SAFE Inc. is customer focused, results based engineering firm providing technical services such as stress, design and construction, fatigue and damage tolerance analysis for the aviation industry. We provide comprehensive engineering and maintenance support to the Department of Defense, commercial airlines, and major overhaul and repair facilities. Support includes evaluation and approval of repairs and modifications, evaluation of process specifications and development of specialized installation and tooling procedures. Engineers at SAFE possess an in-depth working knowledge of all aspects of the DoD research, development, testing and evaluation (RDT&E) effort; basic research, applied research, advanced technology development, demonstration / validation, and engineering / manufacturing development (technology transition). SAFE's work also includes engineering research for the United States Air Force Academy's Center for Aircraft Structural Life Extension (CAStLE). **SAFE Inc.** is a *Service Disabled Veteran Owned Small Business (SDVOSB)*. http://saf-engineering.com.

Position Description:
SAFE Inc. has an opening for a *Machinist and Engineering Technician* to support research and development activities in the areas of mechanical test and analysis, aircraft structures analysis and test, fatigue crack growth, additive manufacturing using supersonic particle deposition (SPD) and failure analysis of metallic components.

Work Location: Monument, Colorado and USAF Academy, Colorado
Annual Salary: $15 - $25/hour (hourly)

The ideal candidate will:

- Be passionate about providing materials engineering support for air, land, and sea vehicles and manufacturing processes specific to metallic components
- Be energized by working for a world-class R&D provider and collaborating on cross-functional teams
- Recognize the importance of building and maintaining strong interpersonal relationships
- Be willing and enthusiastic about learning new skills

Responsibilities include:

- Machining of mechanical test specimens and custom test fixtures in aluminum and steel using Manual and CNC Mills, lathes, Plunge and Wire Electrical Discharge Machines (EDM) Surface Grinders.
- Plans machining by studying work orders, blueprints, engineering plans, materials, specifications, orthographic drawings, reference planes, locations of surfaces, and machining parameters; interpreting geometric dimensions and tolerances (GD&T).
- Programs mills, lathes Electric Discharge machining (EDM) and surface grinding by entering instructions, including zero and reference points; setting tool registers, offsets, compensation, and conditional switches; calculating requirements, including basic math, geometry, and trigonometry; proving part programs.
- Sets-up mills, lathes, EDM Machines and Surface Grinders by installing and adjusting three- and four-jaw chucks, tools, attachments, collets, bushings, cams, gears, stops, and stock pushers; indicating vices; tramming heads.
- Verifies settings by measuring positions, first-run part, and sample workpieces; adhering to international standards.
- Maintains specifications by observing drilling, grooving, and cutting, including turning, facing, knurling and thread chasing operations; taking measurements; detecting malfunctions; troubleshooting processes; adjusting and reprogramming controls; sharpening and replacing worn tools; adhering to quality assurance procedures and processes.
- Maintains safe operations by adhering to safety procedures and regulations.
- Maintains equipment by completing preventive maintenance requirements; following manufacturer's instructions; troubleshooting malfunctions; calling for repairs.
- Documents actions by completing production and quality logs.

- Updates job knowledge by participating in educational opportunities; reading technical publications.
- Accomplishes organization goals by accepting ownership for accomplishing new and different requests; exploring opportunities to add value to job accomplishments.
- Recognizing and developing new processes when required
- Desire to learn new skills including but not limited to: static and fatigue test planning and execution of test coupons and aircraft-structures, Non-Destructive Evaluation (NDE) techniques, corrosion test and evaluation.

Qualifications:

Required Job Qualifications:

- An Associate's degree in Machining Technology or related field with 3+ years related work experience
- Demonstrated ability in the machining of development and execution of experiments, testing, data analysis and documentation of results
- Demonstrated ability to prioritize, initiate, and drive projects to completion
- Ability to work in a hands-on environment during all phases of projects
- Strong mechanical aptitude
- Ability to work effectively in team situations as well as independently
- Ability to network and interact effectively with a broad range of associates spanning varied disciplines and responsibilities, including both internally and externally
- Must have the legal and ongoing authority to work in the US

Desired Job Qualifications:

- Hands-on experience in machining using manual and CNC Mills, lathes, Plunge and Wire Electrical Discharge Machines (EDM) Surface Grinders.
- Working experience with metallic air, land, and sea vehicles materials such as 2XXX, 5XXX, 6XXX, and 7XXX series aluminum alloys and stainless steel alloys
- Designing, building, and testing prototypes
- Working knowledge of drawings, specifications, and dimensional tolerances

Application Notes:

Please submit a cover letter and resume with references to rtb@saf-engineering.com

Position will remain open until filled.