Bird Precision began producing ruby ring jewels for the Waltham Watch factory in 1913. Natural ruby and sapphire stones were mined in Montana and then through diamond machining and lapping techniques formed into ring jewels and pallet stones.

Mr. Richard H. Bird along with Howard Stedman a foreman at Waltham Watch developed semi-automated machines to mount these stones into various bushing mounts that would precisely fit various Waltham Watch plates. (See the attached photo of a typical Waltham Railroad watch with 21 jewels.)

The early 1900’s were a fortuitous time to start a new company based solely on the production of jewel bearing components. The growth in precision instruments using jewels during this century was meteoric. Electrical measurement instruments through the early work of inventor Edward Weston began using jeweled bearing suspensions, for Watt Hour, Volt and Ohmmeters. Early gauge pioneers like Mr. Bliss Charles Ames founder of B.C. Ames Inc., also of Waltham, began using jewels for dial indicator movements. Helping tool up for this Industrial revolution. The use of jeweled bearings in aircraft instrumentation as well as navigational instruments became geometric as the nation took to the air.

In 1938 Mr. Bird was joined by Randall P. Cameron Sr., and together they pioneered the production of glass vee jewels. Using hard glass in
applications, which formerly used only Sapphire and Ruby, they revolutionized the jewel industry. With the War years Bird’s production geared up to meet the demands.

The United States at that time was cut off from European suppliers of jeweled components and Companies like Bird Precision rushed to fill the needs for jeweled bearings used in altimeters, compasses, counters, electrical measuring instruments, clocks and timing mechanisms. Bird Precision played a vital role in WWII, earning the coveted Army-Navy E Award, for their meritorious role.

During the 50’s 60’s and 70’s Mr. Randall Cameron Jr. took the helm, quickly automating the plant, and computerizing its systems. This gave Bird the competitive edge to keep on top of their industry. Bird’s Precision’s expertise found applications in early satellite guidance systems, rate gyros and is proud of its role in early space exploration and Luna missions.

Today under the Direction of Mr. Carl J. Cunningham the competitive and innovative spirit remains solid. Utilizing laser-drilling techniques, wire lapping methods, and specialized assembly techniques the company has transitioned to become a world leader in precision jeweled orifice production. The company is proud of its role in pediatric oxygen valves, home health oxygen generators, rebreathers, hydraulic valves, pneumatic regulators, ink jets water jet cutting, pace makers and hearing devices to name a few.

Looking back over 100 years it has been the company’s, flexibility, versatility and ingenuity that has given it the thrust to succeed, but more importantly it has been the trust and confidence our customers have in us, that has made us what we are today. Our customers come to us to improve the quality and performance of their products and we have always taken that role seriously. As the years continue to unfold we are committed to live up to that trust.

We are also committed to fine tune our expertise for precision components. We will continue to adjust and adapt to the demands put upon us forever-higher standards of quality and workmanship. 🌐

“Even if you are on the right track you will get run over if you just sit there.”
-Will Rogers