; solid rocket propellants.

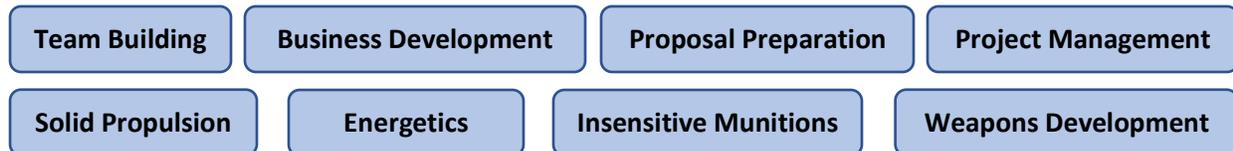
- 1999 - 2003
  - **Technical Specialist Officer**  
**NATO Insensitive Munitions Information Center, NATO Headquarters**  
 Served as propulsion design specialist at NIMIC, responding to technical inquiries, assessing technological capabilities and needs, preparing technical reports in areas of interest to safety and propulsion communities of the NIMIC member nations. Communicated IM requirements, procedures and technical capabilities to member nations' military and contractor partners.  
  
 Conceived, planned, conducted and documented international workshop on Insensitive Munitions Assessment Methodology.
- 1984 - 1999
  - **Propulsion Project Engineer**  
**Naval Air Warfare Center Weapons Division**  
 Supported various tactical missile development programs as lead propulsion engineer, responsible for propulsion system design and interior ballistics analysis. Served as project manager for various propulsion technology demonstration projects.

## EDUCATION

Bachelor of Mechanical Engineering, University of Dayton, Dayton, Ohio

- Graduate studies in propulsion, Purdue University, West Lafayette, Indiana and California State University, Northridge, California
- Technical Manager's Certificate Program, Naval Air Warfare Center Weapons Division, China Lake, California: approximately 300 hours training
- Defense Acquisition Workforce Level III certification – Systems Planning, Research, Development & Engineering

## SKILLS/EXPERTISE



## PUBLICATIONS

Published and presented papers in various professional forums, including the Joint Army-Navy-NASA-Air Force (JANNAF) Joint Propulsion Meeting and various JANNAF Subcommittee meetings; the AIAA Joint Propulsion Conference; the Insensitive Munitions & Energetic Materials Technology Symposium, and other domestic and international events. Published articles in DSIAC Journal and Aerospace America. Multiple technical reports published in DTIC and NATO databases.

## PATENTS

US11428368B1 – Method of making a fiber reinforced energetic composite; Granted 08/30/2022

US10670186B1 – Fiber reinforced energetic composite; Granted 06/02/2020

US9446994B1 – Polymer composite comprising metal based nanoparticles in a polymer matrix; Granted 09/20/2016

US8356727B2 – Venting mechanisms for containers; Granted 01/22/2013