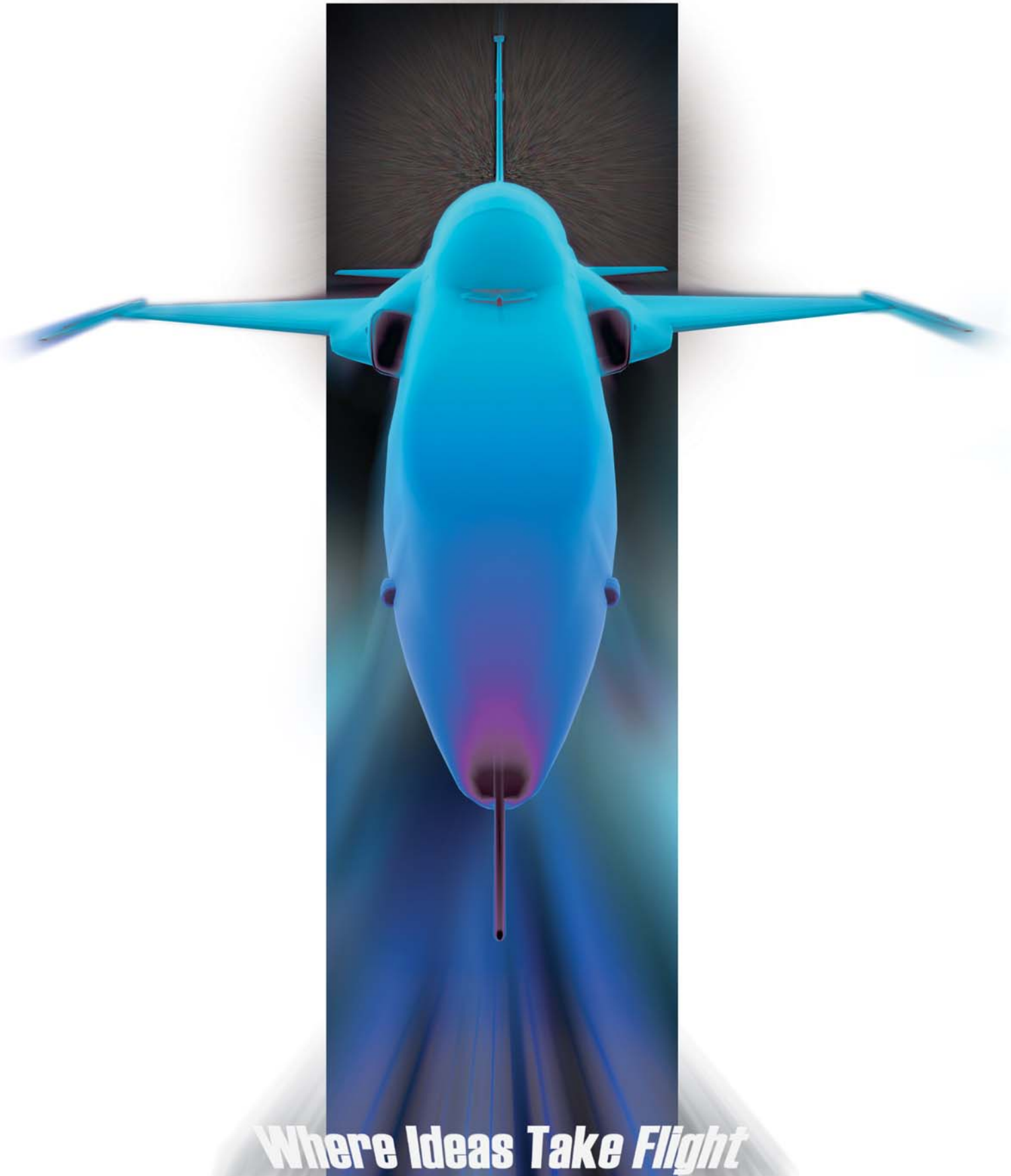


ARNPRIOR
Rapid Manufacturing Solutions



Where Ideas Take Flight



Life and Breath

Whether for digital prototyping of instrument panels, breathing apparatus or communications devices, the need for Arnprior's virtual and total plastic solutions can be found in the cockpit of the world's most sophisticated aircraft.

Arnprior Rapid Manufacturing Solutions provides innovative development solutions and reliable production of components and subassemblies for the aerospace industry.

Arnprior works with design and manufacturing teams to integrate prototyping, product development, production and technical services. Using lean manufacturing practices – paired with the right technologies and materials – we shorten time to market and save your budget.

Arnprior has worked with leading aerospace suppliers to provide:

- Precision machined/fabricated/formed components and assemblies
- Jigs, fixtures and complex tooling
- Injection molded plastic parts
- Metal to plastic substitution
- Laser part marking
- Thermoformed subassemblies
- Rapid prototypes of product

Your next project is our priority at Arnprior Choose Arnprior and you can expect:

- Record turnaround and delivery – your deadline is our priority
- Unparalleled quality – consistently exceeding expectations
- Precision beyond what you'd expect and others can provide

More control, faster turnaround and greater project flexibility

Arnprior's extensive in-house capabilities – coupled with a network of highly qualified partners – allows us to be a leading provider of development and production solutions in the aerospace industry. With these resources, as a Small Business, we are able to handle projects of various size and complexity.

Arnprior Rapid Manufacturing Solutions has the following certifications or approvals:

- AS9100 and ISO9001 compliant
- ITAR (International Traffic in Arms Regulations)



Arnprior's full range of Manufacturing Services provides:

Precision Metal Parts

- Multi-axis machining
- Sheet metal fabrication
- Cylindrical grinding
- Jig Grinding
- Electrical discharge machining

Reliable Plastic Parts

- Machined for development
- Thermoforming
- Mold Fabrication – Prototype through Production
- Injection molding
- Material Consulting

Additive Fabrication & Rapid Prototyping

- Stereolithography
- Selective laser sintering
- Materials Engineering & Testing

*Custom production
solutions that demand
seamless integration
of multiple technologies*

Development and Production of components using the latest technologies.

At Arnprior, we work side by side with our customers delivering the highest quality prototypes and manufacturing solutions, coupled with innovative design and analysis – Arnprior saves customers substantial time and development costs.

Big Lift for Bearings

Correctly balanced aerial equipment extends bearing life and helps to eliminate unscheduled airline maintenance.



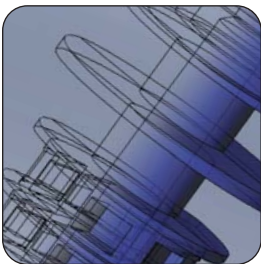
Our breadth of capabilities includes:

Trade Show Models and Digital Prototyping.



Rendering of panel displays, aircraft interior or exterior – as well as virtual animations of working components – provide a true representation of the final product, before manufacturing, saving costly design changes during your development process.

Precision CNC Machining.



Our comprehensive CNC equipment including milling, grinding, lathe, router, and EDM – coupled with the most up-to-date computer technology and training, are leveraged throughout our facility to provide high quality, functional, robust components with the proper accuracy.

Precision Sheet Metal Fabrication and Welding.



Our technical staff delivers turnkey “design and build” capabilities for producing individual sheet metal component parts, assemblies, cabinet and enclosures in both prototype and production quantities – using equipment driven by a state-of-the-art CAD/CAM system.

Stereolithography (SLA) and Selective Laser Sintering (SLS).



With rapid prototyping technologies, real-life replicas can be inexpensively created in days. Everything from duct-work to housings and working mechanical parts in airplanes and helicopters can be tested before full scale manufacturing for fit, form, and function to identify changes early.

Rubber Molding, Casting, and Thermoforming.



Low quantity parts at the lowest possible cost for development. These “bridge through production” solutions are provided prior to manufacturing ramp-up. These processes can also provide low quantity production avoiding costly capital tooling expense.

Plastic Parts - Engineering, Design, Analysis, Process Support, and Molding.



The unique technical and engineering expertise at Arnprior, partners you with a team of highly experienced plastic experts to bring your plastic parts from concept, through design and prototyping, and into production. Our team will make your metal to plastic part substitution a success.

Cut your Assembly Jig fabrication time in half.

Arnrior supplies all types of production tooling ranging from drill and assembly jigs, drill templates, trim tools, weld fixtures, handling fixtures and installation tools. Our innovative approach to fabrication accounts for manufacturing needs.

Features:

- Ergonomic design consideration
- Operator convenient utilities to increase productivity
- Manual or pneumatic clamping



Model of Efficiency

All ergonomic and productivity considerations have been addressed on Arnrior's jig assembly table, such as specialized clamping and integrated utility features enabling you to rapidly produce your fixture with reduced lead time and higher efficiency.



Technical Solutions that stand alone in any development or production environment

During the development of any project, many technical disciplines are required to verify quality and solve design problems or concerns. Arnprior has these services on site which allows us to leverage development, assist customers with their own processes or provide separate support to keep manufacturing plants running efficiently.

Services leveraged in project/equipment development and manufacturing plant support:

- **Inspection.** Utilizing our inspection group for quality assurance helps speed a project through design and testing.
- **Automation and Fixturing.** Whether you need a fixture to help create a specialized assembly or automate an assembly process, our technicians can provide the design and guidance to get the job done.
- **Diagnostic Services.** Diagnostic services help identify product solutions for issues such as vibration, accoustical, thermal and model analysis – before equipment fails.
- **Motor Refurbishment.** Arnprior motor technicians are specialists in both AC and DC motors, pumps and gear box refurbishment along with on site services covering all aspects of rotating equipment.
- **Bearing Center.** Professionals in Arnprior's Bearing Center clean, test and re-pack bearings to like-new condition in order to perform at or beyond OEM specifications – all at a fraction of new bearing cost coupled with a delivery to meet your schedule.
- **Balance Stand.** Arnprior's balance stands are capable of handling rotational components weighing as little as 10 grams or as much as 5000 pounds (2270 kg) and 17 feet (5.2 meters) in length with diameters up to 5 feet. (1.5 meters).
- **Laser Part Marking and Engraving Services.** We use Nd: YAG and CO2 systems to professionally mark metals, ceramics, plastics and a host of other materials. Marking can be sequential serial numbers, alphanumeric and bar codes. Logos can also be generated quickly.
- **Materials Engineering.** Arnprior has extensive materials engineering knowledge and testing capability. Our testing lab provides wear testing, corrosion investigation and surface metrology as well as materials selection and non-destructive testing.

Panoramic Picture-Taker

Arnprior's aerospace experience includes the development of specialized components for optical assemblies used in high-performance space-based imaging systems capable of capturing and disseminating valuable images and data.

Arnprior's integrated Technical Solutions support the development through your entire project to deliver:

- Consistent quality using state of the art computer assisted inspection technologies.
- Fixtures and assembly equipment customized to allow the lowest possible cycle times.
- Diagnostic testing to swiftly identify problems and move to a solution.
- Materials testing and analysis to get to the structure of a material problem and provide solutions.
- Motor, Bearing, and Balancing services to provide the total solution for rotating equipment.
- Laser marking to reliably mark and identify your part for service.
- Materials selected for specific applications will reliably perform for their intended service life.

Arnprior Rapid Manufacturing Solutions operates an extensive facility of 170,000 square feet (16,000 square meters) in Rochester, New York, USA. Over 160 highly skilled employees deliver an unprecedented breadth of technologies serving these industries:

- Aerospace
- Research and Development
- Energy and Power Generation
- Medical and Pharmaceutical
- Communications

Arnprior has built its reputation through collaboration with a wide range of manufacturing customers.

When you partner with Arnprior you receive world class expertise, experience, passion, and innovation delivered on time and on budget.



2400 Mt. Read Blvd.
Rochester, New York 14650-3030
United States of America

Toll Free: 866-603-ARMS (2767)
Fax: 585-617-6329
www.arnprior-rmsi.com