By: Caleb Powell

StandardAero's Maryville facility provides disassembly, inspection, component repair, assembly, test, field support, and spare engine services for commercial, business, and military aviation contracts. The facility services jet engines and auxiliary power units (APUs), which are two different components that work together over the course of a flight. An APU is a single shaft, constant speed, gas turbine engine. Its primary duty is to provide electrical and pneumatic power to the aircraft for use on the ground or in the air. A jet engine is the main engine, started by the APU-generated power that generates thrust and flies the aircraft. The Maryville plant specifically works on engines and APUs from three primary companies; Rolls-Royce AE 3007 engines; Honeywell 36 Series and Airline RE220 APUs; Pratt & Whitney Canada APS2300 APUs. In April of 2018, StandardAero signed a 20-year, maintenance, repair, and operation (MRO) to service Rolls-Royce AE 1107C engines at the company's Maryville, Tennessee facility and inducted its first engine in July of 2018. The AE 1107C turboshaft engine model is new to StandardAero's MRO portfolio and it powers the Bell-Boeing V-22 Osprey tiltrotor aircraft. The AE 1107C delivers 7,000 lbs. shaft horsepower and is in service with the U.S. Marine Corps and the U.S. Air Force.

The Maryville facility opened in 1994 as Alliance Engines with 25 employees in a 50,000 square foot building. Their goal was to establish a new approach to repairing and overhauling the AlliedSignal engines for both corporate and regional airline operators. In 1997, StandardAero acquired Alliance Engines and launched the Rolls Royce AE3007 engine program. StandardAero (Alliance) Inc. is now an integral part of the StandardAero family. Currently the plant employs around 300 employees and is housed in a 121,000 square foot facility.

StandardAero has a proud history of environmental commitment and performance that dates back over twenty years. In 2003 StandardAero conducted research on different global environmental management systems that would be applicable to their operations; the ISO 14001 was selected as the best fit for the company. After a gap analysis, StandardAero's four largest manufacturing facilities were selected for implementation of measures to achieve ISO 14001 certification: Winnipeg, San Antonio, Tilburg and Maryville. Within several years of StandardAero achieving ISO14001 at their four largest facilities, the company recognized the benefits of adopting an environmental management system and decided to make ISO 14001 certification a company-wide operational standard. In 2011, StandardAero became the first aviation company in the world to receive an enterprise-wide ISO 14001 certification.
One of StandardAero's signature areas of focus is continuous improvements (CI) systems, which has become an essential part of the Maryville facility. The CI system that StandardAero relies on includes a global database for updates on real time projects and weekly facility walkthroughs and meetings to report on findings. The EHS team also brings together a group that meets weekly to go over the corrective action report, which consists of environmental, safety, and process issues that are determined during the facility walkthroughs and need to be addressed. There is a large focus on EHS issues and priorities through the facility’s Safety Committee and Spill Prevention Control and Countermeasures Team.

The Maryville plant is currently involved in several CI's to reduce energy and water use and waste generation, including: using a rag recycling company instead of single-use cleaning rags, using a precision paint gun to reduce paint waste, retrofitting the lighting to LEDs, recycling water from the parts washing process instead of evaporating it, site-wide secondary confinement to reduce safety and environmental issues regarding spills, and implementation of a dryer timer that shuts off the dryer after an hour instead of it running all the time. When asked how all of this was able to happen, Myles O’Sullivan, the facility's Senior EHS Specialist, stated, “It's great to work with managers and an entire facility as a whole that is supportive of environmental sustainability and improvement, from both a financial and involvement standpoint. The leadership understands the importance of sustainability and gives me the backing I need to try new ideas.” The facility is currently in the midst of opening another building across the street that will house a new contract line and approximately 50 employees. The EHS team is excited to be able to pilot programs at the new building and implement them into the entire operation without having to change the already existing lines and processes.

As soon as you walk into the Maryville facility, it is evident that the employees enjoy what they do. Their mission is to create a product that exceeds the quality and standards of the customer while making an effort to be environmentally conscious. That can be a challenge when there are strict contracts to uphold, but StandardAero (Alliance) Inc. in Maryville is working hard every day to do just that.

The Tennessee Materials Marketplace is a collaboration between industries, facilitated by an interactive online materials exchange, to recycle, repurpose, and return material discards back to Tennessee's economy. StandardAero (Alliance), Inc. learned of the marketplace initiative through its membership in the Tennessee Green Star Partnership.

“The StandardAero is committed to promote global environmental protection as an integral part of the products and services that we provide for our valued customers. We work hard to ensure that our legacy is and always will be one of integrity.” – StandardAero Environmental Initiative

The Tennessee Green Star Partnership is a voluntary environmental leadership program designed to recognize industries in the state that are committed to sustainable practices. If you are interested in joining StandardAero (Alliance), Inc. and other sustainable industries in Tennessee by becoming a member, please contact us.